



# Nap-Gard<sup>®</sup>

## FBE Powder Coatings

Decades of Performance. A World of Experience.



# Nap-Gard

## FBE Powder Coatings

Nap-Gard® fusion bonded epoxy (FBE) powder coatings offer innovative solutions for today's epoxy-based pipe coating applications. Designed to provide superior corrosion protection, Nap-Gard FBE protects internal and external pipe surfaces of oil and gas pipelines. Nap-Gard powder coatings also provide corrosion protection for valve products used in the most demanding environments, such as in wastewater treatment facilities, and in saltwater.

Nap-Gard functional coatings are also the leading choice for rebar application for concrete structures and bridges. They meet the performance standards set by AASHTO and resist cobwebbing and shatter cracking when rebar is formed.

Nap-Gard powders are thermosetting, 100% solids, hazardous air pollutant (HAP) free, and are high building (8-14 mils) in just a single coat.



Global leader for more than 50 years



Complete functional coating solutions product portfolio



The right choice for rebar

## Axalta supplies a complete offering for all pipeline applications - oil, gas and water

- > Single-layer FBE systems
- > Dual-layer FBE systems
- > FBE primers for multi-layer systems
- > Internal coatings
- > Girth weld coatings\*
- > Repair materials\*\*

\* Liquid coating available

\*\* Liquid and patch stick coatings available

## External Pipe Coating

### Single Layer Systems

**7-2500** - In buried service, coating is formulated to be capable of withstanding continuous operating temperatures of 107°C (225°F). It may also be used on the inside of steel pipes and fittings, and is NSF-61 approved for potable water services.

**7-2508** - Coating is formulated to be capable of withstanding continuous operating temperatures of 107°C (225°F). It may also be used on the inside of steel pipe and fittings.

**7-2514 EN** - Coating is formulated to provide excellent corrosion protection and improved resistance to cathodic disbondment while capable of withstanding continuous operating temperatures of 103°C (217°F).

These products are certified to meet the requirements of CSA Z245.20-10, NACE RP-0394-02, and ISO 21809-1.

### High Tg

**7-2555** - Coating is formulated for use in submerged or wet conditions where high in-service temperatures may reach up to 155°C (311°F)

### Dual Layer Systems

**7-2610** - Abrasion resistant overcoat (ARO) provides abrasion impact resistance and aids in protecting the corrosion coating from damage during the installation or directional drilling process.

**7-2504** - Coating provides water and impact resistance at high temperatures while capable of withstanding continuous operating temperatures of 130°C (265°F).

**7-2502 NS** - Coating provides a bonded, non-slip surface over standard FBE coatings. This coating offers additional shear slip resistance on concrete coated pipe used for negative buoyancy in offshore installations. The NS product line is a sacrificial coating and can be applied over any system.

**7-2675** - When used with 7-2555, the operating system tolerance increases to 180°C (356°F). The second layer provides reduced water permeability and improved chemical resistance.

## FBE Primers For Multi-Layer Systems

Primers are available for use in multi-layer polyethylene (PE) and polypropylene (PP) systems. In addition to corrosion resistant properties, these FBE primers are formulated to provide sufficient intercoat adhesion to the multi-layer topcoat.

## Internal FBE Pipe Coating

Nap-Gard FBE internal pipe coating is recommended for use over Nap-Gard 7-1808 phenolic primer on the inside of steel pipe and fittings in adverse temperature and pressure service and in contact with corrosive oils, gases and water.

**7-0008** - Coating offering is capable of withstanding continuous operating temperatures of up to 93°C (200°F).

**7-0017** - Coating is capable of withstanding continuous operating temperatures of 140°C (285°F) while providing corrosion protection in high temperature and high pressure sweet and sour gas environments.

**7-0014** - Coating is designed for both external and internal buried pipeline services. In particular, it is recommended for use on the inside of steel pipe.

- > Meets the requirements of AWWA standards C116, C213, C550, and CSA standard Z245.20-10
- > Certified to NSF-61 for drinking water system components

## FBE Rebar

Nap-Gard functional coatings are also a leading choice for rebar application for concrete structures and bridges. These systems meet or exceed the performance standards set by ASTM and AASHTO. They are designed to resist cobwebbing and shatter cracking when rebar is formed. These FBE Rebar systems are 100% solids, HAPs free, and are high building in just a single coat.

## FBE Valve

**7-4500** - Coatings are designed for use as a valve coating. In testing, it meets the requirements of UL 262 Gate Valve specification and FM 1120/1130, 1510 and 1511 specifications. It has been certified to NSF-61, drinking water system components (AWWA C213).

