



Verniciatura Industriale Pesarese  
Coating Services  
Solutions against time

# FBE FUSION BONDED EPOXY

V.I.P. Verniciatura Industriale Pesarese srl is one of the few companies able to offer Fusion Bonded Epoxy (FBE) coating on special pieces as well as on pipes.  
The best epoxy resin powder applied on pre-heated surfaces.  
Thermosetting coating designed for the anticorrosive protection of articles destined to immersion or buried services in oil and gas sector and in the protection of the water pipeline.



## Long-lasting corrosion protection

The FBE primer offers an excellent adhesion to the substrate and provides a **long-term corrosion protection** for pipelines operating at moderate temperatures. It also ensures the resistance to the cathodic disbondment so the total cost of cathodic protection of the pipeline decreases.



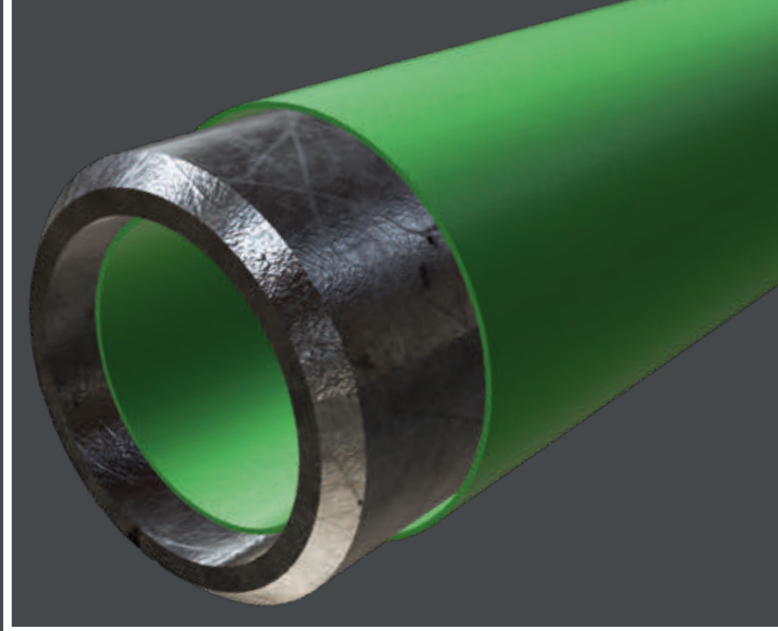
## Single and double layer coating

The coating can be applied in a **single, double or triple layer** and the method used guarantees that the coating can be applied with **differentiated thickness** as required by the specification. The single and double layer include a range of applicable products for meeting the most varied requirements in relation to pipeline protection. It is one of the most economic coatings for pipelines.



## Main advantages of FBE

- Excellent adhesion to the metal substrate.
- High resistance to cathodic disbondment.
- Excellent mechanical properties and resistance to corrosion.
- Resistance to bending even when the film is very thick.



## Application



External coating



Internal lining

## Applicability - **Limitless amount**



SMALL AND  
LARGE PIPES



STANDARD  
FITTINGS



BENDS



FLANGES



CUSTOM PIECES



BUCKLE  
ARRESTORS



FIELD JOINTS



TANK



WATERWORKS  
COMPONENTS



STEEL  
STRUCTURES



VALVES

## Inspection & Testing

In our internal laboratory, we perform all the tests and inspections during all the project's phases, carried out with NACE certified staff.

## Coating typical properties

**Hardness** : 80-90 shore D avg.

**Minimum recommended temperature** : - 73°C

**Maximum recommended temperature** : + 180°C

## Coating capacity

### PIPES

**Diameter** from 1/2" to 120"

Maximum unit **length** 13,5 meters

Maximum unit **weight** 15,000 kg

### VALVES AND/OR CUSTOM PIECES

(Bends, tees, reducers, flanges, etc.)

Maximum **size** 3.0 x 3.0 x 13.5 meters

Maximum **unit weight** 15,000 kg

Maximum **thickness** of the coating 3,5 mm



ISO 14001  
LL-C (Certification)



ISO 9001  
LL-C (Certification)

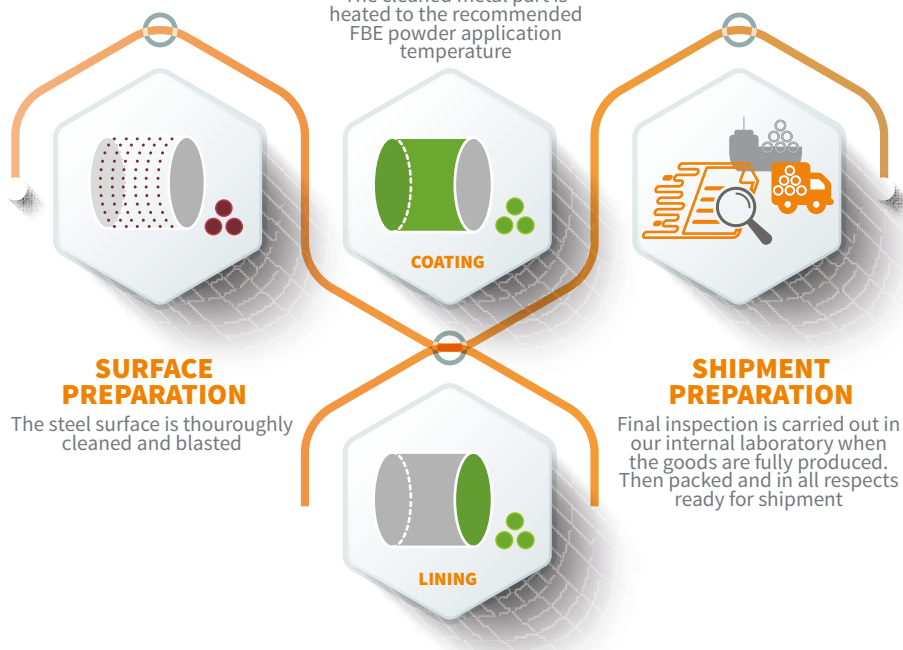


ISO 45001  
LL-C (Certification)

# FBE PRODUCTION PROCESS

## FUSION BONDED EPOXY

The cleaned metal part is heated to the recommended FBE powder application temperature



## GENERAL TESTING

High resistance to impact

Adhesion in hot water

Low porosity

Dielectric strength

Applicable at various thickness

Elevate value of cathodic resistance

Various grades of bendability

Low value of water absorption

Variable hardness

High heat distortion resistance

## CERTIFIED QUALITY

All the laboratory tests are performed internally, the FBE powder brands we use are approved by Saudi Aramco and for drinking water.



**Address :** Via del Vallo n°46  
61122 - Pesaro (PU) - Italy  
**Phone :** +39 0721 20 28 82  
**Fax :** +39 0721 20 34 63

**vip** Verniciatura Industriale Pesarese  
Coating Services  
Solutions against time  
**www.vippesaro.com**

**E-mail :** info@vippesaro.com  
**Cod. Fisc./Part. IVA :** IT 02198710416  
**R.E.A. :** n° 162110  
**Cap.Soc. :** 100.000,00 i.v.