

INSTRUCTION MANUAL

PNEUMATIC TOOL FOR TWO-COMPONENT INJECTION.

Manufacturer: Distra Chemical, S.L.

Address: Camino abrevadero,12, Valladolid 47008 - Valladolid - SPAIN

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1- “CE” Declaration of Conformity

“CE” DECLARATION OF CONFORMITY

Distra Chemical, S.L.

Paseo de la castellana, 115,1ºA.

28046 Madrid-Madrid Spain

Declares that the machine:

Description: Pneumatically fed bi-component pressure injector in pipes. Model: Spray Pipe Line 1.6

Serial no: 2205001

Max. load: 16 kg

Complies with the provisions of the Machinery Directive 2006/42/EC

Complies with the provisions of the following harmonised standards:

UNE-EN ISO 4871:2010

UNE-EN 894-1:1997+A1:2009

UNE-EN ISO 4414:2011

UNE-EN ISO 12100:2012

UNE-EN ISO 11161:2009

UNE-EN 981:1997+A1:2008

UNE-EN ISO 4414:2011

2- General information

2.1 Scope of this manual

This instruction manual contains useful and important information for the correct operation and maintenance of the bi-component pipe injection tool. It also contains important recommendations to prevent possible accidents and damage during operation and maintenance of the tool.

"Original handbook".

This document was written by Distra Chemical S.L. (hereinafter DISTRA) and is intended to be used for the coating of pipes.

WARNING!

Read these instructions carefully before working with the Spray PipeLine 1.6 and follow all recommendations for safe work.

2.2 Units of measurement

Unless specifically stated otherwise, all units of measurement cited in this manual and in the control programme are expressed in the International System.

2.3 Safety instructions

Hazard notes

DANGER!

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

ATTENTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
WARNING!	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

Additional notes

NOTE	The term "note" is used to indicate important information or usage tips.
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3- Safety precautions

3.1 Safety conditions for the use of this machine

The following safety regulations must be read, understood and observed before any operation or maintenance work.

ATTENTION
The manufacturer disclaims all liability for any damage or injury to persons or other equipment resulting from the use of the pipe coating tool in an operation or installation other than that for which it was designed.

Operation and maintenance of the tool

- The following general safety precautions are not related to any specific procedure. These are the specific safety precautions that personnel must understand and apply during the operation and maintenance phases.

- Operators and maintenance personnel must not attempt to perform any operation, adjustment or maintenance work on the pipe coating tool without a proper understanding of this manual and the occupational health and safety rules and regulations contained herein.
- Operators and maintenance personnel must comply with all safety regulations. The safety instructions must be read before any operation of the tool.
- It must be ensured that no danger / warning / caution signs are missing from the machine and that they are always clearly visible and legible.
- Never work on any part of the tool for maintenance or adjustment without first switching off and locking the power supply.
- No attempt should ever be made to inspect safety systems unless the machine is switched off.
- All parts and components that need to be replaced or repaired must be carried out with the machine at standstill and de-energised.

3.2 Mechanical safety

The following safety rules must be read and understood before any operation or maintenance work on the tool.

- The operator or maintenance worker must always observe all safety rules and regulations relating to health and safety at work and the safety instructions contained herein before carrying out any mechanical operations.
- **Never** remove the guards or work on the tool without disconnecting the tool.

WARNING!

The safety conditions of the tool are fulfilled provided that all fixed and movable guards are in place before the tool is activated.

THE TOOL MUST NEVER BE ACTIVATED UNLESS ALL GUARDS ARE IN THEIR DEFAULT LOCATION.

NEVER REMOVE ANY OF THE GUARDS WHILE THE EQUIPMENT IS IN OPERATION.

NOTE

The manufacturer declines all responsibility for any damage or injury to persons or equipment resulting from operating the machine with any of its guards removed from their location or improperly attached in contravention of these instructions.

- Operators must **never** touch the moving parts of the tool while it is in operation.

Personal protective equipment

Operators and maintenance personnel using the pipe coating tool must be equipped with the following personal protective equipment in addition to that required by the task to be performed or the area where the tool is to be used:

- Protective gloves against mechanical risks, according to UNE-EN 388.
- Safety goggles.

Pneumatic Safety

The following safety rules must be read and understood before any operation or maintenance work on the tool.

- The operator or maintenance worker must always observe all safety rules and regulations related to occupational health and safety before performing any pneumatic maintenance operation.
- No components must be replaced and no adjustments must be made inside the tool when connected to the pneumatic supply system.
- To avoid accidents, it must be ensured that the power supply is switched off.

3.3 Explosive atmosphere

The pipe coating tool is not designed for use in explosive atmospheres (ATEX).

