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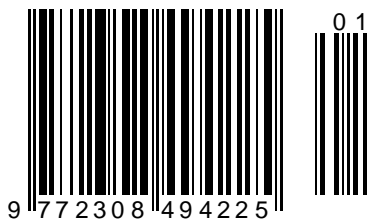
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**REFERENCE DATA OF PRESSURE DISTRIBUTION ON THE SURFACES OF AIRFOILS (HYDROFOILS) HAVING THE NAMES BEGINNING WITH THE LETTER E (THE FIRST PART)**

**Abstract:** The results of the computer calculation of air (water) flow around the airfoils (hydrofoils) having the names beginning with the letter E are presented in the article. The contours of pressure distribution on the surfaces of the airfoils (hydrofoils) at the angles of attack of 0, 15 and -15 degrees in conditions of the subsonic airplane flight speed were obtained.

**Key words:** the airfoil, hydrofoil, the angle of attack, pressure, the surface.

**Language:** English

**Citation:** Chemezov, D., et al. (2022). Reference data of pressure distribution on the surfaces of airfoils (hydrofoils) having the names beginning with the letter E (the first part). *ISJ Theoretical & Applied Science*, 01 (105), 501-569.

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### Introduction

Creating reference materials that determine the most accurate pressure distribution on the airfoils (hydrofoils) surfaces is an actual task of the airplane aerodynamics.

### Materials and methods

The study of air (water) flow around the airfoils (hydrofoils) was carried out in a two-dimensional formulation by means of the computer calculation in the *Comsol Multiphysics* program. The airfoils (hydrofoils) in the cross section were taken as objects

of research [1-16]. In this work, the airfoils (hydrofoils) having the names beginning with the letter *E* were adopted. Air (water) flow around the airfoils (hydrofoils) was carried out at the angles of attack ( $\alpha$ ) of 0, 15 and -15 degrees. The flight speed of the airplane in each case was subsonic. The airplane flight in the atmosphere was carried out under normal weather conditions. The geometric characteristics of the studied airfoils (hydrofoils) are presented in the Table 1. The geometric shapes of the airfoils (hydrofoils) in the cross section are presented in the Table 2.

**Table 1. The geometric characteristics of the airfoils (hydrofoils).**

Airfoil (hydrofoil) name	Max. thickness	Max. camber	Leading edge radius	Trailing edge thickness
E10(08%)	10.06% at 27.9% of the chord	0.27% at 27.9% of the chord	0.707%	0.0%
E168 (12,45%)	12.44% at 26.7% of the chord	0.0% at 0.0% of the chord	1.0272%	0.0%
E169 (14,4%)	14.4% at 26.5% of the chord	0.0% at 0.0% of the chord	1.2453%	0.0%
E171	12.25% at 32.4% of the chord	0.0% at 0.0% of the chord	0.7631%	0.0%
E174 (Dicke 8,92%)	8.88% at 28.8% of the chord	3.83% at 39.2% of the chord	0.6574%	0.0%
E176 (8,83%)	8.81% at 29.7% of the chord	3.31% at 40.1% of the chord	0.6147%	0.0%
E178 (8,69%)	8.68% at 30.6% of the chord	2.77% at 40.9% of the chord	0.574%	0.0%
E178P	8.68% at 30.6% of the chord	2.77% at 40.9% of the chord	0.4617%	0.019%
E180 (8,59%)	8.57% at 31.5% of the chord	2.23% at 36.6% of the chord	0.5788%	0.0%
E182 (8,47%)	8.46% at 32.4% of the chord	1.72% at 37.5% of the chord	0.5848%	0.0%
E184 (8,33%)	8.31% at 33.3% of the chord	1.2% at 33.3% of the chord	0.5556%	0.0%
E186 (10,27%)	10.23% at 29.0% of the chord	1.3% at 29.0% of the chord	0.6676%	0.0%
E193 (10,22%)	10.2% at 34.0% of the chord	3.57% at 39.3% of the chord	0.7407%	0.0%
E193-12	12.0% at 30.9% of the chord	3.6% at 40.2% of the chord	0.8629%	0.0%
E195 (11,82%)	11.81% at 34.1% of the chord	3.19% at 44.5% of the chord	0.8291%	0.0%
E197 (13,49%)	13.48% at 34.2% of the chord	2.8% at 44.4% of the chord	0.9373%	0.0%
E201 (11,88%)	11.86% at 33.8% of the chord	3.1% at 44.1% of the chord	0.8305%	0.0%
E203 (13,64%)	13.63% at 33.4% of the chord	2.67% at 48.6% of the chord	0.9472%	0.0%
E205 (10,48%)	10.47% at 30.1% of the chord	3.01% at 35.1% of the chord	0.7673%	0.0%
E2052595	9.5% at 30.1% of the chord	2.5% at 35.1% of the chord	0.461%	0.0%
E207 (12,04%)	12.02% at 30.0% of the chord	2.49% at 39.9% of the chord	0.8618%	0.0%
E209 (13,72%)	13.68% at 29.8% of the chord	1.97% at 44.5% of the chord	0.9792%	0.0%
E210 (13,64%)	13.63% at 31.4% of the chord	4.01% at 46.8% of the chord	1.0214%	0.0%
E211 (10,96%)	10.95% at 33.2% of the chord	2.57% at 59.1% of the chord	0.7569%	0.0%
E212 (10,55%)	10.55% at 27.3% of the chord	2.93% at 58.4% of the chord	0.8043%	0.0%
E214 (11,1%)	11.08% at 31.4% of the chord	4.03% at 52.4% of the chord	0.7962%	0.0%
E216 (10,4%)	10.42% at 28.6% of the chord	5.17% at 55.6% of the chord	0.9126%	0.0%
E220 (11,48%)	11.46% at 36.9% of the chord	2.45% at 36.9% of the chord	0.7408%	0.0%
E221 (9,39%)	9.36% at 27.1% of the chord	1.83% at 32.0% of the chord	0.681%	0.0%
E222 (10,17%)	10.16% at 28.7% of the chord	2.51% at 49.2% of the chord	0.7428%	0.0%
E224 (10,17%)	10.17% at 30.0% of the chord	1.74% at 50.4% of the chord	0.7223%	0.0%
E226 (10,19%)	10.17% at 31.3% of the chord	0.98% at 41.3% of the chord	0.7132%	0.0%
E228	10.2% at 28.3% of the chord	0.28% at 28.3% of the chord	0.2679%	0.168%
E230 (9,96%)	9.96% at 29.3% of the chord	0.0% at 0.0% of the chord	0.8194%	0.0%
E231	12.32% at 41.4% of the chord	2.45% at 41.4% of the chord	0.4968%	0.0%
E374	10.92% at 37.1% of the chord	2.21% at 40.2% of the chord	0.6022%	0.0%
E385 (8,41%)	8.41% at 30.5% of the chord	5.73% at 47.1% of the chord	0.6856%	0.0%
E387	8.88% at 28.8% of the chord	3.83% at 39.2% of the chord	0.6454%	0.179%
E392 (10,15%)	10.13% at 33.1% of the chord	3.83% at 43.6% of the chord	0.6635%	0.0%
E393	11.56% at 32.2% of the chord	4.01% at 47.8% of the chord	0.599%	0.307%
E423	12.51% at 23.7% of the chord	10.03% at 41.4% of the chord	2.6584%	0.0%
E471 (6,25%)	6.25% at 26.1% of the chord	4.73% at 53.3% of the chord	0.4745%	0.0%
E474 (14,09%)	14.08% at 21.5% of the chord	0.0% at 0.0% of the chord	1.7161%	0.0%
E474 (14,09%)- portato al 16	16.2% at 21.5% of the chord	0.0% at 0.0% of the chord	2.2662%	0.0%
E475 (15,01%)	15.0% at 21.7% of the chord	0.0% at 0.0% of the chord	1.8319%	0.0%
E61 (5,64%)	5.66% at 28.1% of the chord	6.69% at 51.0% of the chord	0.4525%	0.0%
E61 (5,64%)	5.66% at 28.1% of the chord	6.69% at 51.0% of the chord	0.2206%	0.0%
E62 (5,62%)	5.63% at 25.3% of the chord	5.37% at 47.2% of the chord	0.4792%	0.0%

**Impact Factor:**

<b>ISRA (India) = 6.317</b>	<b>SIS (USA) = 0.912</b>	<b>ICV (Poland) = 6.630</b>
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<b>GIF (Australia) = 0.564</b>	<b>ESJI (KZ) = 9.035</b>	<b>IBI (India) = 4.260</b>
<b>JIF = 1.500</b>	<b>SJIF (Morocco) = 7.184</b>	<b>OAJI (USA) = 0.350</b>

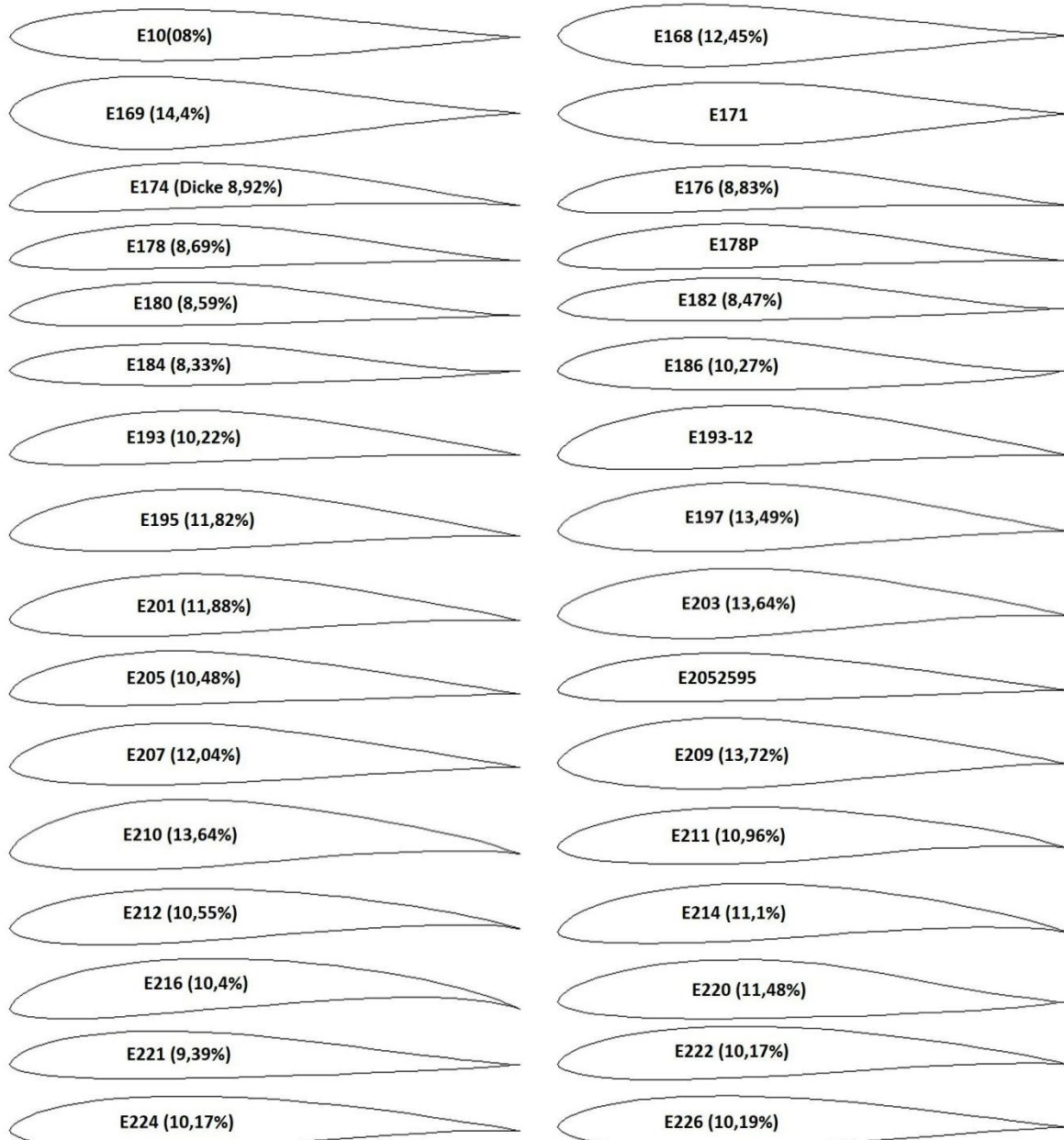
<i>E63 (4,25%)</i>	4.25% at 19.8% of the chord	5.38% at 52.1% of the chord	0.3814%	0.0%
<i>E64 (8,45%)</i>	8.44% at 28.0% of the chord	3.32% at 48.9% of the chord	0.6364%	0.0%
<i>E71 (5,15%)</i>	5.16% at 25.9% of the chord	4.64% at 53.1% of the chord	0.426%	0.0%
<i>EB 1,5-10</i>	10.0% at 30.0% of the chord	1.65% at 40.0% of the chord	1.6578%	0.0%
<i>EB 380</i>	9.91% at 30.0% of the chord	2.94% at 40.0% of the chord	0.7954%	0.0%
<i>EH 0,0-9,0</i>	9.0% at 28.7% of the chord	0.0% at 0.0% of the chord	0.5263%	0.0%
<i>EH 1,0-9,0</i>	8.99% at 28.7% of the chord	1.0% at 25.9% of the chord	0.5408%	0.0%
<i>EH 1,5-9,0</i>	8.99% at 28.7% of the chord	1.49% at 25.9% of the chord	0.5392%	0.0%
<i>EH 1.0/7.0 (from EH 1.0/9.0)</i>	7.0% at 31.6% of the chord	1.0% at 25.9% of the chord	0.3821%	0.0%
<i>EH 2,0-10</i>	10.08% at 28.7% of the chord	2.0% at 25.9% of the chord	0.626%	0.0%
<i>EH 2,0-12</i>	11.99% at 28.7% of the chord	1.99% at 25.9% of the chord	0.8956%	0.0%
<i>EH 2,5-10</i>	9.99% at 30.0% of the chord	2.49% at 25.0% of the chord	0.463%	0.0%
<i>EH 3,0-12</i>	11.98% at 30.0% of the chord	3.0% at 25.0% of the chord	0.6929%	0.0%
<i>Eiffel 375</i>	9.92% at 30.0% of the chord	2.49% at 30.0% of the chord	1.4074%	0.0%
<i>Eiffel 400</i>	13.0% at 30.0% of the chord	6.6% at 30.0% of the chord	1.1077%	0.0%
<i>Eiffel 428</i>	8.8% at 40.0% of the chord	5.1% at 40.0% of the chord	0.9129%	0.0%
<i>Eiffel 430</i>	9.69% at 15.0% of the chord	6.4% at 30.0% of the chord	1.7186%	0.0%
<i>Eiffel 431</i>	9.9% at 20.0% of the chord	7.5% at 40.0% of the chord	1.3847%	0.0%
<i>EIFFL32</i>	5.06% at 20.0% of the chord	5.43% at 30.0% of the chord	1.7603%	0.67%
<i>EIFFL338</i>	8.04% at 40.0% of the chord	0.0% at 0.0% of the chord	1.6831%	0.0%
<i>EIFFL359</i>	10.83% at 30.0% of the chord	5.42% at 30.0% of the chord	1.7593%	0.0%
<i>EIFFL371</i>	14.4% at 30.0% of the chord	7.27% at 30.0% of the chord	1.254%	0.0%
<i>EIFFL385</i>	13.35% at 20.0% of the chord	7.53% at 40.0% of the chord	1.9339%	0.0%
<i>EIFFL389</i>	7.93% at 40.0% of the chord	4.54% at 30.0% of the chord	1.6678%	0.0%
<i>EIFFL437</i>	11.23% at 20.0% of the chord	6.24% at 40.0% of the chord	1.8311%	0.0%
<i>EL 25108</i>	10.78% at 40.0% of the chord	2.5% at 40.0% of the chord	0.7749%	0.0%
<i>ELEK</i>	12.0% at 30.9% of the chord	4.0% at 43.5% of the chord	1.1914%	0.0%
<i>ELINA</i>	9.47% at 29.9% of the chord	2.95% at 40.2% of the chord	0.3471%	0.0%
<i>EMX-07</i>	9.9% at 29.7% of the chord	2.53% at 20.6% of the chord	0.7331%	0.304%
<i>EPB - 1</i>	14.76% at 30.0% of the chord	7.38% at 30.0% of the chord	3.4711%	0.0%
<i>EPPLER 1098</i>	18.95% at 36.9% of the chord	3.7% at 56.7% of the chord	1.0292%	0.0%
<i>EPPLER 1200</i>	16.95% at 37.2% of the chord	3.43% at 47.4% of the chord	1.58%	0.0%
<i>EPPLER 1210</i>	15.81% at 20.4% of the chord	5.18% at 35.5% of the chord	2.9263%	0.0%
<i>EPPLER 1211</i>	18.0% at 20.2% of the chord	4.42% at 40.0% of the chord	3.3009%	0.0%
<i>EPPLER 1213</i>	17.34% at 23.7% of the chord	2.05% at 33.1% of the chord	2.7377%	0.0%
<i>EPPLER 1214</i>	19.82% at 23.9% of the chord	2.11% at 32.9% of the chord	3.0901%	0.0%
<i>EPPLER 1230</i>	17.45% at 29.6% of the chord	3.6% at 26.6% of the chord	2.3131%	0.02%
<i>EPPLER 1233</i>	18.92% at 29.6% of the chord	4.32% at 29.6% of the chord	2.058%	0.0%
<i>Eppler 166</i>	10.44% at 30.0% of the chord	1.32% at 30.0% of the chord	0.9403%	0.0%
<i>Eppler 189</i>	8.22% at 30.0% of the chord	1.17% at 40.0% of the chord	0.9289%	0.0%
<i>Eppler 228</i>	10.2% at 30.0% of the chord	0.3% at 30.0% of the chord	1.0712%	0.0%
<i>EPPLER 266</i>	17.32% at 39.8% of the chord	3.2% at 39.8% of the chord	1.1246%	0.0%
<i>Eppler 270</i>	10.16% at 30.0% of the chord	0.0% at 0.0% of the chord	1.1165%	0.0%
<i>EPPLER 297</i>	11.39% at 37.7% of the chord	0.05% at 0.0% of the chord	0.1034%	0.0%
<i>EPPLER 325</i>	12.62% at 34.3% of the chord	1.75% at 16.3% of the chord	0.7201%	0.0%
<i>EPPLER 326</i>	12.86% at 33.4% of the chord	2.17% at 19.5% of the chord	0.9824%	0.0%
<i>EPPLER 327</i>	13.11% at 32.4% of the chord	2.59% at 23.0% of the chord	1.0816%	0.0%
<i>EPPLER 328</i>	13.33% at 31.5% of the chord	3.03% at 22.1% of the chord	1.3353%	0.0%
<i>EPPLER 329</i>	13.52% at 30.6% of the chord	3.54% at 25.7% of the chord	1.3256%	0.0%
<i>EPPLER 330</i>	11.02% at 29.2% of the chord	2.16% at 16.9% of the chord	0.6991%	0.0%
<i>EPPLER 331</i>	11.25% at 28.3% of the chord	2.59% at 23.6% of the chord	0.4837%	0.0%
<i>EPPLER 332</i>	11.52% at 32.3% of the chord	3.04% at 22.6% of the chord	0.8634%	0.0%
<i>EPPLER 333</i>	11.75% at 31.3% of the chord	3.54% at 26.4% of the chord	1.1851%	0.0%
<i>EPPLER 334</i>	11.93% at 30.3% of the chord	4.04% at 25.4% of the chord	1.2059%	0.0%
<i>EPPLER 335</i>	12.56% at 29.0% of the chord	2.36% at 19.9% of the chord	1.0209%	0.0%
<i>EPPLER 336</i>	12.79% at 28.1% of the chord	2.79% at 23.4% of the chord	1.0164%	0.0%
<i>EPPLER 337</i>	13.1% at 32.0% of the chord	3.25% at 22.4% of the chord	1.3266%	0.0%
<i>EPPLER 338</i>	13.3% at 31.1% of the chord	3.74% at 26.2% of the chord	1.32%	0.0%
<i>EPPLER 339</i>	13.54% at 30.1% of the chord	4.21% at 25.2% of the chord	1.5434%	0.0%
<i>EPPLER 340</i>	13.68% at 28.8% of the chord	2.59% at 19.7% of the chord	1.1378%	0.0%
<i>EPPLER 341</i>	13.94% at 32.8% of the chord	3.04% at 23.2% of the chord	1.3422%	0.0%
<i>EPPLER 342</i>	14.26% at 31.8% of the chord	3.49% at 22.2% of the chord	1.6374%	0.0%
<i>EPPLER 343</i>	14.47% at 30.9% of the chord	3.96% at 26.0% of the chord	1.548%	0.0%
<i>EPPLER 344</i>	14.72% at 29.9% of the chord	4.44% at 25.0% of the chord	1.7864%	0.0%
<i>EPPLER 360</i>	12.23% at 36.9% of the chord	1.54% at 27.2% of the chord	1.0835%	0.0%
<i>EPPLER 361</i>	12.11% at 37.1% of the chord	1.64% at 27.4% of the chord	1.0704%	0.0%
<i>Eppler 375</i>	10.9% at 40.0% of the chord	2.25% at 40.0% of the chord	0.7883%	0.0%
<i>EPPLER 376</i>	2.44% at 3.8% of the chord	8.93% at 32.6% of the chord	0.453%	0.0%
<i>EPPLER 377</i>	3.85% at 6.8% of the chord	8.74% at 37.2% of the chord	0.503%	0.0%

**Impact Factor:**

<b>SIS (India) = 6.317</b>	<b>SIS (USA) = 0.912</b>	<b>ICV (Poland) = 6.630</b>
<b>ISI (Dubai, UAE) = 1.582</b>	<b>ПИИИ (Russia) = 3.939</b>	<b>PIF (India) = 1.940</b>
<b>GIF (Australia) = 0.564</b>	<b>ESJI (KZ) = 9.035</b>	<b>IBI (India) = 4.260</b>
<b>JIF = 1.500</b>	<b>SJIF (Morocco) = 7.184</b>	<b>OAJI (USA) = 0.350</b>

<i>EPPLER 377 (MODIFIED)</i>	3.76% at 6.5% of the chord	9.13% at 32.6% of the chord	0.5042%	0.0%
<i>EPPLER 378</i>	4.07% at 7.7% of the chord	7.99% at 38.5% of the chord	0.4654%	0.0%
<i>EPPLER 379</i>	2.21% at 7.9% of the chord	7.99% at 34.2% of the chord	0.4615%	0.0%
<i>Eppler 387</i>	9.1% at 30.0% of the chord	5.8% at 40.0% of the chord	0.7091%	0.0%
<i>EPPLER 393</i>	11.52% at 32.1% of the chord	3.99% at 47.7% of the chord	0.6346%	0.0%
<i>EPPLER 395</i>	12.29% at 29.5% of the chord	5.24% at 51.1% of the chord	0.6173%	0.0%
<i>EPPLER 396</i>	13.06% at 29.5% of the chord	5.44% at 51.1% of the chord	0.6128%	0.0%
<b>Note:</b> <i>E474 (14,09%)- portato al 16 (Mod.);</i> <i>EB 1,5-10 (USA);</i> <i>EB 380 (T. Bartovsky (Czechoslovakia));</i> <i>Eiffel 375, Eiffel 400, Eiffel 428, Eiffel 430, Eiffel 431 (B. Eiffel (France));</i> <i>EL 25108 (L. Lister (USA));</i> <i>EMX-07 (Designed by Martin Lichte);</i> <i>EPB - 1 (USA);</i> <i>Eppler 166, Eppler 189, Eppler 228, Eppler 270, Eppler 375, Eppler 387 (R. Eppler (Germany)).</i>				

**Table 2. The geometric shapes of the airfoils (hydrofoils) in the cross section.**



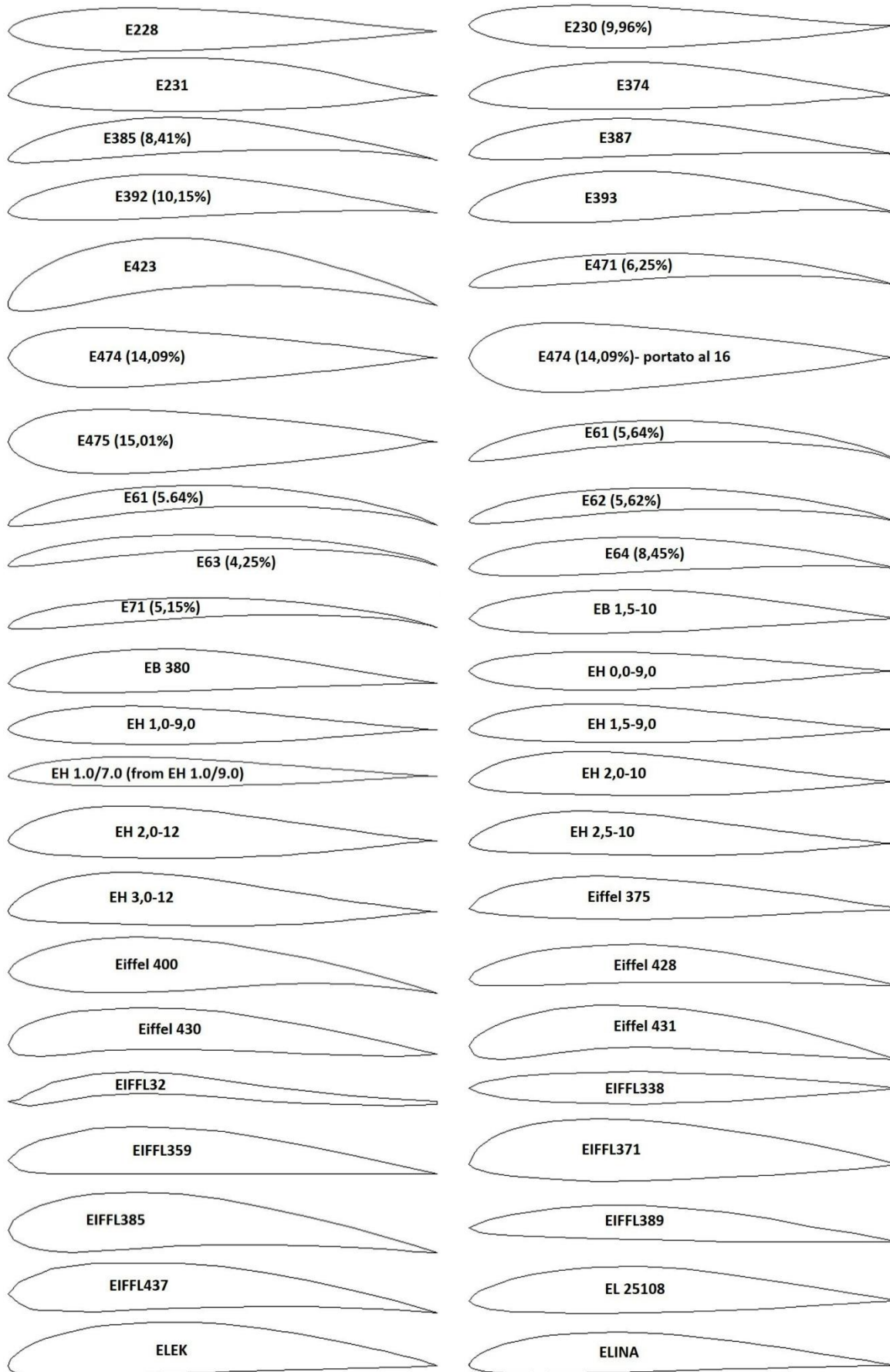


**Impact Factor:**

ISRA (India) = 6.317  
 ISI (Dubai, UAE) = 1.582  
 GIF (Australia) = 0.564  
 JIF = 1.500

SIS (USA) = 0.912  
 ПИИЦ (Russia) = 3.939  
 ESJI (KZ) = 9.035  
 SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
 PIF (India) = 1.940  
 IBI (India) = 4.260  
 OAJI (USA) = 0.350

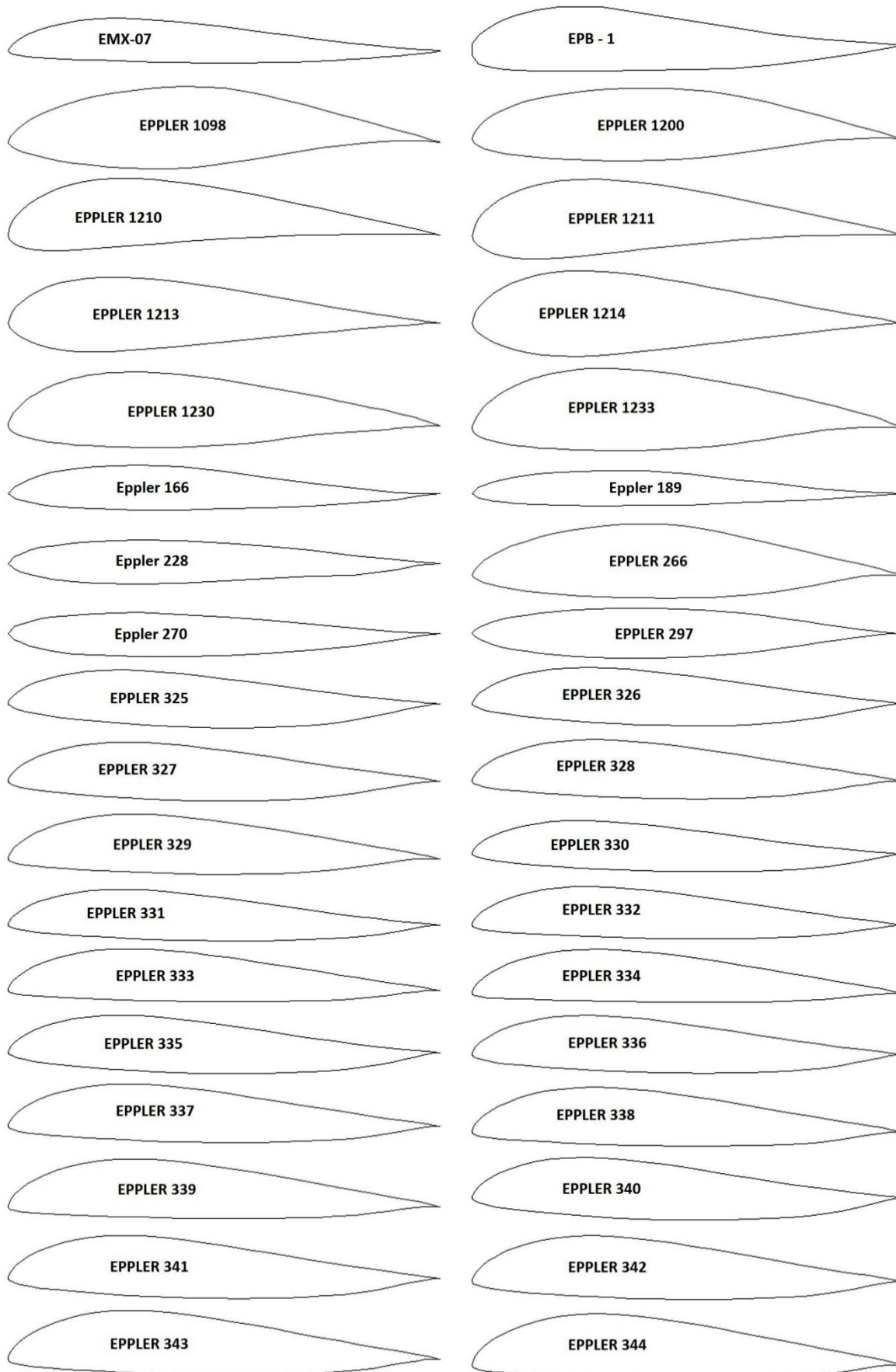


**Impact Factor:**

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИЦ (Russia) = 3.939**  
**ESJI (KZ) = 9.035**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

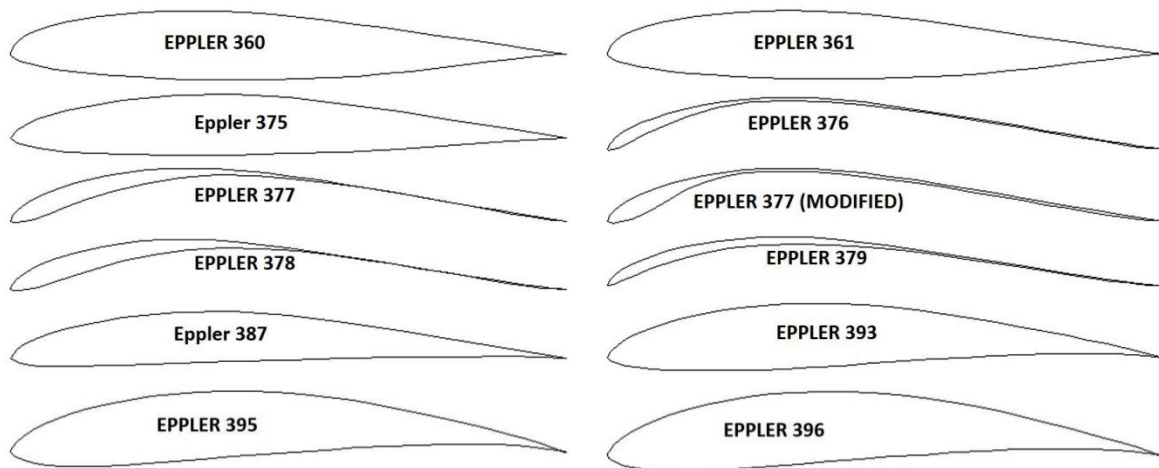


## Impact Factor:

ISRA (India) = 6.317  
 ISI (Dubai, UAE) = 1.582  
 GIF (Australia) = 0.564  
 JIF = 1.500

SIS (USA) = 0.912  
 ПИИИ (Russia) = 3.939  
 ESJI (KZ) = 9.035  
 SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
 PIF (India) = 1.940  
 IBI (India) = 4.260  
 OAJI (USA) = 0.350



### Results and discussion

The calculated pressure contours on the surfaces of the airfoils (hydrofoils) at the different angles of attack are presented in the Figs. 1-124. The calculated magnitudes on the scale can be represented as the basic magnitudes when comparing the pressure drop under conditions of changing the angle of attack of the airfoils (hydrofoils).

The leading edge pressure was determined for the E, Eiffel and EPPLER series airfoils and hydrofoils. Other airfoils were also considered.

The range of change in positive pressure at the leading edge of the studied airfoils (hydrofoils) is on average 6.3-6.6 kPa. This is 1.0-1.2 kPa less than pressure at the leading edge of the EPPLER 1200 airfoil. With an increase in the angle of attack by 15 degrees, pressure increases by more than 20 times, for example, during takeoff of the airplane with the asymmetric airfoil of the wing (EPPLER 393).

The EPPLER 379 airfoil is subjected to the least stress at the negative angle of attack.

The maximum increase in pressure at the leading edge occurs at the angle of attack of 15 degrees for the following airfoils (hydrofoils): E168 (12,45%), E169 (14,4%), E171, E174 (Dicke 8,92%), E176 (8,83%), E178 (8,69%), E178P, E180 (8,59%), E182 (8,47%), E184 (8,33%), E193 (10,22%), E2052595, E216 (10,4%), E221 (9,39%), E228, E385 (8,41%), E387, E392 (10,15%), E393, E471 (6,25%), E474 (14,09%), E474 (14,09%) - portato al 16, E475 (15,01%), E61 (5,64%), E61 (5,64%), E62 (5,62%), E63 (4,25%), E64 (8,45%), E71 (5,15%), EB 380, EH 0,0-9,0, EH 1,0-9,0, EH 1,5-9,0, EH 1.0/7.0 (from EH 1.0/9.0), EH 2,5-10, Eiffel 375, Eiffel 400, Eiffel 428, Eiffel 431, EIFFL32, EIFFL359, EIFFL371, EIFFL385, EIFFL389, EIFFL437, ELINA, EMX-07, Eppler 189, EPPLER 330, EPPLER 331, EPPLER 332, EPPLER 333, EPPLER 334, EPPLER 376, EPPLER 377, EPPLER 377 (MODIFIED), EPPLER 378, EPPLER 379, Eppler 387, EPPLER 393. The maximum increase in pressure at the leading edge occurs at the angle of attack of -15 degrees for the remaining airfoils (hydrofoils).

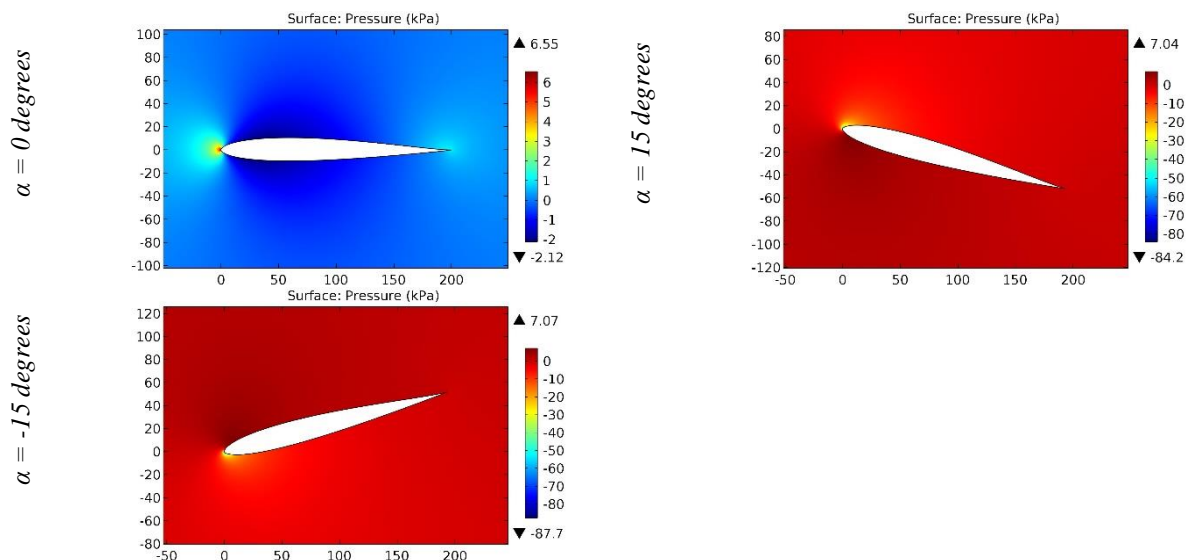


Figure 1. The pressure contours on the surfaces of the E10(08%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

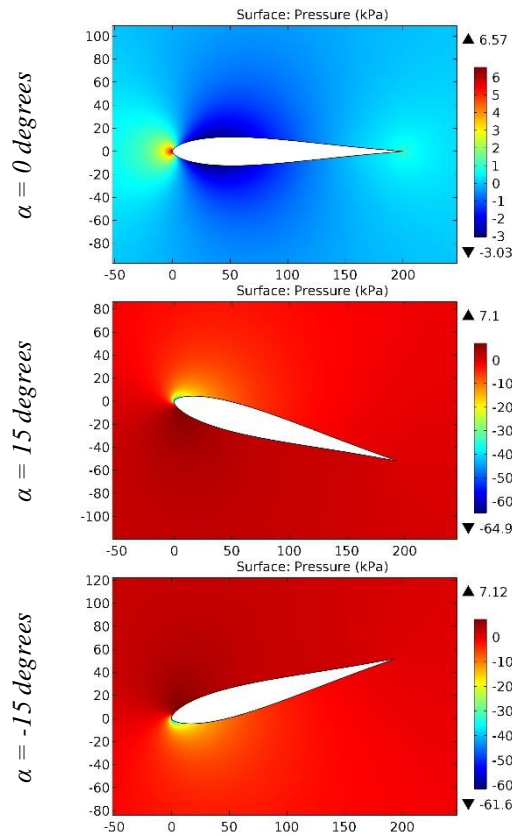


Figure 2. The pressure contours on the surfaces of the E168 (12,45%) airfoil.

