

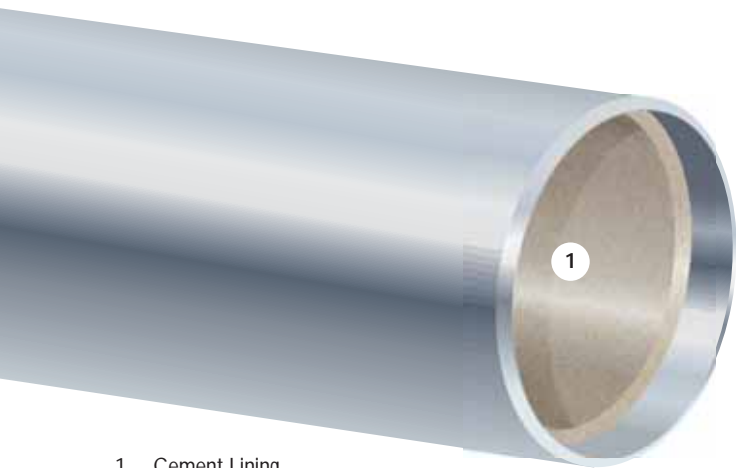
# SureFlo<sup>®</sup> CML

Centrifugally Applied Cement Mortar Lining



INTERNAL

PRODUCT DATA SHEET



1. Cement Lining

## Product Description

Cement Mortar Lining (CML) is a centrifugally applied continuous lining of dense portland cement mortar with a smooth and uniform finish. **This product was developed to provide an economical form of internal corrosion and abrasion protection for oilfield tubulars and line pipe.** CML is used primarily in water injection and disposal lines. The product is also suitable for potable water lines but should not be specified for lines where hammer conditions or fluid pH below six (acidic condition) exist.

## Applications



Small Diameter Pipelines



Large Diameter Pipelines



Potable Water Lines

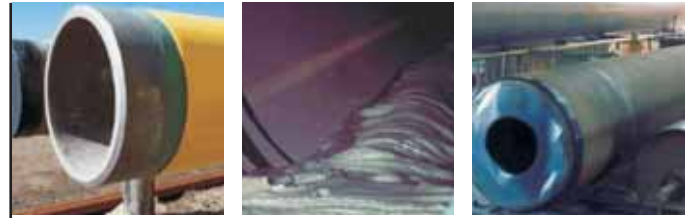


Waterworks Pipelines

## Related Standards and Specifications

- ISO 9001:2008

*For additional standards and specifications with which this product complies, please contact your Bredero Shaw representative. In Canada, consult Shaw Pipe.*



## Provides Economical and Lasting Protection

- Economical and lasting protection against the corrosive effects of saline solutions and other types of industrial liquids and wastes

## Proven Technology

- Over a century of use in municipal water mains and water service lines

## Compatible with Bredero Shaw's External Coatings

- Extruded polyethylene (YJ) external coating may be applied over CML pipe provided the steel is not heated rapidly by more than 80°C during the coating process.

## Excellent Structural and Spall-Resistant Properties

## Global Availability

- Available from a network of coating plants strategically located across the world to minimize pipe transportation costs.
- High capacity within the Bredero Shaw plant network allows the client to benefit from single source advantages, providing more cost effective management of pipe coating needs.

