ChemLINE® TC
Thermal Cycling

A protective lining for superior corrosion and high temperature resistance with exceptional flexibility and toughness.

Description

ChemLINE® TC (Thermal Cycling) coating is a specially formulated polymer coating for handling the high temperature and abrasion requirements of the power industry. ChemLINE® TC is a two-component force cure system that offers unique characteristics. ChemLINE® TC is a cross linked organic-inorganic multifunctional polymer coating that is cured through homopolymerization. This dense cross linked polymer exhibits high flexibility and toughness, having no detrimental hydroxyl or ester groups. In addition to ChemLINE® TC's temperature resistance of 400°F (204°C), it provides superior resistance to:

- Acids, alkalis, solvents, oxidizing agents
- Good wear and abrasion resistance
- Impact resistance
- Thermal cycling -40°F (-40°C) to 400°F (204°C)

Industry Applications

- Stacks
- Chimneys
- Ducts
- Flue gas desulfurization scrubbers
- Chemical scrubbers
- Pre-scrubbers
- Spray towers
- Fans



Application Highlights

- Excellent resistance to hot flue gas condensate
- Resists fly ash abrasion
- Low coefficient of thermal expansion
- Smooth, low surface energy reduces fly ash build-up in ducts and stacks
- Can be applied to pitted corroded steel
- Low VOC - 134 grams/L (1.11 lbs. per gallon)
- Outstanding flexibility
- Resists hydroblasting
- Field repairable
- Coefficient of thermal expansion comparable to stainless steel
- Dry heat resistance up to 400°F (204°C)

Typical Properties (mixed, as supplied)

- Stock Colors _____ White
- VOC Level _____ 134 grams/L (1.11 lbs./gal.)
- Pot Life _____ 120 minutes @ 75°F (24°C)
- Viscosity Reduction _____ Reduce with Toluene or Xylene
- Solids by Volume _____ 85%
- Recommended Film Thickness (dry) mils average
  _____ Steel: 16 mils (400 microns)
  _____ Concrete: 24 mils (600 microns)
- Shelf Life _____ 12 months

For product recommendations and technical, application and heat curing information contact Advanced Polymer Coatings' customer service. Contact +1 440-937-6218.

KRY Coating & Denizcilik
ChemLINE®

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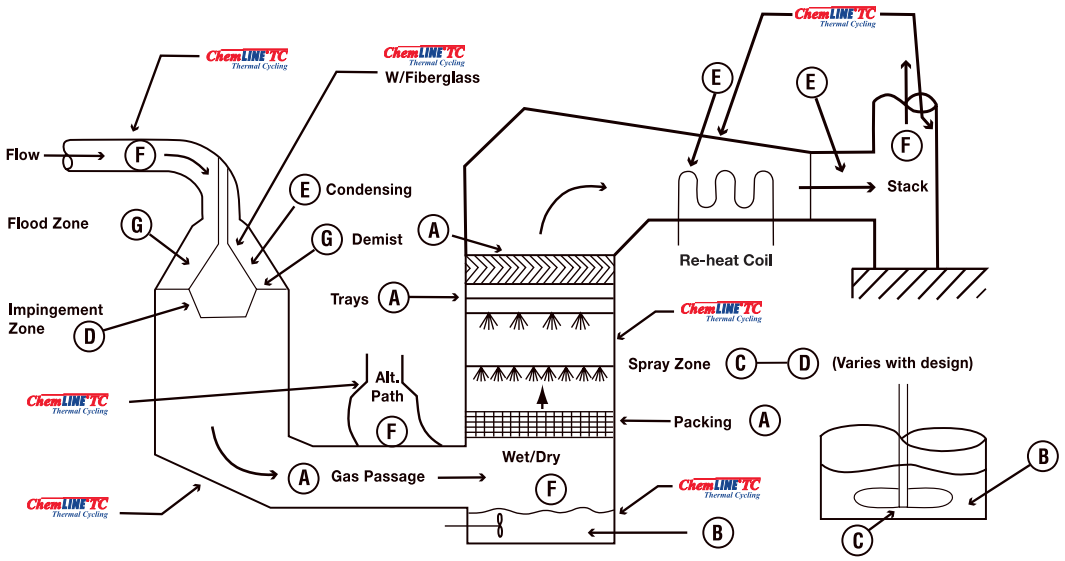
Typical FGD Schematic (non-denominational) Showing Various Lining Zones for ChemLINE® TC



Explanation of Above Codes Used to Define Living Environment

Code	(1) Corrosion	(2) Erosion	(3) Temperature	Recommendation
A	Mild Corrosive (Vapor)	Mildly Abrasive	High	ChemLINE® TC
B	Moderate (Immersion)	Mild	Mild	ChemLINE® TC
C	Moderate	Moderate	Mild	ChemLINE® TC
D	Moderate	Severe	Mild	ChemLINE® TC
E	Severe	Mild	Moderate	ChemLINE® TC
F	Severe	Mild	Severe	ChemLINE® TC
G	Severe	Severe	Severe	ChemLINE® TC

Key
1) Corrosion - Mild 30% to 80% Sulfuric Acid (Severe)
2) Erosion - High Energy Fly Ash Particles
3) Temperature - Mild 200°F (93°C) to 350°F (177°C) (Severe)

ADVANCED POLYMER COATINGS

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ISO 9001:2015

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