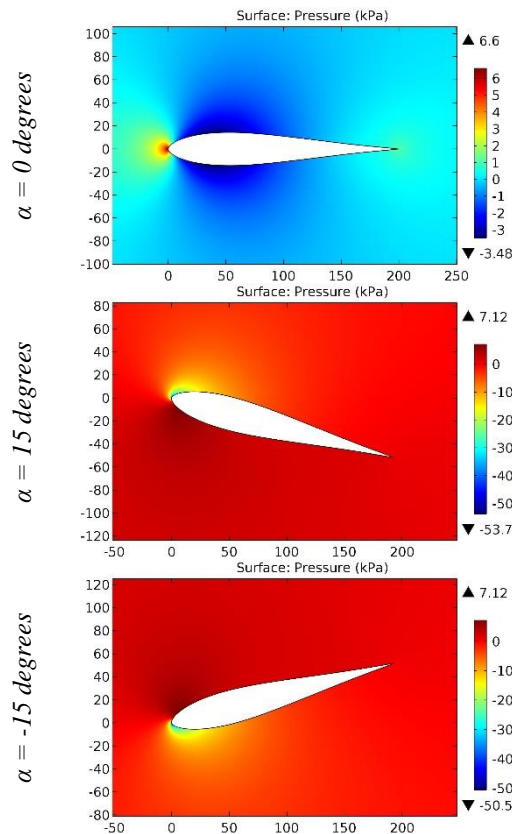
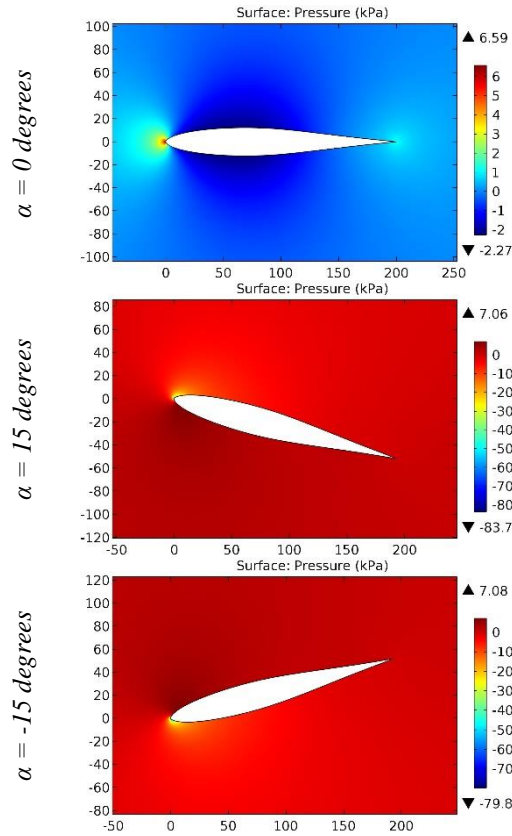


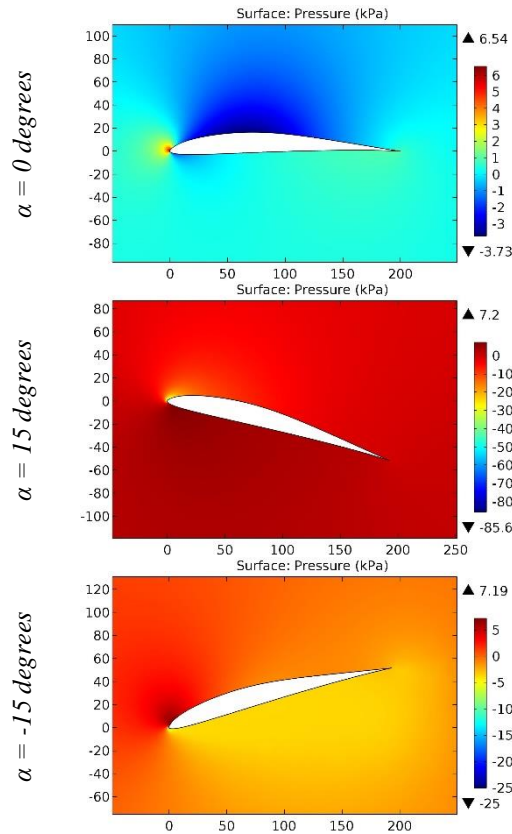
Figure 3. The pressure contours on the surfaces of the E169 (14,4%) airfoil.

**Impact Factor:**

<b>SISRA</b> (India) = <b>6.317</b>	<b>SIS</b> (USA) = <b>0.912</b>	<b>ICV</b> (Poland) = <b>6.630</b>
<b>ISI</b> (Dubai, UAE) = <b>1.582</b>	<b>ПИИИ</b> (Russia) = <b>3.939</b>	<b>PIF</b> (India) = <b>1.940</b>
<b>GIF</b> (Australia) = <b>0.564</b>	<b>ESJI</b> (KZ) = <b>9.035</b>	<b>IBI</b> (India) = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF</b> (Morocco) = <b>7.184</b>	<b>OAJI</b> (USA) = <b>0.350</b>



**Figure 4.** The pressure contours on the surfaces of the E171 airfoil.



**Figure 5.** The pressure contours on the surfaces of the E174 (Dicke 8,92%) airfoil.



**Impact Factor:**

<b>SISRA (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

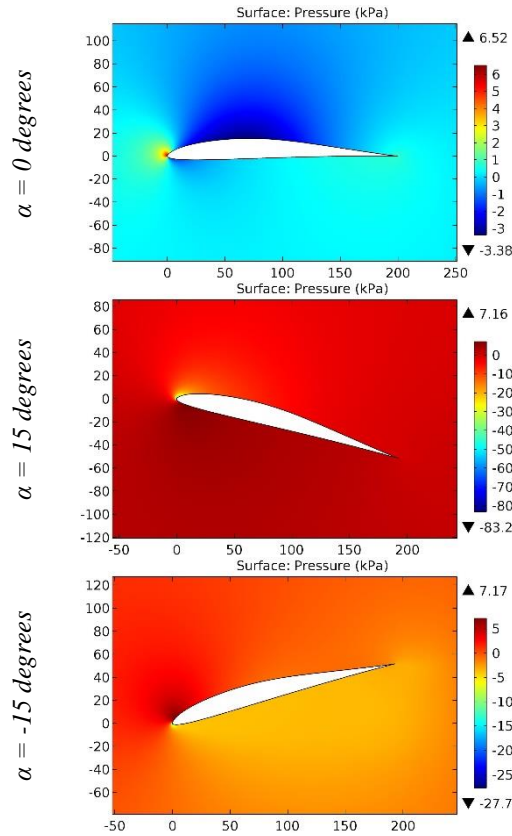


Figure 6. The pressure contours on the surfaces of the E176 (8,83%) airfoil.

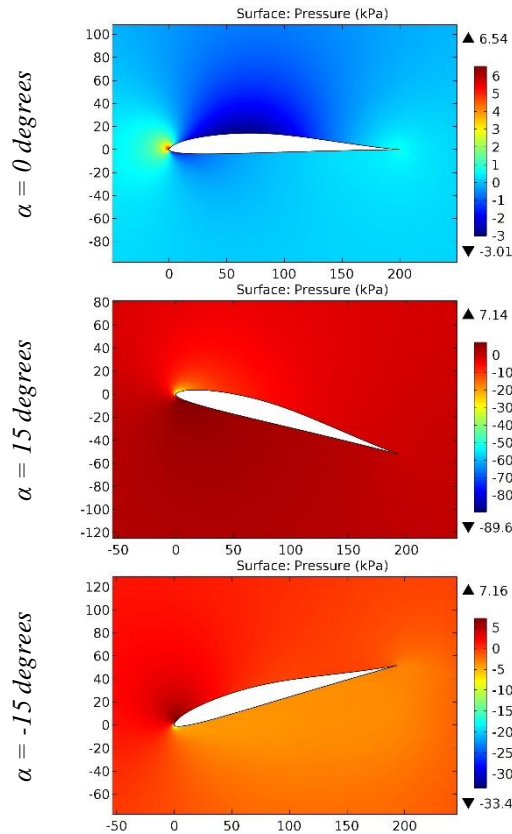


Figure 7. The pressure contours on the surfaces of the E178 (8,69%) airfoil.

**Impact Factor:**

<b>SISRA (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

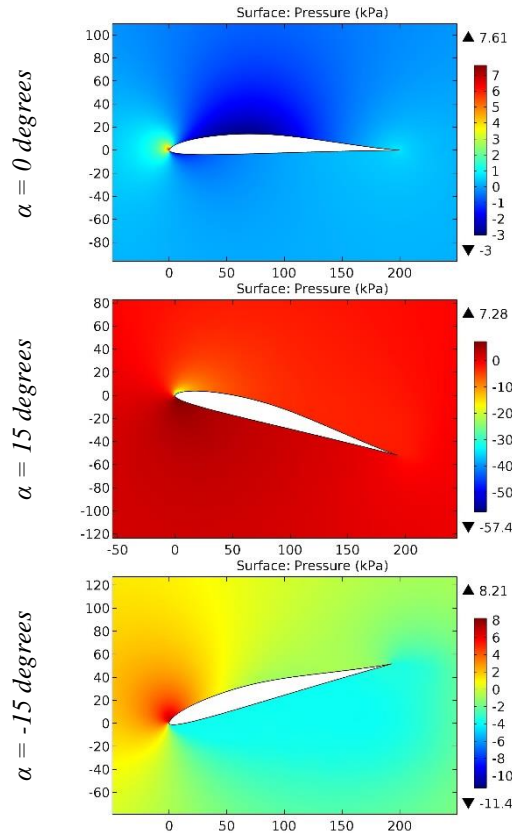


Figure 8. The pressure contours on the surfaces of the E178P airfoil.

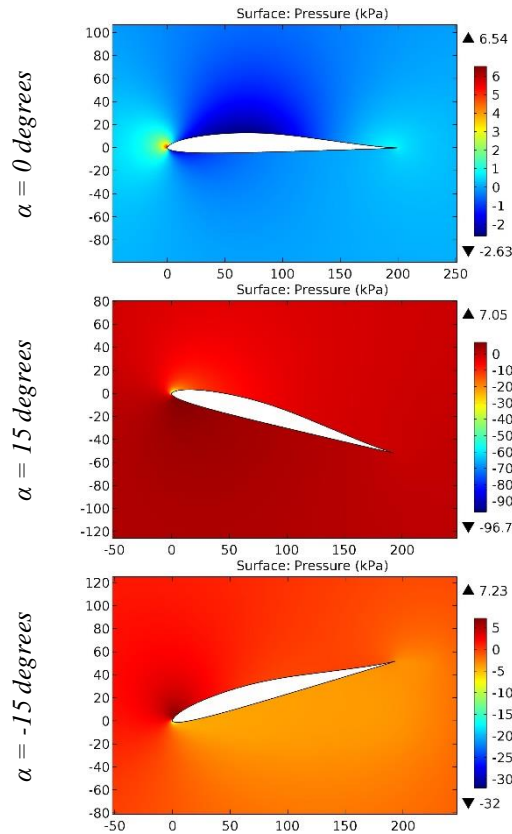


Figure 9. The pressure contours on the surfaces of the E180 (8,59%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

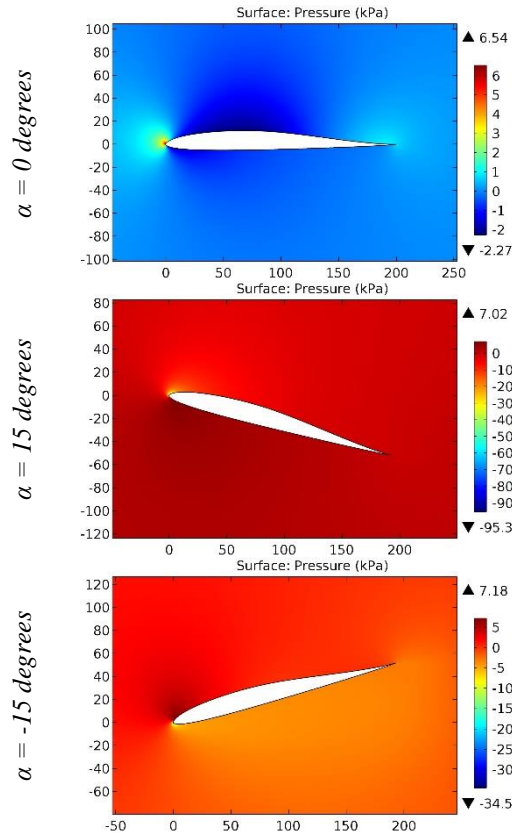


Figure 10. The pressure contours on the surfaces of the E182 (8,47%) airfoil.

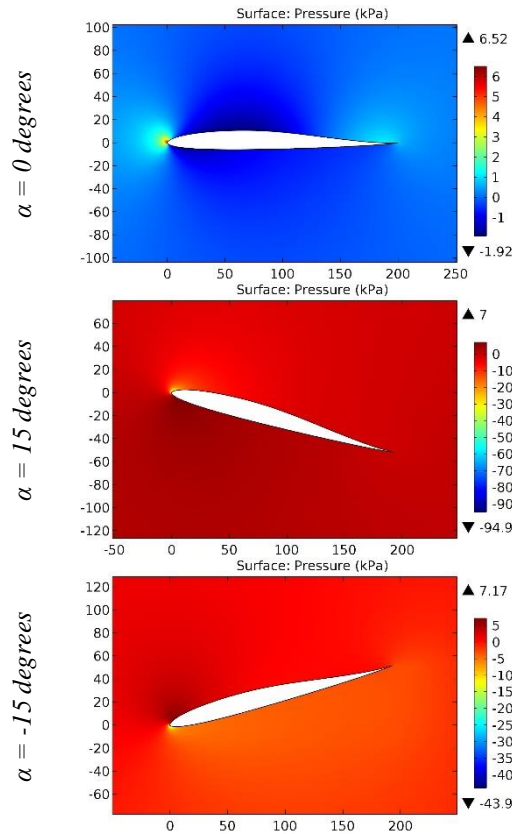


Figure 11. The pressure contours on the surfaces of the E184 (8,33%) airfoil.

**Impact Factor:**

<b>ISRA (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>

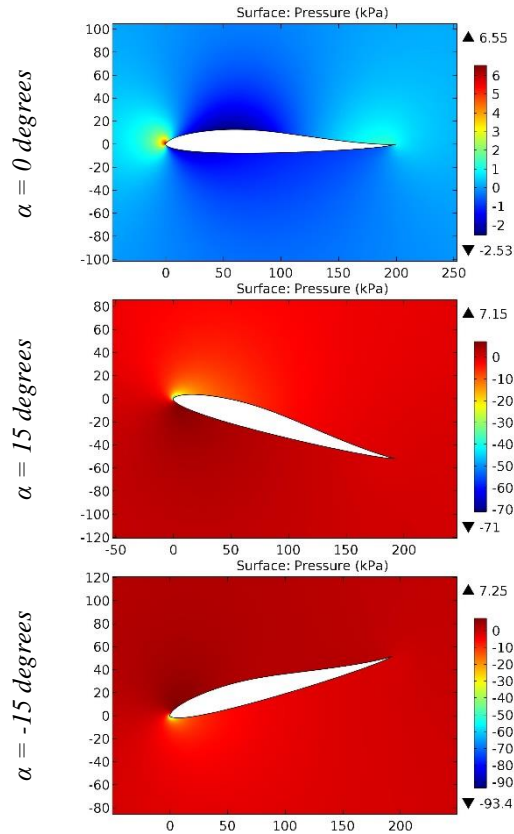


Figure 12. The pressure contours on the surfaces of the E186 (10,27%) airfoil.

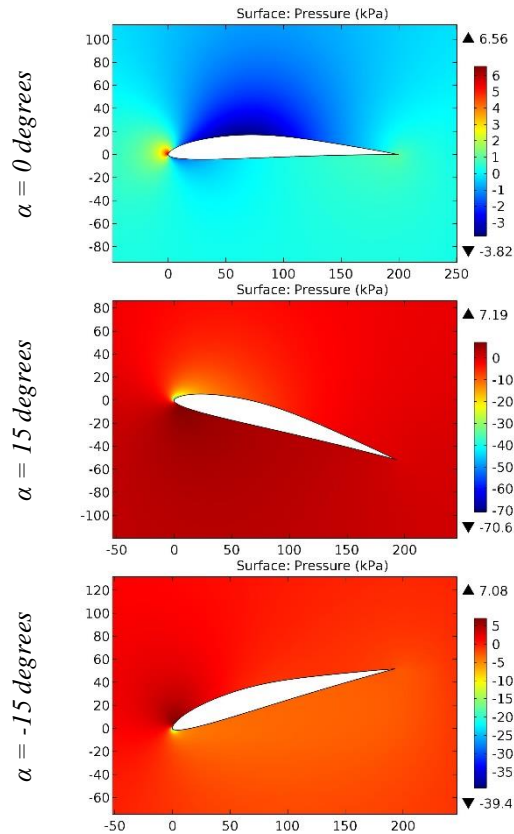


Figure 13. The pressure contours on the surfaces of the E193 (10,22%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

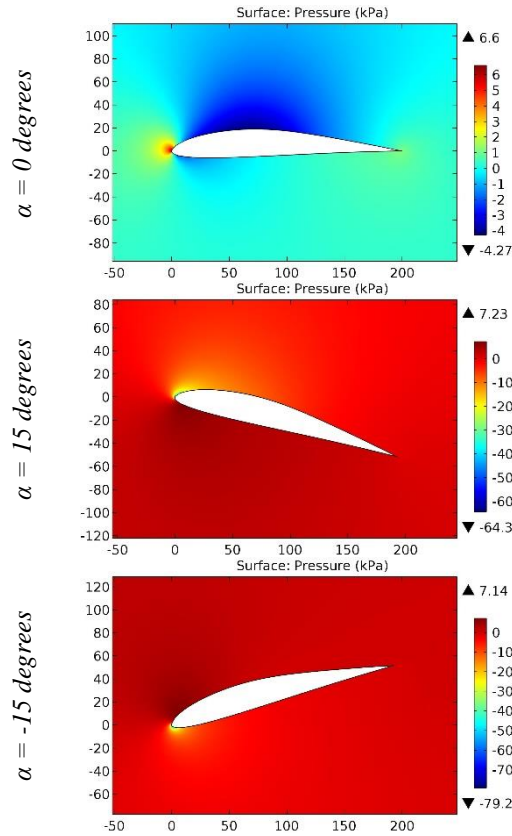


Figure 14. The pressure contours on the surfaces of the E193-12 airfoil.

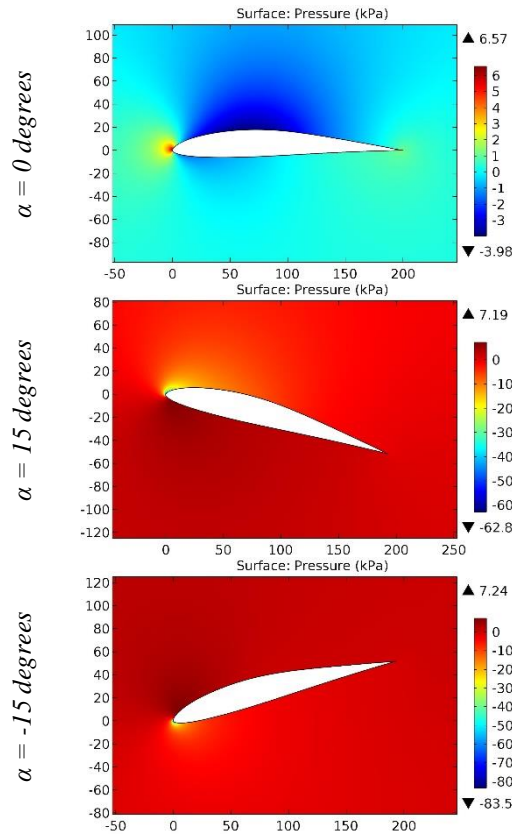


Figure 15. The pressure contours on the surfaces of the E195 (11,82%) airfoil.



**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

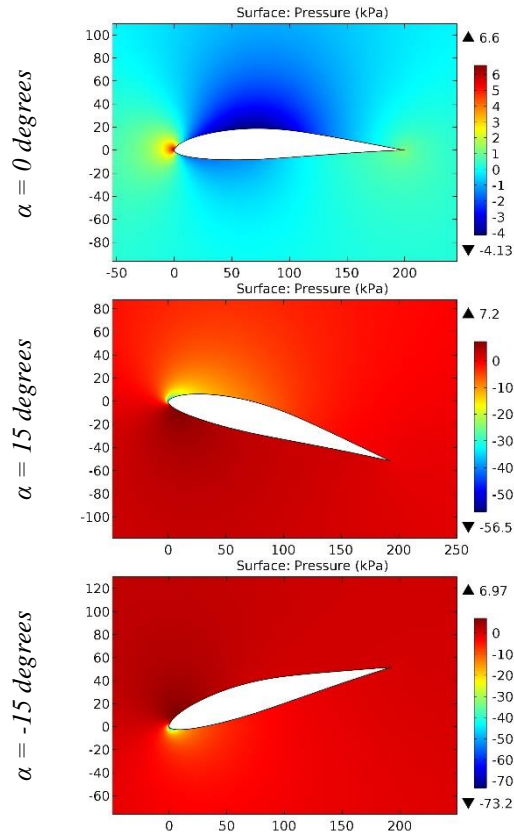


Figure 16. The pressure contours on the surfaces of the E197 (13,49%) airfoil.

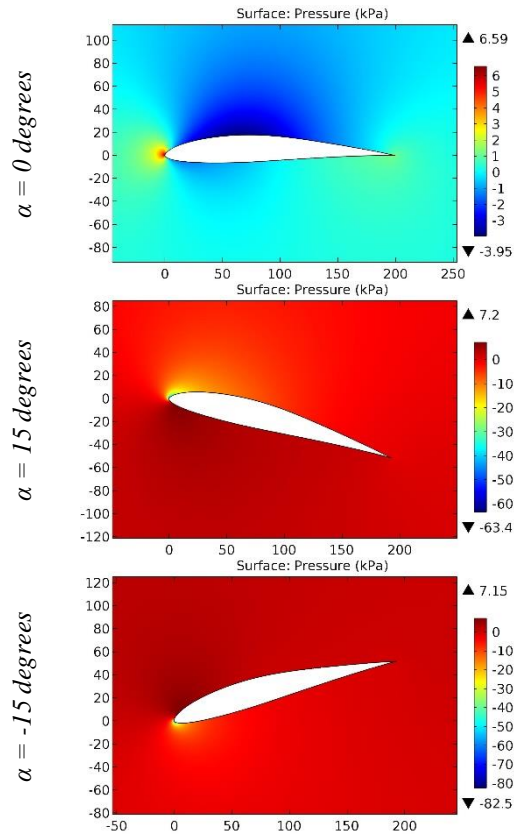


Figure 17. The pressure contours on the surfaces of the E201 (11,88%) airfoil.

**Impact Factor:**

<b>SISRA (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

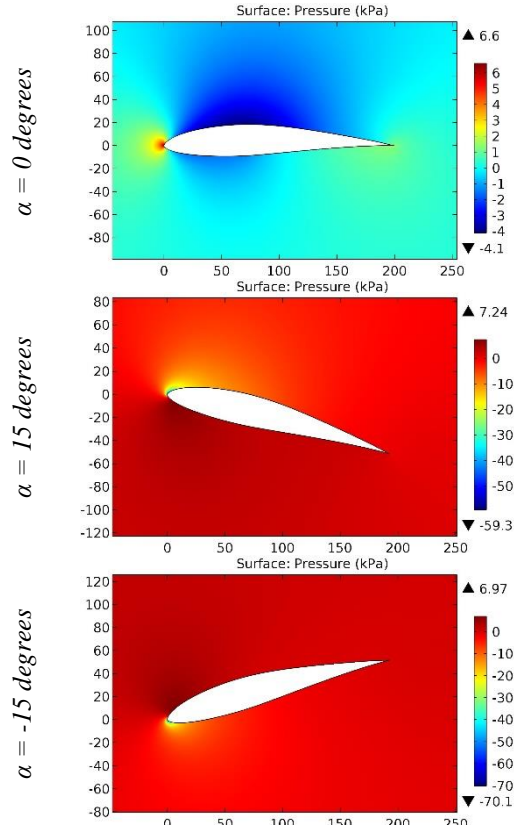


Figure 18. The pressure contours on the surfaces of the E203 (13,64%) airfoil.

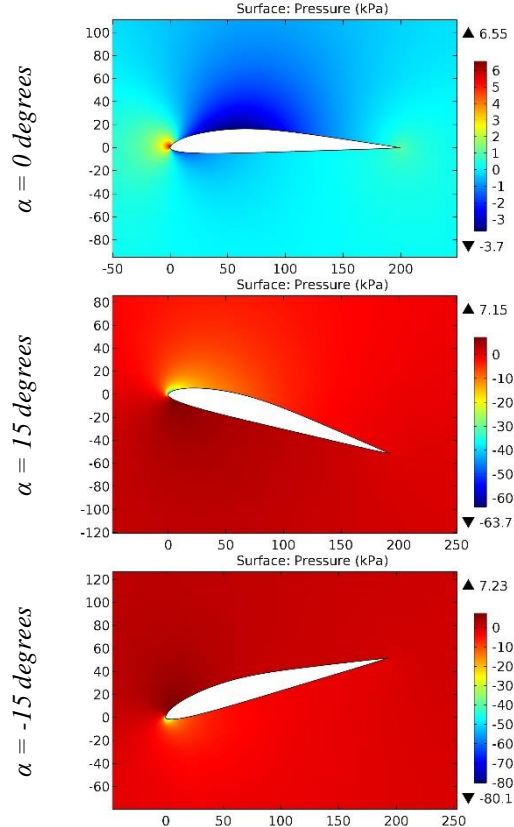


Figure 19. The pressure contours on the surfaces of the E205 (10,48%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

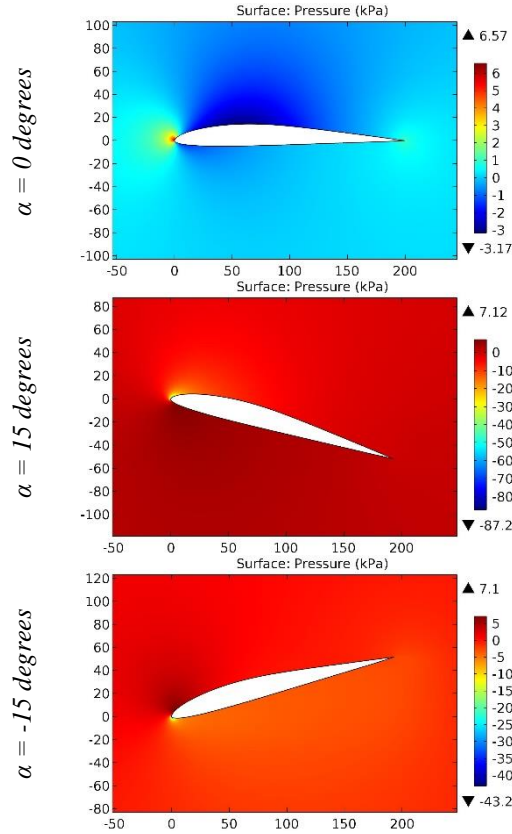


Figure 20. The pressure contours on the surfaces of the E2052595 airfoil.

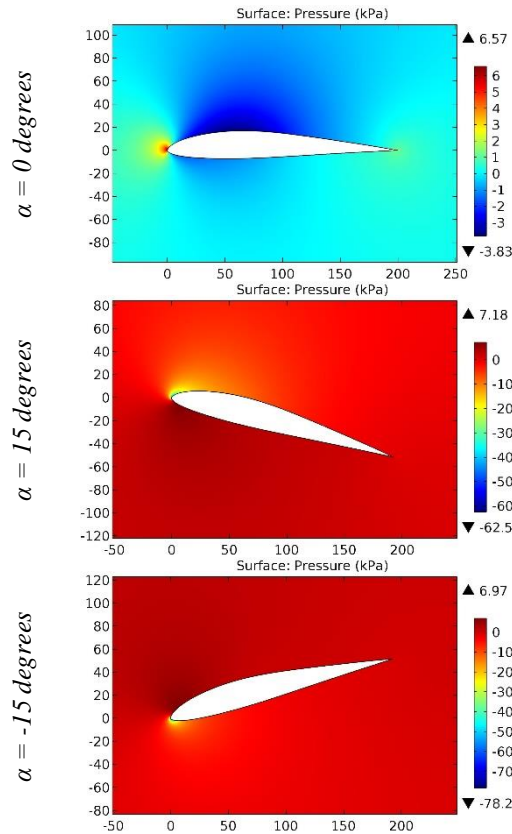


Figure 21. The pressure contours on the surfaces of the E207 (12,04%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

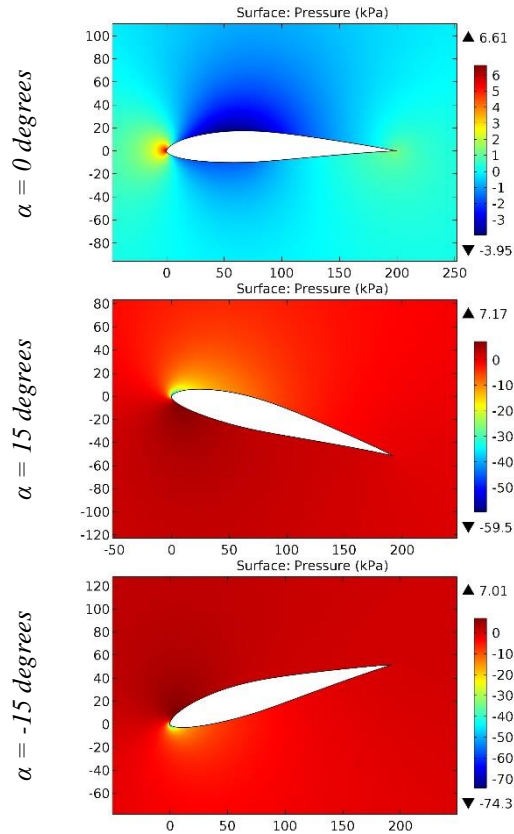


Figure 22. The pressure contours on the surfaces of the E209 (13,72%) airfoil.

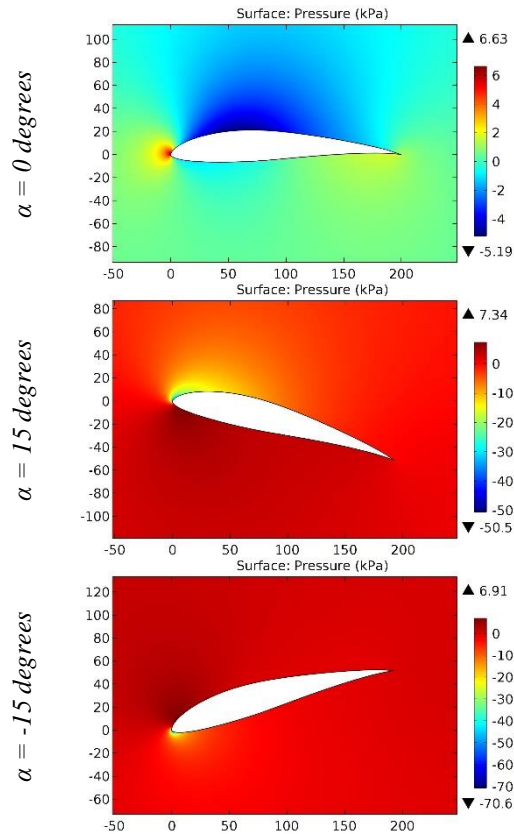


Figure 23. The pressure contours on the surfaces of the E210 (13,64%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

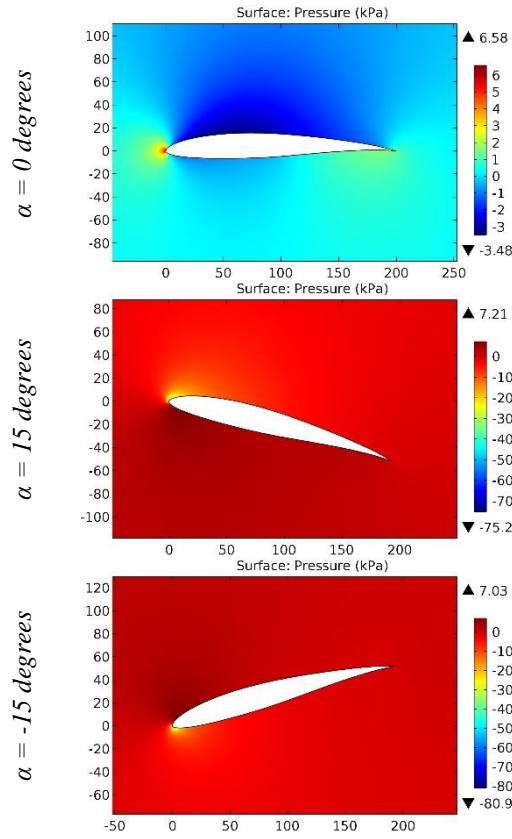


Figure 24. The pressure contours on the surfaces of the E211 (10,96%) airfoil.

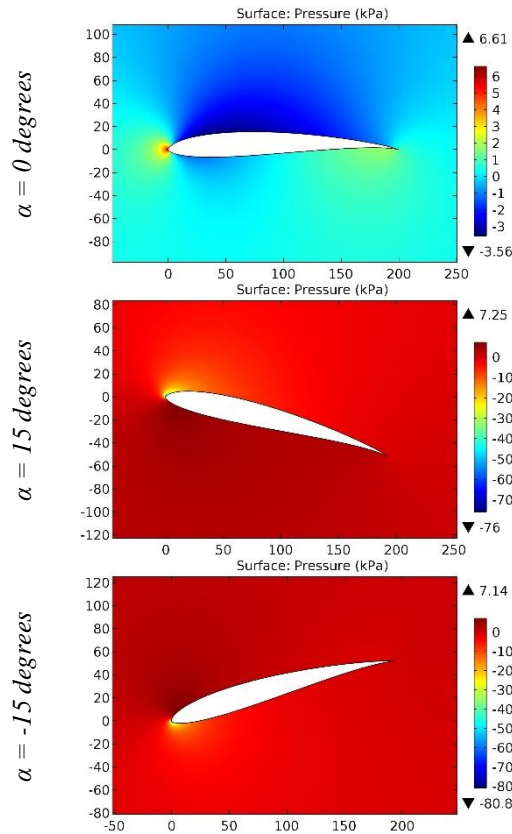
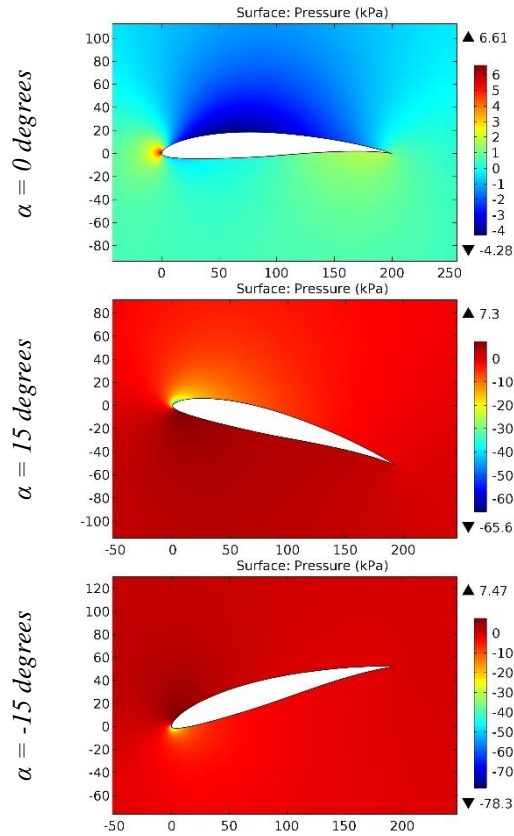


Figure 25. The pressure contours on the surfaces of the E212 (10,55%) airfoil.

