Conforma Clad™ Twin-Screw, Co-Rotating Extruder Barrels

...for increased service life in the most extreme extrusion processes!

- **Increased Component Life**
  Maintain maximum performance levels with increased system availability and profitability. Kennametal’s Conforma Clad barrels last up to three times longer than those protected by competitive materials.

- **Improved Abrasion and Corrosion Resistance**
  While competitive materials can only provide protection from one mode of wear, our cladding has been scientifically engineered to resist both abrasion and corrosion.

- **Enhanced Heat Transfer**
  Our direct-clad barrels provide excellent heat transfer when needed.

- **Reduced Risk of Catastrophic Failures**
  Our uniform, metallurgically-bonded cladding promises dependable wear rates and predictable life. And our direct-clad barrels and sleeves prevent costly equipment failures.

- **Increased Consistency and Quality**
  Protecting critical equipment tolerances permits tighter process control, resulting in more consistent product quality and throughput.

- **Engineered Cladding Solutions**
  A large assortment of standard and custom cladding formulations are available to meet all of your wear protection needs.
Conforma Clad™ Extruder Barrels

Conforma Clad™ twin-screw extruder barrels are engineered to withstand the most extreme extrusion processes. Kennametal manufactures wear-protected replacement barrels and liners for virtually all OEMs.

Our infiltration brazed tungsten carbide cladding is metallurgically bonded to barrel surfaces, resulting in barrels that are extremely abrasion and corrosion resistant. The unique cloth delivery system of Kennametal’s Conforma Clad enables densely-packed tungsten carbide to be uniformly applied to complex geometries, providing a protective barrier that wears at a consistent and predictable rate.

**Specifications**

**BARREL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Bore Diameter</th>
<th>Barrel Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>B&amp;P Process Equipment</td>
<td>30–133</td>
<td>93–510</td>
</tr>
<tr>
<td>Berstorff</td>
<td>43–140</td>
<td>160–650</td>
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<td>Clextral S.A.</td>
<td>53–200</td>
<td>185–700</td>
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<td>Coperion Corporation</td>
<td>30–177</td>
<td>93–720</td>
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<tr>
<td>Davis-Standard Corporation</td>
<td>32–152</td>
<td>105–490</td>
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<td>Entek Extruders</td>
<td>27–133</td>
<td>144–510</td>
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<td>Leistritz Corporation</td>
<td>27–135</td>
<td>108–490</td>
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<td>Toshiba</td>
<td>41–136</td>
<td>164–544</td>
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<tr>
<td>Theysohn</td>
<td>30–120</td>
<td>120–560</td>
</tr>
</tbody>
</table>

**Cladding Specifications**

- **Substrates**: Cladding can be applied to most carbon steels, precipitation hardened steels, stainless steels and other corrosion-resistant alloy materials.
- **Temperature**: Continuous operation at temperatures up to 1900° F (1038° C) with nominal performance impact. Able to withstand transients in excess of 2000° F (1093° C).
- **Chemical Resistance**: Compatible with all chemicals commonly found in plastics extrusion, including hydrochloric acid, sulfuric acid and nitric acid.

**Tri-Metallic Advantage™**

Our exclusive Tri-Metallic Advantage is the only available wear solution that uses multiple cladding formulas to target the distinct properties required to protect extruder barrel bores and apexes.

We directly clad the bores of steel extruder barrels with WC 200 cladding and apply WC 219 cladding to the apexes. The barrel is then infiltration brazed, metallurgically bonding the two claddings to the substrate and creating a resilient, seamless barricade to extreme wear.

Over 16 years ago, Kennametal and Coperion co-developed this tri-metallic wear solution for extruder barrels known as WPR-29. Now, the same tri-metallic protection is available to end-users directly from Kennametal.