Alcomet in Schumen, Bulgaria has successfully installed the new generation of foil Stressometer flatness system in the MINO foil breakdown rolling mill

Alcomet’s MINO foil breakdown mill is running with the new generation of foil Stressometer flatness system.

Introduction of Alcomet AD
Alcomet AD is one of the leading manufacturers of rolled and extruded aluminium products in the Balkans and the only one of its kind in Bulgaria to house the production of both types of products.

Benefiting from forty years of experience in the field of non-ferrous metallurgy, today Alcomet offers a large variety of foils, sheets, strips and profiles with total production capacity of 65,000 tons per year.

Located in the north-eastern part of Bulgaria, in the town of Shumen, Alcomet AD has an international reach extending far beyond the country borders. Over 95% of the total volume is marketed abroad, mainly to Europe and the US.

Facts on rolling shop
Main equipment:
- 5 rolling mills*
- 2 tension-leveling lines
- 5 slitting lines
- 2 cut-to-length lines
- 4 foil separators
- 13 annealing furnaces

Annual production capacity:
- 50,000 tons

Distribution of 50,000 tons per year:
- 21,000 tons of foil
- 11,000 tons of technical foil
- 18,000 tons of sheet

* 5 rolling mills of which one (1) MINO foil breakdown mill with the new generation of ABB foil Stressometer flatness system. Max speed: 1,500 m per min.
Alcomet’s MINO foil breakdown mill is running with the new generation of foil Stressometer flatness system.

What are the main benefits?

We ask Mr Cevdet Ahmet, Manager for mills, and Mr Ilter Tasin, Automation Engineer, about the Foil Stressometer Flatness system and they coherently express:

“The Stressometer flatness system has a very solid and robust measuring roll. Since some years back there is no damage whatsoever on the Stressometer roll. A really good-quality solid roll.”

“Over two years we have had no maintenance and no need for calibration of the Stressometer. We just have basic preventive maintenance of the Stressometer. And less maintenance and no calibration mean increased production, our constant goal at Alcomet.”

“Foil production increased with 30% when the MINO foil breakdown mill was installed. This new generation Stressometer foil roll is measuring accurately and is sensitive. It detects all buckles. For technical foil it is very important with perfect flatness and one of the most demanding customers is printing machine suppliers. With Stressometer flatness system we have been able to deliver perfect flatness to these demanding customers.”

“We are very happy with the Stressometer system and it is the biggest ABB installation at Alcomet.”

“In general Stressometer is a reliable flatness system with a very solid and robust measuring roll.”
**Facts on Alcomet AD**

**Alcomet AD**

- Number of employees: 1000
- Turnover in 2018: 185 million Euros
- Total production capacity: 65000 tons
  - Rolling, Extrusion, Casting
- Sales in: 30 countries
- Export: 95%, mainly to Europe and US

**Mill data**

<table>
<thead>
<tr>
<th>Mechanical supplier</th>
<th>MINO foil breakdown mill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work roll diameter</td>
<td>300 mm max.</td>
</tr>
<tr>
<td>Thickness</td>
<td>1.2 to 0.05 mm</td>
</tr>
<tr>
<td>Min. width</td>
<td>1000 mm</td>
</tr>
<tr>
<td>Max. width</td>
<td>1600 mm</td>
</tr>
<tr>
<td>Max. rolling speed</td>
<td>1500 m/min</td>
</tr>
</tbody>
</table>

Additional comments from Mr Huseyin Yorucu, Chairman of the Management Board, Alcomet:

“Alcomet is providing opportunities and the one-stop shop in aluminium supply coverage.”

“Alcomet is very flexible with short delivery times leading to high competitiveness in the marketplace.”

“Alcomet is always developing new upcoming application areas for growing the business.”

“Alcomet is running at full production and all production equipment must be working perfectly to meet delivery times and customer requirements. Stressometer flatness system has met the expectations in a very good way.”
**Facts on Stressometer**

The Stressometer system is since more than fifty years recognized as the world standard in flatness measurement and control in flat rolling mills. Based upon our experience from more than 1700 Stressometer roll installations provides the advanced automated control system needed to produce the high quality flat strip and foil demanded by producers.

The Stressometer roll minimizes the cost of ownership. No on-site calibration is needed and the system has very low cost with regards to power and air consumption.

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**Data**

**New generation of foil Stressometer roll**

<table>
<thead>
<tr>
<th>Roll life cycle</th>
<th>More than 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strip thickness range</td>
<td>Down to 0.005 mm</td>
</tr>
<tr>
<td>Typical accuracy</td>
<td>Better than 0.3 l-units</td>
</tr>
<tr>
<td>Parallel resolution</td>
<td>52 mm</td>
</tr>
<tr>
<td>Measurement zone width</td>
<td>52 mm</td>
</tr>
<tr>
<td>Minimum edge zone coverage for measurement</td>
<td>1 mm</td>
</tr>
<tr>
<td>Measurement range, tension/zone</td>
<td>1 to 1000 N</td>
</tr>
</tbody>
</table>

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01 Foil Stressometer roll.