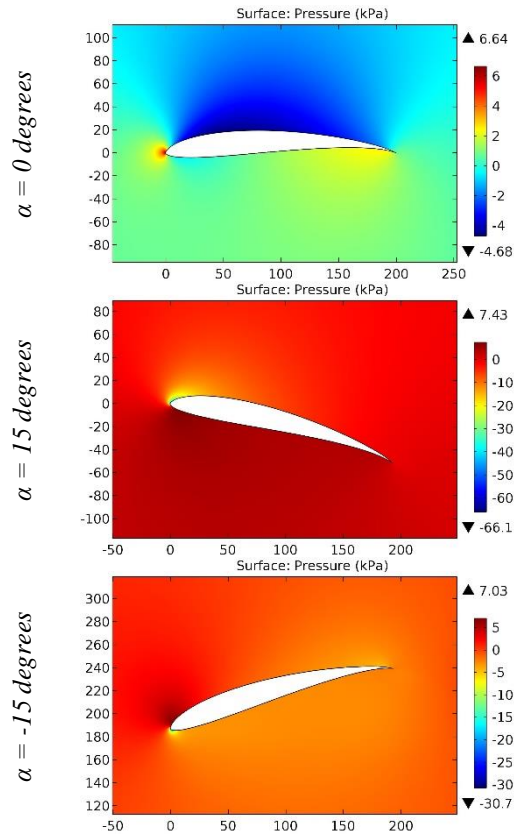


**Impact Factor:**

<b>SIS (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>



**Figure 26. The pressure contours on the surfaces of the E214 (11,1%) airfoil.**



**Figure 27. The pressure contours on the surfaces of the E216 (10,4%) airfoil.**

**Impact Factor:**

<b>SIS (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

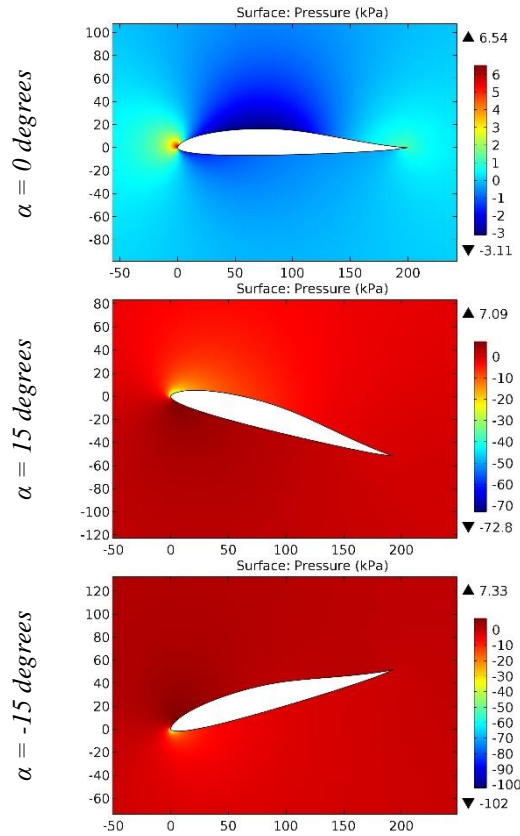


Figure 28. The pressure contours on the surfaces of the E220 (11,48%) airfoil.

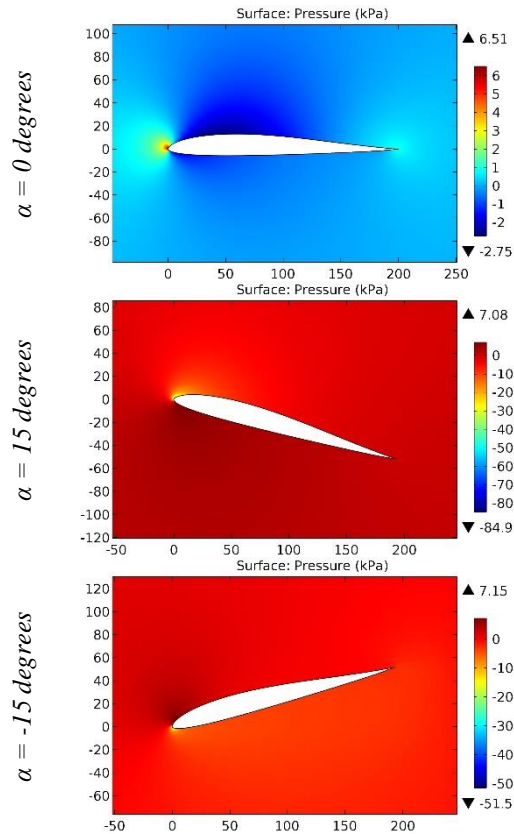


Figure 29. The pressure contours on the surfaces of the E221 (9,39%) airfoil.

**Impact Factor:**

<b>SISRA (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

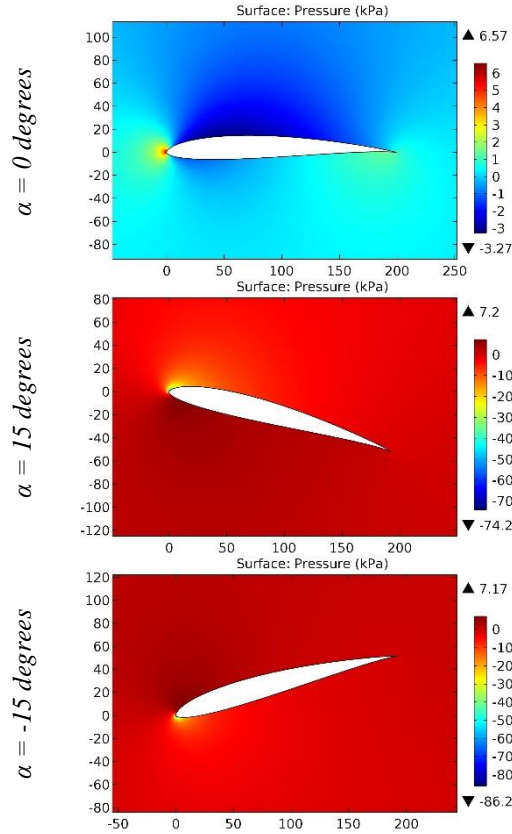


Figure 30. The pressure contours on the surfaces of the E222 (10,17%) airfoil.

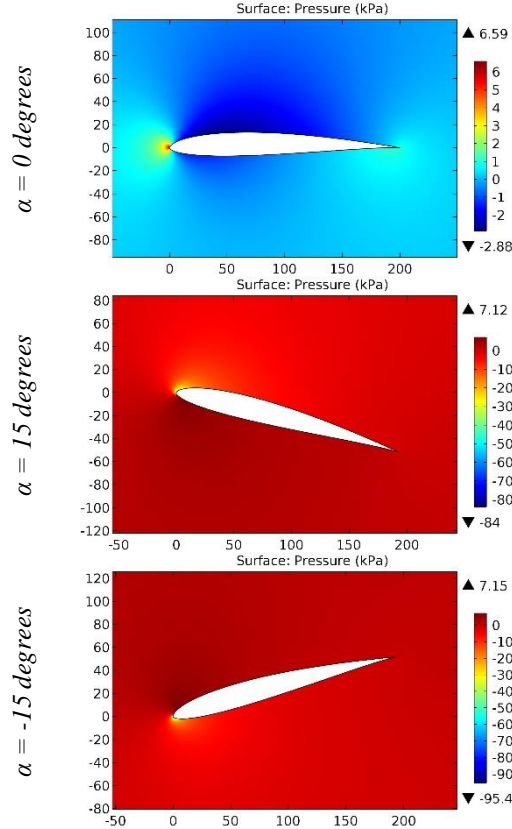


Figure 31. The pressure contours on the surfaces of the E224 (10,17%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

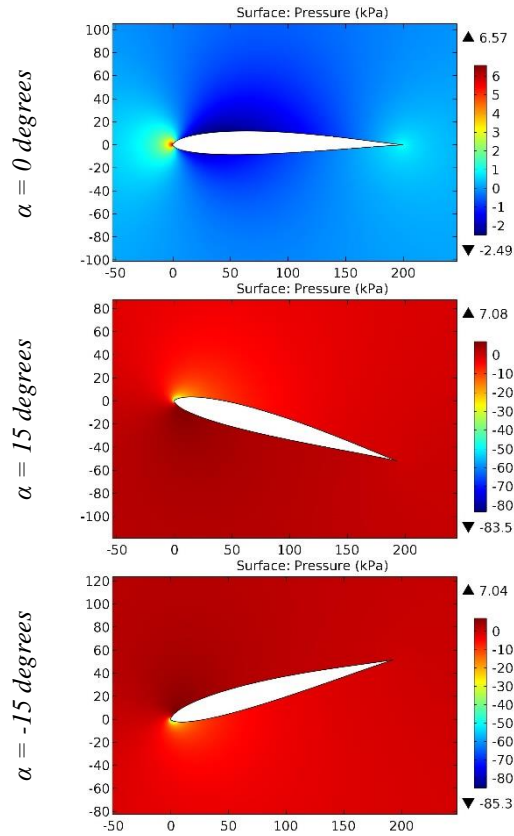


Figure 32. The pressure contours on the surfaces of the E226 (10,19%) airfoil.

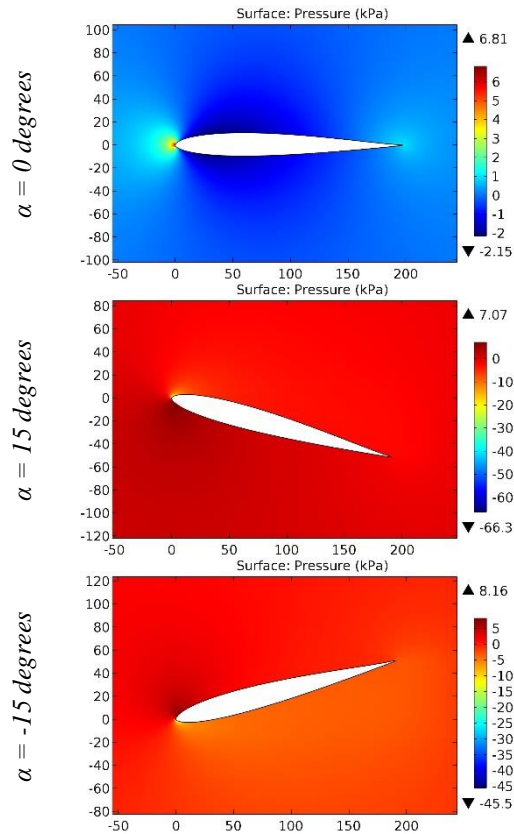


Figure 33. The pressure contours on the surfaces of the E228 airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

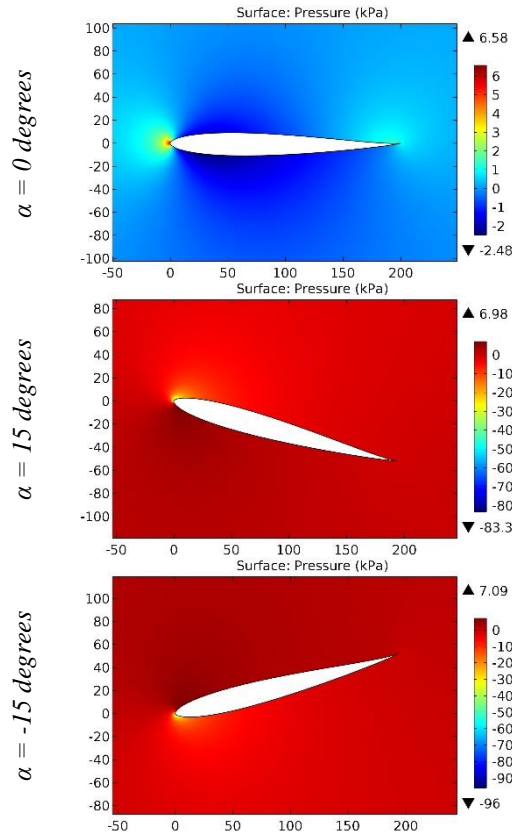


Figure 34. The pressure contours on the surfaces of the E230 (9,96%) airfoil.

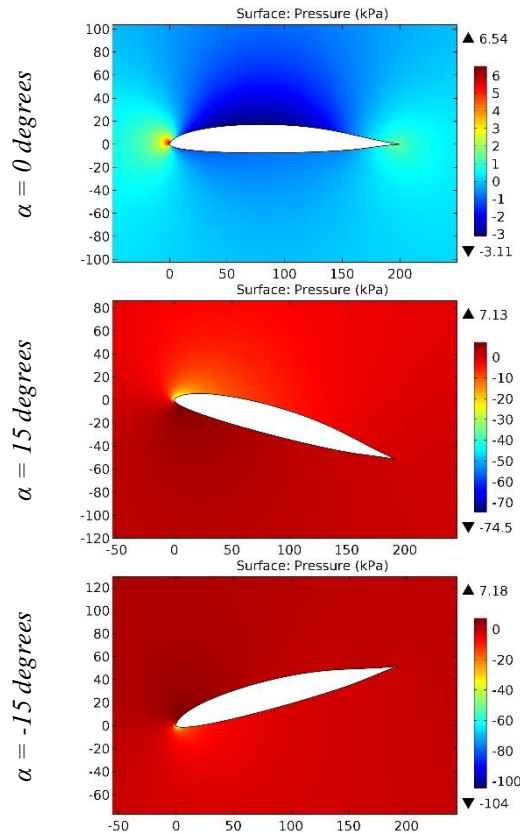
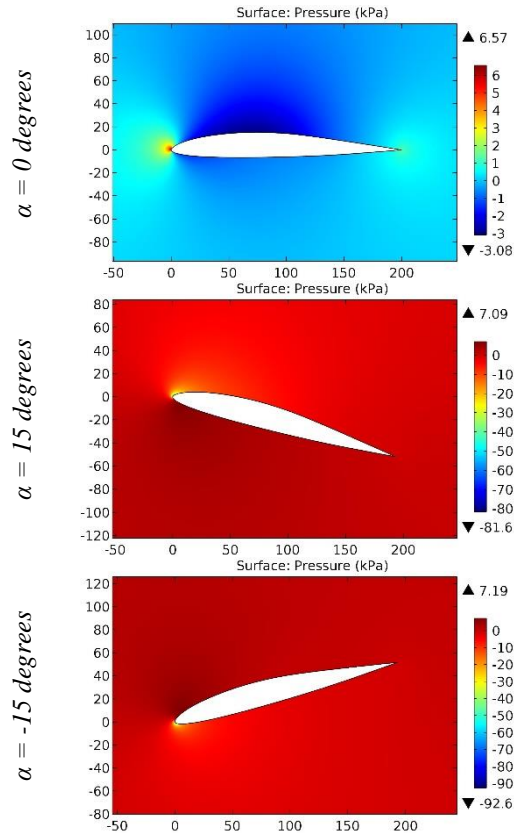


Figure 35. The pressure contours on the surfaces of the E231 airfoil.

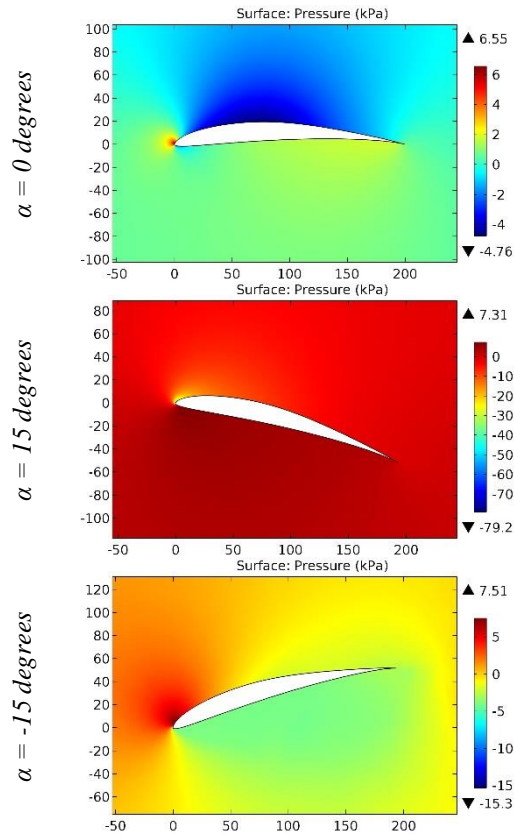


**Impact Factor:**

<b>SISRA (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350



**Figure 36.** The pressure contours on the surfaces of the E374 airfoil.



**Figure 37.** The pressure contours on the surfaces of the E385 (8,41%) airfoil.

**Impact Factor:**

<b>SIS (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

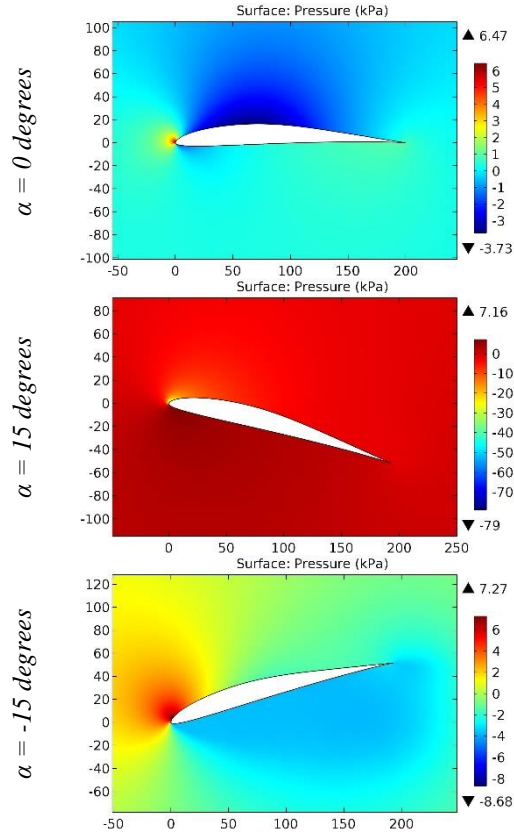


Figure 38. The pressure contours on the surfaces of the E387 airfoil.

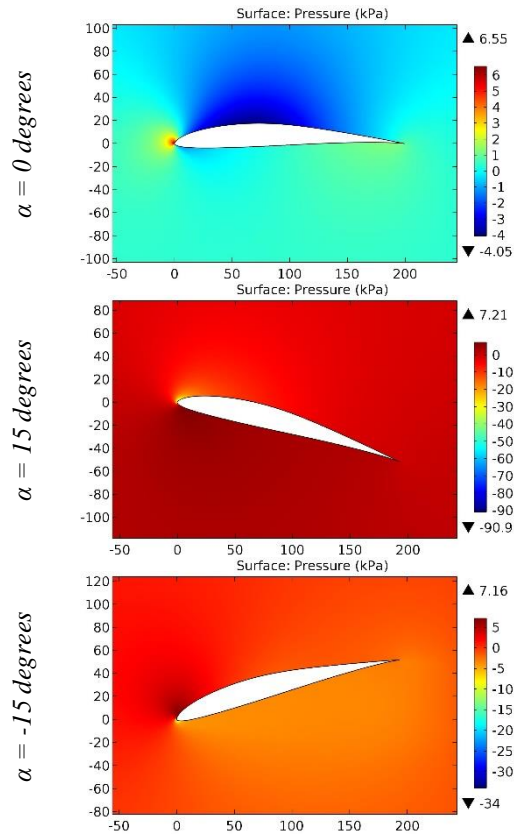


Figure 39. The pressure contours on the surfaces of the E392 (10,15%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

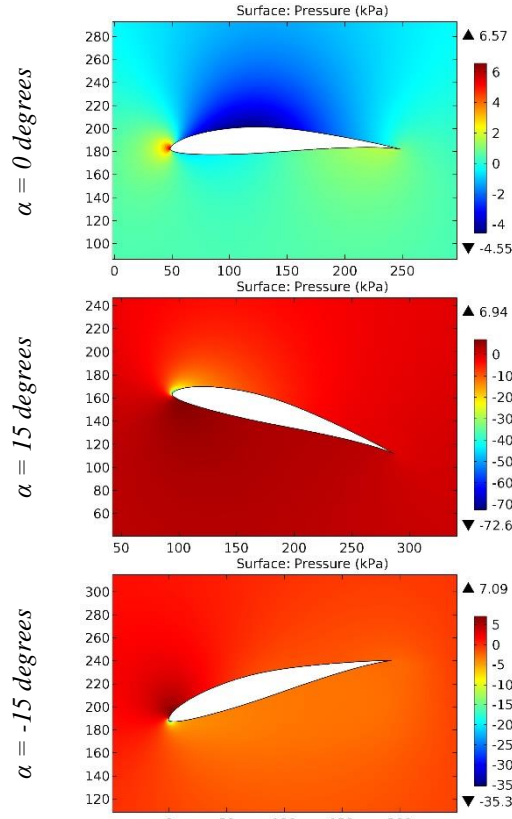


Figure 40. The pressure contours on the surfaces of the E393 airfoil.

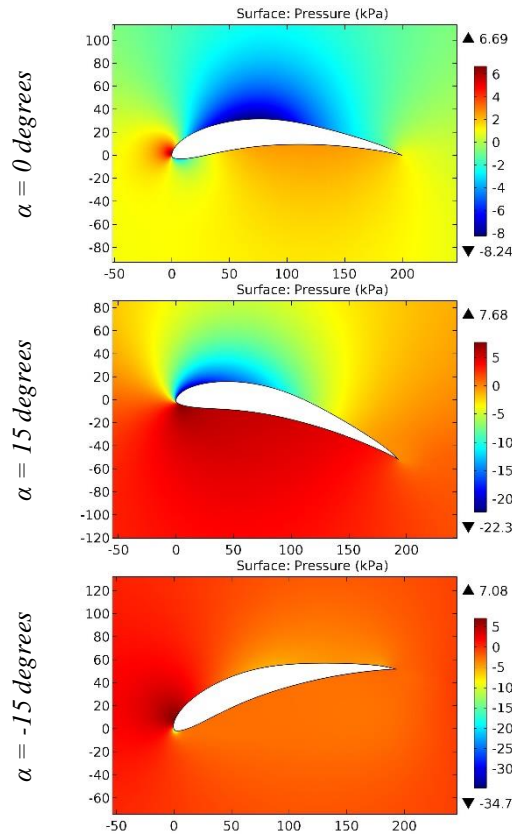


Figure 41. The pressure contours on the surfaces of the E423 airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

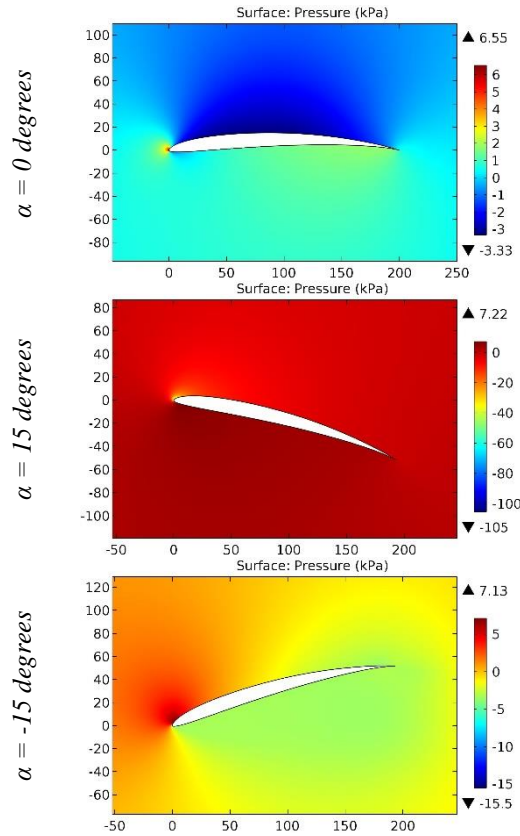


Figure 42. The pressure contours on the surfaces of the E471 (6,25%) airfoil.

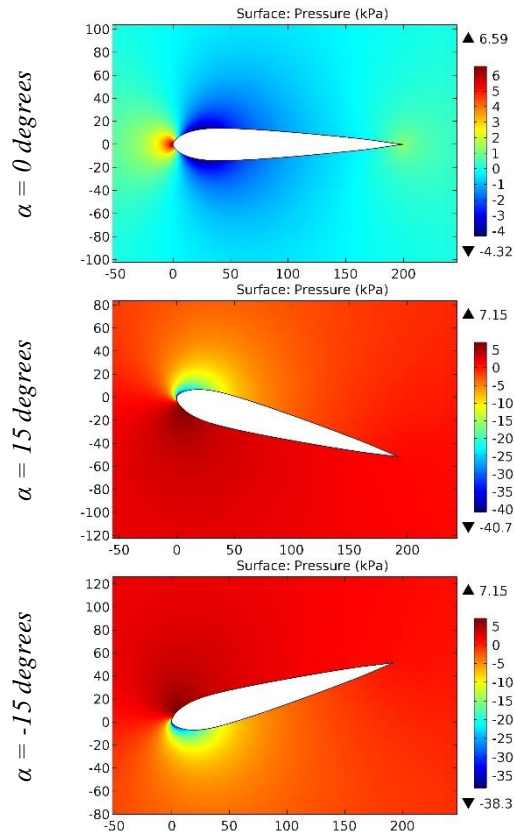


Figure 43. The pressure contours on the surfaces of the E474 (14,09%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

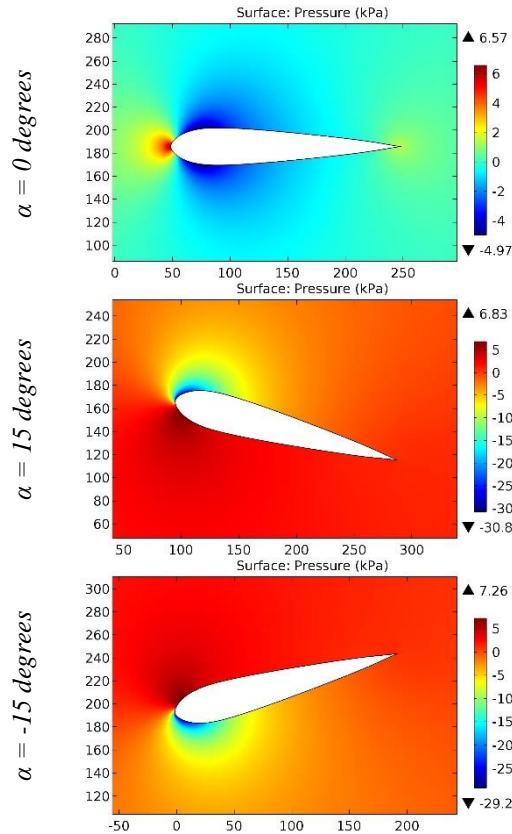


Figure 44. The pressure contours on the surfaces of the E474 (14,09%)- portato al 16 airfoil.

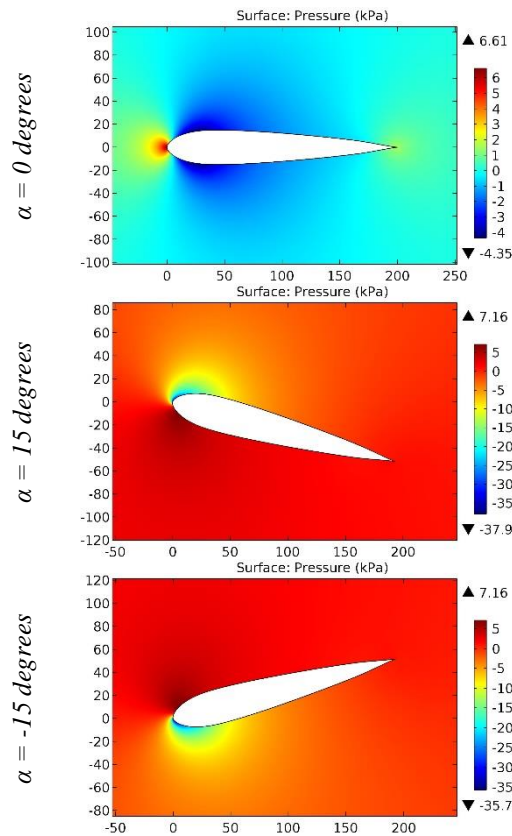


Figure 45. The pressure contours on the surfaces of the E475 (15,01%) airfoil.



**Impact Factor:**

<b>SISRA</b> (India) = <b>6.317</b>	<b>SIS</b> (USA) = <b>0.912</b>	<b>ICV</b> (Poland) = <b>6.630</b>
<b>ISI</b> (Dubai, UAE) = <b>1.582</b>	<b>ПИИИ</b> (Russia) = <b>3.939</b>	<b>PIF</b> (India) = <b>1.940</b>
<b>GIF</b> (Australia) = <b>0.564</b>	<b>ESJI</b> (KZ) = <b>9.035</b>	<b>IBI</b> (India) = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF</b> (Morocco) = <b>7.184</b>	<b>OAJI</b> (USA) = <b>0.350</b>

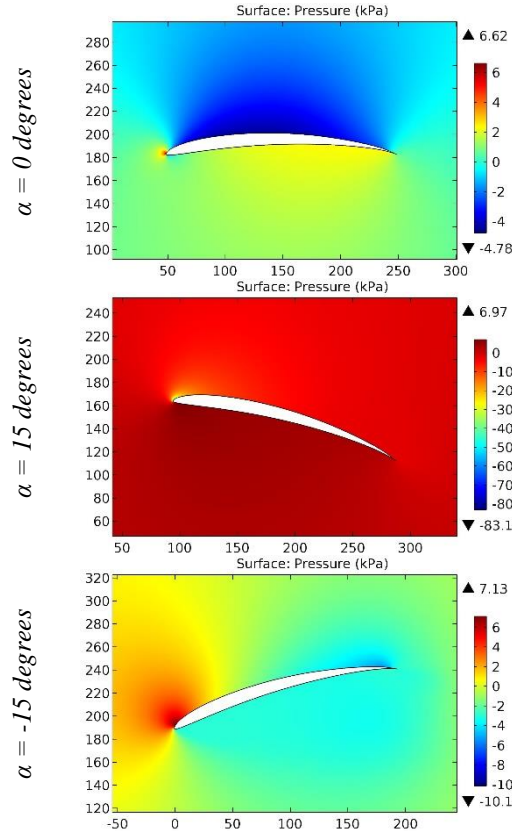


Figure 46. The pressure contours on the surfaces of the E61 (5,64%) airfoil.

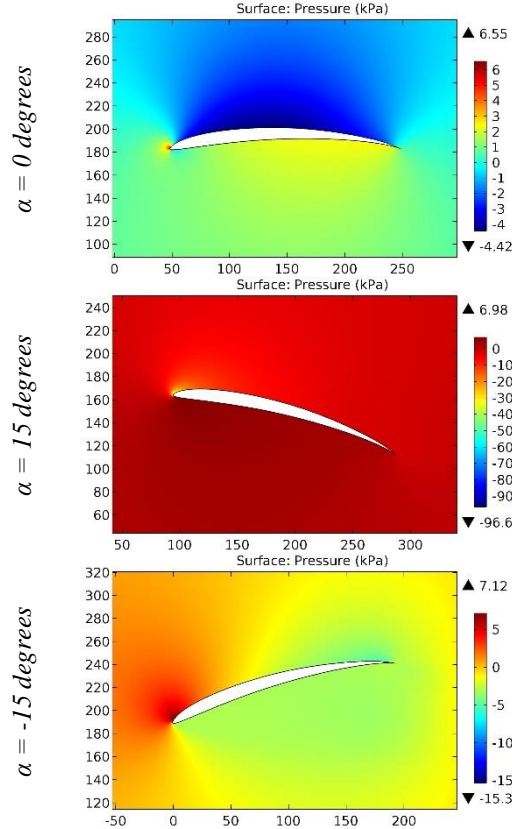


Figure 47. The pressure contours on the surfaces of the E61 (5.64%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

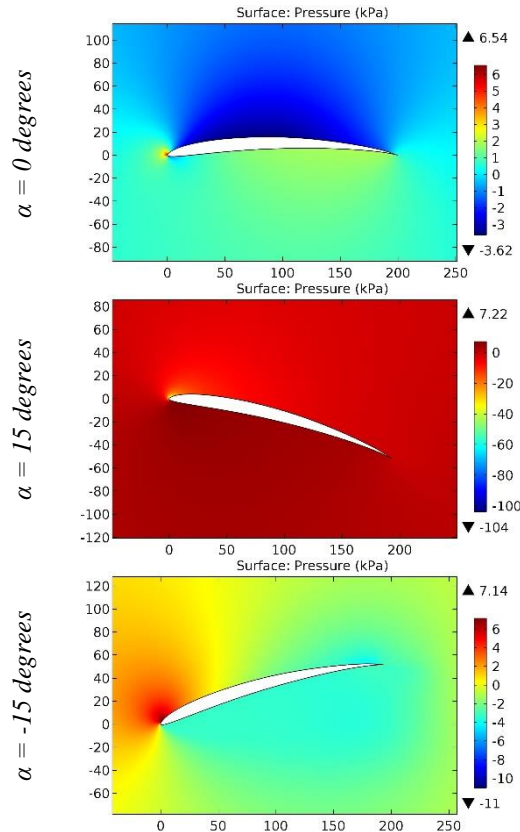


Figure 48. The pressure contours on the surfaces of the E62 (5,62%) airfoil.

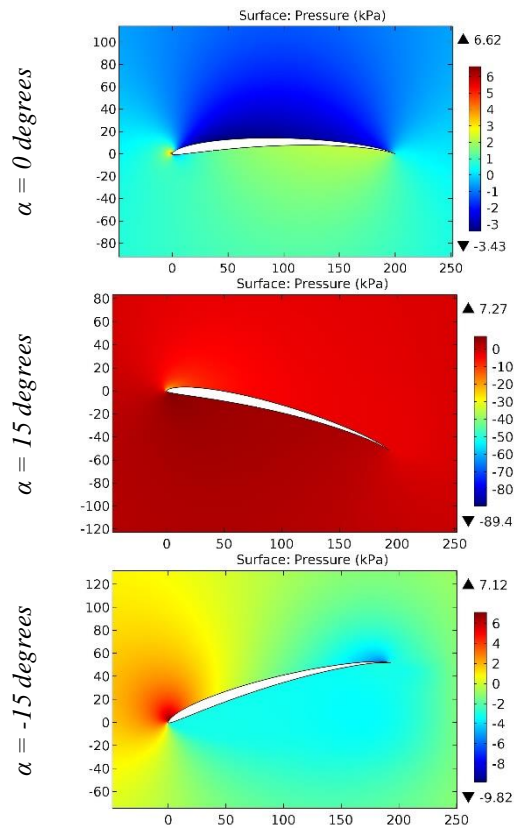


Figure 49. The pressure contours on the surfaces of the E63 (4,25%) airfoil.

**Impact Factor:**

<b>ISRA (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>

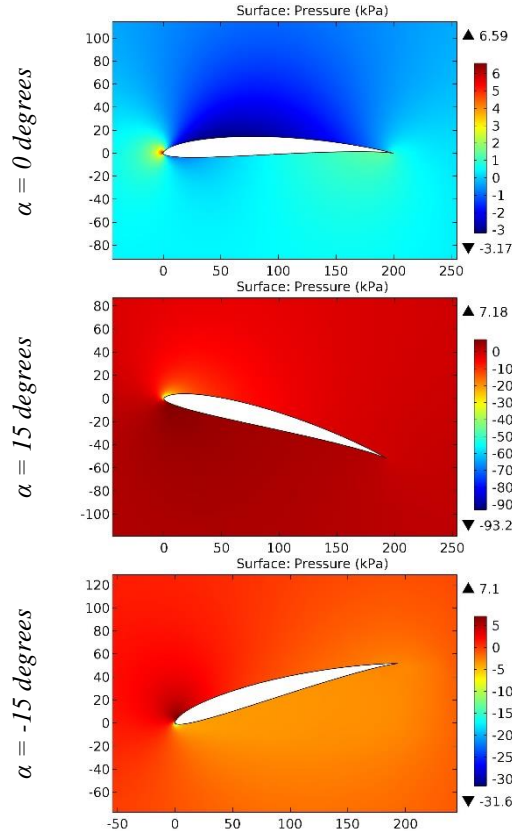


Figure 50. The pressure contours on the surfaces of the E64 (8,45%) airfoil.

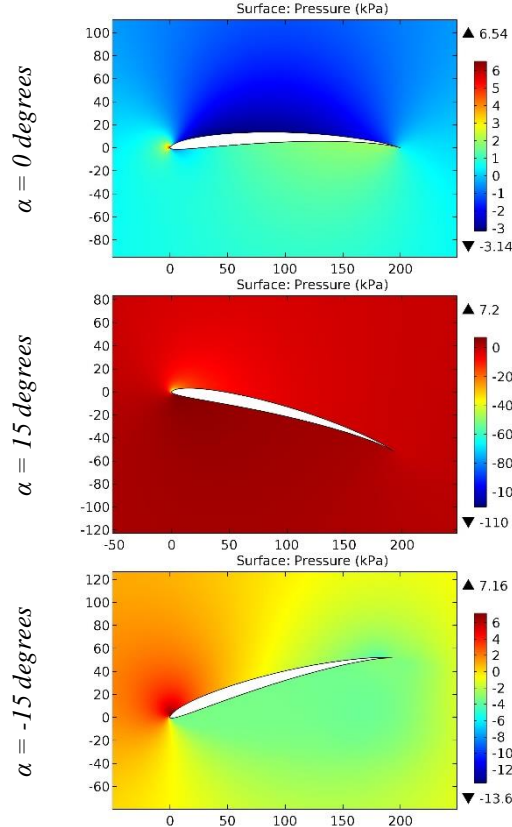


Figure 51. The pressure contours on the surfaces of the E71 (5,15%) airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

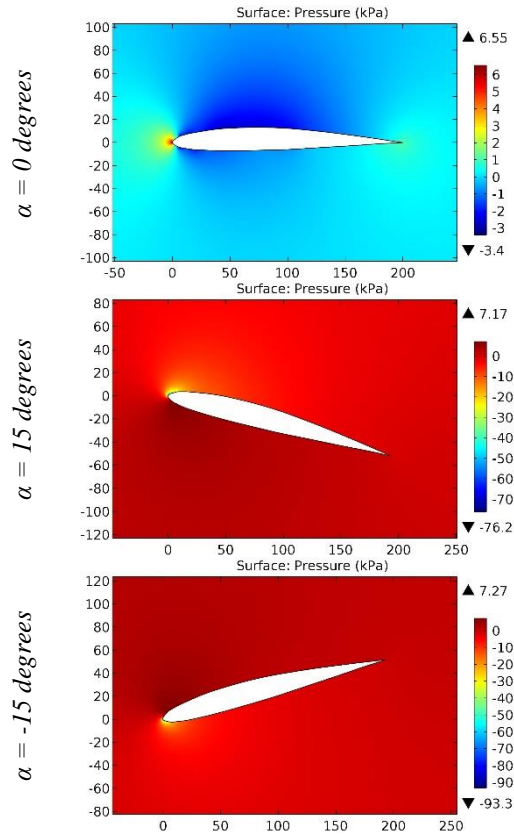


Figure 52. The pressure contours on the surfaces of the EB 1,5-10 airfoil.