Features & Benefits

# SureFlo® CML

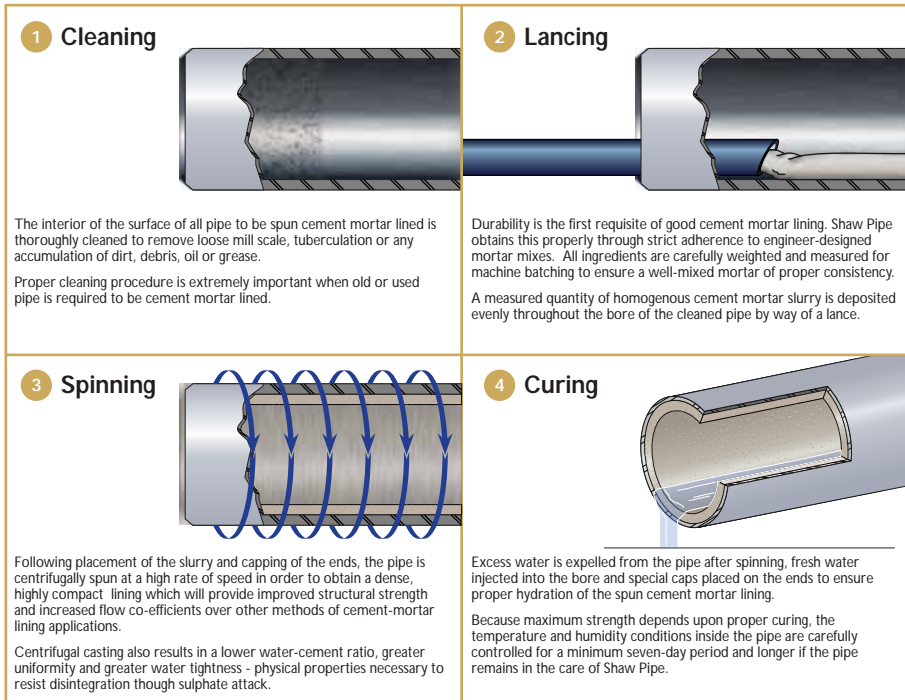
## Centrifugally Applied Cement Mortar Lining

### Typical Plant Capabilities and Product Properties

Capability/Property	SureFlo® CML
Minimum Pipe Diameter .....	50 mm (2.375)
Maximum Pipe Diameter .....	609 mm + (24")*
Minimum Pipe Length .....	6.1 m (20')
Maximum Pipe Length.....	15.2 m (50')
Minimum Operating Temperature .....	-40°C (-40°F)
Maximum Operating Temperature.....	300°C (572°F)

Values shown are typical and may vary from plant to plant. Consult Bredero Shaw for special requirements. In Canada, consult Shaw Pipe. \* Larger diameters may be possible.

### Product Application Process



SureFlo® CML\_rev021

Regional Offices

**HEAD OFFICE**  
**Bredero Shaw**  
3838 N. Sam Houston Pkwy E.  
Suite 300  
Houston, Texas  
77032-3400, USA  
Phone: +1-281-886-2350  
solutions@brederoshaw.com

**NORTH AMERICA**  
**Bredero Shaw**  
Two Executive Place,  
200, 1824 Crowchild Trail, N.W.  
Calgary, Alberta  
T2M 3Y7, Canada  
Phone: +1-403-263-2255  
northamerica@brederoshaw.com

**LATIN AMERICA**  
**Bredero Shaw**  
3838 N. Sam Houston Pkwy E.  
Suite 300  
Houston, Texas  
77032-3400, USA  
Phone: +1-281-886-2350  
latinamerica@brederoshaw.com

**EUROPE, MIDDLE EAST,  
AFRICA & RUSSIA**  
**Bredero Shaw**  
Lakeside House  
1 Furzeground Way  
Stockley Park, Uxbridge  
UB11 1BD  
Phone: +44 (0) 208 622 3071  
EMAR@brederoshaw.com

**ASIA PACIFIC**  
**Bredero Shaw**  
101 Thomson Road  
#17-01/02 United Square  
Singapore 307591  
Phone: +65-6732-2355  
asiapacific@brederoshaw.com

### Plants

#### North America

Edmonton, Alberta

### About Bredero Shaw

Bredero Shaw is the global leader in pipe coating solutions. With more than 80 years of experience, the largest team of dedicated pipe coating professionals, the most extensive network of strategically located plants worldwide and with proven innovative coating technologies, the company has protected more pipelines in virtually every environment and operating condition than anyone in the industry.

Bredero Shaw offers technologically advanced solutions for anti-corrosion coatings, protective and weight coatings, thermal flow assurance coatings, internal coatings, custom coatings and field joints for both onshore and offshore applications. This broad range of products and services provides Bredero Shaw with the unique capability to service the full spectrum of pipeline protection and flow assurance requirements. Consult your Bredero Shaw representative for your unique project requirements.

The information contained herein is indicative of the types of coatings provided by Bredero Shaw, and is not intended to be a guarantee that a particular coating will be suitable for a given application. Since many unique environmental, operating, and design conditions must be considered, the user shall determine the suitability of the coating for the intended use and assume all the risks and liabilities in connection therewith. Bredero Shaw's liability is stated in our standard conditions of sale.