



## ❖❖ METHODS OF APPLICATION

**A coating systems' effectiveness is governed by the selection of the best possible protective coating materials and the proper method of application. Without the right application method, any coating system will fail to excel to its full potential.**

It is part of TIB Chemicals' approval criteria that the correct application procedures in the factory and in the field are carried out exclusively by specialists. These personnel have to possess credentials which demonstrate their experienced and skilled technique.

PROTEGOL® coating systems can be applied in a variety of ways: from plural component airless hot spraying for large areas to conventional air-assisted spraying and manual application by brush or roller, which is most suitable for repair work and small or limited accessible areas.

## AUTOMATIC APPLICATION

The fastest PROTEGOL® application rates can be achieved by means of the automatic spray ring. This method has proven to be the most productive and reliable method and is not only suited for short distances such as bell hole rehabilitation, but also for the coating of the entire pipeline – either in or over the ditch and even when the pipeline is in service.

TIB Chemicals has been actively involved within the research and development phase of the first automatic spray ring for application of PROTEGOL® in the field.



PROTEGOL® two-component liquid coatings are the preferred choice, when application in the field is required. Pioneered in the early 1990s as the first two-component polyurethane coating to be selected for the external protection of field joints of pipes pre-coated in the factory with multi-layer PE and PP systems, PROTEGOL® continues setting the standard for field joint coating utilising MCL (Multi Component Liquid) systems. It remains the most widely recognised liquid coating system for field joint application today.



## MANUAL APPLICATION

Manual spraying involves airless and air-assisted spraying methods. With the plural component airless hot spray machine, production rates are increased. High coating thicknesses of PROTEGOL® coating systems can be achieved in just one single pass resulting in a homogenous and pinhole free coating.

PROTEGOL® coatings supplied in cartridges can be applied efficiently using an air-assisted spray gun. This is preferably used on smaller areas and where limited working space could make application work with a plural component airless system difficult.



Another PROTEGOL® method of application consists of manual application using a brush, spatula or roller and can be utilised to stripe-coat edges and welds or to touch up damaged areas.





## ❖❖ SURFACE PREPARATION – A FUNDAMENTAL PRE-REQUISITE

**In order to obtain satisfactory coating application results, the following fundamental factors have to be observed:**

- The steel surfaces to be coated must be dry, clean and free from all release agents (e.g. oil, grease and old paint) and must constitute a good profile.
- The degree of cleanliness should comply with ISO 8501-1, Sa 2 1/2 (SSPC-SP 10/ NACE No. 2).
- Suitable substrate preparation methods such as grit blasting must be used.
- The surface inspection should be in accordance with ISO 8501-3.
- The surface temperature during the coating application process must be at least 3 °C above the dew point.