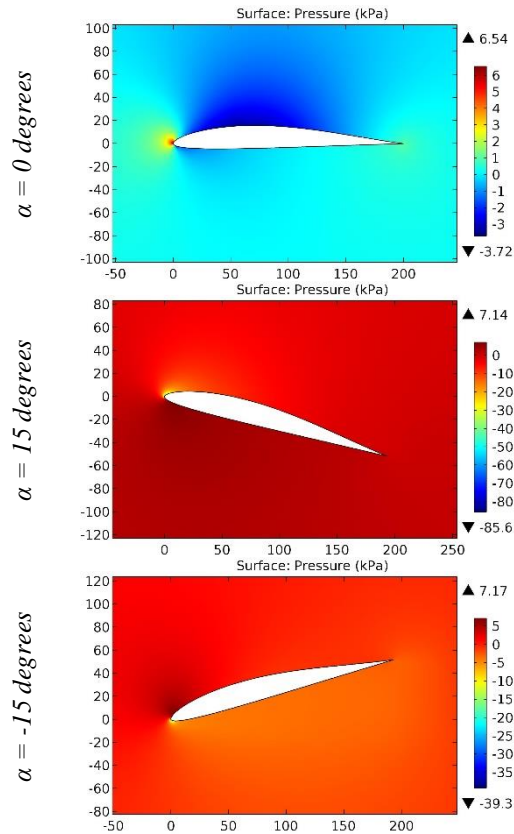


Figure 53. The pressure contours on the surfaces of the EB 380 airfoil.

**Impact Factor:**

<b>SIS (USA)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

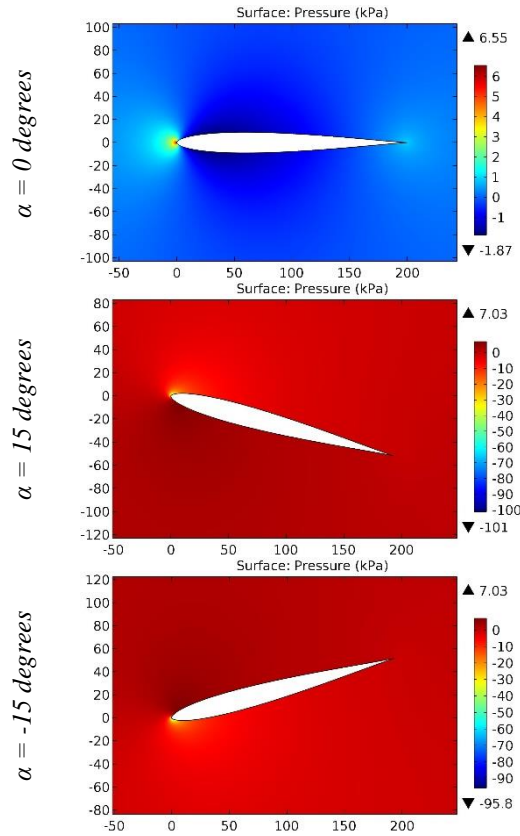


Figure 54. The pressure contours on the surfaces of the EH 0,0-9,0 airfoil.

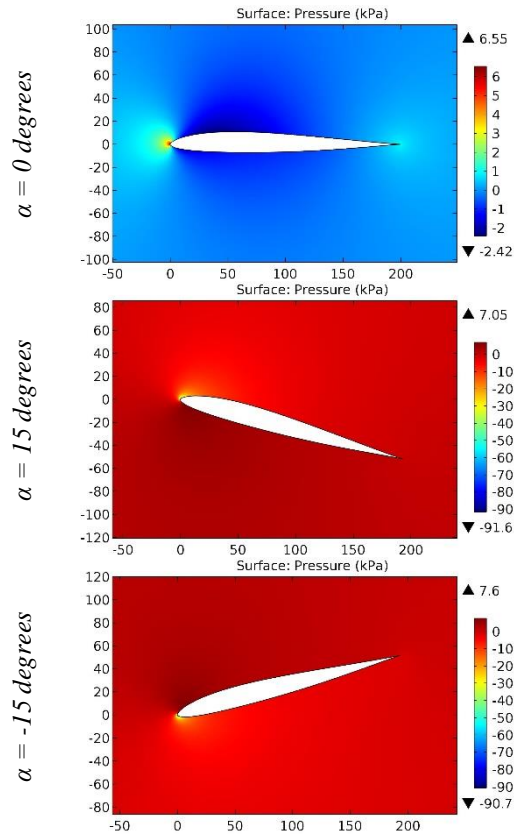


Figure 55. The pressure contours on the surfaces of the EH 1,0-9,0 airfoil.



**Impact Factor:**

<b>SISRA (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

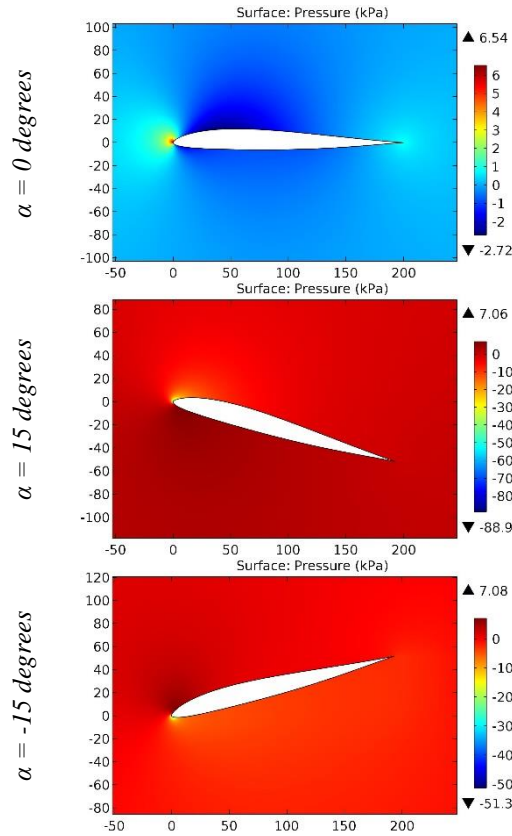


Figure 56. The pressure contours on the surfaces of the EH 1,5-9,0 airfoil.

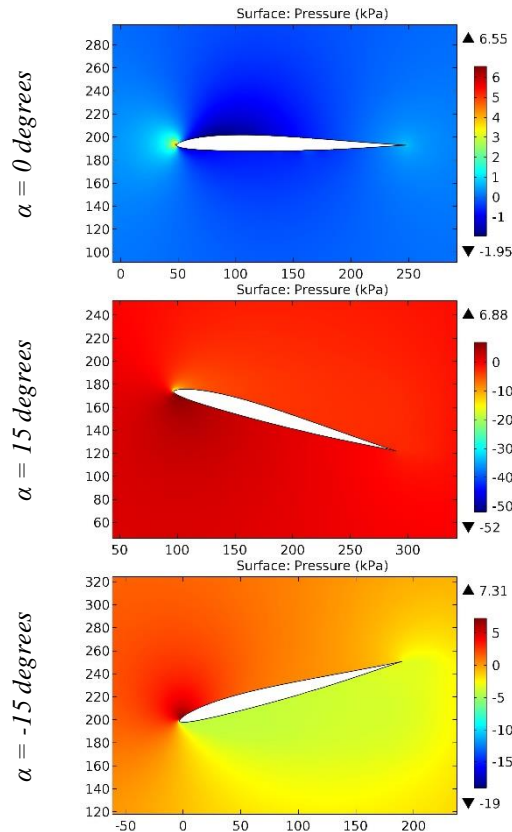


Figure 57. The pressure contours on the surfaces of the EH 1.0/7.0 (from EH 1.0/9.0) airfoil.

**Impact Factor:**

<b>SISRA (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

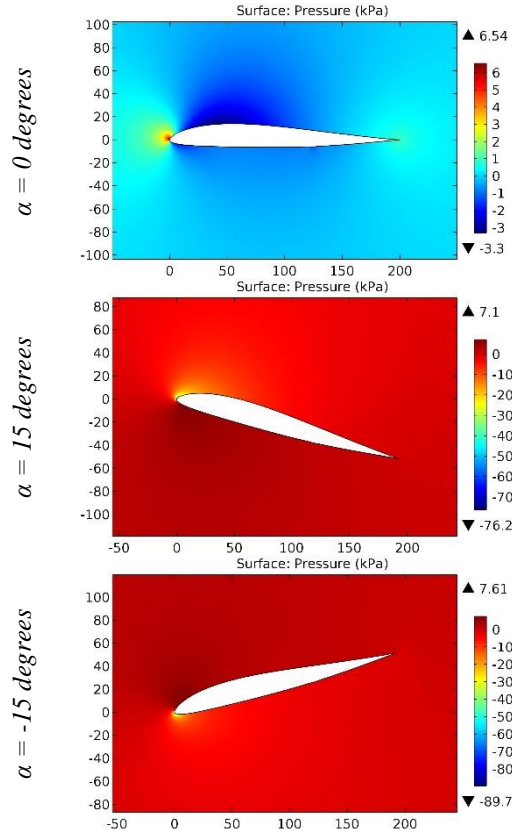


Figure 58. The pressure contours on the surfaces of the EH 2,0-10 airfoil.

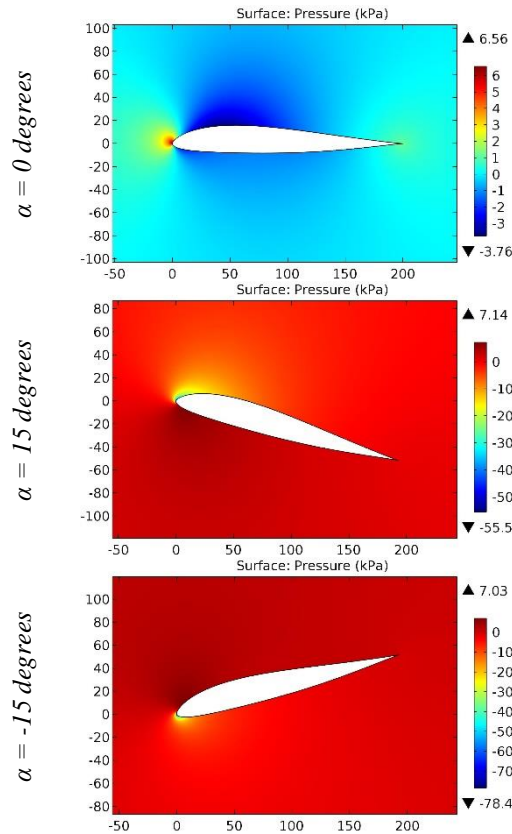
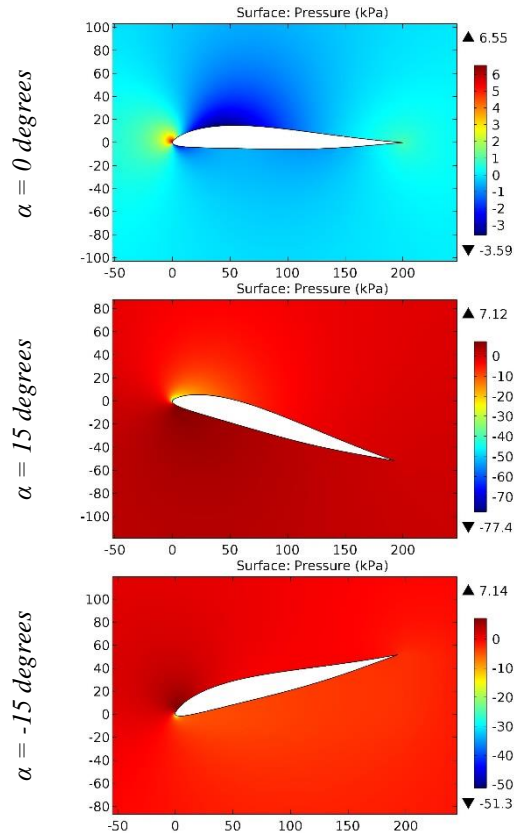


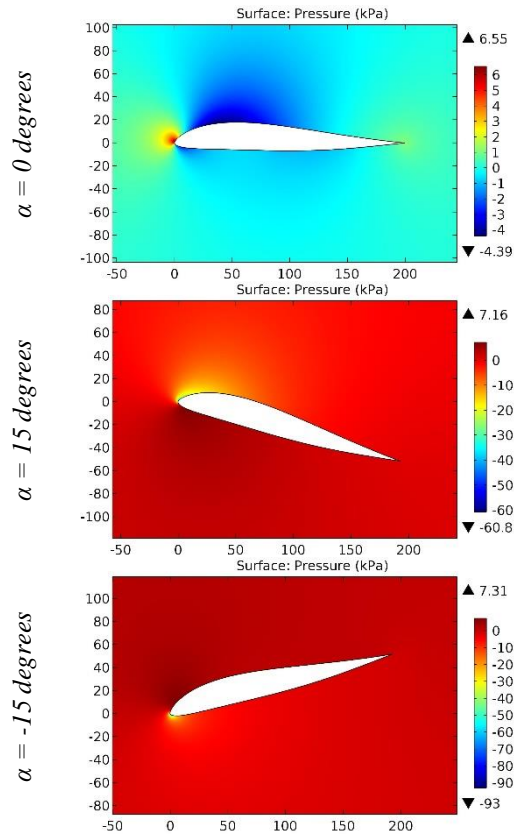
Figure 59. The pressure contours on the surfaces of the EH 2,0-12 airfoil.

**Impact Factor:**

<b>SISRA (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>



**Figure 60. The pressure contours on the surfaces of the EH 2,5-10 airfoil.**



**Figure 61. The pressure contours on the surfaces of the EH 3,0-12 airfoil.**

**Impact Factor:**

<b>SIS (USA)</b> = <b>0.912</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>

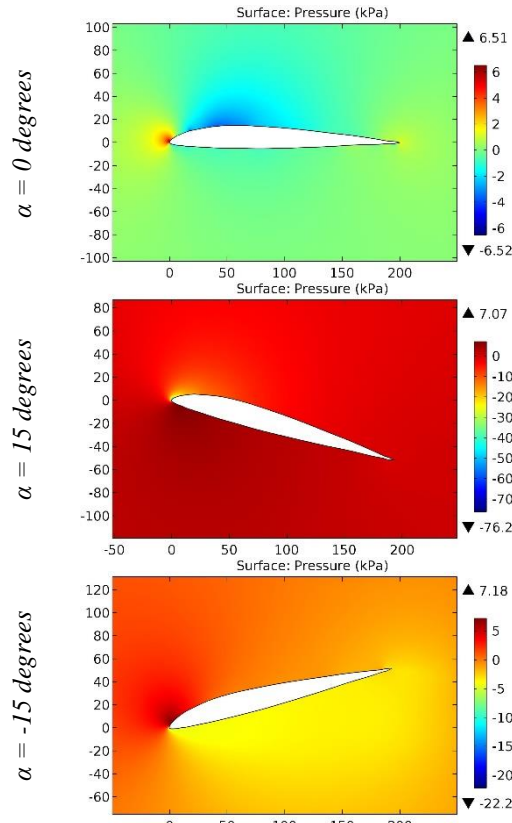


Figure 62. The pressure contours on the surfaces of the Eiffel 375 airfoil.

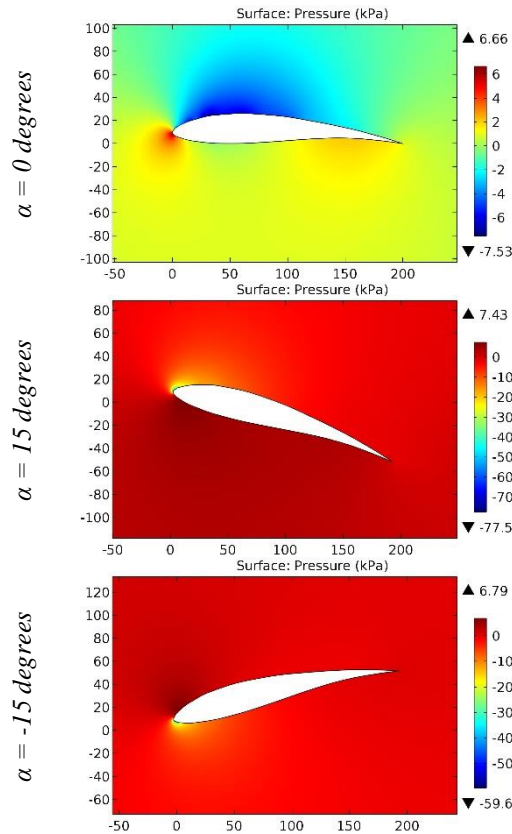


Figure 63. The pressure contours on the surfaces of the Eiffel 400 airfoil.

**Impact Factor:**

<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>OAJI (USA)</b> = 0.350
<b>PIHII (Russia)</b> = 3.939	
<b>ESJI (KZ)</b> = 9.035	
<b>SJIF (Morocco)</b> = 7.184	

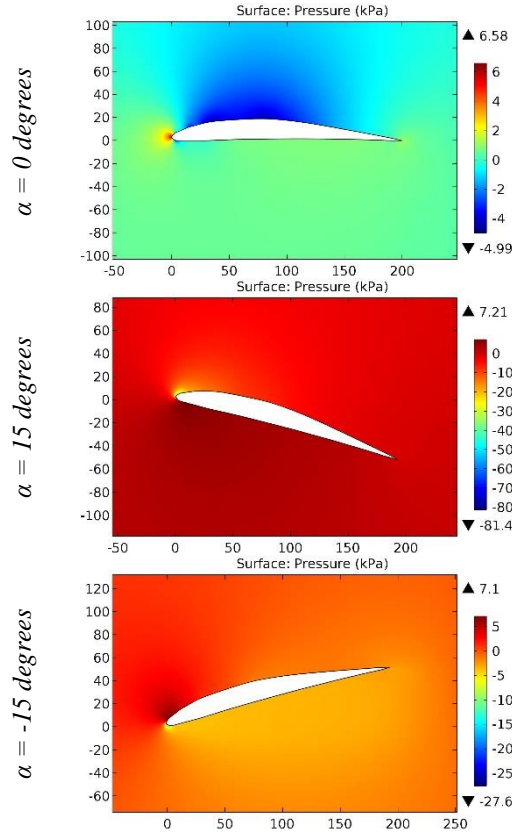


Figure 64. The pressure contours on the surfaces of the Eiffel 428 airfoil.

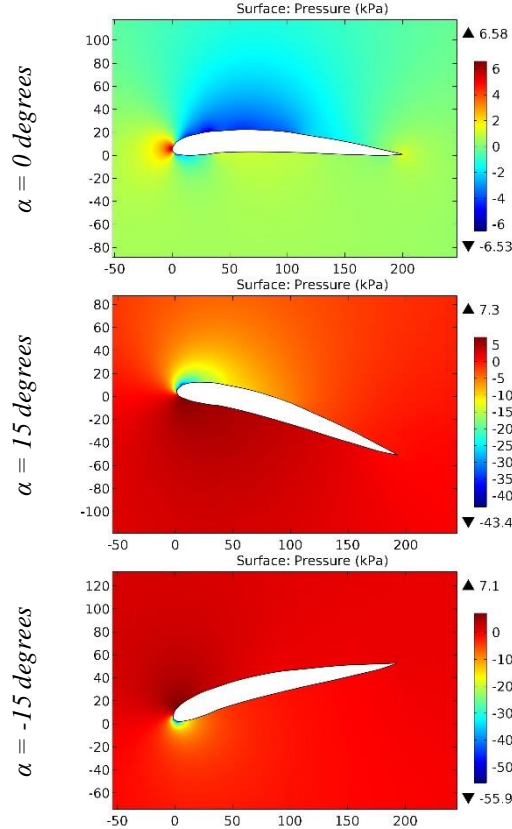


Figure 65. The pressure contours on the surfaces of the Eiffel 430 airfoil.



**Impact Factor:**

<b>SIS (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИЦ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>

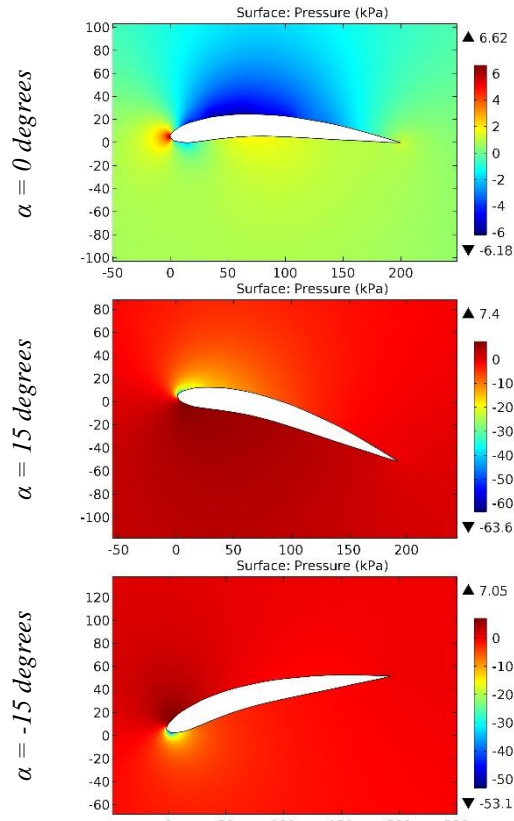


Figure 66. The pressure contours on the surfaces of the Eiffel 431 airfoil.

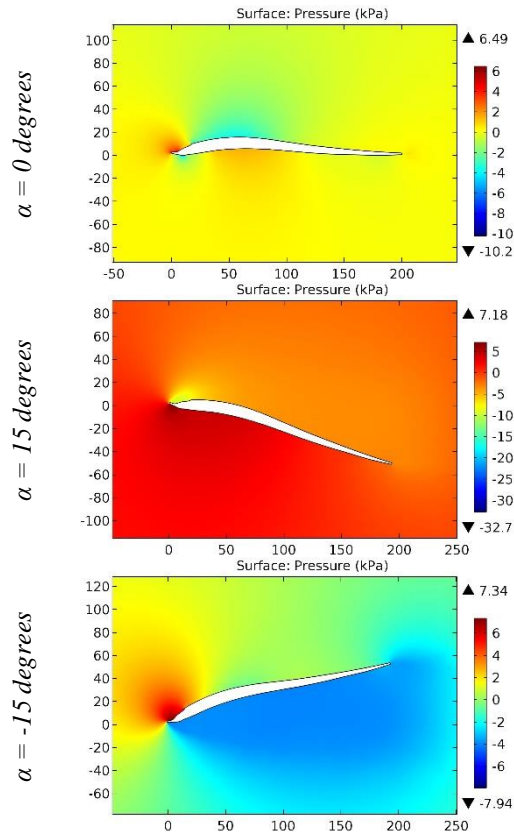
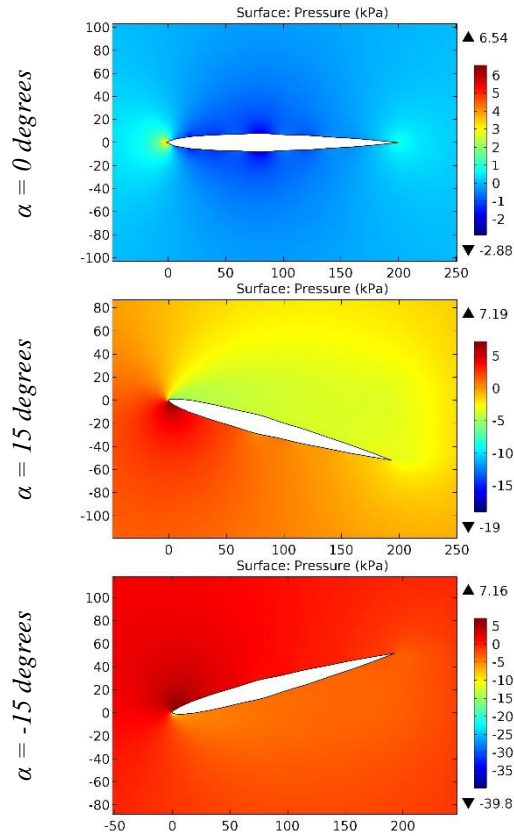


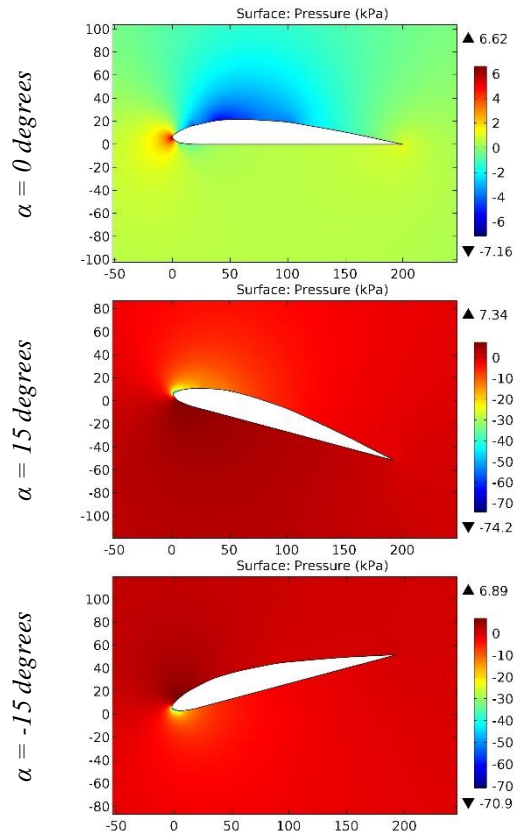
Figure 67. The pressure contours on the surfaces of the EIFFL32 airfoil.

**Impact Factor:**

<b>SIS (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>



**Figure 68.** The pressure contours on the surfaces of the EIFFL338 airfoil.



**Figure 69.** The pressure contours on the surfaces of the EIFFL359 airfoil.

**Impact Factor:**

<b>SIS (USA)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИЦ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

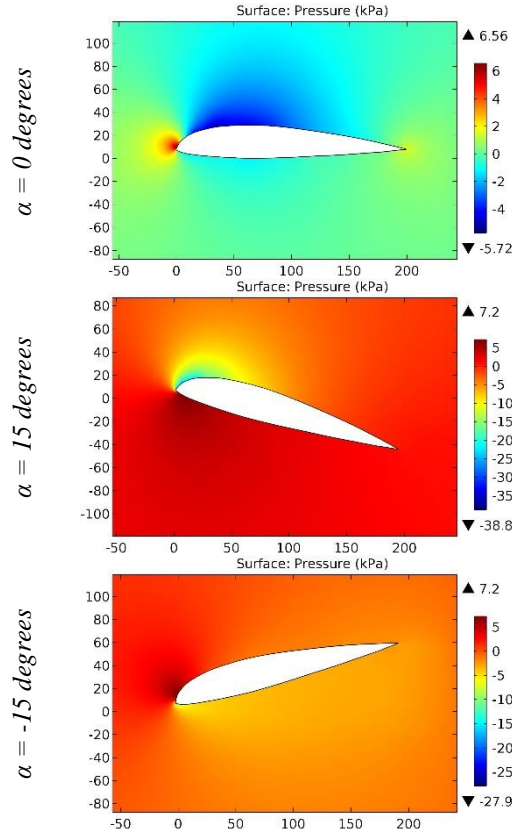


Figure 70. The pressure contours on the surfaces of the EIFFL371 airfoil.

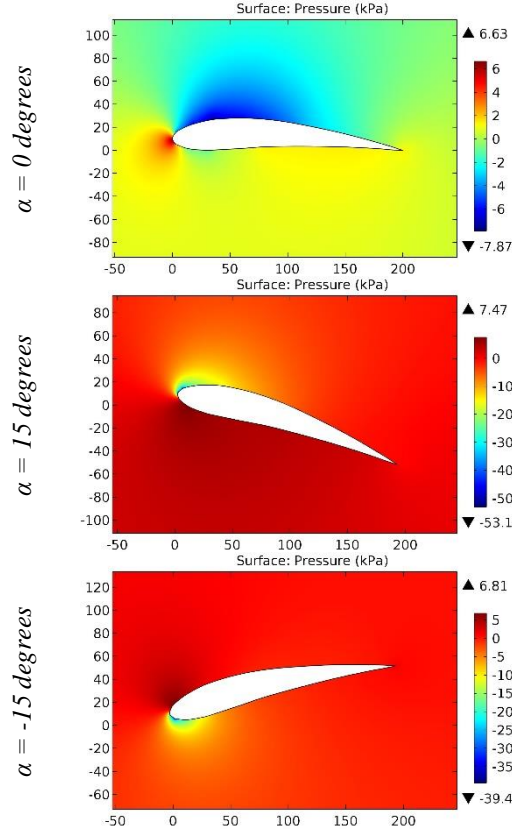


Figure 71. The pressure contours on the surfaces of the EIFFL385 airfoil.

**Impact Factor:**

<b>SISRA (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>

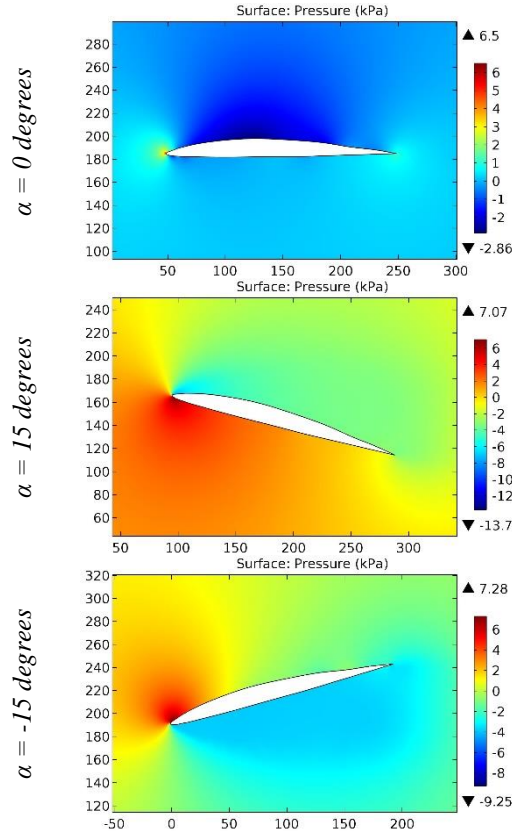


Figure 72. The pressure contours on the surfaces of the EIFFL389 airfoil.

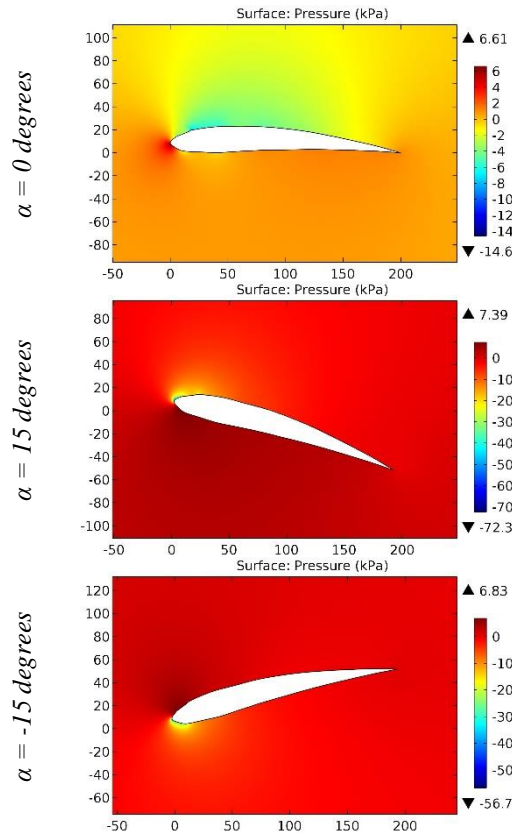
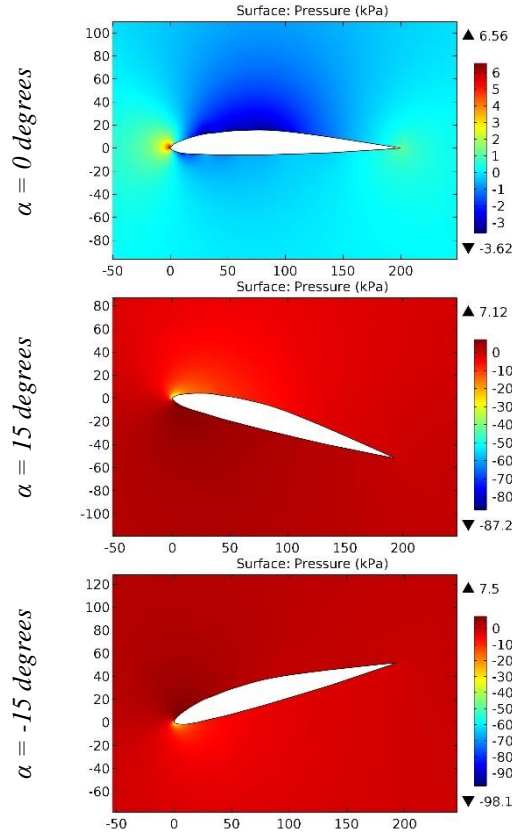


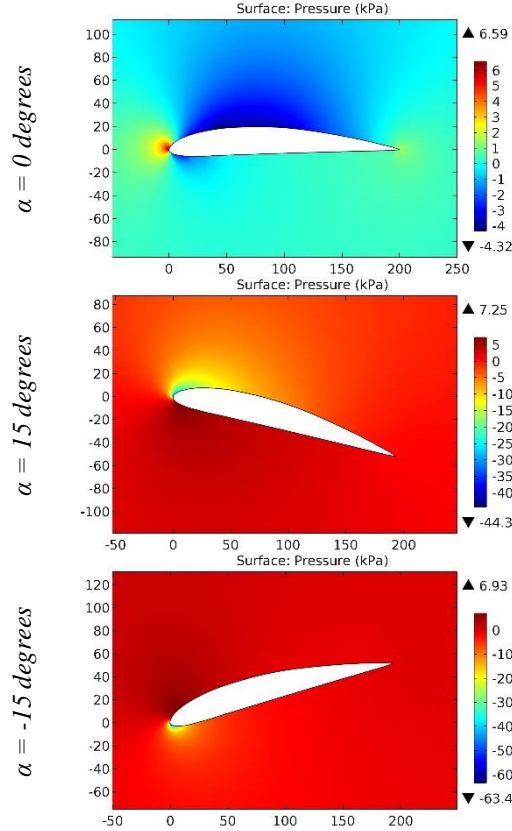
Figure 73. The pressure contours on the surfaces of the EIFFL437 airfoil.

**Impact Factor:**

<b>ISRA (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>



**Figure 74.** The pressure contours on the surfaces of the EL 25108 airfoil.

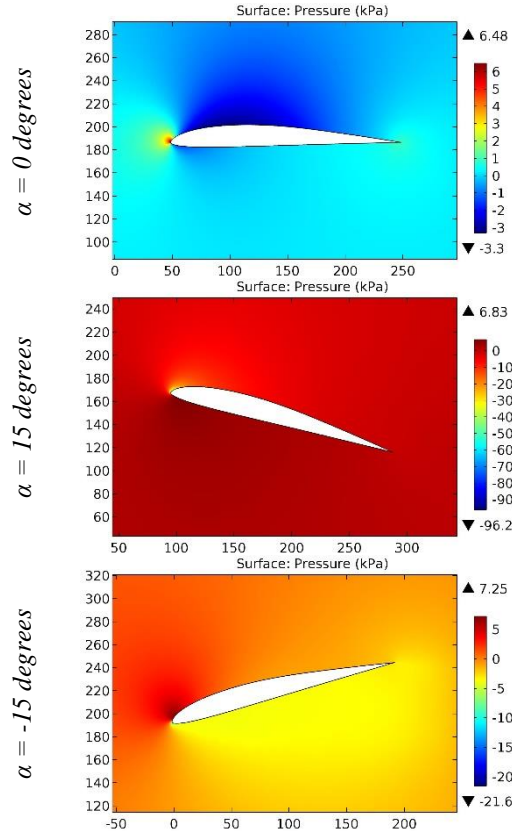


**Figure 75.** The pressure contours on the surfaces of the ELEK airfoil.

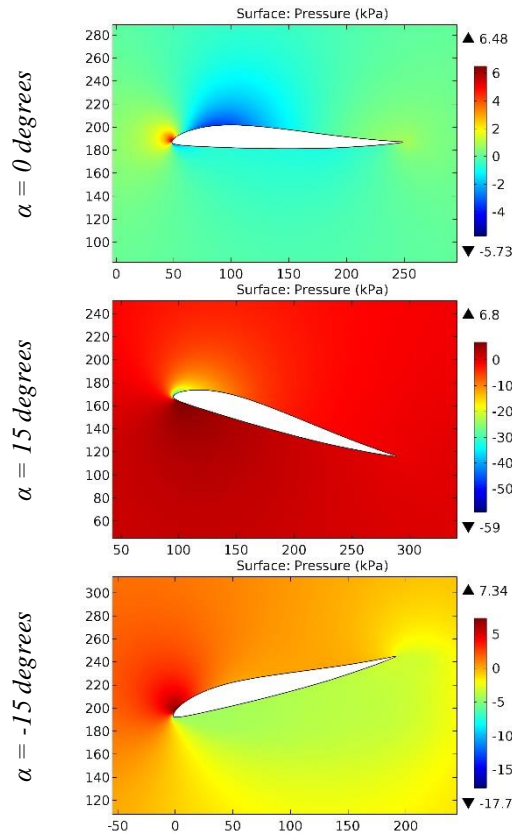


**Impact Factor:**

<b>SISRA (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>



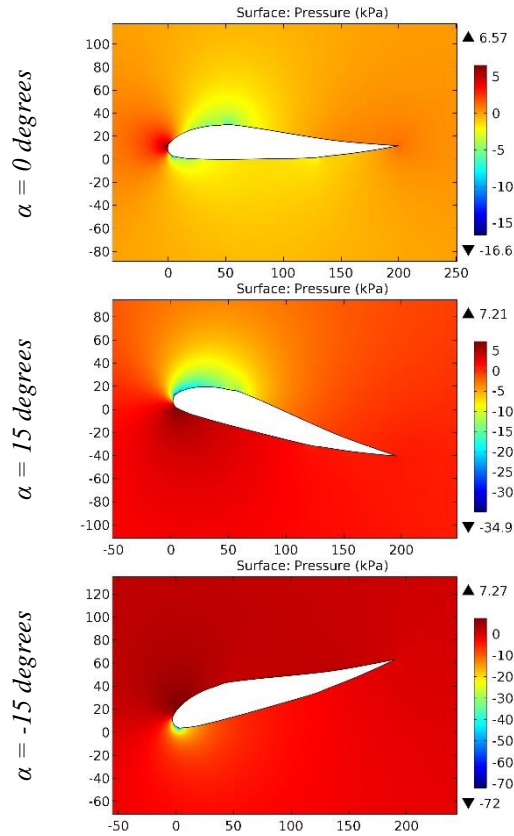
**Figure 76. The pressure contours on the surfaces of the ELINA airfoil.**



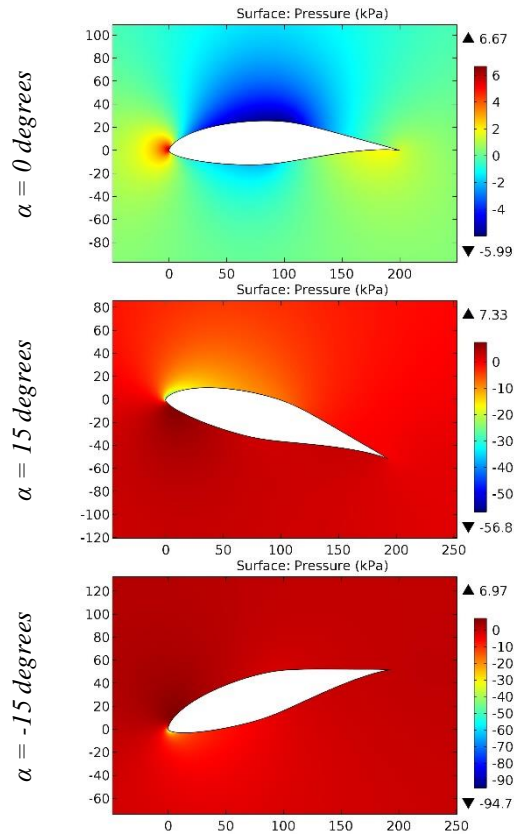
**Figure 77. The pressure contours on the surfaces of the EMX-07 airfoil.**

**Impact Factor:**

<b>SIS (USA)</b>	<b>= 0.912</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 9.035</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>



**Figure 78. The pressure contours on the surfaces of the EPB - 1 airfoil.**



**Figure 79. The pressure contours on the surfaces of the EPPLER 1098 airfoil.**

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

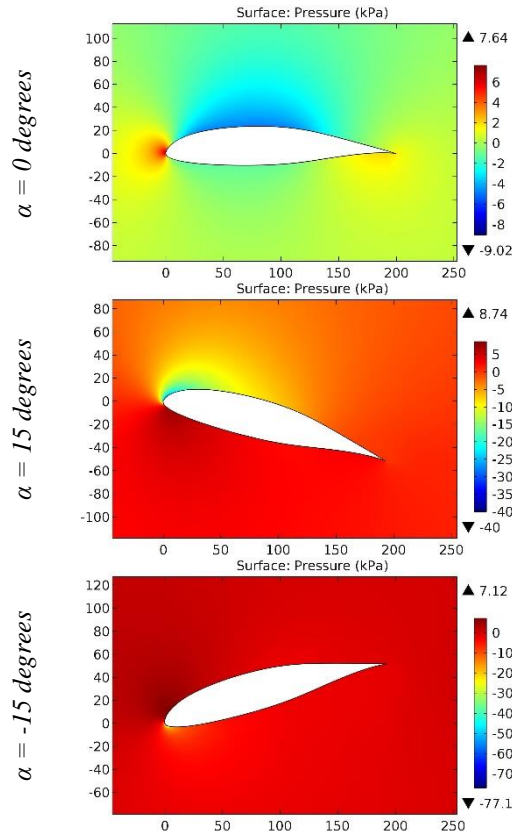


Figure 80. The pressure contours on the surfaces of the EPPLER 1200 airfoil.

