

# THERMOPLASTIC FLAME SPRAY COATING OF METALS

THE FLAME SPRAY TECHNOLOGY IS THE ONLY SYSTEM WHICH CAN APPLY POWDERS ON SITE AND WITH NO NEED FOR A COATING LINE

## FLAME SPRAY COATING OF METALS - BENEFITS:

The Flame Spray technology is particularly suitable for coating of metal substrates, since it provides the following benefits:

- No need for a primer:
  - PolyHotCote powders adhere directly to the prepared substrate.

Please see the Application Procedure below.

- Anti-osmotic barrier:
  - For outdoor structures such as buildings / constructions, bridges, offshoresector, nautical applications.
- Continuous dielectric insulation:
  - Protective coating against stray currents for articles to be buried;
  - Electrical and marine corrosion protection.
- Abrasion resistance:
  - Abrasion-resistant coatings, high mechanical strength;
  - Coatings for ducts to discharge mineral waste, process water, etc.
- Chemical resistance:
  - Anti-acid coating for tanks, containers, fittings, industrial plants, etc.











# APPLICATION PROCEDURE

**Surface Preparation:** The substrate must be cleaned. Sandblasting is the preferred pre-treatment method, using a grain size which provides a 40-50 microns profile and SA 2.5 cleaning standard.

**Preheating:** The substrate is preheated to approx. 100°C-150°C (normally the melting point of the thermoplastic coating powder used) using the gun of the flame spray coater (flame only, no powder).

**Powder Application:** The powder flow is started by turning on a switch located on the gun itself or by pressing the gun trigger. Now the powder is propelled through the gun by dry compressed air, hits the preheated substrate, and immediately melts adhering to the substrate.

# The flame spray coating cycle is now complete.

Usually, the substrate is air cooled. If needed, you can water quench the coated substrate.

**NOTE 1**: The coating thickness is dependent on the number of passes. The minimum recommended coating thickness is 300 microns.

**NOTE 2**: Additional coating or repairing will always be possible in time: while coating, after coating is complete, after some time or later.





## **APPLICATION EQUIPMENT**

**Gladiator Omnicoater** and **Hercules** are the perfect Portable Flame Spray Coating Systems for metal substrates, tanks, vessels, but also for concrete flooring, concrete tanks and other surfaces **(with specific guns)**.

The most efficient technology to prevent surface corrosion by applying an eco-friendly thermoplastic coating system on site.

#### **GENERAL FEATURES**

- Compact;
- Portable, easy to carry;
- Easy to use;
- Versatile, thanks to three application gun sizes with different flow rates, fully interchangeable;
- The application process can be easily controlled by means of fast settings.

#### SYSTEM DESCRIPTION

- · Mobile unit with large wheels for easier transport on rough terrain;
- Quick connect, colour coded hoses to machine (9 m long with possible 6 m optional extension);
- Just requires LPG (minimum propane content: 50-60%; 3 bar pressure) and compressed dry air 700 l/ min (25 cfm) or more with Gladiator Omnicoater and 1100 l/ min (40 cfm) or more with Hercules System.

#### **NEW "CENTURION" GUN**

The most powerful gun of its time powered by ibix<sup>®</sup> SRL. Exceptionally wide spray pattern. Available on the large and medium guns.



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