



Seamless, Internally Wearfaced Pipe

**CastoTube®**



- Produced using advanced wear resistant alloys
- Easy to join by welding or mechanical means
- Cost effective for rapid replacement of worn pipe
- Custom cutting, elbows and joints available
- Wearfaced coating withstands impact and handling



# CastoTube

## CastoTube Advantages

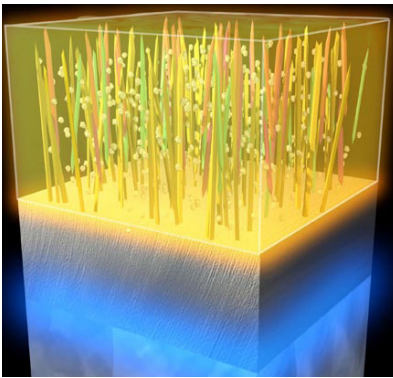
CastoTube wear resistant solutions for pipe, are seamless, easy to weld, mild steel, tubes which have been internally wearfaced with wear resistant alloys. By avoiding expensive forming operations of flat plates into tubes, CastoTubes offer many advantages:

- Very cost effective when compared to rolled plate.
- Seamless - absence of wear-prone linear weld joints.
- Exceptional wear resistance.
- Round cross section, spiral welding minimizes distortion.
- Easy-to-join by welding or mechanical means.
- Available from 4" up to 24" I.D.



## The Eutectic Difference

- Ultra-hard phases anchored in a tough matrix to combat severe abrasion.
- Hardness that's typically 2-3 times higher than the most abrasive media found in industrial processes.
- Uniform hardness throughout the coating.
- Controlled cooling produces strongly oriented hard phases for maximum wear resistance.
- Available in straight pipe or custom configurations such as elbows, reducers, wyes and other shapes.
- Eutectic offers matching alloys, in electrode and wire form, for joining and capping all seams - complete protection!



Controlled cooling during the manufacturing process produces densely dispersed hard phases. These are strongly oriented to provide superior wear resistance when compared to conventional weld coatings.

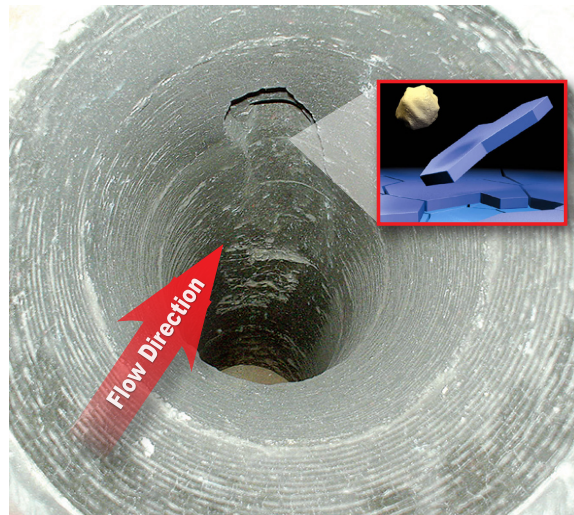


# Solving Complex Wear Problems

Wear rate increases dramatically in elbows due to the change in speed and direction of particles. Often straight pipe segments remain in good condition while elbows wear out prematurely. The biggest engineering challenge is creating uniform wear throughout the system.

Eutectic will engineer a solution...

- Pipe segments with different wear resistant alloys.
- Combination of metal and polymer coatings.
- Increased segments to improve particle flow and smoothness of the pipe radius.
- Wearface each joint internally to improve wear resistance.



Competitor elbow displaying extreme wear at entry.



CastoTube smooth radius elbow.



CastoTube elbow externally coated with MeCaTec® polymer.

## CastoTube Specifications

Recommended joining alloys EnDOTec DO\*66 or EnDOTec DO\*68S wires or EutecTrode 66 or 680 electrodes.

\* Contact Eutectic for capping alloy product recommendations.