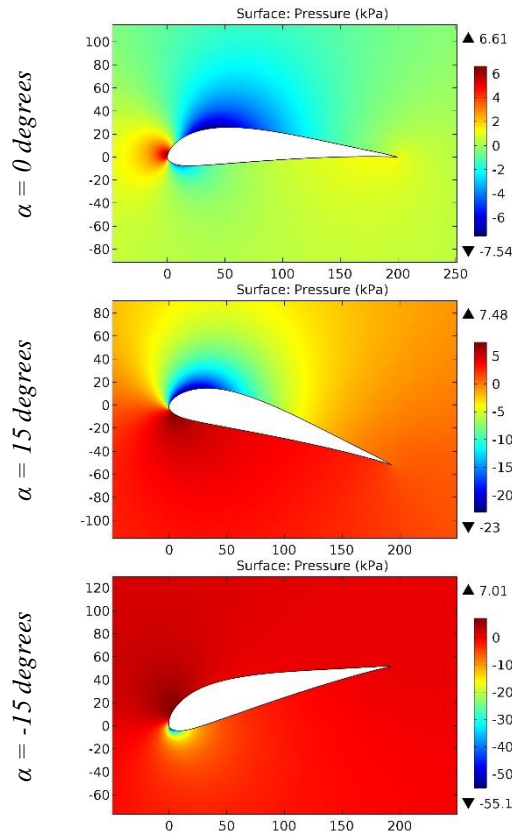
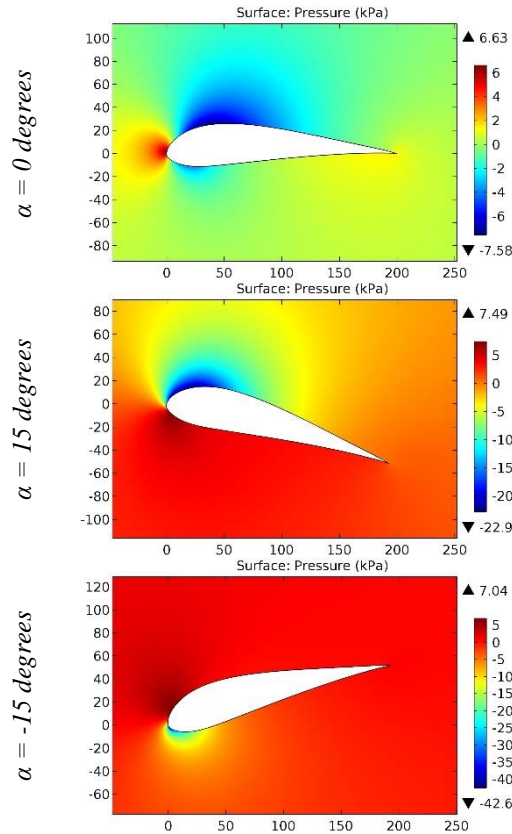


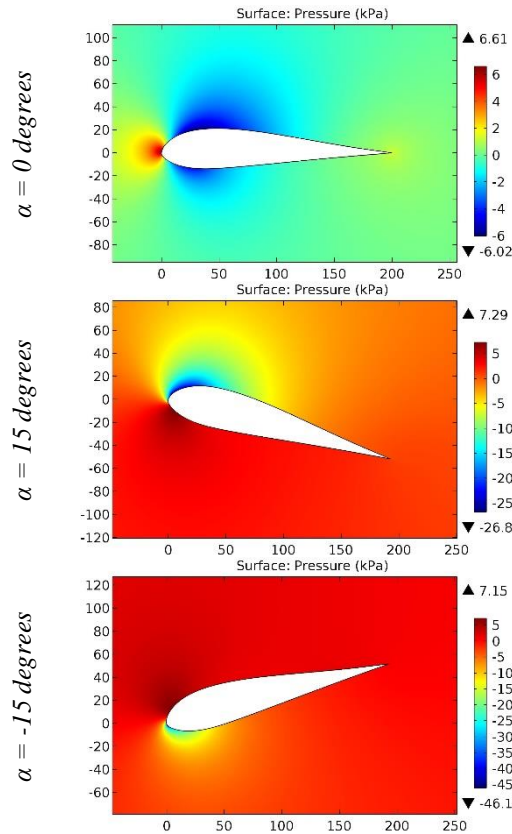
Figure 81. The pressure contours on the surfaces of the EPPLER 1210 airfoil.

**Impact Factor:**

<b>SISRA</b> (India) = <b>6.317</b>	<b>SIS</b> (USA) = <b>0.912</b>	<b>ICV</b> (Poland) = <b>6.630</b>
<b>ISI</b> (Dubai, UAE) = <b>1.582</b>	<b>ПИИИ</b> (Russia) = <b>3.939</b>	<b>PIF</b> (India) = <b>1.940</b>
<b>GIF</b> (Australia) = <b>0.564</b>	<b>ESJI</b> (KZ) = <b>9.035</b>	<b>IBI</b> (India) = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF</b> (Morocco) = <b>7.184</b>	<b>OAJI</b> (USA) = <b>0.350</b>



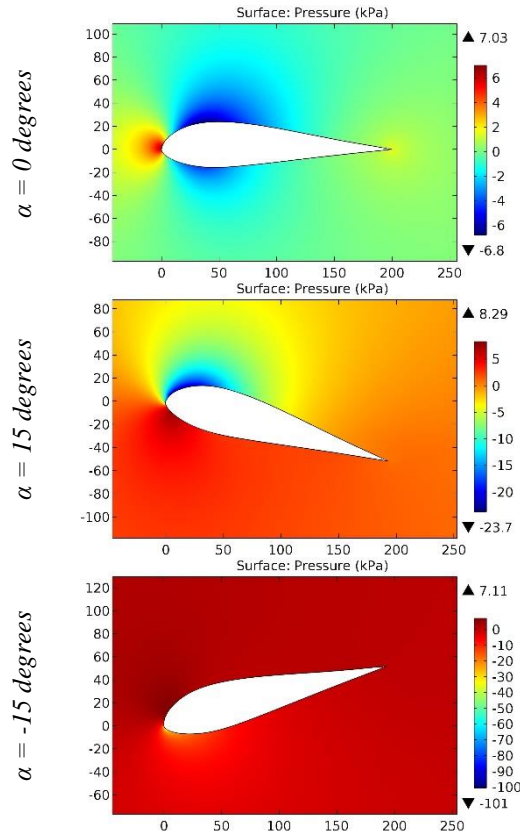
**Figure 82. The pressure contours on the surfaces of the EPPLER 1211 airfoil.**



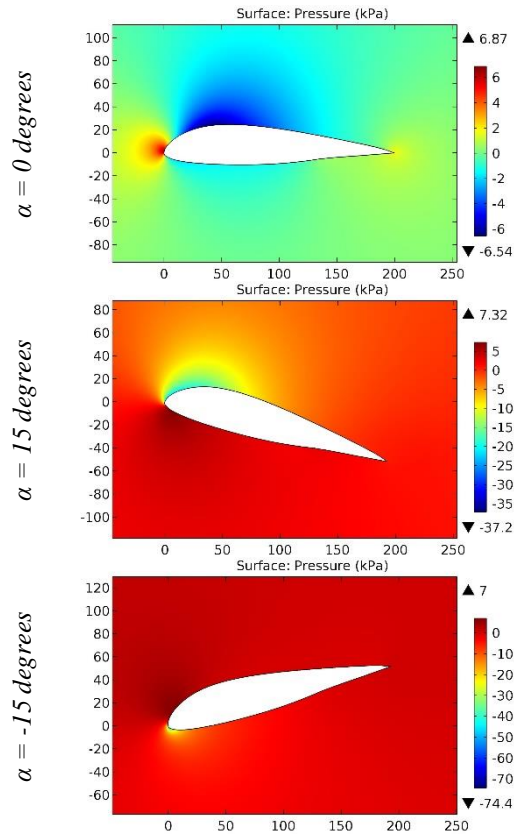
**Figure 83. The pressure contours on the surfaces of the EPPLER 1213 airfoil.**

**Impact Factor:**

<b>SIS (India)</b> = <b>6.317</b>	<b>SIS (USA)</b> = <b>0.912</b>	<b>ICV (Poland)</b> = <b>6.630</b>
<b>ISI (Dubai, UAE)</b> = <b>1.582</b>	<b>ПИИИ (Russia)</b> = <b>3.939</b>	<b>PIF (India)</b> = <b>1.940</b>
<b>GIF (Australia)</b> = <b>0.564</b>	<b>ESJI (KZ)</b> = <b>9.035</b>	<b>IBI (India)</b> = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF (Morocco)</b> = <b>7.184</b>	<b>OAJI (USA)</b> = <b>0.350</b>



**Figure 84. The pressure contours on the surfaces of the EPPLER 1214 airfoil.**

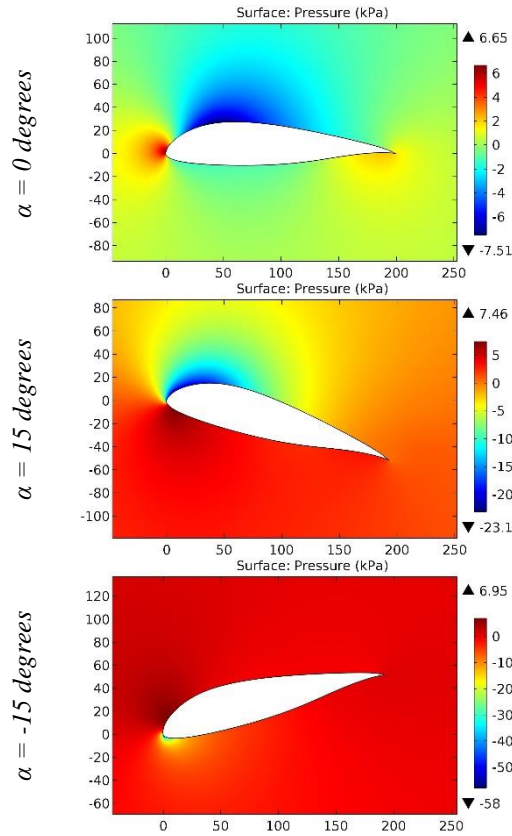


**Figure 85. The pressure contours on the surfaces of the EPPLER 1230 airfoil.**

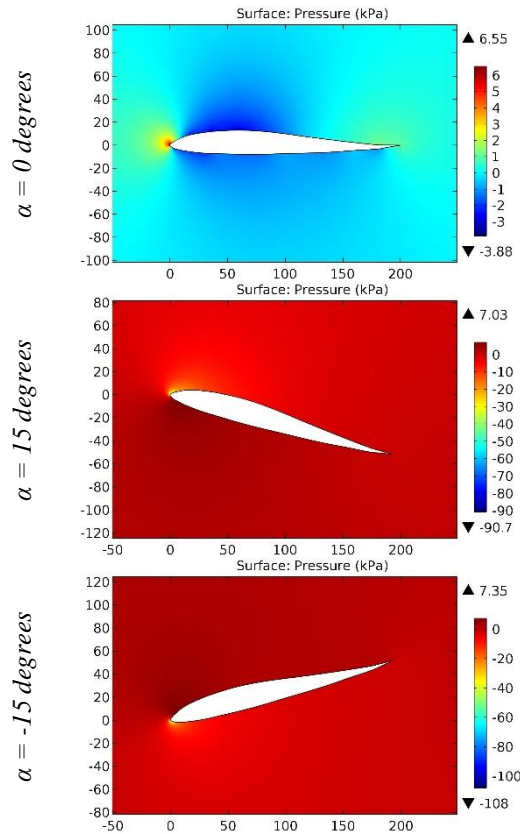


**Impact Factor:**

<b>SIS (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИЦ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350



**Figure 86.** The pressure contours on the surfaces of the EPPLER 1233 airfoil.



**Figure 87.** The pressure contours on the surfaces of the Eppler 166 airfoil.

**Impact Factor:**

<b>SIS (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

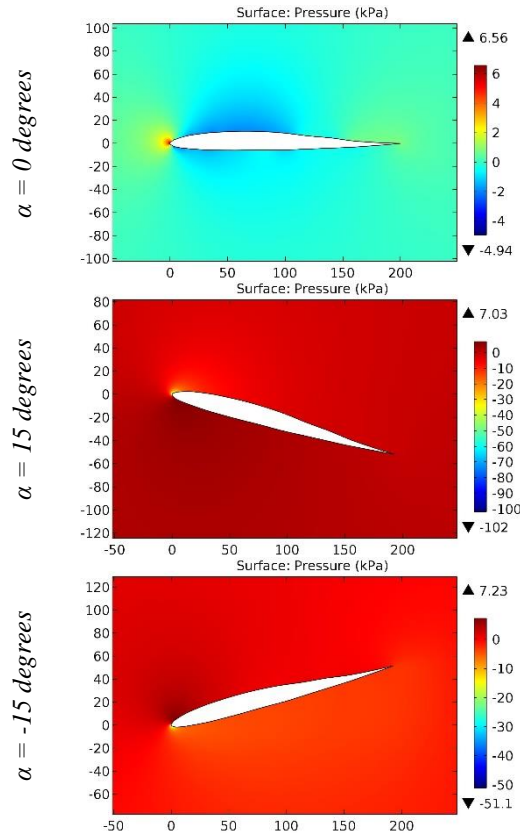


Figure 88. The pressure contours on the surfaces of the Eppler 189 airfoil.

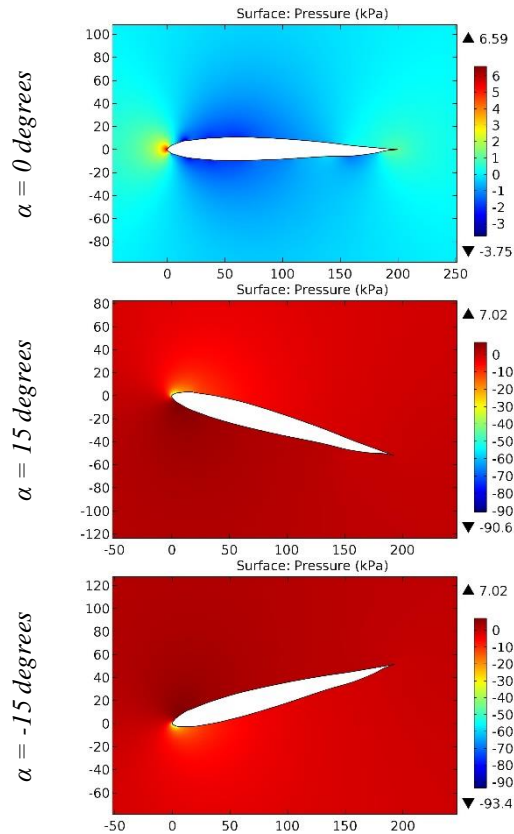


Figure 89. The pressure contours on the surfaces of the Eppler 228 airfoil.

**Impact Factor:**

<b>SISRA</b> (India) = <b>6.317</b>	<b>SIS</b> (USA) = <b>0.912</b>	<b>ICV</b> (Poland) = <b>6.630</b>
<b>ISI</b> (Dubai, UAE) = <b>1.582</b>	<b>ПИИИ</b> (Russia) = <b>3.939</b>	<b>PIF</b> (India) = <b>1.940</b>
<b>GIF</b> (Australia) = <b>0.564</b>	<b>ESJI</b> (KZ) = <b>9.035</b>	<b>IBI</b> (India) = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF</b> (Morocco) = <b>7.184</b>	<b>OAJI</b> (USA) = <b>0.350</b>

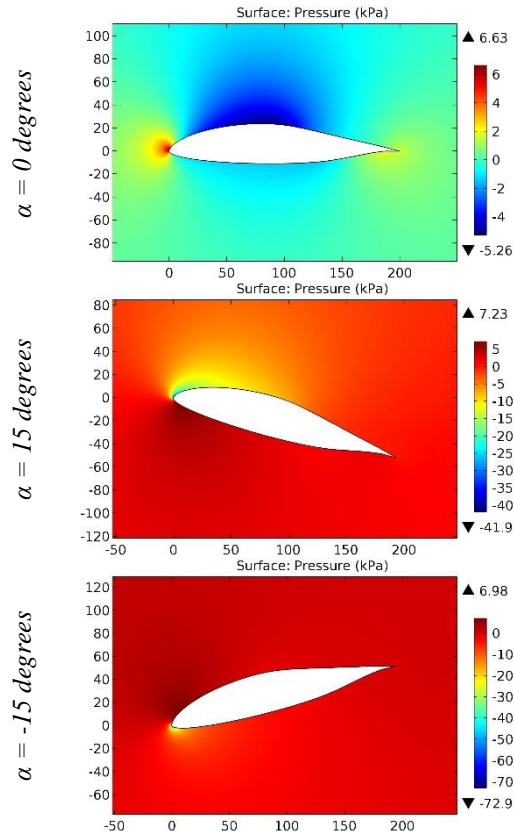


Figure 90. The pressure contours on the surfaces of the EPPLER 266 airfoil.

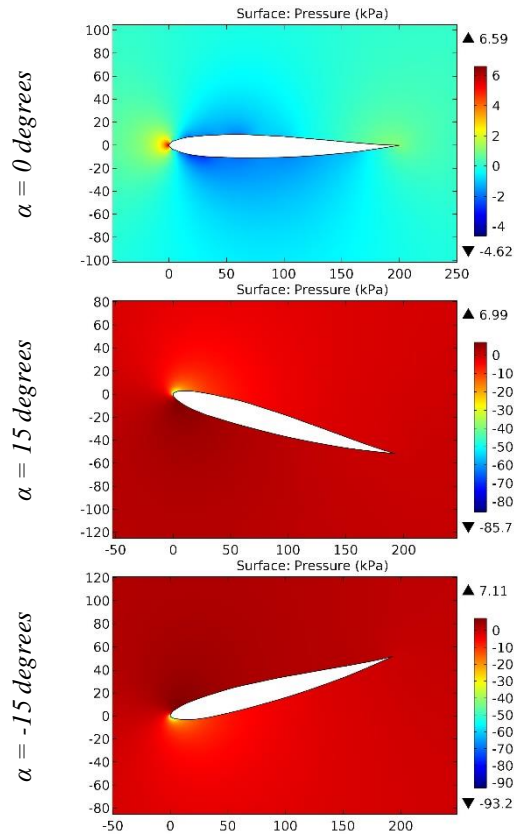


Figure 91. The pressure contours on the surfaces of the Eppler 270 airfoil.

**Impact Factor:**

<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>OAJI (USA)</b> = 0.350
<b>SIS (India)</b> = 6.317	<b>PIHII (Russia)</b> = 3.939
	<b>ESJI (KZ)</b> = 9.035
	<b>SJIF (Morocco)</b> = 7.184

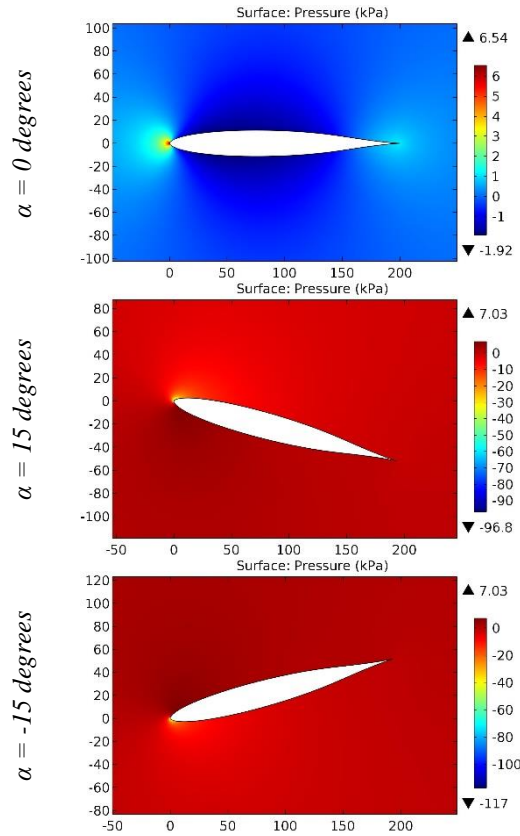


Figure 92. The pressure contours on the surfaces of the EPPLER 297 airfoil.

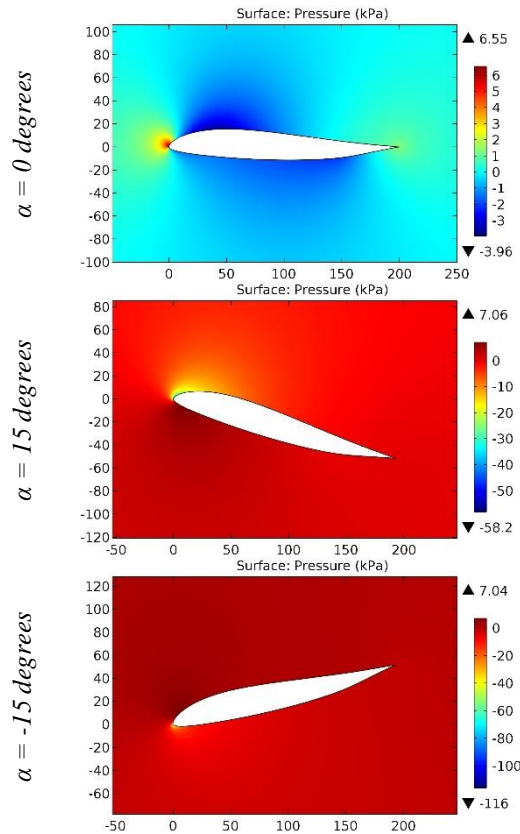
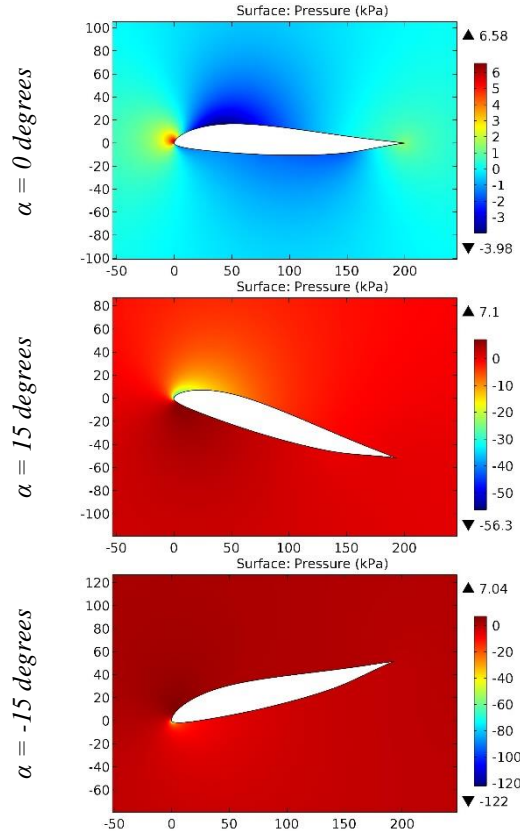


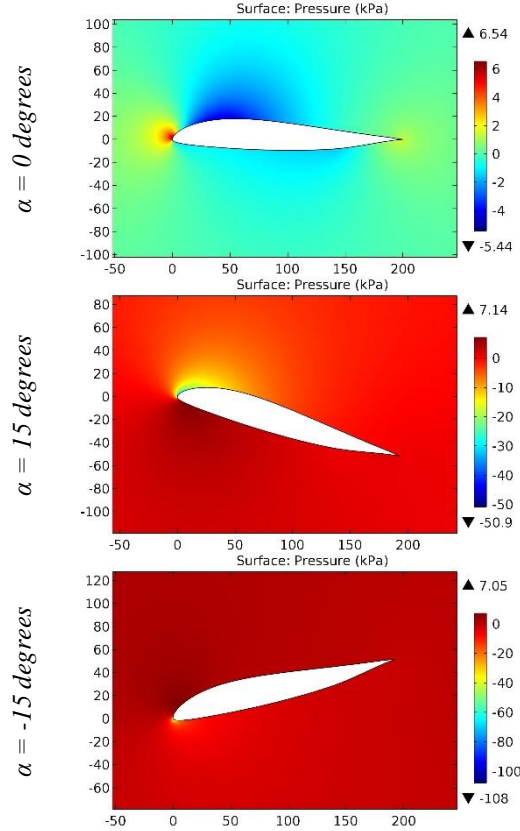
Figure 93. The pressure contours on the surfaces of the EPPLER 325 airfoil.

**Impact Factor:**

<b>SISRA</b> (India) = <b>6.317</b>	<b>SIS</b> (USA) = <b>0.912</b>	<b>ICV</b> (Poland) = <b>6.630</b>
<b>ISI</b> (Dubai, UAE) = <b>1.582</b>	<b>ПИИИ</b> (Russia) = <b>3.939</b>	<b>PIF</b> (India) = <b>1.940</b>
<b>GIF</b> (Australia) = <b>0.564</b>	<b>ESJI</b> (KZ) = <b>9.035</b>	<b>IBI</b> (India) = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF</b> (Morocco) = <b>7.184</b>	<b>OAJI</b> (USA) = <b>0.350</b>



**Figure 94.** The pressure contours on the surfaces of the EPPLER 326 airfoil.



**Figure 95.** The pressure contours on the surfaces of the EPPLER 327 airfoil.



**Impact Factor:**

<b>SIS (USA)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

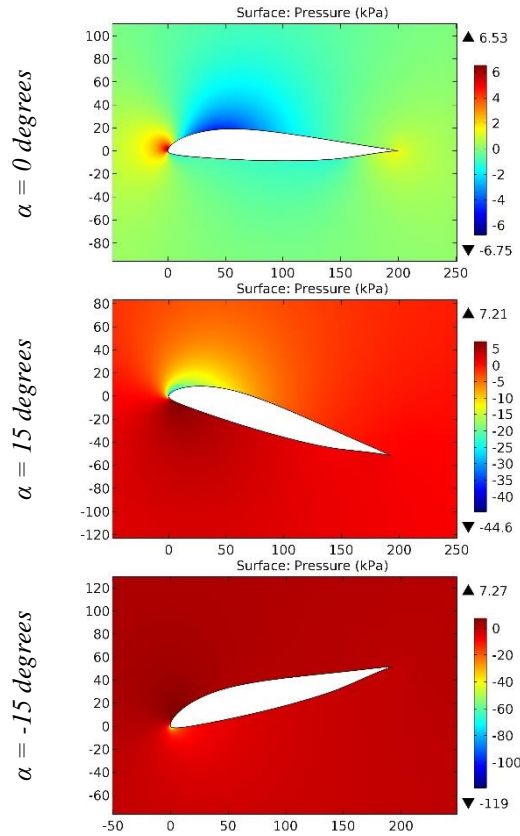


Figure 96. The pressure contours on the surfaces of the EPPLER 328 airfoil.

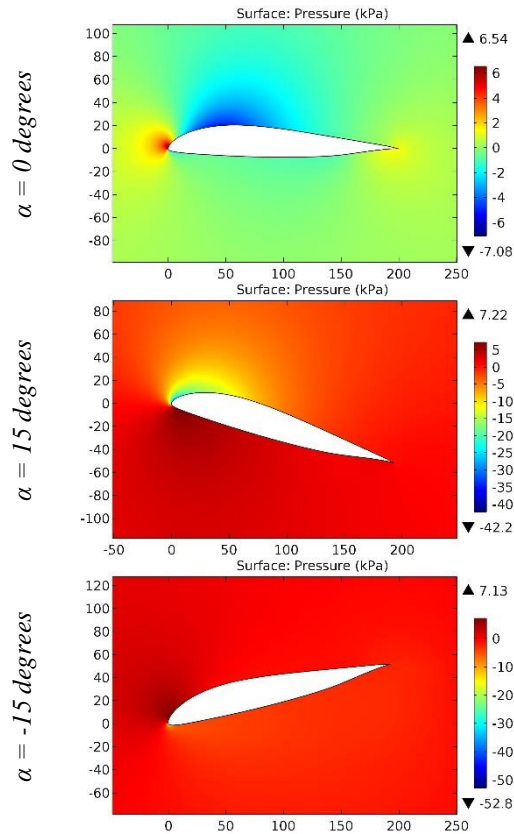


Figure 97. The pressure contours on the surfaces of the EPPLER 329 airfoil.

**Impact Factor:**

<b>SIS (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

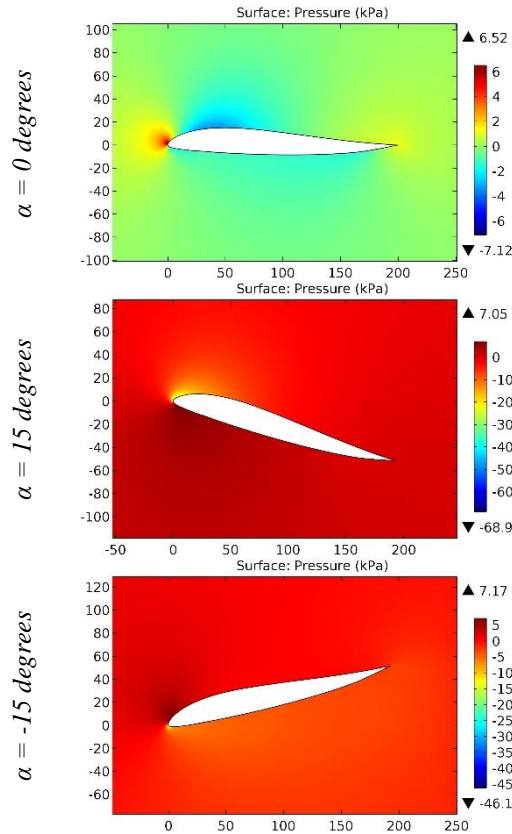


Figure 98. The pressure contours on the surfaces of the EPPLER 330 airfoil.

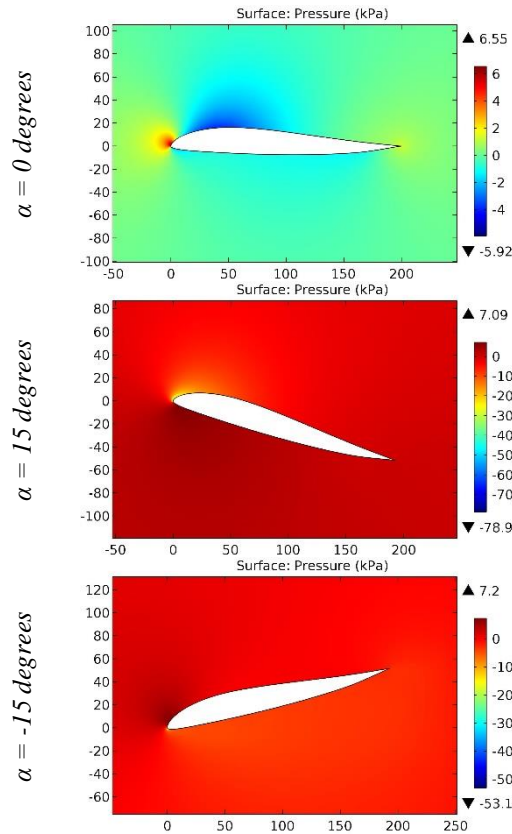


Figure 99. The pressure contours on the surfaces of the EPPLER 331 airfoil.

**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

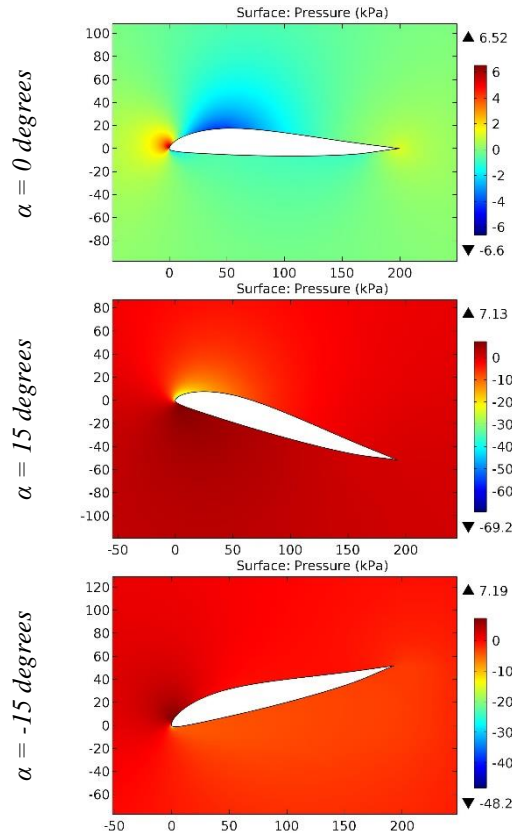


Figure 100. The pressure contours on the surfaces of the EPPLER 332 airfoil.

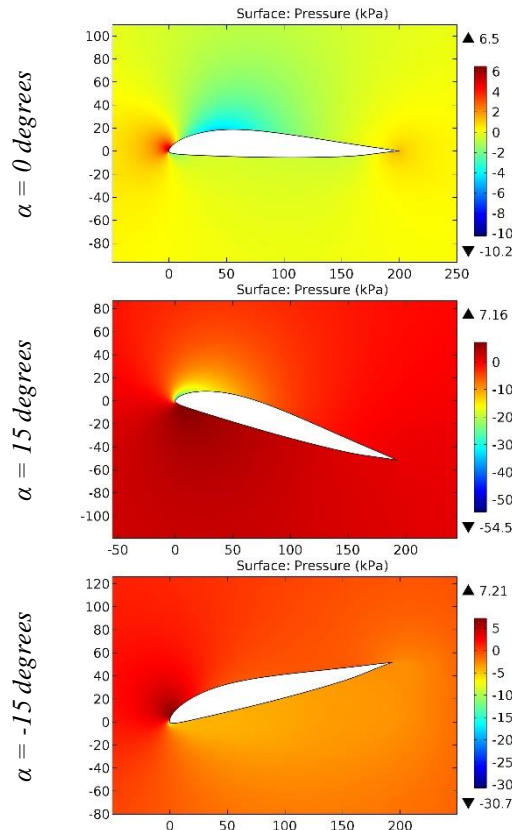
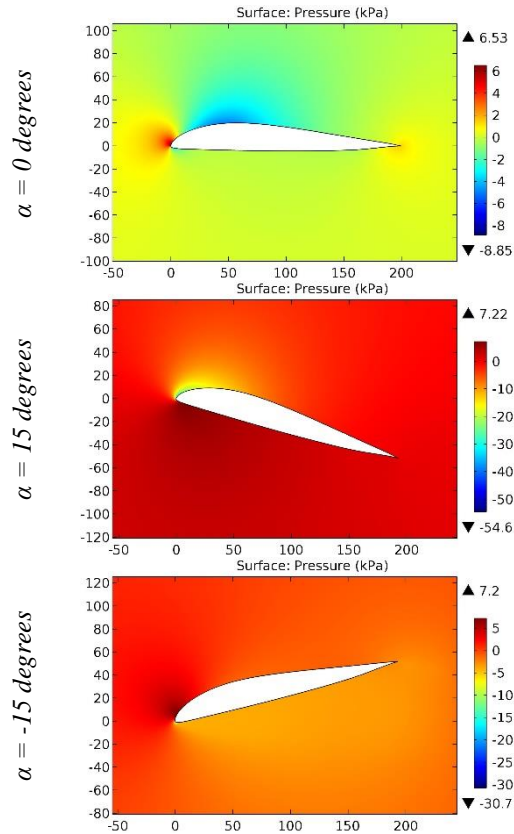


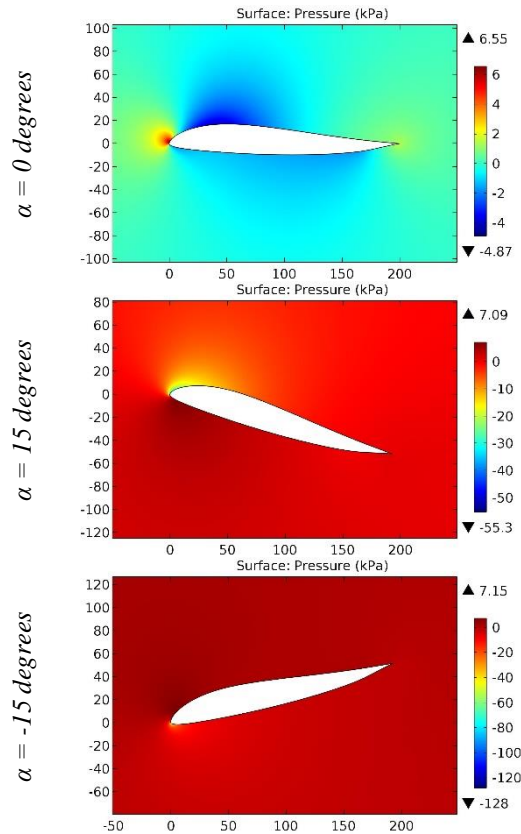
Figure 101. The pressure contours on the surfaces of the EPPLER 333 airfoil.

