EvoQuench upgrade
For microfiber yarn production
Spinning super-microfiber and microfiber filament yarns
The quenching system is a critical component that enables the production of microfiber yarns. For existing spinning plants, Oerlikon Barmag offers solutions for upgrading your existing quench system, transforming it into the proven Evo-Quench radial quench system.

EvoQuench advantages
• Product range of between 0.5 and 3 dpf for super-microfiber, microfiber and standard yarns;
• Extremely-effective and uniform quenching for excellent yarn quality;
• 80% reduction in quench air consumption;*
• Minimum operating costs with reusable, robust long-life quenching candles.
From cross-flow to EvoQuench, Oerlikon Barmag’s quench modification offers substantial energy savings and quality improvements for existing plants.

Designed for fast return-on-investment
With very short delivery and installation times, you are guaranteed a fast high return-on-investment.

In comparison to the same process on cross-flow quenching, EvoQuench provides an immediate economic benefit by reducing the air consumption* by 20 million cubic meters – per position and per year. This generates significant energy savings required for cooling the quench air.

Furthermore, excellent yarn quality with optimum Uster values, elongation and dyeability is achieved. For example, EvoQuench improves the Uster value from 1.09 to 0.55 and the coefficient of variation from 1.39 to 0.71 for 75den/f144 POY yarn.

### Product quality range for PET-POY

<table>
<thead>
<tr>
<th>Denier</th>
<th>Filaments</th>
<th>dpf</th>
<th>Speed [m/min]</th>
<th>POY denier [dtex]</th>
<th>Tenacity [cN/dtex]</th>
<th>Elongation [%]</th>
<th>Uster [U%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>96</td>
<td>0.52</td>
<td>2650</td>
<td>90</td>
<td>2.28</td>
<td>125</td>
<td>&lt; 1.1</td>
</tr>
<tr>
<td>75</td>
<td>72</td>
<td>1.04</td>
<td>2900</td>
<td>130</td>
<td>2/38</td>
<td>132</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>120</td>
<td>96</td>
<td>1.25</td>
<td>2850</td>
<td>185</td>
<td>2.35</td>
<td>138</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>120</td>
<td>192</td>
<td>0.63</td>
<td>2650</td>
<td>185</td>
<td>2.30</td>
<td>127</td>
<td>&lt; 1.1</td>
</tr>
<tr>
<td>150</td>
<td>144</td>
<td>1.04</td>
<td>2850</td>
<td>248</td>
<td>2.31</td>
<td>132</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>150</td>
<td>288</td>
<td>0.52</td>
<td>2600</td>
<td>266</td>
<td>2.29</td>
<td>130</td>
<td>&lt; 1.1</td>
</tr>
</tbody>
</table>

Actual possible values are dependent on the individual setup.

EvoQuench is the world’s most successful radial quench system with over 3,500 positions sold.

Oerlikon Barmag upgrades are designed to give our customers a competitive edge. Please contact us to arrange a personal consultation to upgrade your spinning plant for microfiber production.

* compared to cross-flow quenching for same denier and dpf