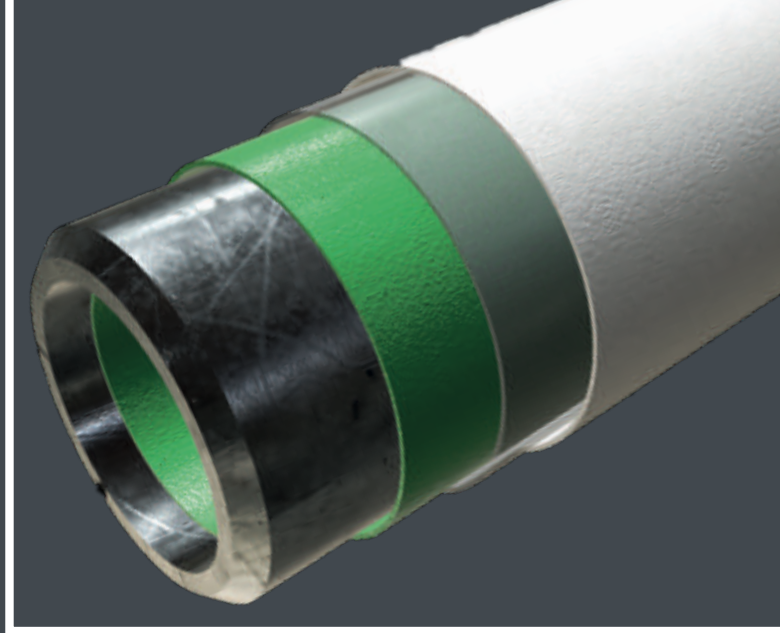




Verniciatura Industriale Pesarese  
Coating Services - Solutions against time



# 3LPP THREE LAYER POLYPROPYLENE

V.I.P. Pesaro is one of the few companies able to offer the 3LPP coating on pipes as well as on custom pieces. The coating is a multilayer composed of a primer fusion bonded epoxy (FBE) followed by an adhesive copolymer and another layer of polypropylene which provides resistance and long-lasting protection. The system ensures the applicability of the sintered coating also on pieces with special shapes.

## Long-lasting corrosion protection



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

## Remarkable mechanical protection



The applied polypropylene layer protects the pipeline during shipping and installation reducing repair costs and providing an **underground protection against mechanical, chemical and abrasive attacks**.

Applying an higher polypropylene thickness, the mechanical protection increases proportionally.

## Advantages of the sintered system



V.I.P. Pesaro using this special application technique is able to coat also specific pieces with special shapes (bends, tees, reducers, joints, etc.).

**There aren't any limitations about the amount of pieces to coat**, even the single piece can be treated. 3LPP can be applied **in different thicknesses** to meet the requirements of project specifications.

## Application

- External coating
- Internal lining

## Applicability - **Limitless amount**

- SMALL AND LARGE PIPES
- STANDARD FITTINGS
- BENDS
- FLANGES
- CUSTOM PIECES
- BUCKLE ARRESTORS

## 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

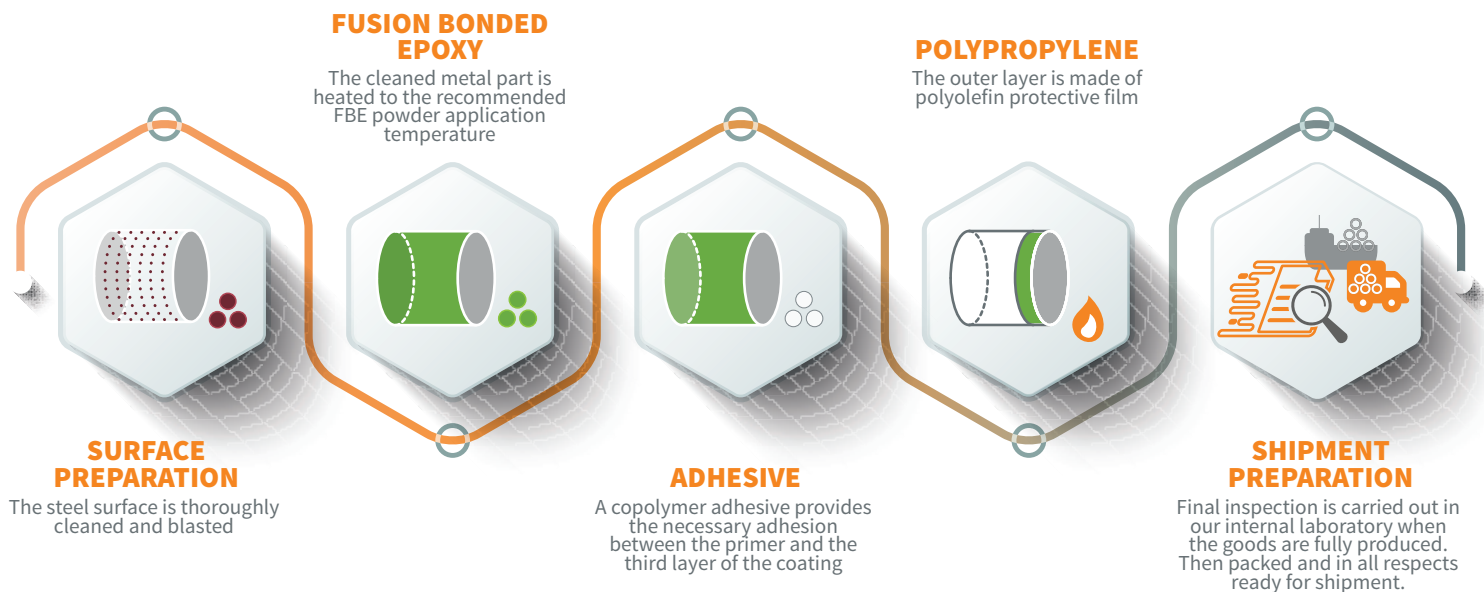
- Elongation at Break:** > 600%
- Hardness:** Shore D 63
- Minimum recommended temperature:** - 20°C
- Maximum recommended temperature:** + 110°C

## Coating capacity

- PIPES**
- Diameter** from 1/2" to 120"
- Maximum unit **length** 13,5 meters
- Maximum unit **weight** 15,000 kg
- JOINTS 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



# 3LPP PRODUCTION PROCESS



## GENERAL TESTING

These are merely approximate values adjustable according to clients' requirements.

PROPERTY	TEST DESCRIPTION	TYPICAL VALUES
Degree of cure of epoxy resin	ISO 21809/1	$\Delta T_g$ according to the manufacturer specifications
Impact	ISO 21809/1	> 10 J/mm
Cathodic Disbondment	ISO 21809/1	23°C/ 28 days or 60°C/ 2 days max 7 mm
Peel Strength	ISO 21809/1	$\geq 25$ N/cm at 23°C; $\geq 4$ N/cm at 90°C
Continuity (Holiday detection)	ISO 21809/1	10 kV/mm; max 25kV



**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.