**Impact Factor:**

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<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350



**Figure 102.** The pressure contours on the surfaces of the EPPLER 334 airfoil.



**Figure 103.** The pressure contours on the surfaces of the EPPLER 335 airfoil.

**Impact Factor:**

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GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

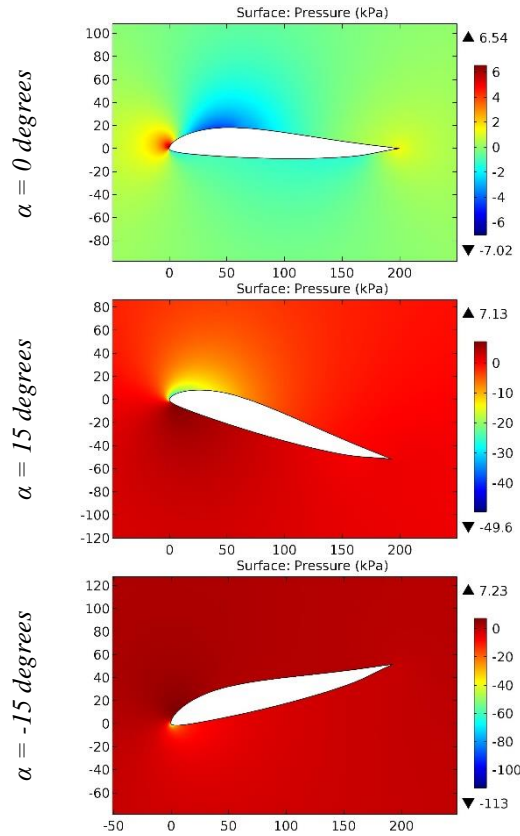


Figure 104. The pressure contours on the surfaces of the EPPLER 336 airfoil.

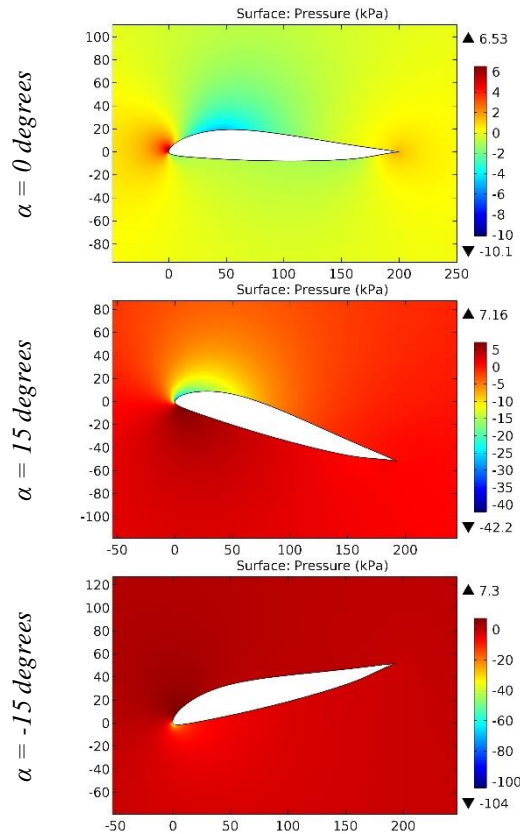
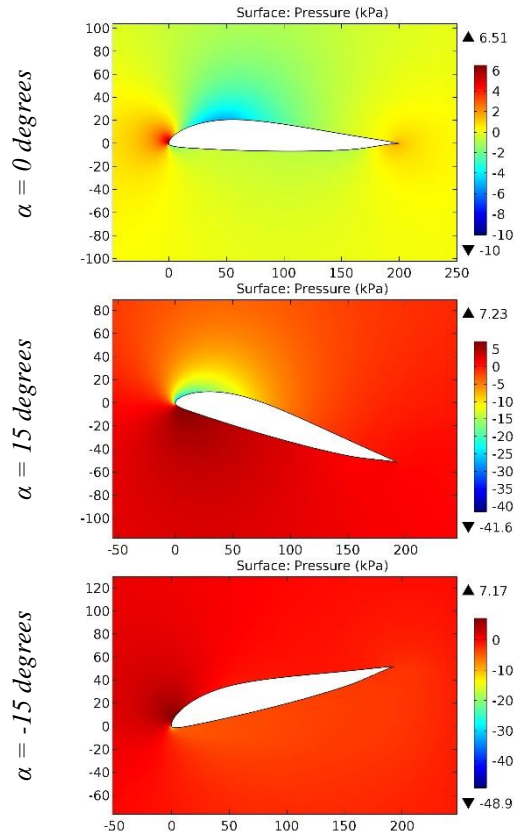


Figure 105. The pressure contours on the surfaces of the EPPLER 337 airfoil.

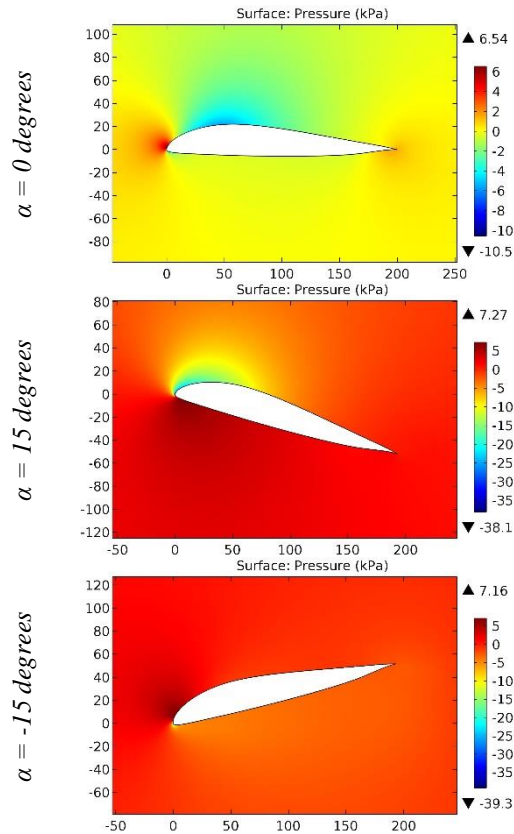


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<b>ISI</b> (Dubai, UAE) = <b>1.582</b>	<b>ПИИИ</b> (Russia) = <b>3.939</b>	<b>PIF</b> (India) = <b>1.940</b>
<b>GIF</b> (Australia) = <b>0.564</b>	<b>ESJI</b> (KZ) = <b>9.035</b>	<b>IBI</b> (India) = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF</b> (Morocco) = <b>7.184</b>	<b>OAJI</b> (USA) = <b>0.350</b>



**Figure 106.** The pressure contours on the surfaces of the EPPLER 338 airfoil.



**Figure 107.** The pressure contours on the surfaces of the EPPLER 339 airfoil.

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JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

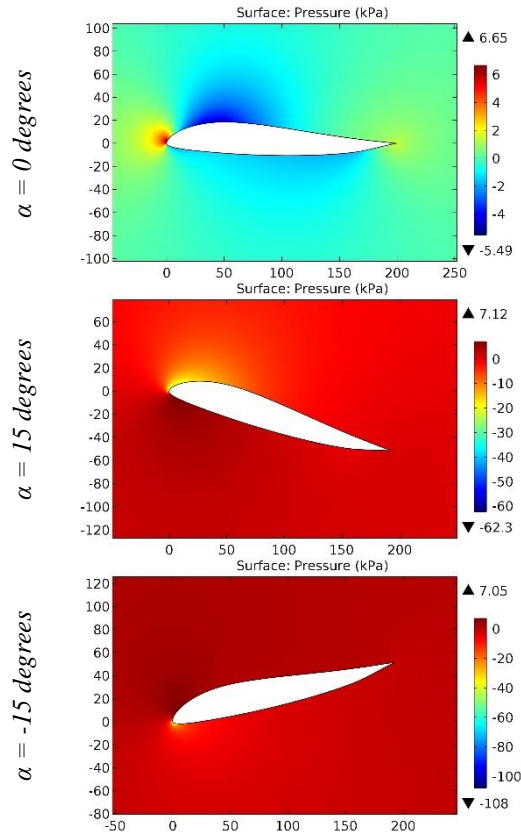


Figure 108. The pressure contours on the surfaces of the EPPLER 340 airfoil.

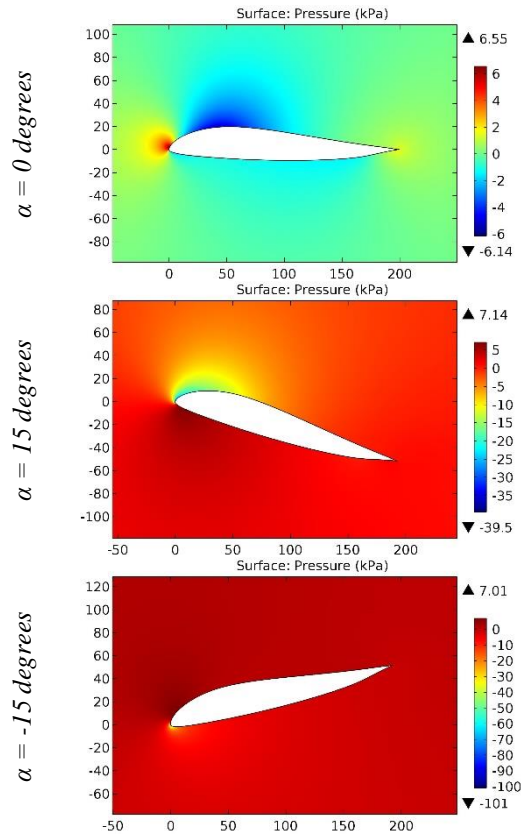


Figure 109. The pressure contours on the surfaces of the EPPLER 341 airfoil.

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JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

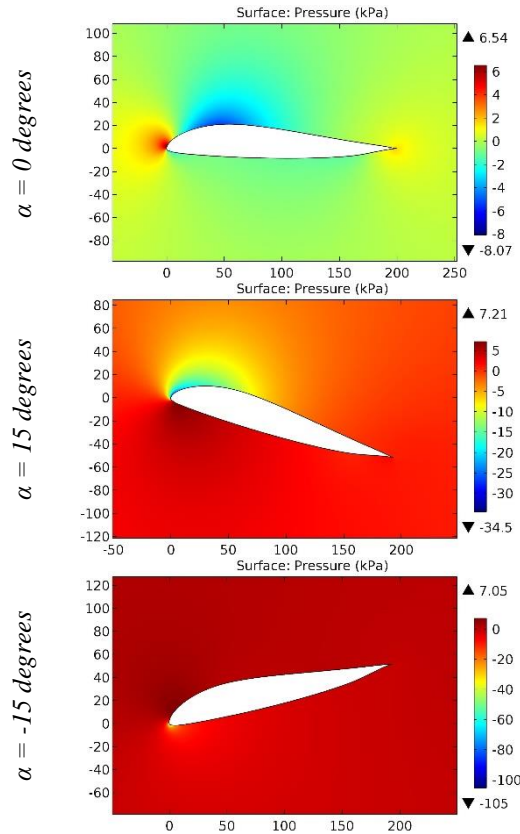


Figure 110. The pressure contours on the surfaces of the EPPLER 342 airfoil.

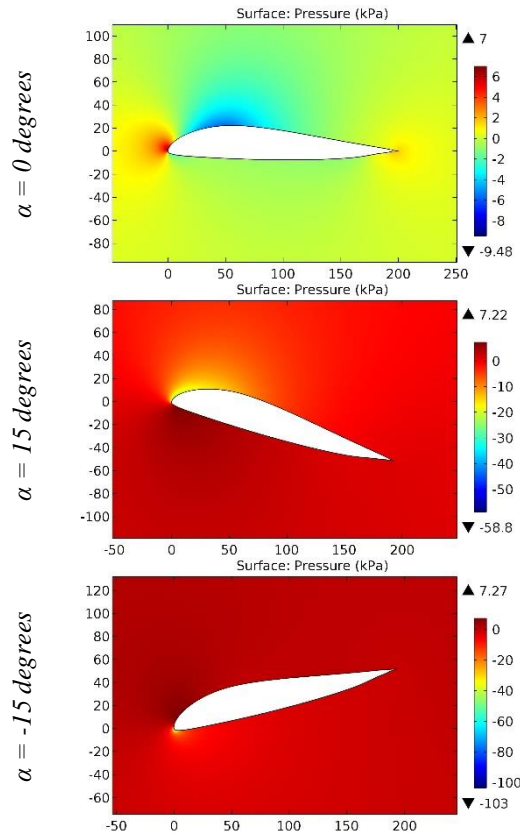


Figure 111. The pressure contours on the surfaces of the EPPLER 343 airfoil.

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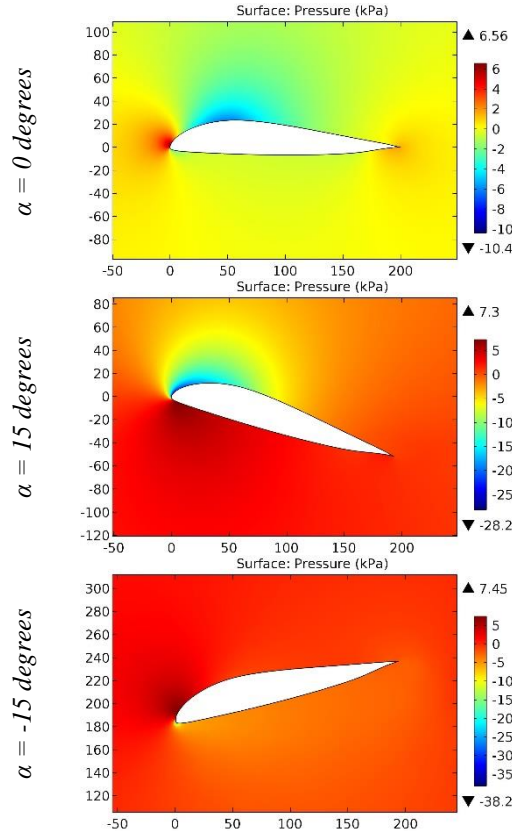


Figure 112. The pressure contours on the surfaces of the EPPLER 344 airfoil.

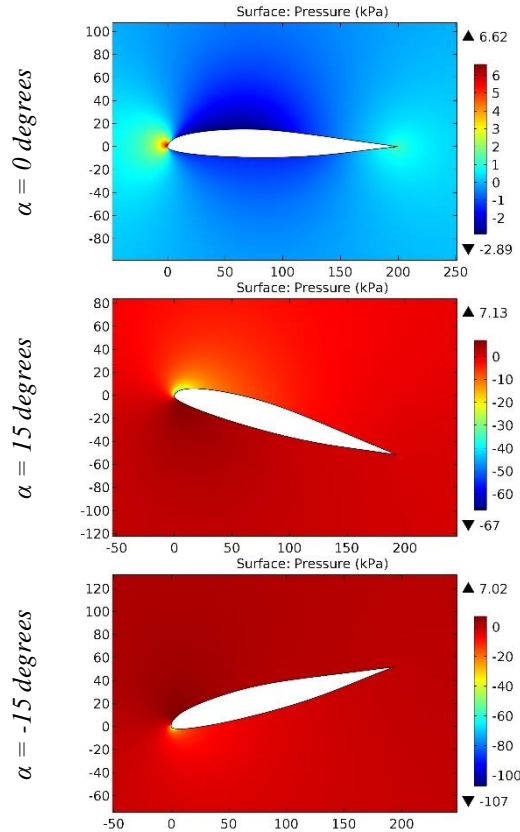
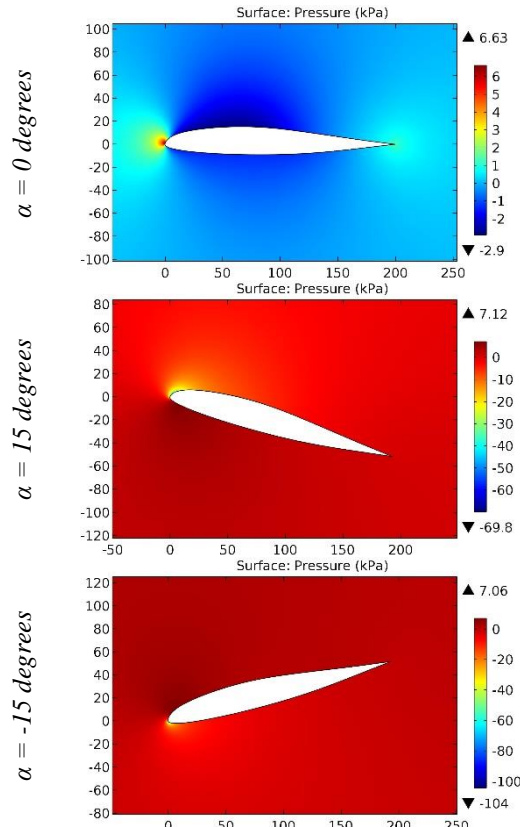


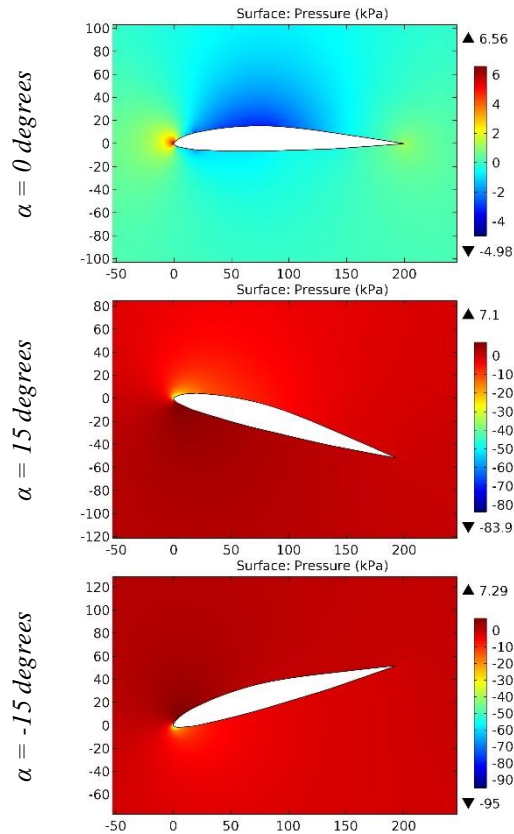
Figure 113. The pressure contours on the surfaces of the EPPLER 360 airfoil.

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<b>ISI</b> (Dubai, UAE) = <b>1.582</b>	<b>ПИИИ</b> (Russia) = <b>3.939</b>	<b>PIF</b> (India) = <b>1.940</b>
<b>GIF</b> (Australia) = <b>0.564</b>	<b>ESJI</b> (KZ) = <b>9.035</b>	<b>IBI</b> (India) = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF</b> (Morocco) = <b>7.184</b>	<b>OAJI</b> (USA) = <b>0.350</b>



**Figure 114. The pressure contours on the surfaces of the EPPLER 361 airfoil.**



**Figure 115. The pressure contours on the surfaces of the Eppler 375 airfoil.**



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GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

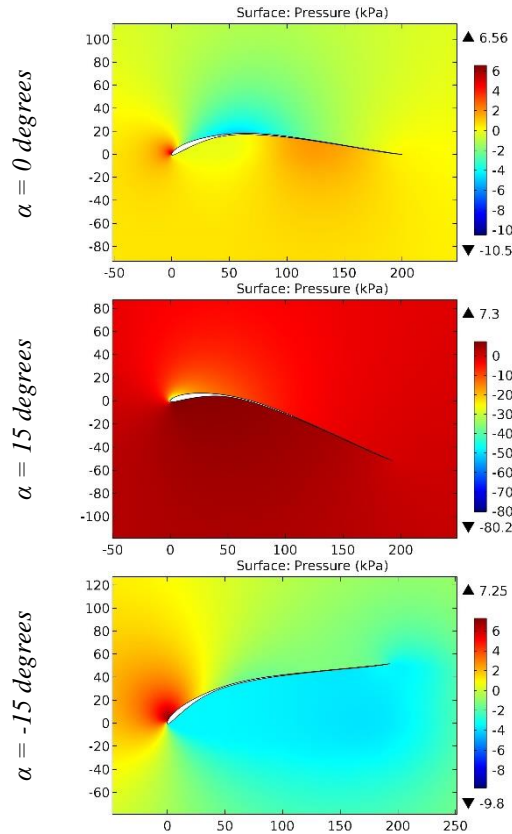


Figure 116. The pressure contours on the surfaces of the EPPLER 376 airfoil.

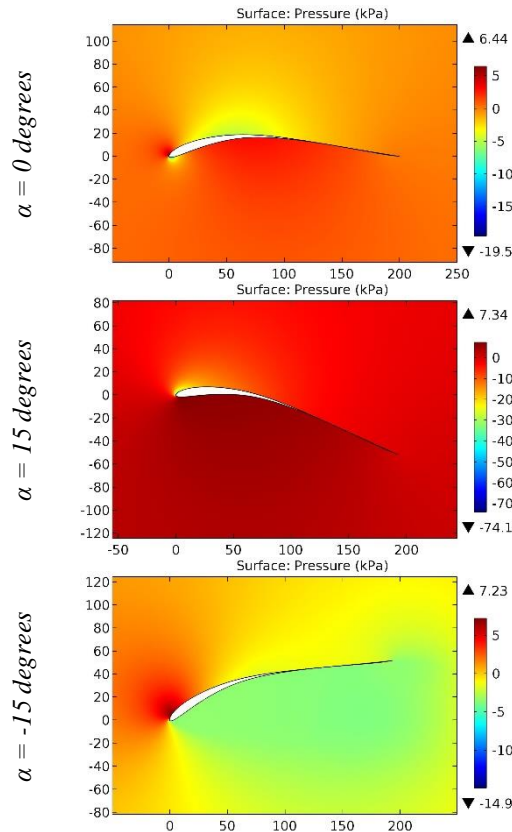


Figure 117. The pressure contours on the surfaces of the EPPLER 377 airfoil.

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JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

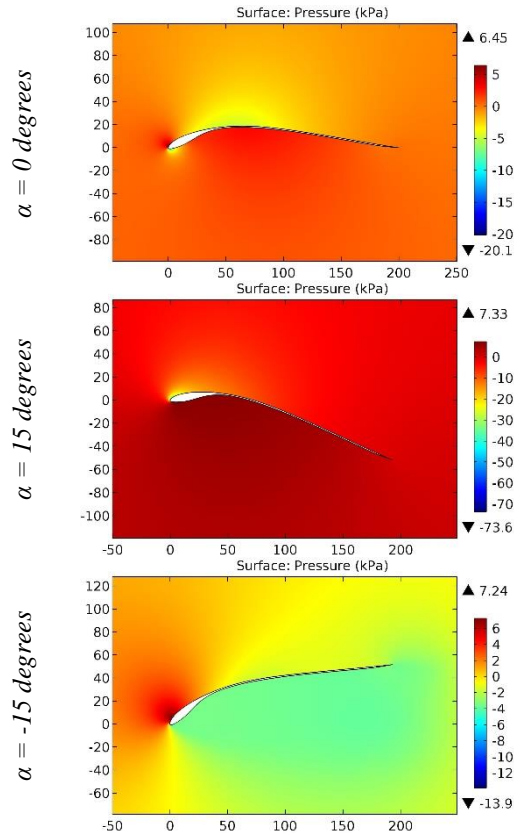


Figure 118. The pressure contours on the surfaces of the EPPLER 377 (MODIFIED) airfoil.

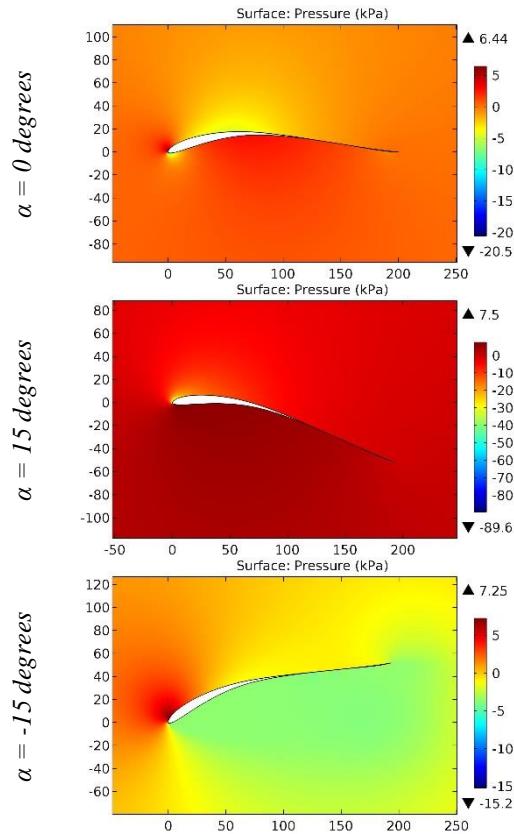


Figure 119. The pressure contours on the surfaces of the EPPLER 378 airfoil.

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<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 9.035	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350

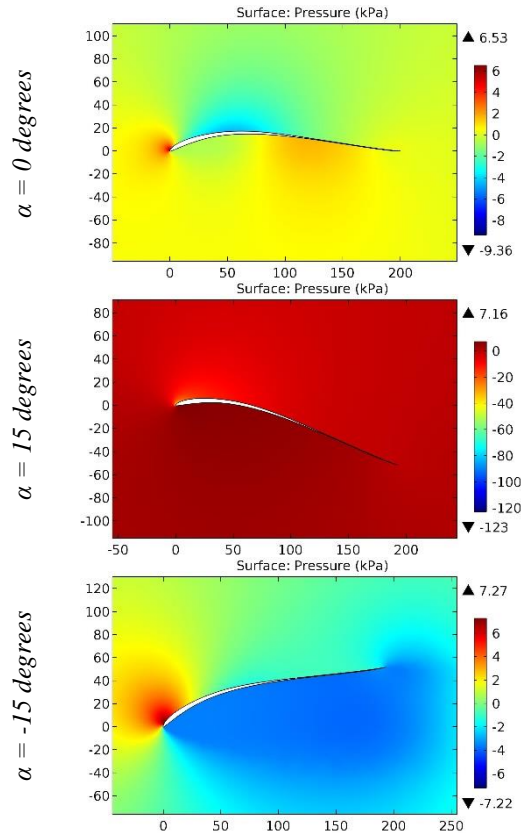


Figure 120. The pressure contours on the surfaces of the EPPLER 379 airfoil.

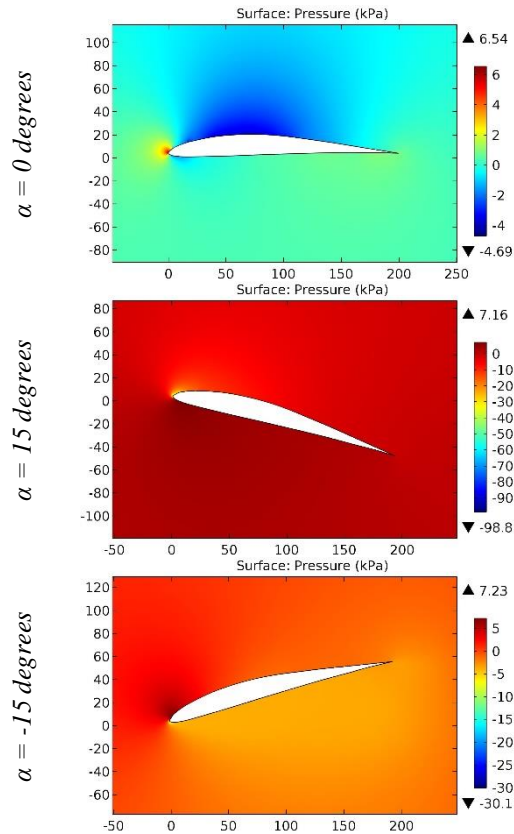
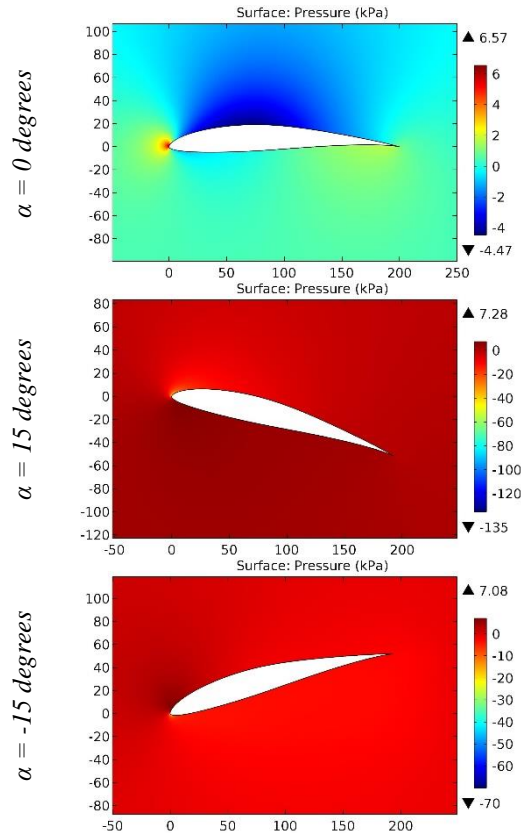


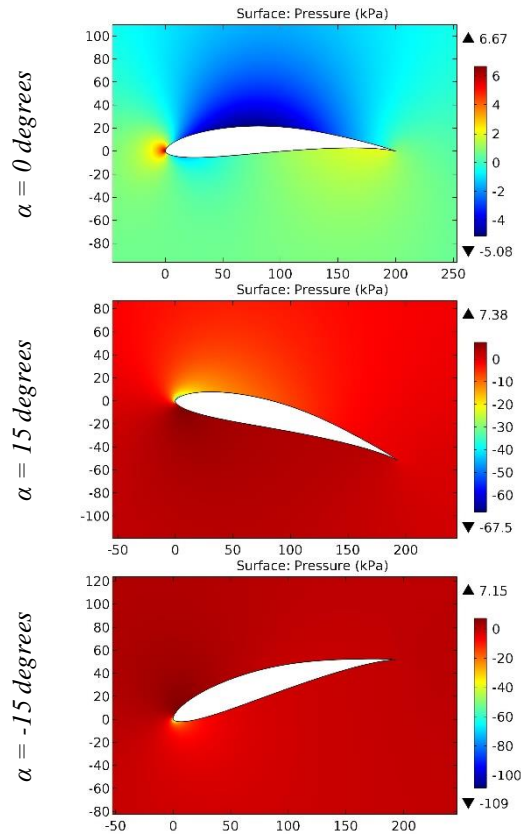
Figure 121. The pressure contours on the surfaces of the Eppler 387 airfoil.

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<b>GIF</b> (Australia) = <b>0.564</b>	<b>ESJI</b> (KZ) = <b>9.035</b>	<b>IBI</b> (India) = <b>4.260</b>
<b>JIF</b> = <b>1.500</b>	<b>SJIF</b> (Morocco) = <b>7.184</b>	<b>OAJI</b> (USA) = <b>0.350</b>



**Figure 122. The pressure contours on the surfaces of the EPPLER 393 airfoil.**



**Figure 123. The pressure contours on the surfaces of the EPPLER 395 airfoil.**

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ESJI (KZ) = 9.035  
SJIF (Morocco) = 7.184

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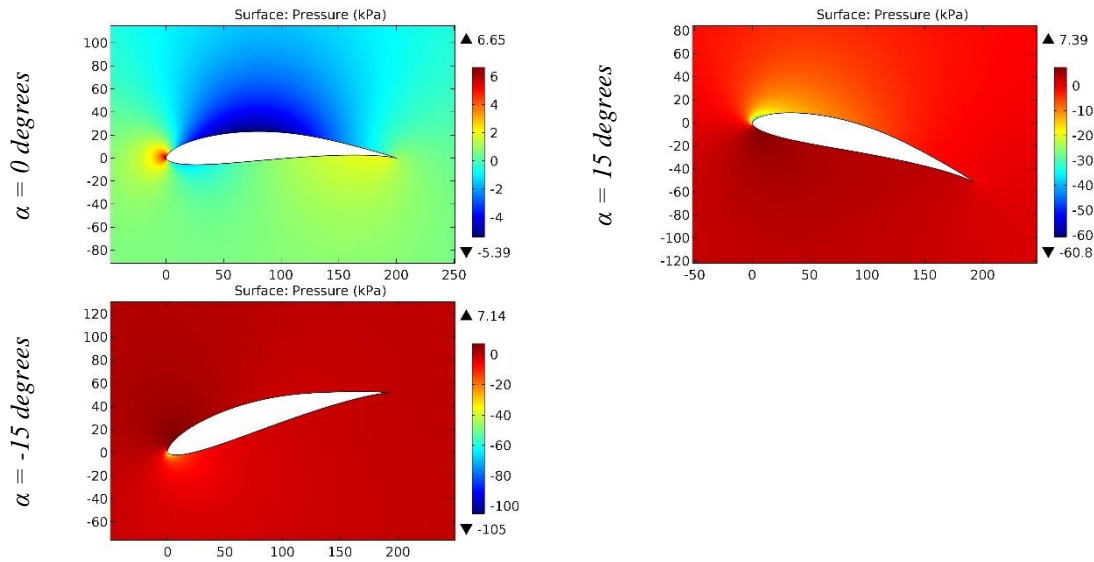


Figure 124. The pressure contours on the surfaces of the EPPLER 396 airfoil.

### Conclusion

High pressure occurs on a small area of the leading edge of the airfoil of the airplane wing with the angle of attack greater than 0 degrees. The drag at the leading edge of the E series airfoils is generally

less in magnitude than the drag at the leading edge of the EPPLER series airfoils. The convex-concave airfoils at the negative angle of attack are subjected to less stress during the airplane flight.

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## ON THE IMPORTANCE OF MOTIVATING THE LEADER OF AN ENTERPRISE - AS AN EFFECTIVE LEADER IN MANAGING THE QUALITY AND PRIORITY OF THEIR PRODUCTS

**Abstract:** *The article considers the possibilities of producing competitive and popular products, which are possible only if there are managers who are professionally trained and morally responsible for the results of their activities. The authors reasonably believe that in the moral responsibility of the heads of enterprises there is the highest measure of expressing their professionalism for the implementation of the tasks assigned to them. But at the same time, I would like to note that their failure to fulfill these promises and statements is evidence of their inability to ensure the implementation of the tasks facing them. And it is clear that there are no such objective reasons that would justify a decline in production in the light industry, so the results of an assessment of economic policy should be either useful or harmful - this should always be an axiom. If this doesn't happen, it means that something in this very economic policy is not a professional decision, actions are harmful to society and timely adjustments are needed. The authors recommend that the market reconsider the concept of forming it with demanded and import-substituting goods, taking into account their attractiveness. Such a concept will fully correspond to the desire of the consumer to satisfy his desire and desire to make a purchase, taking into account his social status, providing manufacturers with the full sale of their products and guaranteeing enterprises sustainable TEP of their activities. The authors recommend that the market reconsider the concept of forming it with demanded and import-substituting goods, taking into account their attractiveness. Such a concept will fully correspond to the desire of the consumer to satisfy his desire and desire to make a purchase, taking into account his social status, providing manufacturers with the full sale of their products and guaranteeing enterprises sustainable TEP of their activities. The authors recommend that the market reconsider the concept of forming it with demanded and import-substituting goods, taking into account their attractiveness. Such a concept will fully correspond to the desire of the consumer to satisfy his desire and desire to make a purchase, taking into account his social status.*

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**Key words:** professionalism, charisma, leader, quality, import substitution, demand, market, profit, buyer, manufacturer, financial stability, sustainable TEP.

**Language:** English

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## Introduction

UDC339.18:685.14

It is necessary to revive the role and significance of a quality-oriented strategy, since only in this case, enterprise managers will subjectively and objectively be forced to improve their production using nanotechnologies and innovative processes so that competitive and sought-after materials and products fully meet the needs of domestic consumers. At the same time, the assertion is substantiated that the consumption of domestic materials and products is regulated by the market. In this case, market requirements should dictate to manufacturers the need to increase the role of the state and consumers in the formation of sustainable demand for domestic materials and products, namely: to maintain the range of goods, regulating it with federal, regional and municipal orders; encourage price stability; increase consumer ability and gradually improve their quality. The implementation of these tasks will create a basis for the consumer to realize the need to pay for the benefits of quality materials and products, and the manufacturer to realize that improving the quality of materials and products cannot be associated only with rising prices, but also through technical innovations aimed at the use of new technological and engineering solutions, including making a quality revolution either through the quality of advertising, or through real quality.

Today, and even more so tomorrow, the implementation of one of the defining principles of production efficiency is important - the manufacturer produces exactly what the consumer needs in the assortment that creates the basis for meeting demand.

It is equally important to understand the role and significance of quality activity, that is, to what extent leaders penetrated the essence of things, learned to manage things, change their properties (range), form, forcing them to serve a person without significant damage to nature, for the benefit and in the name of a person, that is, in accordance with the requirements of the Federal Law "On Technical Regulation".

Both political leaders and the government have recently been talking about the need for a competent industrial policy. However, if we carefully consider the normative, methodological documents on the structural restructuring of industry, then the thought arises whether we are stepping on the same rake that

has been stepped on all the years of reforms, namely: we didn't care about our producer ..

A world-famous quality specialist E. Deming, who at one time was a scientific consultant to the Japanese government and led Japan out of the economic crisis, in his book "Out of the Crisis" says: "... managing paper money, not a long-term production strategy - the path to the abyss.

