INNOVATIVE SURFACE COATING TECHNOLOGY

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INNOVATIVE SURFACE COATING TECHNOLOGY IS COMMITTED TO SAVE ENERGY AND REDUCE CO2 IN THE HEATING RELATED PROCESSES

THERMO CERAMIC COATINGS RANGE-

- TCC-400deg.c
- TCC-600 deg.c
- TCC-800 deg.c
- TCC-1200 deg.c
- TCC-1800 deg.c

THERMO CERAMIC COATINGS CAN BE USED IN FOLLOWING PROCESS

- POWDER COATING OVENS (conveyor / batch ovens)
- WATER DRYING OVENS
- WELDING ELECTRODE BAKING OVENS
- ALUMINIUM AGING OVENS
- LIQUID PAINTING SHOPS
- BAKING OVENS
- CARBURIZING FURNACES
- HEARTH BOGGIE FURNACES
- REFINERY CRACKING FURANCES
- KILNS (ceramic tiles/vitrified tiles conveyor kilns)

Thermo Ceramic Coating

The Only Energy Saving Coating to Reduce CO_2 Emissions

Saves energy! Saves money! Reduce CO_2 Emissions

- Scientifically proven
- Suitable for Ovens and Furnaces
- Saves up to 25% on energy costs
- Non-toxic – safe & easy to use

Thermo Ceramic Coating - An innovative concept in paints.

Saves energy! Saves money! Reduce Co_2 Emissions

What is Thermo Ceramic Coating?

Thermo Ceramic Coating is a revolutionary, durable heat reflecting, energy efficient Coating that reflects heat and cuts energy costs by up to 25%, by reducing heating times & Co_2 emissions.

What does it do?

- Saves on running time for heating equipment
- Gives up to a 25% reduction in heat loss through internal walls, ceilings (or other coated surfaces such as pipes and ducting)
- Improves the performance of existing insulation
- Saves Fuel by more than 5% upto 25%
- No damage to existing structure
- EMT graph of particular object improves
- Excellent return on investment
- Reduces impact on the environment by reducing Co_2

How does it work?

Thermo Ceramic Coating contains durable energy saving ceramics. The energy saving ceramic enable, Thermo ceramic coating to reflect and dissipate radiation heat back in the process. If applied on internal walls and ceilings this reduces heat loss and on external walls and roofs. It has a very high melting point and it improves the fire retardant properties of surfaces.

Scientifically Proven

SPECIFICATION OF DURABLE HEAT REFLECTING CERAMIC

CAS Numbers	1302-93-8 1335-30-4
Bulk Density	0.7 0.8g/cc
Particle Distribution	30 micron 100 micron
Thermal conductivity	0.061KCal/m.h.c (0.1w/m/Deg. C)
Max. heat resistance	R20

Where to use Thermo Ceramic Coating

Ovens
Range - 200°C-600°C
Powder Coating
Liquid Painting Shops
Baking Ovens
Bakery Ovens
Hot Air Ducts
Steam Pipes
Automobile Painting Shops

Furnaces
Range - 600°C-1600°C
Forging Furnace
Hardening Furnace
Rolling Mills & Casting Industries
Sealed Quenching Furnace
Ladels
Galvanizing Furnaces
Melting Furnaces

THERMO Ceramic COATING

Energy Saving Beyond Insulation
www.rooftopcoating.com

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Thermo Ceramic Coating - An innovative concept in paints.

WHAT IS THERMO CERAMIC COATING & HOW DOES IT WORK ?

Thermo Ceramic Coating (TCC) is an Energy Saving Coating and it is a combination of Specialized High Temperature Resins and Heat Reflecting Ceramics. It has to be applied On the internal metallic walls (Metal sheets in the process area) . It reflects radiation Heat back in the process area, thereby preventing radiation heat losses and saves any Type of fuel Energy by reducing heating times. Upto 25% fuel savings can be achieved.

