



**TECHNICAL DATA SHEET**

**BOILEREX CERALOY**

Product Codes: 1900, 1910, 1923, 1945

**Boiler Tube Coating / 2200F**

**PRODUCT DESCRIPTION**

BOILEREX CERALOY has been the "original" workhorse for metal repairs since 1983. This one component hybrid Pregzite & Ceramic formula exhibits tenacious bond to all carbon & stainless steel and offers protection up to 2200F. An environmentally safe coating which boasts exceptional anti-corrosion, wear/erosion and slagging properties. Applied in a convenient 2 color system, base coat and top coat for inspections to the boiler to determine wear and allow the customer to repair any damages to the coating before damage to the tube occurs. BOILEREX maybe applied to thicknesses of 8-12 mils of first color and 8-12 mils of second color. (Red/White or Green White)

**INTENDED USES**

- water walls
- generating sections
- boiler tube exteriors
- roof tubes
- refractory interface areas
- cyclone inlets etc

**BENEFITS**

- Two color application for added protection to boiler tubes
- Easy to use, mix and spray
- Resistant to thermal cycles
- Resists scaling and slagging / errorsion & abrasion
- Highly chemical resistant to most chemicals
- Excellent bonding to carbon & stainless steel
- High emissivity & thermal nuetral (non-insulative properties)

**PRODUCT SPECIFICATIONS**

<b>Performance Data</b>	<b>#1900</b>	
Adhesion to metal	>3000 psi	
Color	Red/White, Green/White	
Cure	2 hours at 180F 1 hour at 300F 1 hour at 450F	
Coverage @ 12 mil dft (water walls)	54 sq/ft gallon	
Coverage per kit @ 1/4" Note: account for waste & surface roughness	Dark Grey	
Dry Time @ 50% RH., 70 deg F	1-2 hr/ recoat 2-24 hours	
Substrate Temperature during coatings	32F to 200F	
Temperature Resistance	2200F	
Finish	Smooth	



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Thinner	None required	
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### 1910, 1923, 1945 - Customized formulations

#### SURFACE PREPARATION

1. If required remove all chlorides, grease, oil, cutting compounds, UT coupling and oil based contaminants by solvent or steam cleaning before abrasive blasting begins.
2. Only dry filtered compressed air should be used in the abrasive blasting process. To achieve proper production rates, compressed air volume and pressure should be sized properly for the abrasive blasting equipment being used. Contact E.M.P. Inc. for specific application specifications.
3. Use only clean, washed, sharp blast abrasive that will create a .003 anchor tooth profile.
4. Blast surfaces to achieve a NACE 1, SSPC-SP5 white blast specification and a .003 anchor tooth profile.

#### Application Method

1. Surface temperature must be a minimum of 5°F (3°C) above the dew point. Do not apply to steel temperatures below 32°F (0 °C).
2. When applying the base (white) coat do not exceed maximum dry film thickness recommendations of .006 (150 microns).
3. Conventional spray system, pressure pot and agitator or airless spray is recommended. Pre-mixing is accomplished by using a drill with mechanical agitator. Insert the blade all the way to the bottom of the container. Mix until uniform. Continue to use mechanical agitation during the application process.
4. Apply the base coat (white) in subsequent coats of approximately .003 (75 microns) thick.
5. Allow each coat to completely dry to the touch (est. 1 hour) before adding additional coats. Check coating thickness after each coat to assure proper thickness building is being achieved during application.
6. Standard minimum recommended thickness for the white base coat is min. .008-.012 (250-300 micron) after completing the base coat assure that the proper coating thickness has been achieved by inspection. Add additional coats as required to achieve the proper thickness specification for the base coat.
7. Apply the top (green or redcoat) in subsequent coats as before. Assuring that each coat is completely dry before adding additional coats. Do not exceed the recommended coating thickness of .012 (300 microns) when applying the top coat.
8. Do not expose the ceramic coating to water or moisture before it is cured. Until fired the ceramic is uncured even when dry to the touch and may wash off with water until the curing procedure is completed.

#### Post Cure

1. After allowing the completed BOILEREX system to ambient dry above 50°F (10°C) For at least 24 hours curing can begin. Use the following procedures.  
>2 hours at 180°F (88°C)  
>1 hour at 300°F (149°C)  
>1 hour at 450°F (232°C)

After one hour at 450°F (232°C) the BOILEREX is ready for service.

### Storage & Handling

Store boilerex at 40F-100F.

### Additional information



Two colors shown as an example (Green & White)  
(Red & White / Not shown)

### Warranty Information



**SAFETY PRECAUTION: READ MATERIAL PRODUCT SAFETY DATA SHEETS BEFORE USING PRODUCT.** Our products are intended for use by experienced professional only. Suitable chemical resistant gloves, safety glasses or full face shields, protective clothing and respirators must be worn as per product safety data sheet while conducting surface preparation and applying product. Do not smoke or drink while using product. Keep away from open flames and sparks.

EMPCORR warrants their product from defects. Because the application, handling or storing of our products is beyond our control, EMPCORR will not be held liable and in any form whatsoever for the results obtained after usage. To the best of our knowledge, the technical data contained herein is accurate on the date of publication and is subject to change without prior notice. Purchasers shall conduct their own tests to determine the suitability of our products for their particular purpose. Product properties, performance data and contents of this technical data sheets should not be constructed as specifications. User must contact EMPCORR to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. EMPCORR assumes no responsibility for coverage, performance or injuries resulting from use. No other warranty or guarantee of any kind is made by EMPCORR, express or implied, statutory, by operation of law, or otherwise, including merchantability and fit for a particular purpose

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