Regarding whether the state should pursue an industrial policy, one can cite the statement of the outstanding economist of the past, Adam Smith, who 200 years ago laid the foundations for the scientific analysis of the market economy. About the role of the state, he said: "... only it can, in the interests of the nation, limit the greed of monopolists, the adventurism of bankers and the egoism of merchants." You can't really say.

What are the results of economic activity today, what are the achievements in this area? The growth of gold and foreign exchange reserves, the decline in inflation, the budget surplus and other financial and economic achievements. And what, is this really the end result of public administration, and not the quantity and quality of goods and services sold in the domestic and foreign markets and the solvency of the population to purchase these goods and services? And, ultimately, not the quality of life of the population of the country?

Therefore, it is quite natural today that the task is set for all levels of the executive and legislative authorities - to improve the quality of life of Russian citizens.

Let us carry out an enlarged factorial analysis of the problem of "quality of life". The quality of life of citizens depends on the quality of goods and services consumed in the full range - from birth to ritual services, as well as on the solvency of citizens, which allows them to purchase quality goods and services. These two factors (quality and solvency) depend on the state of the country's economy, which in turn depends on the efficiency of enterprises in various sectors of the economy, including light industry. The effectiveness of the work of enterprises depends on the state of management, on the level of application of modern management methods, on the implementation of production quality requirements.

The problems of improving the quality, competitiveness of materials and products at the present stage of development of the Russian economy are becoming increasingly important. As the

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experience of advanced countries, which at one time emerged from such crises (the United States in the 30s, Japan, Germany - in the post-war period, later - South Korea and some other countries) shows, in all cases, the basis for industrial policy and the rise economy was put a strategy to improve the quality, competitiveness of products that would be able to win both domestic and foreign markets. All other components of the reform - economic, financial and credit, administrative were subordinated to this main goal.

Positive changes in the quality of goods require qualitative changes in engineering, technology, organization and management of production. Production must improve, which does not mean becoming more costly.

Absolutely right, attention was drawn to one phenomenon that usually slips away in the bustle of the problem - the historicity of the economy. The way it is perceived now, the economy has not always been and will never remain. Economic life changes over time, which forces one to tune in to its changing existence. The modern economy is built on a market foundation and the laws of the market dictate its own rules. In the foreground are profit, competition, efficiency, unity of command. How long will this continue? Analysts say the symptoms of a new economic order are already on the rise. The next turn of the economic spiral will also spin around the market core, but the significance of the market will not remain total. The priority of market competition, aggressively pushing the "social sector" to the sidelines, is not compatible with the prospect of economic development, which is confirmed by the steady striving of the social-democracy in the West to develop the economy on the front of social security, a fair distribution of profits. The new economy is called temporarily "prudent". It requires humanization not only in the distribution of national wealth. The production itself is also being humanized, including the management system. The current principle: "survival of the strongest, most adapted" will replace "social production partnership - the manager and the manufacturer will become members of the same team. Mass production will give way to an organization corresponding to the implementation of the principle - "the manufacturer makes exactly what the consumer needs." A "thrifty" economy will be focused on resource-saving technologies and environmental friendliness of production. She demanded a new look at the root concepts. fair distribution of profits. The new economy is called temporarily "prudent". It requires humanization not only in the distribution of national wealth. The production itself is also being humanized, including the management system. The current principle: "survival of the strongest, most adapted" will replace "social production partnership - the manager and the manufacturer will become members of the same team. Mass production will give way to an organization corresponding to the implementation of the principle - "the manufacturer makes exactly what the consumer needs." A "thrifty" economy will be focused on resource-saving technologies and environmental friendliness of production. She demanded a new look at the root concepts. fair distribution of profits. The new economy is called temporarily "prudent". It requires humanization not only in the distribution of national wealth. The production itself is also being humanized, including the management system. The current principle: "survival of the strongest, most adapted" will replace "social production partnership - the manager and the manufacturer will become members of the same team. Mass production will give way to an

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organization corresponding to the implementation of the principle - "the manufacturer makes exactly what the consumer needs." A "thrifty" economy will be focused on resource-saving technologies and environmental friendliness of production. She demanded a new look at the root concepts.

Therefore, the philosophy of quality must also change. We must be prepared for the coming events.

The quality of "it is written for generations" to be at the epicenter of both scientific and amateurish reflections at all times. The problem of ensuring the quality of activities is not just universally relevant, it is strategic. The dilemma in relation to quality is reasonable only within the limits of the opposition of the ratio of actions "immediate" and "indirect". The saying "it's all about him" owes its origin to quality. The problem of quality can be "forgotten" only because every fruitful and luminous activity is ultimately aimed at improving quality. Quality is either "on the mind" or "implied". From the correlation in the dynamics of these projections, quality problems in creative thinking are lined up in an appropriate schedule, reflecting the relevance and profitability of activities aimed at developing production.

The most significant and global in nature are international standards for quality management. The use of modern methods in them allows us to solve not only the problem of improving quality, but also the problem of efficiency and productivity. That is, today the concept of "quality management" is moving into the concept of "quality management".

In respect of achievement of target indicators for the development of the strategy for the production of demanded products in the regions of the Southern Federal District and the North Caucasus Federal District, a set of measures has been developed in priority areas of technological, economic and social development of the light industry for the production of demanded products, scientifically and economically confirming the objective need to take immediate and specific actions to address them. Implementation, including by state bodies within the framework of the Federal Law on Territories of Advanced Social and Economic Development.

The development of measures was carried out taking into account the strategic goals, legislative acts that determine the policy of the state in the development of light industry in the medium and long term.

Increasing the competitive advantages of the light industry in terms of the production of products in demand, demand and consumer preferences, technical regulation:

- ensuring compliance of Russian products with international standards in terms of quality, environmental safety and design;
- increase in production volumes of

competitive new generation products in demand by the market with qualitatively new output consumer characteristics, functional properties and with a high share of added value;

— faster growth of the beneficial effect compared to the growth of costs for new and previously mastered types of similar and functionally homogeneous products, efficiency in the execution of orders and consumer requirements within the territories of advanced social and economic development based on the mining towns of the Rostov region for the production of demanded products.

Technical re-equipment and modernization of production demanded light industry products:

— modernization of the bulk of the operating technological equipment, allowing to improve its technical, economic and operational characteristics;

— creation of new equipment with a high degree of automation, corresponding to the world competitive level and capable of mastering advanced technologies and ensuring a quick change of assortment, development of technical documentation and requirements for its manufacture;

— use of leasing for the purchase of imported equipment or direct purchases of new high-performance imported equipment and spare parts for it that are not produced in our country;

— development of VIP-projects (anti-crisis programs) for the financial recovery of the industry, providing for technical re-equipment, modernization, reconstruction and creation of high-tech industries, attracting foreign capital, investments from Russian business and budgetary funds for their implementation.

Development of innovative activity of enterprises light industry for the production of demanded industry:

— implementation of structural and technological restructuring, development of proposals for the preservation and development of the intellectual potential of light industry, the creation of a state scientific innovation center for light industry;

— development and mastering of basic industrial technologies (including nanotechnologies and nanomaterials, system information technologies of the intersectoral level), modular and flexible technological systems for the production of competitive world-class science-intensive products used in strategically important areas;

— organization of mass production of an innovative product at the enterprises of the industry, including modifications of the product and the technological process, structural changes in the range of manufactured products, training and retraining of personnel for servicing equipment operating on new technologies;

— development of international cooperation with foreign countries on the basis of bilateral and multilateral agreements and programs for the



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development, acquisition and sale of technologies, licenses, holding joint scientific and technical symposiums, conferences, exhibitions.

Protection of the domestic market from illegal shadow circulation of goods and Russian manufacturers, formation of a civilized consumer goods market, creation of fair conditions for competition between Russian and imported products:

— operational measures to stop the channels of illegal import flow and reduce the amount of illegal import into the territory of the Russian Federation of contraband goods (mostly of low quality) and counterfeit products, to destroy counterfeit products by removing illegal production from the shadows, as well as measures to tighten control over the implementation of current legislation in this domain;

— preparation of a number of amendments to draft laws concerning the improvement of the regulatory framework for the collection of tax payments and duties when importing products using cargo transportation, as well as measures to protect against counterfeit products;

— monitoring sales volumes and prices for consumer goods in retail markets and, on its basis, developing a flexible tariff and duty policy that stimulates the production and export of Russian goods and selectively restricts imports, primarily highly competitive finished products;

Improving the system for providing light industry with raw materials:

— monitoring the world and Russian markets for raw materials and the situation in prices for raw materials in order to develop proposals for the purchase of raw materials, dyes and fuel additives in the volumes and assortment necessary to ensure the predicted output of light industry products;

— development of requirements for the quality and range of raw materials for the textile and light industries.

It is planned to create a TOP on the basis of the mining towns of the Rostov region in accordance with the Federal Law of December 29, 2014 No. administrative barriers, solving such a topical problem for domestic enterprises as preventing them from bankruptcy. This decision acquires special significance in the formation of new, or in the restructuring of former light industry enterprises located in these regions, filling them with innovative technologies. The adoption of a positive decision on the creation of a territory of advanced socio-economic development on the basis of the mining towns of the Rostov region will solve three main tasks:

1. Filling markets for consumers of competitive and popular products;

2. Creation of new jobs, reducing social tension in these regions;

Save small and medium-sized cities of these regions from extinction.

## Main part

Quality and the idea of quality are stable phenomena, but time changes them too. Initially, quality was identified with meaning. The criteria of quality were the usefulness and size of the subject, relations. With the development of consciousness and practical possibilities, the grounds for comparison and choice have developed. Quality is relatively separate from quantity. The differentiation of usefulness is being made, participation is being rethought as quantitative features. The evolution of the understanding of quality is directly conditioned by the embodiment of creative potential in activity. The discrepancy in the intensity of advancement of individual skill, the interests of those who are called upon to clear the way for talent and mass consciousness complicates the understanding of quality and the process of quality management. Of particular importance is the specificity of the interpretation of quality, in particular, such a basic characteristic as objectivity. The social theory of being is built on a natural-historical basis - the canvas was laid by nature, and the historical drawing was created by man. In the natural environment, all signs, including such synthetic ones as quality, are products of spontaneous movement. In society, every phenomenon passes through activity, includes in itself and in its quality the mental and physical labor of a person. Determining the quality of phenomena created by human activity is impossible without sociocultural concretization. As a result, two questions arise: as quality - products of spontaneous movement. In society, every phenomenon passes through activity, includes in itself and in its quality the mental and physical labor of a person. Determining the quality of phenomena created by human activity is impossible without sociocultural concretization. As a result, two questions arise:

- in what status and to what extent is consciousness included in what is traditionally called the quality of things (with the services of clarity more)?

The answers to both questions must be sought in the philosophical theory of alienation. The theory of alienation has no direct relation to the theory of quality. It contains the keys to the methodology of constructing the theory of quality.

The trajectory of the process of alienation of human creativity into something that exists outside of it must necessarily preserve and activate the ability to create. Unlike the being of nature, the being of man is not substantial. It is not self-sufficient and can take place solely due to the interchange initially with



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nature, and subsequently with society, through which human relations with each other and interaction with nature are built. The tool that ensures the existence of a person is labor, the highest quality of labor is manifested in activity.

The quality of activity, on the one hand, is an indicator of the quality of a person's life (it should be so!), On the other hand, high-quality activity is built into the quality of what he transforms. The quality of the "first" (natural) nature is formed by itself as a set of objectively related natural features, spontaneously. The quality of the "second" (reconstructed, adapted by man to suit his interests) nature is synthetic. It seems to be a double helix formed by the natural features of natural material (perhaps in people's relations, knowledge expressed indirectly) and the qualitative characteristics of human activity - knowledge, emotions, will, value orientation, skill. As a result, the quality of the product, as opposed to the product itself, embodies the quality of the individual.

The personality is alienated in quality, and therefore, in principle, alienation is natural and does not oppress the personality. The negative consequence of alienation is caused by the disproportionate compensation for the lost energy of activity. Having discovered the poor quality of the goods, a hidden production defect, the fraudulent actions of the seller, a normal buyer is upset, first of all, because of his own poor-quality solution. Other losses of the transaction are most often compensated. There is a feeling of imperfection of one's own taste and knowledge.

The quality of everything that is created by activity includes the properties of both practical and spiritual activity in an objectified (objective or functional) expression. From this follows the conclusion about the need to form and direct the development of the ability of mass consciousness to qualitatively evaluate goods: certain experience in the Soviet era was and showed its effectiveness: "circles", "schools", "universities", including those initiated by television and radio. The place of systematic education of the mass consumer, professional assistance in the development of a culture of high-quality selectivity, today on the air is clogged with aggressive advertising, the quality of which is not controlled or control is not commensurate with the size of the deception. Who should be the main educator? The producer and only he, because only he, in full measure, according to the logic of the formation of understanding, should know what is quality. Taking on the production of goods without understanding the specific quality of this product means a professional failure in the market. The release of a product with fake quality is prosecuted by law, however, formally and ex post facto. Suppliers of pseudo-quality goods hope for the latter.

Let's be honest - the problem of quality theoretically remains developed one-sidedly, which is not very noticeable, because there is no normal

organization of production and marketing of high-quality commercial products. Current practice is satisfied with this degree of certainty in the theory of quality. The theory of quality management is simplified to the concept of control over the conditions of quality production. While there is no systematic understanding of what is the quality of a product?

Historically, the understanding of the quality and specificity of its reality, presented in the product, reflect the economic and cultural development of society. Quality in the days of workshop production was determined by the conservatism of manufacturing techniques, but even at that time the municipal authorities strictly checked the quality of products, as well as the ability of the candidate for the manufacturer, there was an official position approved by the authorities of the city or country. Agricultural products were controlled by the consumers themselves.

The Industrial Revolution simplified the production process and created the conditions for mass production. Adequate quality control measures were required. As the social architectonics leveled out and the range of goods became more accessible, ideas about quality changed in the direction of its quality - quality components. At the same time, the possibility of quality falsification was formed. Further, both de facto and de jure, there was only a step to replace the brand qualities. Going beyond the limits of measure opens the way to legal violations and a moral crisis, up to without limit.

Were the trends in the interpretation of quality and attitudes towards quality that developed in the economy of mass production inevitable? No, they were generated by the new nature of production, reflected this nature and, to a certain extent, were an objective reflection, but, in addition to the object reflected by consciousness, there is an angle of reflection, due to the position of the consciousness of the reflecting subject, his interests as a participant in the processes taking place in objective reality.

Objective reality itself, by definition, resides outside and independent of consciousness. Its reflection is subjectivized, which, in general, looks in accordance with the theory of reflection. However, it allows, in private, and subjective distortion - involuntary - due to misunderstanding, and conscious in order to obtain a temporary gain. Competition is always a struggle, unfortunately, the struggle is not always conducted according to the rules.

Quality represents a system of essential properties for a product - this is commonplace and well-known, which is actively used, replacing properties or their consistency in a quality product. Essential properties are those that are not just inherent in the product, they determine its functionality. Such properties, as a rule, are revealed in the process of "work" of the product for its intended purpose, they

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are hidden from the unprofessional view of the consumer. In its "pure" form, the market is an intermediary and should not be interested in the quality of products. The task of the market in the theory of the organization of commodity production is the organization of exchange between the producer and the consumer. The development of the market stimulates the increase in production in the interests of the consumer within the infrastructural status of the market.

The monopolization of production led to the accumulation of financial capital, the latter's autonomy, and market control. As a result, the market has turned from an intermediary into a key subject, trying to replace the indicator function - to show the demand for goods - with the role of the organizer of economic activity as a whole, which distorts the economic system.

The economy of commodity production was created by the production of a product and the need for a mass product. The system-forming factor here is the production of goods as a product necessary for consumption by others, that is, the process of alienation of consumption. With natural production, the quality of the product was hardly an actual problem. Quality "dissolved" in the conservatism of technology and technology, traditional assortment. The question of quality was raised by the consumer when he got the opportunity to compare at the fair. The market, which grew out of fair gatherings, gradually enriched the representative status with the advertising business, taking control of the relationship between the producer and the consumer. Management levers - financial policy, directions - influence on quantity and quality.

The quality of the product has become relevant in commodity production. It became clear that in the understanding of quality there are sensual and rational thinking (the latter in the form of calculation). The subjective factor is objectified and fetishized. The market is not capable of directly (using its own mechanisms) influencing the objective properties of a product, but it can very well influence the objectivization of subjective ideas. Thus, the manipulation of quality was first included in the functions of the market, then became an element of economic policy.

A sound and healthy economic policy is called upon to work on improving quality in two interrelated directions: technical and technological, completed by a rigid legal block of support, and socio-cultural - to provide comprehensive support for the formation of conditions for the subjective perception of quality, to block the negative effect of advertising impact, which has long and thoroughly become an attribute of market speculation on the importance of quality for the buyer. The presence of choice and solvent opportunities do not serve as a basis for the indisputability of a quality acquisition.

In the existing market, price and quality are divorced even at auctions, famous for the thoroughness of the organizational culture. The buyer is turned into an expert and this grimace of the market is not so bad as illogical. The market forces the consumer to develop as a person. From a layman with a wallet, in order not to turn out to be suckers, we unwittingly try to learn more about the subject of interest, we improve our "purchasing qualifications". The term is not new, it is used by journalists, but for them it is a passing, verbal number, and for us it is no longer a new combination of common words, but the most important concept, without which the modern theory of quality does not have a systemic holistic view.

"Purchasing qualification" includes, along with certain knowledge that helps to determine the location of the store, the price range for the goods, requires the presence of basic information about the manufacturer, quality features of the product, the manufacturer's market reputation, company traditions, scale of activity. Today, in the consumer market, the naive buyer runs the risk, beyond any reasonable measure, of being the victim not only of deceit, but also of his own carelessness, and therefore without any right to compensation.

The buyer in Russia is formally protected. In real life, one has to be guided by the famous rule "saving the drowning ("buying") is the work of the drowning themselves, read "buying". Raising the "purchasing qualifications", if there is a desire, is a mutually beneficial matter for the state, activating the cultural national heritage and the patriotic mood of the mass consumer.

We know how to make high-quality products and are quite able to regain "our" market. The issue is not even the price, the problem is the loss of control over the consumer (and not only consumer, judging by failures in rocketry, aircraft operation, etc.) market. They explain to us: we need economic measures. Correct, but it's a half-truth. If you need it, then take it. The government should have power that is not nominal. It's time to understand that economics has always been politics, economics has always been political economy.

Economic movement is self-movement, but it does not take place in a vacuum. The economy is the basis of social movement. Society provides the conditions for economic movement, and the state has the right to actively engage in the mechanisms of economic self-propulsion, directing the development of the economy in the interests of society.

An amazing thing. When it comes to the future of technological progress, futurologists of various stripes moan that the autonomization of the movement of technology will lead to the dominance of robots over humans, and it is better not to interfere in the development of the economy. For whom is it better? There is only one conclusion: do not disrupt the self-

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movement of the economy in the interests of those who have privatized the economy and in whose service are the "border guards" who prohibit controlling economic processes through politics.

None of the convertible currencies is backed by a high-quality commodity equivalent, and the "free" movement of the currency continues under the guise of politics. Financial self-movement creates favorable opportunities for chaos in the consumer market. The state sluggishly protects the legitimate interests of the national producer, even when the product is a product of interethnic integration. There is no political aggressiveness, politics is dragged along in the wagon train of the economy instead of being ahead of its development on the basis of objective socio-economic trends.

Domestic producers need a "clear" economic policy. By "intelligibility" they mean: clarity, consistency, guarantee support, which allows cutting off the many-sided arbitrariness of administrative authorities and "guardians" of order. Everyone is responsible for quality. And those who produce, and those who are called upon to ensure the rights of producers. The Customs Union has lit the green light for national goods on the market of the Treaty countries. Thus, an equilibrium real market competition has been created, which makes it possible to evaluate natural, and not advertising quality.

It is no less important to analyze the problem of quality in the coordinate system of the national mentality and interethnic integration. Integration is deliberately replaced by globalization, despite the obvious difference between these phenomena. Both trends are objective and characteristic of recent history.

Integration - interethnic interpenetration of various types of activities of a socio-economic, cultural and humanitarian scale. It may have an international size, for example - "Union State (RF and RB); local - Customs Union; regional (Shanghai Organization, EEC). Globalization indicates the worldwide scope of the phenomenon. Global problems include those that have arisen as a result of common, but not necessarily integration, processes, and require a consolidated solution.

Global problems, in contrast to the problems associated with integration, are potentially relevant and have a strategic meaning. For example, how to protect life on Earth from large meteorites. When the time of the event is postponed, but it itself is super relevant in terms of significance, then speculators, including financial oligarchs, actively rush into the resulting gap, trying to profit from uncertainty.

Quality is associated with globalization, but practically not so relevant. Quality is closely related to integration.

Consider the problem of "quality of consumer goods" in the coordinate system "national" and "international". First of all, it is necessary to find an

answer to the question: is integration capable of replacing the national component of quality?

Integration processes are based on standardization and uniform metrological characteristics of production, which corresponds to objective reality. Technological progress is based on science, scientific knowledge is imperative in terms of normativity. However, being in common is not sufficient on its own. General requirements are realized through a special development, due to the specific circumstances of the action. In other words, no matter how standardized the production of a commodity is, it will still show the originality of the conditions of production.

The specificity of the conditions - regional, national is immanently present in the raw materials, climate, traditions, culture of consciousness of the performers. And in all this is the power of production, which determines the nuances of the quality of the product, creating a special consumer interest in it. Tea is grown in our time all over the world, but the uniqueness of tea plantations in Sri Lanka, the national attitude to tea ensured the leading position in the quality of the Ceylon product. The same can be said about Kenyan coffee, Bulgarian and Chilean peppers, French cognacs and champagne, Ukrainian lard, Bavarian and Dutch beer, Scottish whiskey, Russian linen, Egyptian cotton, Chinese silk, Argentinean leather, Greek olive oil and much more. The specificity of the environment should be valued and preferences for its reproduction should be provided. In the founding treaties,

The Customs Union reinforces the interethnic division of labor built in the 20th century, contributes to the expression of the objective and subjective aspects of the development of production, mutually enriches the market, facilitating access to it for producers. But this is all theory. Theory develops into reasonable practice not only because it is correct. Activity makes theory a practice, and in order to get the desired result, the activity must be systematic and consistent.

Interest in the quality of goods, theoretically, should not begin in production. Its initial position is in a normalized market, more precisely, at a meeting between a manufacturer and a buyer. A normal market is an indicator of the quality of a product. Demand pulls along the production chain, but not the spontaneous demand of buyers abandoned to the mercy of fate. Demand is a state of mind determined by purchasing power, but not limited to the amount of money, especially when lending is stimulated by banks in every possible way. Demand farmed out to intermediaries, lobbyists, speculators is a deadly disease for Russia's national producer. Demand should be taken under control and formed, the buyer should be educated. Consumer education costs a lot. But it's worth it if you look to the future.

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Market liberalism corresponded to the flourishing of the first type of mass production economy, focused on ensuring free access and choice of goods. Such production perceives the consumer as an abstract subject of the relationship in the system "manufacturer - seller - buyer". The seller is given the role of an active intermediary, but nothing more. It culturally provides a meeting point between producer and consumer. The system must be functionally active, which implies not the presence of its constituent components, but their complicity. The perfection of the design of the system lies in the maximum realization of the potential of relations that create consistency.

The buyer is perfect as a subject of systemic interaction with his purchasing preparation. It is perfect not by the size of the paying capacity. His complicity is determined by knowledge of the commodity-economic situation. The consumer is not the object of the application of the actions of the seller and the manufacturer. The consumer is a subject of the market and it is in his (and other subjects too) interests to be informed not by the advertising community, but by professional sources. The quality of a product starts in the mind of the consumer. Imposing the idea of quality is bad for all legitimate subjects of economic relations. It needs to be brought up again by everyone: the manufacturer, the seller, the buyer himself and the institutions of civil society, if the state is passive.

The transition to mass production of the second type - a "smart", "prudent" economy activates systemic relations. The function of the market appears in a new light. Together with the manufacturer, the seller focuses on knowledge of consumer tastes. To the perfection of the system, it remains to take only one, but not an easy, step - the whole world to take up the formation of a consumer culture.

The accusation of the current generation in the consumer attitude to life is not entirely fair. Consumption is the ultimate goal of production. The trouble is in the absence of a consumer culture of the mass consumer, the trouble is really of a socio-cultural dimension. Another consequence of funding cultural progress. Why does one power replace another, while culture is still in power last in line for political relevance? It is time to understand that not only science has become a direct productive force. Culture is also a factor in the development of production, moreover, a multifaceted and very effective factor.

The manufacturer is traditionally preoccupied with the thought of how to ensure the maximum possible compliance of commercial products with model samples. In conditions of mass production, such a problem is quite costly, since it requires the organization of a special expanded service, and most importantly, where to get a significant number of qualified workers. The Japanese, faced with the problem of providing production with qualified performers, were forced to solve it in a very peculiar

way - they supplied the most advanced equipment to their enterprises located in neighboring: Malaysia, Thailand, Singapore, Indonesia, in order to minimize manual labor. Not everyone is ready to follow the example of Japan.

The linear development of the economy would certainly lead to a dead end - mass production would eventually become extremely costly. No complex mechanization and automation saved:

firstly, the reduction of staff would cause an increase in unemployment with all the ensuing social negatives;

secondly, skilled workers would still be needed in large numbers.

Salvation came from the non-linearity inherent in the dialectic of progress. The economy of mass production has worked out its resource and, like the next stage of a rocket, has lost the need for existence. The economic paradigm has changed. Irrational in various aspects - environmental, humanitarian, economic, mass production has a given way to "lean economy" (lean production). Production fundamentally changes the purpose. The traditional task of manufacturing a large number of similar products that meet the requirements of regulatory documentation, from which the consumer is invited to choose the most suitable ones, is replaced by the task of manufacturing exactly the product that the consumer needs and in the required volume and at the right time.

A "thrifty" (sparing) economy focuses the attention of the manufacturer on the state of consumer sentiment. The manufacturer needs to study demand, look for his niche in consumer demand, "educate" with the help of advertising, educational work, and organization of customer service.

The new economic philosophy brings producers and consumers closer, emphasizes the dialectical nature of their relationship - they are opposites, but those that exist only in unity. Initially, the producer and consumer were generally in one person. The division of labor and the increase in its productivity have physically separated one from the other, but the essence of the relationship has not changed. The market opposed them, complicating the system of spatial relations with intermediary, transport and other tools. The task that unites the producer and the consumer is not to lose sight of each other, to clear market superstructures, to make themselves direct financial partners, reducing the financial burden on production.

At the same time, the producer and the consumer in the system of market relations generated by the commodity economy oppose one another, therefore their understanding of the quality of production, goods partially coincide, which is also important to take into account when setting up a presence on the market, hoping to gain a foothold there for the rest of your life.



## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 9.035  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
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Common features of the quality of goods for the manufacturer and consumer will be its usefulness, convenience, hygiene, ergonomics, resistance to deformation, ease of handling, fashion. The consumer, unlike the manufacturer, is of little interest in the quality of the production of goods, although a "promoted", that is, an enlightened consumer should not, according to the logic of changing things, completely ignore technology, the organization of production. The relationship between the quality of the product and the quality of production is of a causal nature, and this is quite accessible to amateurish understanding.

For its part, the manufacturer runs the risk of being out of work if he underestimates the specifics of consumers' perceptions of the quality of goods. E. Deming - the author of the classification of "deadly diseases" for the manufacturer - among the seven deaths named under No. 1 "orientation of production to such goods that are not in demand on the market", that is, they are not in demand by the consumer; no. 2 - "emphasis on short-term profits and momentary benefits." In both cases, the manufacturer makes the same methodological mistake - he removes his activity from the system of relationships, makes "his site" universal, for which he pays in full.

The consumer's perception of the quality of consumer goods is less objective than the manufacturer's. A conscientious manufacturer, undertaking professional obligations, attracts scientific knowledge, independent expertise, etc. The consumer, in contrast to the professional manufacturer, is in the general mass "amateur". His views on the quality of goods, to put it simply, philistine, are based not on scientific knowledge, but on common sense. They are dominated by a pragmatic approach, a subjective assessment. Theoretically, the manufacturer should always be right; in practice - then there would be no normal market, so everyone knows the opposite statement: the buyer is always right.

The dominance of a pragmatic approach to the quality of goods by the consumer is a kind of cost in relations between the main market actors. We have to put up with this, otherwise, apparently, it is impossible to build a system-forming link in market practice. The consumer, as a buyer, is limited by the ability to pay. The manufacturer has certain theoretical resources, for example, to increase sales, working capital, reduce costs, etc. The consumer-buyer has no real reserves - loans will only increase his expenses, and in the Russian Federation very significantly. Based on his situation, the consumer looks at the quality of the goods through the sight of the number of rubles set by the seller as an equivalent of quality. To the above, let's add the skepticism that awakens in the mind of the buyer the annoying repetition: "

"Quality" and "price" are basic concepts for both the producer and the consumer, but they are woven into system considerations in different ways -

depending on the opposite of the market situation. Each of the subjects measures the quality of the goods, based on their own status.

The third subject of producer-consumer relations, and another "appraiser" of the quality of goods is the market, which is a tool for regulating relations between producer and consumer. The role of the market has historically been strengthened with the development of national economies and the creation of transnational companies. The market from an episodic tool limited in time, has become a completely independent economic phenomenon. The growth of the market was accompanied by its structural evolution, it eventually lined up in a complex pyramid of direct, indirect participation; retail trade completed transactions from the present have gone into the future. A leader has emerged on the market - the financial transactions market, which should be considered as a symptom, because the financial market, by definition,

"The quality of the goods", from the point of view of the market, is a sign of the liquidity of the goods. The product is not stale, therefore, the desired quality has been achieved. The market does not care whether the quality of the product really satisfies the consumer. In the market, the "king" is not the buyer, but the seller and the quality criterion is the time of sale of the goods. What will happen next? The seller doesn't really care. That is why such a "deadly disease" as the desire for a momentary result is common. Nevertheless, the "market theory" of quality has its place and must be taken into account when determining economic policy.

Production, consumption and the market, which turned out to be the subject of their relations, are cultural phenomena, their historical specificity is determined by time, national and regional features of development. The phrases "culture of production" and "culture of consumption" have long and firmly entered the professional vocabulary, which cannot be said about the "culture of the market". The difference is not difficult to explain. Production and modern consumption are based on scientific knowledge, reflecting the objective order of things, it is easy to trace the influence of cultural traditions in them.

The history of the market is not so great and the attitude towards the market is somewhat different in culture. The market of the 20th and the new century undoubtedly absorbed elements of culture, but turned out to be the very activity that does not have fundamental cultural values. The motto of Russian merchants: "Our goal is profit, but honor is higher!" took root thanks to the inherent and culturally designed slyness. Honest and conscientious sellers in the market never lingered - not their place. If we classify the art of deception as a set of cultural phenomena, then the market is a form of reality of mass culturally designed deception. They deceive everyone, always and in every way. And in deceit in



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<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 9.035</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

the art market no less than in the theater, where they also deceive in their own way.

Subjective, with unstable, multidirectional movement dynamics, the market is poorly predictable. Those attempts that are made in predicting the behavior of the market are unproductive precisely because of the insufficiency of objective indicators of a systemic type. So the reserves of the market, as an area of real quality management, are small, especially in the absence of the state's desire to actively intervene in the architectonics of market relations.

For a particular enterprise (preferably an association, a group of enterprises), the prospects for promoting marketable products on the market are associated with the development of resources for understanding quality in the coordinates of production - to seek a qualitative compromise, and educating your consumer .

It is easier for European and North American manufacturers to establish themselves in the market with their goods. The experience of communicating with the consumer has been accumulated over the course of two or three centuries; the market has balanced, adapted to the requirements of the legislation; the state does not put pressure on the market, the manufacturer and the buyer, but where it is present, it does it harshly. Corruption, raids, and monopoly claims have not been eliminated, but the struggle is real, not decorative, sham, which greatly facilitates the accessibility of the market, unifies the conditions of competition.

Among the main problems of European theorists and practitioners is satisfaction with the quality of consumer goods. The problem, in a schematic expression, is simple - it is necessary to qualitatively satisfy the need of the end buyer for the product. Upon closer analysis, simplicity turns out to be conditional - compositional, in order to obtain the desired result, it is necessary to build an ensemble on the market from the value of the product (1), price (2) and the consumer's purchasing readiness . In this sense, the market really acquires a nodal significance for economic development. This emphasis on the economic policy of producers can explain the concentration of interests on the consumer. It is not important to wait for the consumer, he must be actively sought and "converted to one's faith."

In foreign analytical reviews, information has appeared that avant-garde marketers representing large companies producing consumer goods are proposing to significantly expand the format of complicity with product consumers, up to discussing the recommended price for an economy-class product. The idea is quite reasonable and practically feasible without much cost. Buying conferences are less successful, but the extended practice of holding promotions, advertising actions with a device for displaying goods, reporting a settlement price and asking for a consumer assessment of plans are quite

promising and can be effective. One should not underestimate the modern buyer, his financial readiness, just as one should not force him to pay for the unqualified policy of the manufacturer with overpricing. Agreed prices are also not fatal for the enterprise. There are always unused resources: materials science, technological, organizational, by activating which the manufacturer makes the process profitable. For a stable position in the market in the face of increased competition and volatility, you have to pay. Perhaps it makes sense to rationally modernize what is called "bargaining" in a "market" like a bazaar.

The quality of a product, in practical terms, is determined by its ability to meet the needs and expectations of a particular consumer. The quality of the product consists of many useful properties. The figure highlights the main qualitative properties of the product.

The concept of "product value", new to economic theory, is defined as "a set of quality parameters expected by the consumer of the product he needs". From the concept of "product value" "grew" "Tree of consumer satisfaction".

The value of a product is made up of the degree of need for its consumer and the level of quality (the presence of the required characteristics of the product). Buying decisions are also influenced by:

- buyer's confidence in the supplier;
- confidence in the manufacturer;
- information from other consumers;
- accumulated experience of using such a product.

The consumer makes a decision to purchase a product by weighing the ratio of the offered price of the product to the expected costs. The higher the level of consumer satisfaction and the presence of a decision to purchase a product, the more opportunities for business development, the more stable its market and financial position, guaranteed by stable TEP.

The main areas of activity in which the development of the clothing industry is currently being carried out, in accordance with the adopted Strategy for the Development of Light Industry in Russia, are considered.

The geographical features of the regions of the Southern Federal District and the North Caucasus Federal District and an estimate of the number of children's population are given. The features that influence the formation of the range of children's clothing are analyzed. The principles of a competent assortment policy for the production of competitive children's clothing are determined, taking into account the factors affecting its consumer demand:

The requirements for children's clothing and determining its quality are analyzed, of which the most important are the safety requirements established by the technical regulations of the Customs Union TR CU 007/2011, as well as the requirements for materials, the chemical composition and structure of which determine all the main properties of finished

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GIF (Australia)	= 0.564	ESJI (KZ)	= 9.035	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

products, divided by nature into physical, chemical, mechanical, biological. Taking into account this factor, all the others are formed: design, technology, etc. Taking into account all kinds of requirements for clothing, it is noted that the production of clothing from natural organic materials is a high prospect for increasing the competitiveness of Russian industries in different markets, due to their undoubtedly better hygienic properties.

The influence of innovative technologies on the development of children's clothing production has been studied; recommendations are given on equipping the garment enterprises of the South with innovative equipment. The efficiency of enterprises, and in many respects their ability to survive in the competitive struggle, depends on the ability to quickly and cost-effectively reorganize production according to fluctuations in demand, the best opportunities for this are the development and implementation of flexible production systems. The restructuring and technical re-equipment of modern small and medium-sized production of children's clothing, as well as manufacturers of men's clothing with high-performance multifunctional equipment, should be facilitated by the widespread introduction of the practice of leasing schemes as the most optimal option for the development of Russian production.

Thus, the transition of the industry to an innovative development model focused on increasing its competitive advantages not only meets the vital needs of many regions of the Southern Federal District and the North Caucasian Federal District (reducing social tension, providing employment for the population, developing small and medium-sized businesses), but also contributes to the formation of a prosperous, an ecologically healthy childhood environment that satisfies social needs for a fulfilling life.

The successful implementation of the proposed measures requires a real interest in supporting the clothing enterprises of the South from the federal and regional branches of government, which should lead to a reduction in prices for components, materials, energy costs and transport, providing the manufacturer with the opportunity to offer domestic consumers demanded and competitive products due to the price niche. children's clothes. This can provide many manufacturers with stable positions not only in domestic, but, most importantly, in foreign markets. As a result of the research, a model design of a suit for women of younger age group of the size 164-84-92, of the second weight group, as well as technical documentation for its manufacture.

In the design and engineering section, at the stage of the technical assignment, a set of requirements for a women's suit and its technical documentation was developed. Based on these requirements and analysis of fashion trends for the current and future periods, a sketch of a designed

female denim suit, developed using the CorelDRAWX5 program, is presented. The description of appearance is made. At the stage of studying and analyzing models, data were obtained on the overall dimensions of the main parts and the location of model structural elements, on the basis of which general view drawings of the designed product were developed. At the stage of studying and analyzing the model, data were obtained on the overall dimensions of the main parts and the location of the model structural elements, on the basis of which a drawing of a general view of the designed model of clothing for women of the younger age group was developed. In the CAD program "Grace 401" a model design of a women's suit was built.

At the stage of the technical project for the manufacture of the designed women's suit, a rational package of materials was selected that meets the requirements formulated in the terms of reference.

The parts were cut according to the patterns developed at the detailed design stage in accordance with the experimental layouts.

A model of the designed product was made, which made it possible to refine the design and make the necessary corrections.

In the technological section, the methods of shaping the designed set of clothes were determined. The proposed processing methods ensure the manufacture of high-quality products in the conditions of individual production. Improving Efficiency designed female costume achieved by choosing the optimal technological processing modes, drawing up rational schemes for assembling products.

The results of the studies performed confirm that the developed suit for women of the younger age group meets the stated requirements and is appropriate for introduction into production. To design and develop a model of a women's suit for the senior group, an analysis of the fashion direction for the promising season was carried out, the most relevant colors and silhouettes were identified.

After analyzing the direction of fashion, the requirements for the designed product and materials were studied and provided.

Based on the analysis of the fashion direction, the most advantageous version of the women's suit was chosen, which was necessary for the further production of the model, taking into account the individual characteristics of the customer.

Thanks to the analyzes done and the study of information in the literature and magazines, a draft design was developed and a description of the projected model was drawn up. The overall dimensions of the design details of the model were presented in the form of a table.

For further development of the design of the women's suit, an array of initial information was chosen in the form of a table of dimensional features and allowances for free fitting.