ALLOY	DESCRIPTION	G65*	HARDNESS	DIAMETER
<b>395N</b>	<b>HIGHEST ABRASION &amp; EROSION RESISTANCE</b> NanoAlloy® nano size ultra hard phases.	16 mm <sup>3</sup>	68-71 HRC	4" to 24"
<b>4666</b>	<b>HIGHER ABRASION &amp; EROSION RESISTANCE</b> Complex carbides and borides. High-temperature.	17 mm <sup>3</sup>	61-64 HRC	
<b>4603</b>	<b>HIGH ABRASION &amp; EROSION RESISTANCE</b> Premium Chromium carbide.	21 mm <sup>3</sup>	55-59 HRC	

\* ASTM G65 average volume loss in mm<sup>3</sup> after specimen is subjected to wear by dry sand abrasion.

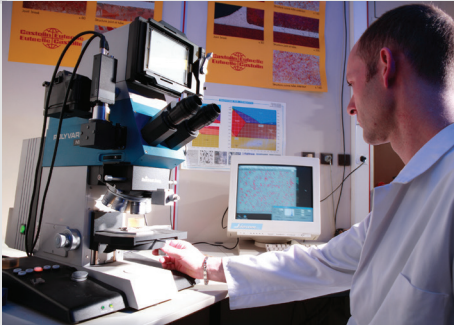


# Eutectic Services - Maintenance & Repair Workshops

Facing daily production problems and the shortage of skilled welders, many companies are outsourcing their maintenance and repairs to the experts. Eutectic has over 115 years of maintenance expertise solving heavy industry's toughest wear problems.

Our experienced Eutectic Services technicians will evaluate the wear phenomenon and provide you with the most reliable and cost effective solution. Often this means a combination of alloys and a specialized welding or thermal spray process only a manufacturer of the product can provide. Or, maybe a replacement wear plate part or pipe is the solution. We can provide new and semi-finished parts ready to be installed, saving you costly down time and labor in your maintenance operations.

No matter what the wear or joining challenge, our fully equipped and professionally staffed Eutectic Services workshop can help you.



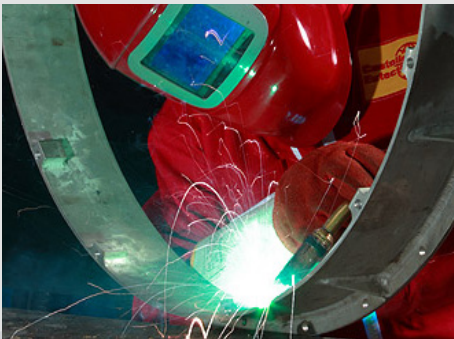
*Metallography*



*CastoTube Internally Wearfaced Pipe*



*PTA Coatings*



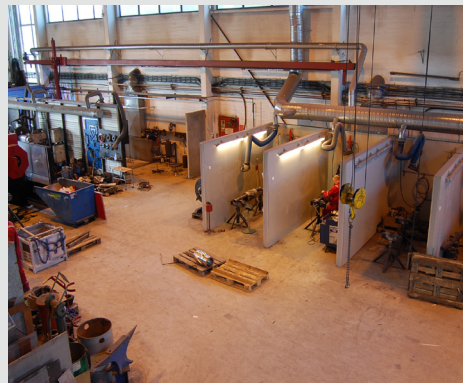
*MIG, TIG and Stick Welding*



*Wear Plate Fabrication*



*Replacement Parts*



*Specialized Workshops*



**Eutectic Corporation:**  
N94 W14355 Garwin Mace Dr.  
Menomonee Falls WI, 53051 USA  
+1 800. 558. 8524 • eutectic.com

**Eutectic Canada:**  
428, rue Aimé-Vincent Vaudreuil-Dorion,  
Québec J7V 5V5 Canada  
+1 800. 361. 9439 • eutectic.ca



Follow Us On...