## Girth Weld Coating & FBE Repairs Materials

Axalta offers a two-part liquid epoxy material, FBE and epoxy patch compounds for repair of Nap-Gard coated pipe or rebar and for field joint coatings of external girth welds. Select systems are formulated to offer excellent cathodic disbondment performance for temperatures up to 150°C (302°F).



## Functional Coatings Applications

Fusion bonded epoxy (FBE) coatings are typically applied to a hot substrate, ranging from 225°C (438°F) to 239°C (463°F) and cured with residual heat. These coatings may be applied by:

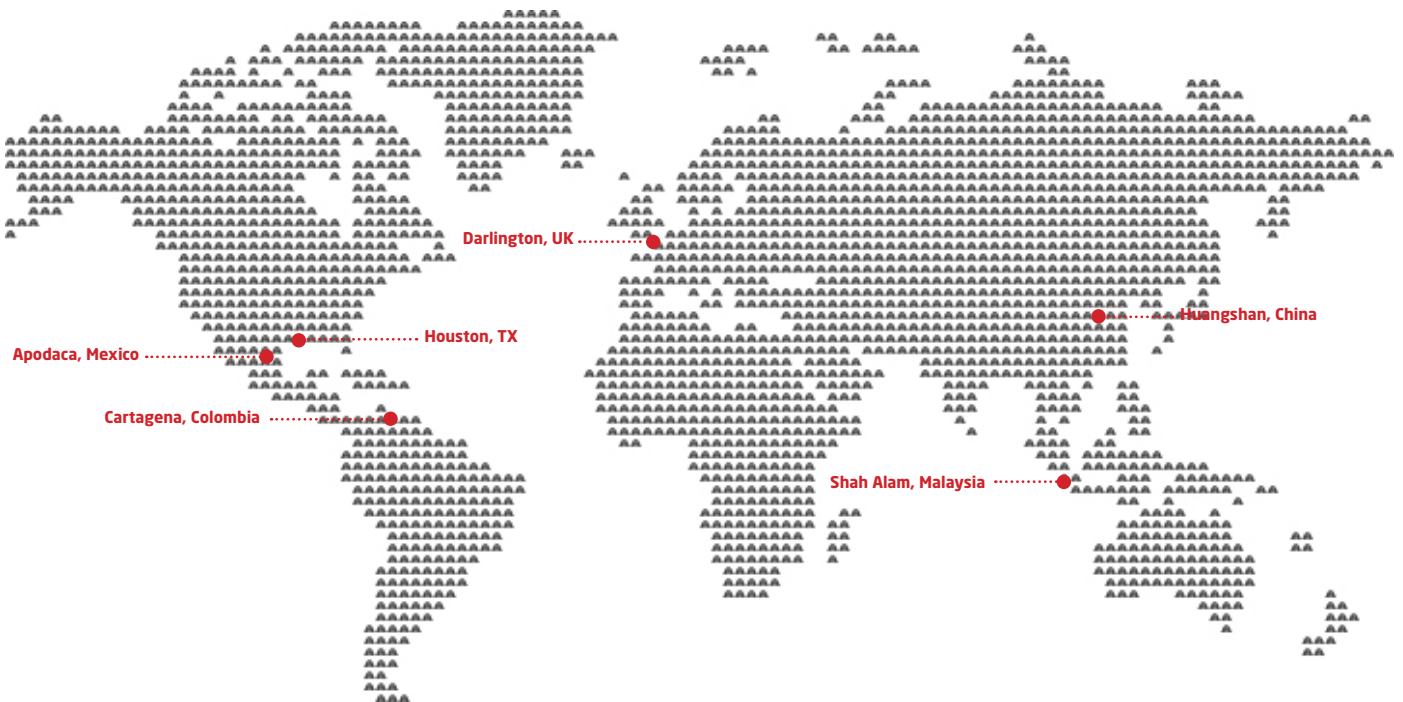
- > Flocking - Spraying powder onto a preheated substrate
- > Dipping in fluidized bed
- > Electrostatic spray
- > Gel and cure quickly to prevent running, sagging or dripping at film thickness over 5 mils. Repair materials are usually 2-part liquid epoxy or patch sticks.

## Coating Systems for Pipelines: Onshore and Offshore

Whether the application is for offshore or onshore service, Nap-Gard FBE powder coatings are designed to meet the most demanding performance requirements set by industry standards.

For buried and sub-sea services this includes single or dual layer FBE systems designed for improved anti-corrosive properties, abrasion and damage resistance, and higher operating temperature pipelines in both dry and wet environments.

# Global Manufacturing Sites



**Axalta Coating Systems**  
[www.powder.axaltacs.com](http://www.powder.axaltacs.com)  
[www.axalta.us/powder](http://www.axalta.us/powder)

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