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With the help of trying on a model of a women's suit, it was possible to carry out work to eliminate fit defects associated with the individual characteristics of the customer's figure. Based on this, a confection map and specification were drawn up, samples of materials and fittings were provided.

The following were produced: the development of derivative parts of a women's costume, which made it possible to determine the consumption of materials using layouts; development of gradation schemes for sizes and heights using the example of a jacket back detail.

To select processing methods and equipment, a characteristic of the shaping of the main parts was given, on the basis of which it was possible to develop an assembly drawing and assembly diagrams of the product before and after fitting.

Determining the economic efficiency of design development made it possible to calculate the cost of developing design and technological documentation, taking into account typical time standards for compiling documentation and spending both raw materials and materials.

According to the developed layout templates for patterns of women's costume parts in CAD "Grace" (version 401), both with the traditional (manual) and automated method of laying out parts, savings were determined while reducing the consumption of materials for the designed product, which made it possible to calculate the total price for the designed model and the savings were determined by reducing the consumption of each type of material for a women's suit, as well as the total.

Thus, we can conclude that the developed models of a women's suit in the conditions of individual production fully comply with all the requirements and fashion trends. The products are suitable for everyday wear, as well as for office work and going out to events.

In recent years, the system of values that existed in industry has undergone major changes. In the improvement of production processes at European light industry enterprises, the rate on intellectual resources is noticeably increased. The guarantors of success are not the size of the enterprise and capital, but ingenuity and creativity, the use of computers, marketing, the latest management methods and the ability to quickly respond to changing world market demands.

Therefore, the authors of the collective monograph tried to present their vision of a way out of the crisis of the domestic light industry in order to ensure demand for the products of the enterprises of the Southern Federal District and the North Caucasus Federal District and create prerequisites for its competitiveness. Such a decision is expedient not due to the transfer of production to other countries (use of outsourcing), but due to the formation of efficient production within the framework of the ASEZ. This is

possible provided that all branches of government are interested in creating additional jobs, reducing the number of unemployed with a significant easing of tension in the already explosive regions of the Southern Federal District and the North Caucasus Federal District. After all, no one has canceled the old truth: if you want to know if a person is well dressed, look at his legs, but for a person to have such a desire,

1. An assortment policy has been developed for the formation of competitive men's, women's and children's shoes, taking into account factors affecting consumer demand: compliance with the main fashion trends, economic, social and climatic features of the regions of the Southern Federal District and the North Caucasus Federal District, the production of which using modern innovative technological processes, as well as for meet the demand of the elite consumer, using manual labor create the basis for meeting the demand for shoes for the buyer of these regions.

2. Innovative technological processes have been developed for the production of men's, women's and children's shoes using modern technological equipment with advanced nanotechnologies, which form the basis for reducing the cost of footwear and providing it with an increase in competitiveness with the products of leading foreign companies, with the possibility of a wide range of footwear production not only by type, but also in terms of fastening methods, which guarantees its demand in full.

3. Layouts of technological equipment are proposed, on the basis of which it is possible to form a technological process for the production of men's and children's, as well as women's shoes with optimal power from the production area and the form of production organization.

4. Software has been developed for calculating cash receipts from the operating activities of shoe enterprises based on assessing the degree of implementation and dynamics of production and sales of products, determining the influence of factors on the change in the value of these indicators, identifying on-farm reserves and developing measures for their development, which are aimed at accelerating product turnover and reduce losses, which guarantees enterprises a stable TEP and prevents them from bankruptcy.

5. Software has been developed for the formation of the technological process of assembling shoes and determining the cost of producing an assortment of shoes. A computer simulation model has been implemented that describes the dynamics of the shoe assembly process. The proposed methodology and the software implemented on this basis make it possible to reduce the duration of technological preparation for production and increase, due to the rationalization of the technological process, the specific consumer effect of footwear.

6. Comprehensive indicators of the effectiveness of innovative technological processes for the

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manufacture of shoes are calculated. Taking into account the production program, promising options for technology and equipment have been formed, the most effective one has been selected; the possibilities of streamlining the flow have been identified, which allow eliminating bottlenecks, minimizing equipment downtime, which is one of the conditions for designing innovative technological processes. The reliability of the calculations carried out to assess the effectiveness of technological processes using targeted programming methods for various technological and organizational solutions is confirmed by calculations of economic efficiency indicators: cost, profit and profitability, etc.

7. The proposed technique allows to reduce the duration of technological preparation of production and reduce the time for expert work while maintaining the required depth and validity of engineering conclusions. The economic effect of the research is expressed in the intellectualization of the work of a technologist with a reduction in time spent on developing an assortment of manufactured shoes and evaluating the effectiveness of technological processes in comparison with a typical economic calculation of the total cost of manufacturing shoes.

8. The analysis of the influence of the forms of organization of production and manufacturing technology on the cost of footwear was carried out using the example of the technological process of manufacturing children's, women's and men's shoes, taking into account the shift program. Theoretical dependencies are obtained to assess the influence of the factor "organization of production" on individual costing items in general and other technical and economic indicators in order to prevent enterprises from bankruptcy.

9. An effective solution has been developed to manage the competitiveness of shoe industry enterprises formed into a cluster through the use of an innovative technological process for the entire assortment of the shoe cluster, equipped with universal, highly efficient and multifunctional equipment.

10. Recommendations have been developed to ensure regulatory documentation for the formation of quality and confirmation of the conformity of shoes within the framework of the Customs Union, which will allow the preparation of certificates of conformity and declarations of conformity of the Customs Union for the entire assortment of the shoe cluster.

11. Substantiated proposals for the creation of a testing laboratory within the cluster, in which it is supposed to test footwear to verify its compliance with the quality and safety indicators established in regulatory documents.

12. The role and main tasks of the metrological service are formulated, its organizational structure is developed.

13. Measures have been developed for testing and assessing the quality and safety of footwear.

To assess the effectiveness of the production activities of a shoe enterprise, it is necessary to analyze the annual results of the enterprise's work on the production of men's and women's footwear assortment. These calculations indicate that with 100% of the sale of men's and women's shoes in the specified period of time, not only the costs of production and sale of products are covered, but there is also a profit in the amount of 3697.4 thousand rubles. This indicates the effective operation of the enterprise, as well as the correct marketing and assortment policy. Product profitability is 14.9%.

Most often, an enterprise sells shoes through stores with payment after sale, concluding contracts with trade, indicating the timing of receipt of funds to the manufacturer's accounts.

In this case, if the footwear is in demand and is sold in full, then the company receives money on time, which is also needed to pay salaries, purchase working capital and other expenses to ensure the development of production.

During the year, the company produces 327,903 pairs of shoes. With 100% sales of these products, the company will receive revenue in the amount of 392202.1 thousand rubles. However, this situation is not always the case.

For example, when selling autumn low shoes in the amount of 80% of the production volume, the profit is reduced by 43.15% and amounts to only 1178 thousand rubles, while the sale of shoes less than 47.4% of the production volume brings losses to the enterprise. Due to the lack of funds, it is necessary to reduce the volume of production, delay the payment of wages to workers, for which at present the heads of the enterprise can be held accountable, even criminally. If such a situation arises, it is necessary to attract borrowed funds to cover costs and organize subsequent production, which is currently associated with certain difficulties: the interest on the loan has been significantly increased (up to 18%), the loan repayment period has been reduced, etc., leading to an even greater increase in production costs. Shoe enterprises should focus on both external (consumer enterprises, competition, market conditions, etc.) and internal factors, such as sales volume, profitability, covering basic costs, etc. However, it is impossible to take into account and foresee all situations that may arise. when selling shoes, i.e. some shoe models at a certain stage are no longer in demand. In this case, another, usually not advertised, side of marketing should appear: if shoes, even without taking into account market requirements, have already been produced, then they must be sold. For this purpose, in order to respond to lower prices of competitors, it is necessary to reduce too large stocks, get rid of damaged, defective shoes, liquidate leftovers, attract a large number of consumers, stimulate shoe



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consumption, using discounts. There are about twenty types of discounts, but for shoes the most common are those types of discounts that are used at various levels of the enterprise, sales organizations, and trade. In addition to using discounts, an enterprise can go for an initiative price reduction in case of underutilization of production capacities, a reduction in market share under the pressure of competition from competing enterprises, etc. In this case, the enterprise takes care of its costs, developing measures to reduce them by improving equipment and technology, introducing new types of materials into production, and constantly improving the quality of products. And all this requires large financial costs from enterprises, but, nevertheless, helps to increase the competitiveness of certain types of leather products and the enterprise as a whole. In addition, the greater the number of footwear products produced, the more production costs are reduced, which leads to lower prices, and most importantly, creates such conditions for the functioning of the market that would not allow other competing enterprises to enter it and would cause a positive reaction from consumers.

The developed software allows the head of the enterprise not only to monitor the receipt of funds on a daily basis, but, most importantly, to predict the replacement of one model, the demand for which has decreased to a critical volume, when funds are not provided to cover the production costs associated with this model, and the transition to production of a new model, the demand for which, based on the analysis of the marketing service, as it were, guarantees its viability and demand in an amount sufficient not only to cover the costs of its production, but also to obtain the necessary profit to ensure production itself without provoking bankruptcy.

Of course, it's good when there is already the necessary support for this very demand for a new model, namely:

- agreements with consumers on delivery with prepayment;
- a guarantee of branded stores that during the trial sale of the models they caused demand and there is a demand for them within the volumes at which the return of funds spent on their launch will be ensured and profit will be ensured, which will ensure the company receives high TEC and stability in the formation and provision consumer of competitive and demanded products.

Thus, taking into account the software for tracking the movement of cash flow and the presence of a well-established marketing service that is able to provide the very process of regulating the demand for the company's products, it is always possible to make the right decision to replace one model with another, while creating the basis for obtaining high TEC and preventing the labor collective from bankruptcy.

Of course, all this is just a wish, but in reality such work should be carried out daily. To do this, it is

necessary to reconsider our attitude towards the so-called break-even point, which, as it were, forms the conditions for the implementation of all our conclusions on the formation of competitive industries, providing labor collectives with high TEP and creating the basis for preventing their bankruptcy.

The traditional version of building a break-even point provides an understanding that the output of a given model cannot be less than a certain number of pairs of a given model.

But with a large assortment of production, the number of manufactured pairs is formed by its demand, and if demand does not ensure its implementation in the volume that ensures the return of all funds spent on this model to the enterprise, in this case the manager must decide on the advisability of launching it into production. Therefore, we consider it justified when constructing the break-even point to indicate not only the volume of production of this model, which would guarantee the return of all costs for this model, but also for how long it is necessary to replace it with a new one so that the return of these funds is provided in full and with profit.

Almost all experts agree that in the conditions of international competition of the next century, it is not the largest, but the most flexible light industry enterprises that retain their positions.

According to the Institute of Commodity Science and Wholesale Market Research, domestic production in Russia in 2020 decreased to 55.6 million pairs. In the context of the global economic crisis, this may lead to a shortage in some footwear price categories. It is obvious that with the total demand of Russia within 540÷580 million pairs of shoes per year, Russian enterprises face the problem of increasing production volumes, a similar situation with other domestic light industry enterprises.

The continuing exchange rate of the dollar against the ruble entails a further increase in prices for foreign-made products. Right now, those Russian manufacturers that produce high-quality light industry products can count on new sales markets within Russia and on new segments of buyers. Evidence of this is the fact that many large Russian trading companies have partially or completely switched to the production and trade in domestic light industry products.

Encouraging phenomena, albeit timidly, but appear directly in the shoe market. So, in 2020, there was a certain stabilization in sales of products through trade organizations. According to most experts, this is due to the reorientation of the population to the purchase of shoes in stores where quality assurance is higher than in "wholesale". In Russia, a new consumer standard is clearly being formed, in which cheap, low-quality shoes may not find their buyer. By the way, this is also manifested in the fact that the once unconditional trust of Russians in imports has noticeably shaken. This gives domestic manufacturers



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some chance, at least, to press the Asian competitors who have usurped the sector of cheap shoes, they are quite capable of. It is only important to remember that focusing exclusively on the production of inexpensive mass-demand products in a saturated market is fraught with a sales crisis. The prospects of Russian manufacturers are connected primarily with buyers who are ready to pay a little more for guaranteed quality and a fashionable style. Everything suggests that this particular group of buyers will expand faster than others in our country.

In the new economic conditions, only such production is progressive, which actively and dynamically responds to emerging tasks. The principle of "producing only what is needed, when needed, and as much as needed" requires light industry enterprises to adapt to the conditions for producing products in small batches with frequent changes in the assortment, i.e. to the conditions of multi-assortment small-scale production. The efficiency of light industry enterprises, and in many respects the ability to survive in the competitive struggle, depend on the ability to quickly and cost-effectively change to produce products in accordance with fluctuations in demand. Great opportunities for this are opened by the development and implementation of flexible production systems.

The technological and organizational flexibility of production systems determines the variable potential of enterprises, their ability to quickly and adequately respond to changes in market conditions and acts as a mechanism for optimizing the structure of the technological system in order to reduce the cost of footwear. Thus, the development of flexible technological processes for the production of light industry products will ensure high efficiency of the light industry and provoke a sharp increase in demand for the products of light industry enterprises in the regions of the Southern Federal District and the North Caucasus Federal District.

The authors outlined the structure of the assortment of shoes of manufacturing companies in the region by types, materials, season of wear, price levels, in order to analyze the market situation, which made it possible to identify those types of shoes that will be in high demand. Their aesthetic and constructive characteristics are formed.

The elements of the expert system for the operational management of a multi-assortment production developed by the authors make it possible to calculate the optimal structure of the assortment of footwear produced and determine the total cost of production of the entire assortment of models, which allows calculating the price niche for the full sale of manufactured footwear.

Theoretical dependencies are obtained to assess the influence of the factor "organization of production" on individual costing items in general and other technical and economic indicators. At the same

time, the analysis was carried out and the influence of the forms of organization of production and manufacturing technology on the cost of footwear was determined using the example of the technological process of manufacturing children's, men's and women's shoes, taking into account the shift program.

Recommendations have been developed for varying the share of costs of costing items for the manufacture of a multi-assortment issue with the possibility of predicting the cost and sales volumes of products, taking into account the demand for shoes in the regions of the Southern Federal District and the North Caucasus Federal District.

Functional and simulation models of business processes for the production of leather goods have been developed, a formal description of the organization of the current technological process and initial data for evaluating the effectiveness of technological processes for the manufacture of various types of footwear, taking into account the existing demand for it, have been obtained.

A methodology for multi-criteria evaluation of the effectiveness of innovative technological processes for the production of leather goods based on the application of the target programming methodology has been developed.

Software has been developed for the formation of the technological process of assembling shoes and determining the cost of producing an assortment of shoes. A computer simulation model has been implemented that describes the dynamics of the shoe assembly process. The proposed methodology and the software implemented on this basis make it possible to reduce the duration of technological preparation for production and increase, thanks to the rationalization of the technological process, the specific consumer effect, which today, and even more so tomorrow, is the main determining factor.

The complex indicators of the effectiveness of innovative technological processes for the manufacture of shoes are calculated. Taking into account the production program, promising options for technology and equipment were formed, the most efficient one was selected, the possibilities for streamlining the flow were identified to eliminate bottlenecks and minimize equipment downtime, which is one of the conditions for designing flexible technological processes for the production of light industry products with a demanded price niche.

The economic effect of the results of scientific research is determined, which are estimated in terms of increasing labor productivity, the level of mechanization of production, lowering the indicators of work in progress and production costs. An accessible tool for light industry production technologists to improve the design of technological processes is proposed, which allows the enterprise to form a competitive assortment and predict the maximum income from the production of light

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industry products for the regions of the Southern Federal District and the North Caucasus Federal District.

The authors support the idea of creating vertically integrated associations (TORs) in the Southern Federal District, which would deal with the entire cycle of ensuring the production of light industry products. This will improve quality control, reduce costs, increase profits, vary the price niche, providing competitiveness and sustainable demand for domestic products, and social protection for residents of the regions of the Southern Federal District and the North Caucasus Federal District. We believe that the results of the study and analysis of the state of the light industry, presented by the authors, will help industry representatives in choosing an effective solution for implementing the development strategy for all sectors of the light industry in the mining single-industry towns of the Rostov region in order to reduce the migration of the population of these cities and create social conditions for the population to live.

It is planned to create a TOP on the basis of the mining towns of the Rostov region in accordance with Federal Law of December 29, 2014 No. administrative barriers, solving such a topical problem for domestic enterprises as preventing them from bankruptcy. This decision acquires special significance in the formation of new, or in the restructuring of former light industry enterprises located in these regions, filling them with innovative technologies. The implementation of these proposals will create more than 30 thousand new jobs in these territories and provide more than 109 million rubles of investment.

It should be noted that knitwear is a fashion hit of the 21st century. Knitted plain stoles with a printed pattern, sexy, casual sweaters with deep cutouts, slit sleeves, tight dresses with wide belts, long cardigans are a nice new detail in the wardrobe of any fashionista. Today, on the catwalks of the world, you can see models knitted according to traditional technology from specially processed strips of leather or even fur.

Considered for some time to be suitable only for underwear, today knitwear is rightfully considered the most democratic clothing. It is indispensable for leisure, sports and even for a business wardrobe: a turtleneck under a jacket has long become a classic.

As a result of the research carried out, the following conclusions can be drawn:

1. In the assortment of knitwear, you can find almost any part of your wardrobe: from socks to fashionable coats.

2. The product can become competitive, i.e. take a worthy place among analogues only if it meets such an elusive and meaningful concept as quality. A more stringent requirement is compliance with standards.

3. Quality is the main characteristic of the product. This is the ability of a branded product to

perform its functions. The concept of quality includes durability, reliability, accuracy, ease of operation, repair and other valuable properties, the absence of defects or defects.

4. The basis for determining the grade are defects - their type, size, quantity, location on the parts and details of the product. Distinguish between the first and second grades of garments.

The product must meet the needs of consumers: physical technically, operationally, aesthetically, at a price.

A product can contribute to the satisfaction of hidden (subconscious) needs - status, age, psychological, spiritual, and then success in the market is guaranteed.

In addition, today modern technologies make it possible to make a knitted thing much more practical and durable through the use of mixed (containing additives) threads. The most popular additives are lycra and tadel. The product containing them becomes more wearable, elastic and does not stretch even after washing. Raw materials and equipment play a decisive role in the production of knitwear.

Thus, the knitwear production, formed within the framework of the ASEZ on the basis of the mining cities of the Rostov region, together with shoe, clothing and leather goods enterprises, will be the most in demand, guaranteeing enterprises stable technical and economic indicators, stable financial condition, employment of the population and a real improvement in their social status.

As a result of the research, a designer collection of leather goods has been developed that corresponds to current trends. Emphasis is placed on the author's handiwork and exclusive and high-quality materials. When developing the collection, design and technological requirements for the manufacture of leather goods were taken into account. Genuine leather was chosen as the material used in the manufacture of products for the collection, as the material has an aesthetic appearance, is environmentally friendly compared to other materials. The source of inspiration for creating a new product is the transformation of the original source, which does not imply a complete copying of it, but a rethinking with the help of associations. To date, the development of new models is based on such a creative method, the main goal of which is only to convey the memory of the source within the framework of a new form. In general, creative work on new models of leather goods, which implies the presence of a source, is very common and, therefore, promising.

The features of designing a collection of women's bags were considered based on the analysis of the compositional solution of samples - analogues. To achieve this goal, the following tasks were solved:

- Studied the history of the creation of leather goods;

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- carried out analysis of collections of well-known brands and mass-market brands in leather and haberdashery products;

- the main requirements and preferences of consumers in relation to the artistic and constructive features of the appearance of women's bags are determined;

- the choice of the optimal solution for basic models based on the analysis of the compositional solution of analogue samples was carried out;

- developed a collection of women's bags.

Based on the analysis of analogue models, a basic model and a structurally unified series of models were developed. The simplicity of the design reduces the complexity and material consumption of the product, which provokes an increase in the productivity of their manufacture.

It should be noted that the presented range of leather goods and accessories will be in demand by consumers of the newly created TOP on the basis of the mining towns of the Rostov region and will expand the range of products for consumers in these regions, increase employment among the unemployed and improve their social standard of living.

The quality of "it is written for generations" to be at the epicenter of both scientific and amateurish reflections at all times. The problem of ensuring the quality of activities is not just universal, relevant, it is strategic.

The domestic light industry is not going through the best of times, and the consumer is offered products of dubious quality that have entered our markets in counterfeit and other illegal ways, that is, they do not have guarantees for buyers to exercise their rights to protect themselves from unscrupulous manufacturers and suppliers.

To revive the role and significance of a quality-oriented strategy, since only in this case, business leaders will subjectively and objectively be forced to improve their production using nanotechnologies, innovative processes and digital production so that competitive and import-substituting materials and products fully meet the needs of domestic consumers. At the same time, our assertion is substantiated that the consumption of domestic materials and products is regulated by the market. In this case, the requirements of the market should shape the role of the state and consumers in the production of sustainable demand for domestic materials and products, namely:

maintain the range of goods, regulating it with federal, regional and municipal orders;

encourage price stability; increase consumer ability and gradually improve their quality. The implementation of these tasks will create the basis for the consumer to realize the need to pay for the benefits of quality materials and products, and the manufacturer to realize that improving the quality of materials and products cannot be associated only with rising prices, but also through technical innovations in

digital production aimed at on the application of new technological and engineering solutions.

Today, and even more so tomorrow, the implementation of one of the defining principles of production efficiency is important - the manufacturer produces exactly what is needed not only for domestic, but also for foreign consumers.

It is equally important to understand the role and significance of quality activity, that is, to what extent leaders have penetrated into the essence of things, learned to manage things, change their properties (range), form, forcing them to serve a person without significant damage to nature, for the benefit and in the name of a person.

Both political leaders and the government have recently begun to talk about the need for a competent industrial policy. However, if we carefully consider the normative, methodological documents on the structural restructuring of industry, then the thought arises whether we are stepping on the same rake that has been stepped on all the years of reforms.

What is the essence of economic reforms and the significance of industrial policy in them, which are theoretically substantiated and tested in practice by a number of developed countries?

This is the fight against inflation, the strengthening of the national currency and financial stabilization. This is a change in the forms of ownership in various sectors of the economy through the process of privatization. This is a structural restructuring of the economy under the conditions of market relations.

At the same time, structural adjustment must be placed at the basis of all these fundamental processes of economic reform. Both financial stabilization and privatization should be subject to the process of structural adjustment, since it is structural adjustment that determines the final result of reforms and the effectiveness of adapting various forms of production to civilized market relations.

The final result should also be taken as the basis for the structural restructuring of the economy. And these are products, services, their competitiveness in the domestic and world markets.

What happened in the Russian reforms? All three basic processes (financial stabilization, privatization and structural adjustments) proceeded on their own, without any interconnection between them. Therefore, the methods used by the government and the Central Bank to combat inflation and other economic indicators often ran counter to the objectives of structural adjustment.

As for the process of structural adjustment, the position of the government is expressed by the following statement: "the market itself will put everything in its place." With such a position towards structural adjustment, it is not surprising that in the national economic policy at that time there was no

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place for the words quality, competitiveness, import substitution

This, unfortunately, is the reality of the reforms carried out today. In this regard, I would like to refer to well-known world experience.

A world-famous quality specialist E. Deming, who at one time was a scientific consultant to the Japanese government and led Japan out of the economic crisis, in his book "Out of the Crisis" says: "... managing paper money, not a long-term strategy for digital production - the path to the abyss.

Regarding whether the state should pursue an industrial policy, one can cite the statement of the outstanding economist of the past, Adam Smith, who 200 years ago laid the foundations for the scientific analysis of the market economy. About the role of the state, he said: "... only it can, in the interests of the nation, limit the greed of monopolists, the adventurism of bankers and the egoism of merchants." It's like today is about us and our situation in the economy.

What are the results of economic activity today, what are the achievements in this area? The growth of gold and foreign exchange reserves, the decline in inflation, the budget surplus and other financial and economic achievements. And what, is this the end result of public administration? And not the quantity and quality of goods and services sold in the domestic and foreign markets, and not the solvency of the population to purchase these goods and services? And, ultimately, not the quality of life of the population of the country???

Therefore, it is quite natural today that the task is set for all levels of the executive and legislative authorities - to improve the quality of life of Russian citizens.

These calculations indicate that with 100% of the sale of men's and women's shoes in the specified period of time, not only the costs of production and sale of products are covered, but there is also a profit in the amount of 3697.4 thousand rubles. This indicates the effective operation of the enterprise, as well as the correct marketing and assortment policy. Product profitability is 14.9%.

With the implementation of 60% of shoes, the activity of the enterprise brings insignificant income. Basically, this income is achieved through the sale of men's shoes, since losses are observed in the women's assortment with these volumes. A further decrease in sales volumes will lead to an increase in losses. To solve this problem, the conditions for the sale of shoes within a specified period of time, as well as the sales volume of at least 50%, are necessary. If such a situation arises, it is necessary to attract borrowed funds to cover the costs and subsequent output.

The table shows the annual results of the work of newly created enterprises based on the mining towns of the Rostov region within the framework of the formed TOP for the production of light industry

goods, which are in demand by consumers in the regions of the Russian Federation.

Most often, an enterprise sells shoes through stores with payment after sale, concluding contracts with trade, indicating the timing of receipt of funds to the manufacturer's accounts.

In this case, if the footwear is in demand and is sold in full, then the company receives money on time, which is also needed to pay salaries, purchase working capital and other expenses to ensure the development of production.

During the year, the company produces 327,903 pairs of shoes. With 100% sales of these products, the company will receive revenue in the amount of 392202.1 thousand rubles. However, this situation is not always the case.

For example, with the sale of autumn low shoes in the amount of 80% of the production volume, the profit is reduced by 43.15% and amounts to only 1178 thousand rubles, while the sale of shoes less than 47.4% of the production volume brings losses to the enterprise. Due to the lack of funds, it is necessary to reduce the volume of production, delay the payment of wages to workers, for which at present the heads of the enterprise are liable, sometimes even criminally. If such a situation arises, it is necessary to attract borrowed funds to cover costs and organize subsequent production, which is currently associated with certain difficulties: the interest on the loan has been significantly increased (up to 18%), the loan repayment period has been reduced, etc., leading to an even greater increase in production costs.

In market conditions of management, an effective management system requires a rational organization of marketing activities, which largely determines the level of use of the means of production at the enterprise, the growth of labor productivity, the reduction of production costs, the increase in profits and profitability. This is due to the fact that marketing activity is not only the sale of finished shoes, but also the orientation of production to meet the effective demand of buyers and active work in the market to maintain and form demand for the company's products, and the organization of effective channels for the distribution and promotion of goods.

In a dynamically changing market environment, the performance of an enterprise, including a shoe one, largely depends on the effective results of the production, sales, financial and marketing policies of the enterprise itself, which creates the basis for bankruptcy protection and a stable position in the domestic market.

Thus, shoe companies should focus on both external (consumer enterprises, competition, market conditions, etc.) and internal factors, such as sales volume, profitability, covering basic costs, etc. However, it is impossible to take into account and foresee all situations that may arise during the sale of shoes, i.e. some shoe models are not in demand at a



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certain stage. In this case, another, usually not advertised, side of marketing should appear: if shoes, even without taking into account market requirements, have already been produced, then they must be sold. For this purpose, in order to respond to lower prices of competitors, it is necessary to reduce too large stocks, get rid of damaged, defective shoes, liquidate leftovers, attract a large number of consumers, stimulate shoe consumption, using discounts. There are about twenty types of discounts, but for shoes the most common are those types of discounts that are used at various levels of the enterprise, sales organizations, and trade. In addition to using discounts, an enterprise can go for an initiative price reduction in case of underutilization of production capacities, a reduction in market share under the pressure of competition from competing enterprises, etc. In this case, the enterprise takes care of its costs, developing measures to reduce them by improving equipment and technology, introducing new types of materials into production, and constantly improving the quality of products. And all this requires large financial costs from enterprises, but, nevertheless, helps to increase the competitiveness of certain types of leather products and the enterprise as a whole. In addition, the greater the number of footwear products produced, the more production costs are reduced, which leads to lower prices, and most importantly, creates such conditions for the functioning of the market that would not allow other competing enterprises to enter it and would cause a positive reaction from consumers. .

With the transition to a new economy, improving the quality and competitiveness of leather products has become a strategic task for all leather and footwear enterprises in the country and the region as a whole, it becomes necessary to take into account the laws and market requirements, master a new type of economic behavior, and adapt all aspects of their activities to a changing situation. , changes in consumer demand should be taken into account with defending the interests of consumers before industry. The fulfillment of these tasks is possible only on the basis of an in-depth study by manufacturers of domestic footwear products, the needs of hotel groups (consumer segments), methods for examining the quality and competitiveness of footwear. The current situation in the shoe industry of the Southern Federal District and the North Caucasus Federal District is not least the result of the inability of many managers of shoe enterprises in the Southern Federal District and the North Caucasian Federal District to quickly adapt to the new requirements put forward by the market, to the competition that has arisen from Russian and foreign manufacturers. Therefore, the current situation led to the development of a development strategy for the production of competitive leather goods in the Southern Federal District and the North Caucasus Federal District.

To implement the strategy for the implementation of the strategy of competitive and in-demand products, issues related to the development of domestic light industry enterprises in the Southern Federal District and the North Caucasus Federal District were considered. As a result of the work carried out, favorable conditions for the implementation of the strategy were identified, namely:

- a large concentration of skilled labor;
- coordinated specialization of producers;
- long-term traditions of shoe craft;
- a small number of local suppliers of high-quality raw materials, component materials;

- high demand in the Southern Federal District and the North Caucasus Federal District for high-quality footwear.

We believe that for the production of competitive products by domestic manufacturers it is necessary:

- increasing the investment attractiveness of the industry;

- creation of conditions conducive to improving the provision of the industry with material and raw materials;

- protection of the internal market from illegal circulation of goods;

- export promotion;
- legalization of preferential taxation of producers;
- development of an interconnected system of supply and marketing, production, technology and innovation, pricing, financial, personnel policy and personnel management;

- improving the quality and design of products;
- uniting the efforts of all manufacturers to promote the footwear of the region;

- development of a set of measures of regional importance aimed at improving the socio-economic situation by creating new jobs;

- studying the life cycle of products and the use of advertising and media;

- strengthening control and introduction of modern ISO quality management systems, development of a dealer and distribution network;

- concessional lending under targeted federal and regional programs (“Family”, “Children”, “Maternity”);

- expanding the practice of leasing schemes;
- with increased commercial risk and in conditions of uncertainty, it is advisable to use outsourcing.

A competitive range of products for the clothing, footwear, knitwear and leather goods industries has been developed, taking into account the factors affecting consumer demand: compliance with the main fashion trends, economic, social and climatic features of the regions of the Southern Federal District and the North Caucasus Federal District. Within the framework of the developed strategy, the production of competitive products will be organized using



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modern mechanized innovative technical processes, as well as to meet the demand of an elite consumer, using manual labor.

Innovative technological processes have been developed for the production of clothing, footwear, knitwear and leather goods industries using modern technological equipment with advanced nanotechnologies, which form the basis for reducing the cost of their production and thereby increasing their competitiveness, manufactured by the world's leading companies, with the possibility of a wide range of footwear production not only by type, but also by manufacturing methods.

Based on the current situation in the economy of our country, in our opinion, an equally significant problem in the development of the regional consumer market is the lack of a full-fledged regulatory and legal framework that ensures the functioning of the mechanism of state regulation of the consumer market in the regions. Based on this, it is the state and regional intervention that should correct the situation on the market of domestic light industry products in the regions, and thus there will be an opportunity for the development of competitive products.

From the analysis performed, we highlight the following trends in the development of shoe production of clothing, footwear, knitwear and leather goods industries based on the TOP in the regions of the Southern Federal District and the North Caucasus Federal District:

1. Due to the high level of migration of the able-bodied population of the Southern and North Caucasian Federal Districts to developing industries, the industries of our districts that we have named above can rightfully be called developing.

2. In the Southern and North Caucasian federal districts, close attention is justified to the issues of high-quality provision of the industry with qualified specialists employed in the field of light industry (a large number of specialized educational institutions for training personnel). An important factor is the increase in the investment attractiveness of the industry, especially from the side of regional authorities, and the creation of conditions for increasing their competitiveness. It is necessary to impose high duties on imported finished products and low duties on imported basic and auxiliary materials and equipment, and it is also necessary to regulate the level of prices and tariffs that would guarantee the manufacturer and trade as a whole the reimbursement of costs and the accumulation of funds for the improvement and further development of production.

Thus, the prerequisites for the development of competitive production in our region are significant and relevant.

In conclusion, we propose a set of the following measures:

1. Creation of a regional program for the development and support of domestic producers in the Southern Federal District and the North Caucasus Federal District (loans, investments, leasing, outsourcing).

2. Development of a modern raw material base of the domestic industry.

3. Stimulation of the tax system for the modernization and reconstruction of existing light industry industries and the creation of new competitive industries.

4. Improvement of financial condition and re-equipment of 50% of fixed assets.

5. Taking measures to reduce the import of imported products into the region and improve the quality of products with bringing exports up to 35%, which will ensure the suppression of trade in contraband products.

6. Recognition from the Government of the Russian Federation of light industry as a priority among other industries and the adoption of a program for the "breakthrough" development of the industry for the period 2015-2020. and until 2025

7. To ensure doubling by 2025 of industrial production and output of products in demand.

8. Competent development of a marketing policy for regional light industry production to better promote domestic products in local markets and intensify media work at the federal and regional levels to raise the image of Russian products.

The implementation of the planned measures will lead to covering the deficit for all types of products, increase labor mobility in the Southern Federal District and the North Caucasus Federal District and reduce negative processes in the labor market, as well as a stable balance of interests of workers, employers and regional and state authorities.

In our opinion, for the successful implementation of all of the above measures within the framework of the created ASEZ, the interest of the regional authorities in the development of light industry production, lower prices for components and energy costs, and, most importantly, convenient transportation is most important. Thus, all this together will provide our TOP with a great future and stable positions both in the domestic and in the markets of near and far abroad. All that is needed is the coherence and interest of all participants in these regions, including the assistance of regional and municipal branches of government.

### Conclusion

The Territory of Advanced Socio-Economic Development (TOSED) is a part of the territory of a constituent entity of the Russian Federation, including a closed administrative-territorial entity, where, in accordance with the decision of the Government of the Russian Federation, a special legal regime for the implementation of entrepreneurial and other activities

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ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

has been established in order to create favorable conditions for attracting investments, ensuring accelerated socio-economic development and creating comfortable conditions for the life of the population.

The priority development area is created for 10 years. The term of existence of the priority development area can be extended by 5 years.

Territory of Advanced Socio-Economic Development (TORs) created to promote the development of mining towns in the Rostov region by diversifying the economy, attracting investments to a single-industry municipality and creating new jobs not related to the activities of the city-forming enterprises, the production of export-oriented and import-substituting products.

Decree of the Government of the Russian Federation "On the procedure for providing subsidies for the reimbursement of part of the costs of creating capital construction facilities of engineering infrastructure that are an integral part of the investment project, and (or) their connection (technological connection) to engineering systems" for investors implementing investment projects in TASED (in within the list of permitted types of economic activity for TASED residents), the criterion for the volume of investments was reduced - at least 5 million rubles (for other categories of recipients of engineering subsidies, the volume of investments remained the same - at least 100.0 million rubles), the amount of the subsidy for connection to facilities infrastructure increased from 50% to 80% of the total cost of the investment project when connecting (technological connection) of capital construction

facilities, which are an integral part of the investment project, to electricity and (or) gas supply networks.

Main regulatory documents:

Federal Law No. 473-FZ dated December 29, 2014 "On Territories of Advanced Social and Economic Development in the Russian Federation".

Decree of the Government of the Russian Federation dated June 22, 2015 No. 614 "On the peculiarities of creating territories of advanced socio-economic development in the territories of single-industry municipalities of the Russian Federation (single-industry towns)".

Decree of the Government of the Russian Federation of March 16, 2018 No. 263 "On the creation of a territory for advanced socio-economic development (TORs).

Decree of the Government of the Russian Federation "On the implementation of activities in the territories of advanced socio-economic development created in the territories of single-industry municipal formations of mining cities of the Rostov region (single-industry towns)".

Forming import substitution, regional and municipal authorities, supporting the heads of enterprises in the implementation of their tasks and filling the markets with products in demand, especially for children and socially vulnerable groups in these regions, they - these same authorities - will directly realize their promises to voters that they have made and create confidence among the population of these regions in their future, which, ultimately, will provide the population of small and medium-sized cities with a decent life.

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## DECISION OF PRESIDIUM OF INTERNATIONAL ACADEMY

According to the results of research work of the past 2021 and published scientific articles in the journal «Theoretical & Applied Science», Presidium of International Academy of Theoretical & Applied Sciences has decided to award the following scientists - rank Corresponding member and Academician of International Academy, as well as give diplomas and certificates of member of International Academy.



**Presidium of International Academy  
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Corresponding member of International Academy TAS (USA)**

Scopus ASCC: 2000. Economics, Econometrics and Finance.			
1	<b>Prokhorov, Vladimir Timofeevich</b>	Institute of Service and Entrepreneurship (branch) DSTU Shakhty, Russia	Doctor of Technical Sciences, Professor
2	<b>Volkova, Galina Yurievna</b>	LLC TsPOSN «Ortomoda» Moscow, Russia	Doctor of Economics, Professor
3	<b>Blagorodov, Arthur Aleksandrovich</b>	Institute of Service and Entrepreneurship (branch) DSTU	

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**JIF**                    = **1.500**      **SJIF** (Morocco) = **7.184**      **OAJI** (USA)      = **0.350**

4	<b>Bordukh, Dmitry</b> <b>Olegovich</b>	Institute of Service and Entrepreneurship (branch) DSTU	
5	<b>Shcherbakov, Danil</b> <b>Sergeevich</b>	Institute of Service and Entrepreneurship (branch) DSTU	
<b>Scopus ASCC: 1600. Chemistry.</b>			
6	<b>Yurchenko, Oleg</b> <b>Ivanovych</b>	Kharkiv V.N. Karazin National University	PhD, Full Professor of Chemical Metrology Department
7	<b>Chernozhuk, Tetyana</b> <b>Vasylivna</b>	Kharkiv V.N. Karazin National University	PhD, Associate Professor of Inorganic Chemistry Department
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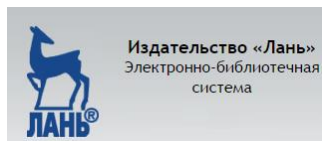
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