

# LOCTITE PC 7000<sup>™</sup>

## High temperature abrasion resistant coating for long-term protection of components against abrasion up to 1200°C

LOCTITE PC 7000<sup>™</sup> High Temperature Abrasion Resistant Coating (HTARC) is a unique three-component, rapid setting, silica-based composite coating system which offers protection from abrasion up to 1200°C. This is a water-based, environmentally responsible system. It bonds well to porous substrates like concrete, refractory bricks, etc. (Metal surfaces need to be reinforced with metallic mesh before coating application.)

### **Benefits**

- Up to 2 X protection from high temperature abrasion
- Cost-effective: Better life, more efficiency
- Thermally insulating: Helps protect surface distortions and softening due to furnace heat

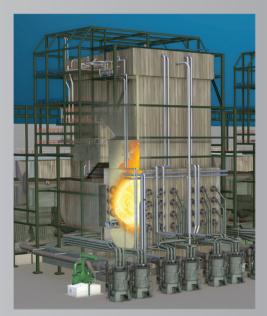


 Coal burner tips splitter section and inner shrouds



**Application Areas** 

Coal burner nozzles





 Coal mill internal components





#### **Product Characteristics**

- Pot life 25-30 min.
- Recommended cure (handling strength) 24 hrs. @ 25°C + 10 min. @ 350°C
- Firing temperature 1200°C
- Thermal stability wt. loss (800°C-24 hrs. exposure) 0%
- Taber™ abrasion H18-1000 cycles (firing to 400°C) 0%
- Drop impact performance 3 mm coating (3 mm thick SS panel/SS mesh reinforcement) > 160 in-lbs. (5 drops)
- Rockwell hardness @ 25°C (ASTM D-785) 35 HRA



Splitter section of burner tip with spot-welded wire mesh. Ready of PC-7000<sup>™</sup> coating



Burner tip splitter coated with PC 7000  $^{\scriptscriptstyle \rm M}$ 



400

Temperatures (°C)

500

700

600

Compressive strengths at increasing

Temperatures (ASTM D-695)

65

200

300

100

PC 7000<sup>™</sup> coated burner tip after 1 full year of service life. (50% of coating still remaining)

#### **Application Procedure**

- Prepare the application surface by mechanical abrasion (grid blasting/grinding). After surface preparation, ensure the surface is clean and free from dust, etc.
- Spot weld stainless steel diamond pattern wire mesh over the work piece as per the application requirement.
- Add Part A and B to the container. Mix until uniform consistency and milky white color.
- Add ceramic fillers incrementally to liquid resin while mixing vigorously with air mixer for 2-3 minutes until fillers are dispersed evenly. Use the entire contents of the kit. Mix it well to prepare the homogenous mixture. No partial mixing is allowed.
- Apply fully mixed material to prepared surface within 30 minutes of mixing. Ensure 100% filling in mesh as per the required application thickness.

• Allow coating to cure at room temperature for 24 hours. After room temperature cure, heat cure at 350°C for 10 minutes or 4 hours at 100°C.



90

80

70 60

30 20

10 0

o

50 <u>41</u> 40 •

Compressive strength (MPa)

LOCTITE PC 7000<sup>™</sup> High Temperature Abrasion Resistant Coating 10 kg Kit Pack IDH - 1890656



Call **1.800.LOCTITE (562.8483)** for more information, or visit **www.henkelna.com/pc7000** 

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