WHY SAVING RADIATION HEAT LOSSES IS IMPORTANT IN EVERY HEATING PROCESS

Radiation heat is transfer of heat due to radiation, due to which Oven gets Heated up. Over the years in heating process, measures have been taken only to save Conduction and Convection Heat losses. In Ovens , Conduction and convection heat losses are stopped by using Mass insulation like Rock Wool and Glass wool. But Nothing has been done to prevent RADIATION heat losses. So there is a Scope to Prevent this Radiation Heat Losses by applying **THERMO CERAMIC COATING** on internal Metal walls, which reflect Radiation heat back in the process, thereby decreasing heating times and due to which Fuel Energy gets saved alongwith reduction in CO_2 emissions.

How many kilograms of Co2 are emitted during combustion ?

- 1 kg of Petrol produce 3.088 kg of CO2.
- 1 liter of Petrol produce 2.22 kg of CO2.
- 1 kg of Diesel produce 3.16 kg of CO2.
- 1 liter of Diesel produce 2.63 kg of CO2
- 1 kg of LPG GPL produce 3 kg of CO2.
- 10 kwh of electricity produce 5 kg of Co2

TECHNICAL SPECIFICATION OF TCC-400/600

Curing Schedule	Air-drying for 5 to 9hrs.
a. Consistency.	Smooth and uniform.
b. Viscosity.-	fordcup 4. 90 +3 sec @25 deg.C.
Finish	MAT FINISH.
Colour	ALUMINIUM FINISH
Fastness to light.	To pass the test.
Scratch Hardness.	No such scratch as to show the bare metal after heating for more than 24 hrs above
100	deg Celsius.
Flexibility and adhesion	No visible damage or detachment of after 48. Hours of curing. The film after put in use for 48hrs.
Resistance to petroleum	-No permanent injury to film hydrocarbon/solvent145/205.
Flash point	minimum 30 deg. C.
Volume solids	40% minimum.
Heat Resistance	upto 400/600 deg Celsius.
Coverage	25-30 Sq.ft/ltr.

APPLICATION PROCEDURE

The application procedure of TCC 400, 600 & 1200 is very easy. It can be applied by brush after mixing it well and thinned down to application viscosity if required. It does not need any primer. The Previously applied coating should be removed from the surface. Then the surface should be scraped lightly with the help of emery paper. The surface should then be cleaned by thinner followed by application of one coat of TCC 400 & 600. The surface should be air-dried for one hour. It should be heated up to 220 degrees Celsius and maintained at that temp for one hour before taking it in actual use for the first time. The covering per litre is around 30 -35 sq. ft. Depending upon the absorption by the surface.

Technical specification is correct to the best of our knowledge and under test conditions and we do not accept any liability towards misuse and contents of it. Product must be tested for specific use prior to use.

Key Features of Product/Benefits of Thermo Ceramic Coating.

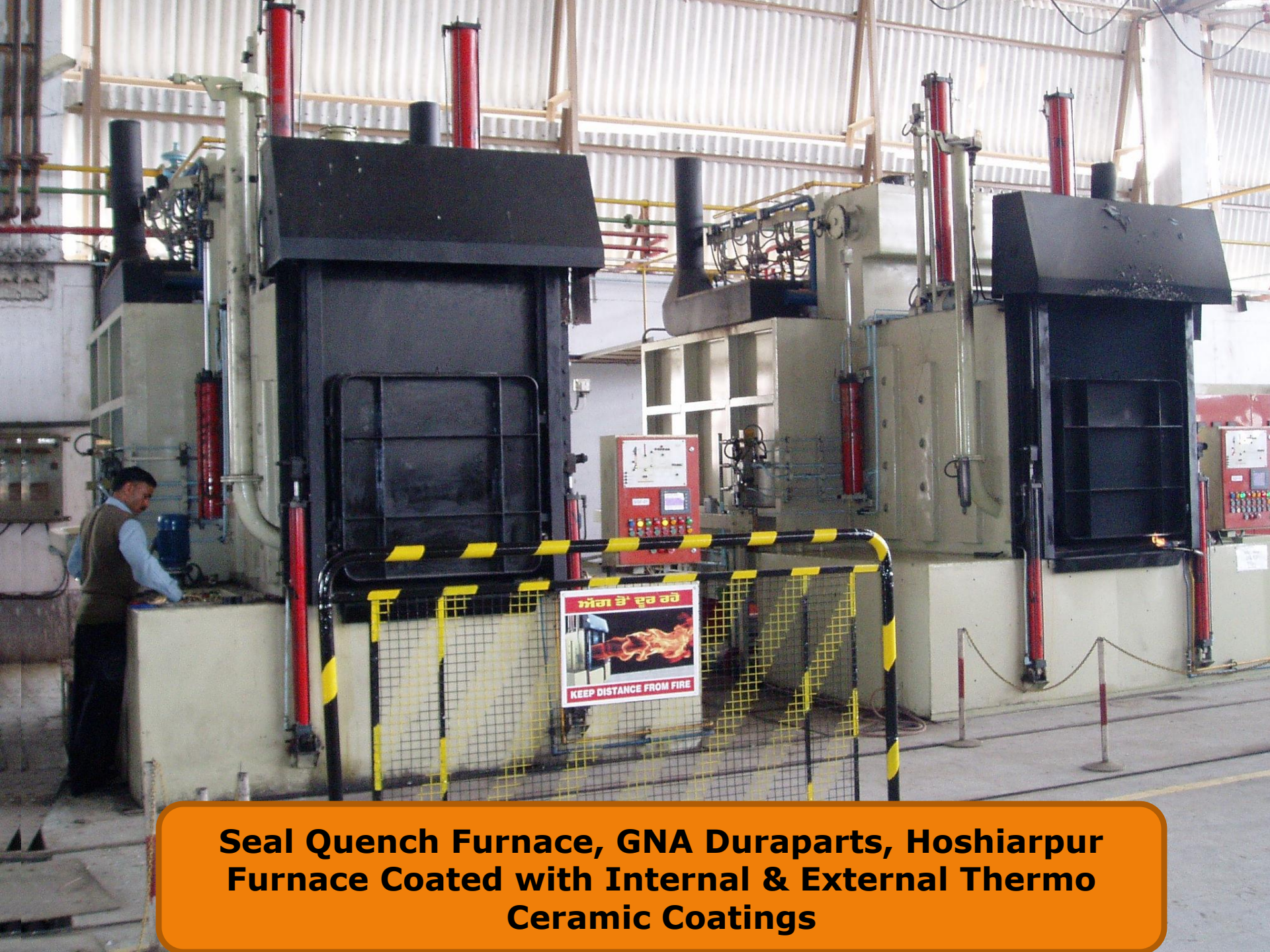
- Saves on Running Times for heating equipment.
- Gives upto 25% reduction in heat loss through internal walls & ceilings.
- Improves performance of existing insulation.
- Saves fuel by more than 5% upto25%.
- No damage to existing insulation.
- Excellent return on investment.
- Reduces impact on the environment by reducing CO2 gasses.
- Zero maintenance coatings.

Some Of Our Clients

- ASHOK LEYLAND (Bhandara, Nagpur)
- Tata Motors, PCBU(Chinchwad Pune)
- Hero Motocorps (Dharuheda, Gurgaon)
- Mungi Engg. Pvt Ltd.(Chakan, Pune)
- Taikisha Engg. Pvt.Ltd. (Kondhapuri, Pune)
- Shree Nanjundeshwara Powder coating, Bangalore
- M& M (Hingna Midc, Nagpur)
- GNA Duraparts (Hoshiarpur, Punjab) , etc


OVEN WITHOUT
COATING


OVEN COATED
WITH THERMO
CERAMIC COAT



Seal Quench Furnace, GNA Duraparts, Hoshiarpur
Furnace Coated with Internal & External Thermo Ceramic Coatings

Furnace Before Coating

Furnace After Coating

Ashok Leyland

Powdered and Damaged Surface before applying Thermo Ceramic Coating

Strong & Energy Efficient Refractory Surface after Applying Thermo Ceramic Coating

Continous Gas CarburizingFurnace

SQF Furnace

SQF Furnace

Seal Quench Furnace After 4 years of Application

Advantages of Thermo Ceramic Coatings in Brass Reheating Furnace

- **Fuel Energy Savings from 3%- 5%.**
- **Increased Life of Refractory Bricks**
- **Reduced External Shell Temperature of Reheating Furnace.**
- **Maintains homogenous Temperature throughout Furnace.**
- **Less Hot & Cold Spots on the Surface of walls.**
- **Improves performance of Existing**

Take the Advantage of Latest Technology

Save Energy : Save Money : Reduce co2

Save Your Family from Global Warming

Thank You

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