4- Description of the tool

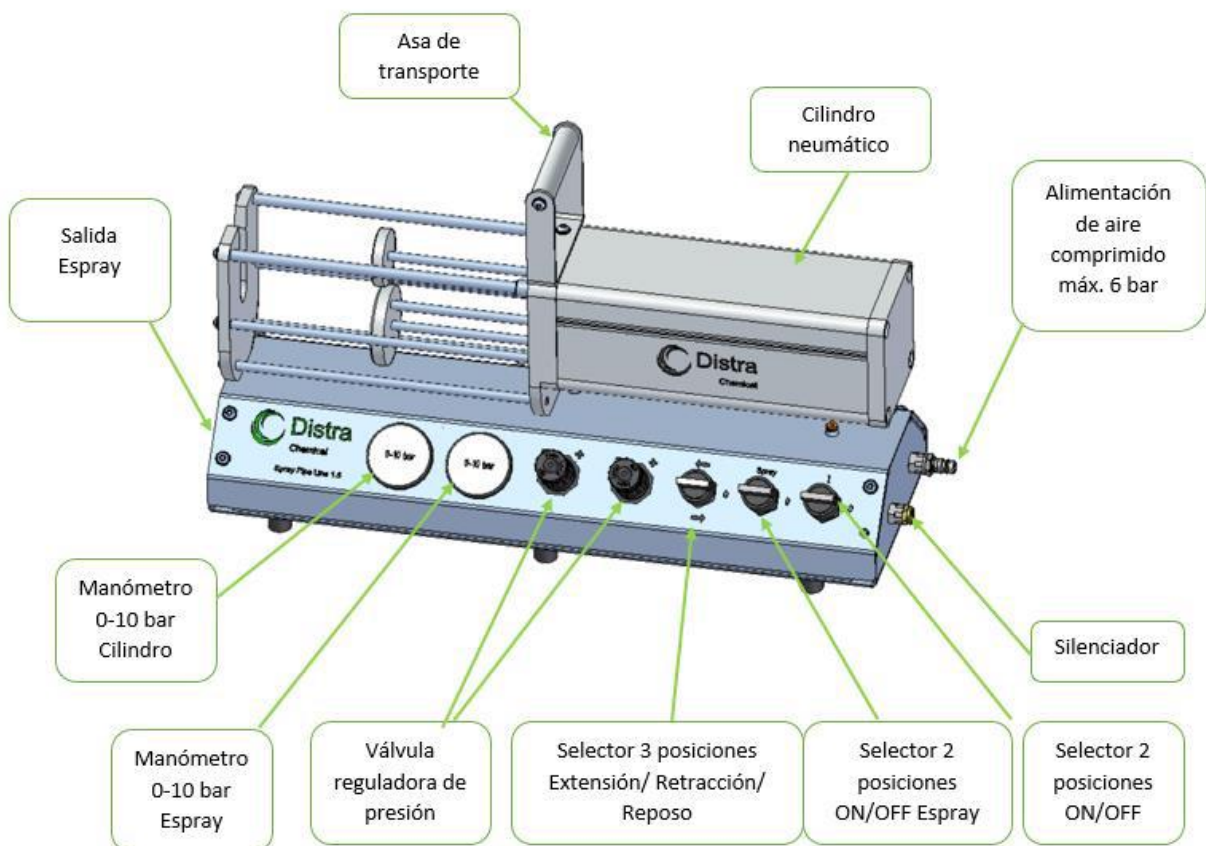
4.1 Introduction

The equipment consists of a machine for the injection of bicomponent into pipelines without the need for construction work, model Spray Pipe Line 1.6 (hereinafter SPL 1.6).

NOTE

The manufacturer declines all responsibility for any damage or injury, to persons or other equipment, resulting from the use of the tool for an operation other than that for which it was designed.

The pipe coating machine is a machine as defined in Directive 2006/42/EC.



- Carrying handle
- Spray outlet
- Pressure gauge 0-10 bar Cylinder
- Pressure gauge 0-10 bar Spray
- Pressure regulating valve
- 3 position selector Extension/ Retraction/ Rest
- Selector 2 positions ON /OFF Spray
- Selector 2 positions ON /OFF
- Silencer
- Compressed air supply Max. 6 bar
- Pneumatic cylinder

Fig. 1. Parts of the SPL 1.6

The pipe coating system consists of a cylinder that pressurises the bicomponent cartridge. The equipment has a main selector that cuts off or opens the air supply to the rest of the pneumatic components. In addition, a 3- position selector has been installed with which the movements of the pneumatic cylinder can be controlled (extension, retraction, rest).

Finally, in order to control the force with which the cylinder is extracted and retracted, a pressure regulating valve and a pressure gauge are installed to continuously monitor the operating pressure of the cylinder.

In addition, this machine is equipped with an air drive selector for a pressure-controlled spray outlet. This outlet is used to connect the spray heads supplied by Distra chemical.

4.2 Technical data

GEOMETRY	
Dimensions:	
Long	600 mm
Width	200 mm
High	360 mm
Total mass	16 kg
PNEUMATIC SYSTEM	
Minimum working pressure	6 bar

5- Operating Instructions

5.1 Personal protective equipment

Operators using SPL 1.6 shall be equipped with the following personal protective equipment (PPE):

- Safety boots
- Gloves
- Glasses

This PPE shall be supplemented by the PPE required in the areas where the equipment is to be used.

WARNING!

The SPL 1.6 operator shall at all times wear the minimum PPE recommended for the operation of the SPL 1.6.

NOTE

The manufacturer declines all responsibility for any damage or injury to SPL 1.6 operators resulting from the non-use of the recommended PPE.

5.2 Pipe coating

The SPL 1.6 shall be placed on level ground.

The steps to be carried out for pipe coating are as follows:

- Attach the hose with the hose head to the equipment at the pressure outlet.
- Connect the machine to the pneumatic line max. 6 bar.
- Set the machine selector switch to I.
- Activate the spray if a Distra chemical spray head is installed.
- Insert the head through the pipe
- Operate the 3-position selector so that the cylinder pushes the resin cartridge previously installed in the machine.

6- Maintenance instructions

6.1 Daily maintenance

The machine is composed of a large number of mechanical and pneumatic elements that require proper maintenance to ensure the correct operation of the equipment. Lack of maintenance will lead to the deterioration of the SPL 1.6 and in the most extreme cases to the breakage of components that could endanger the operation of the assembly, drastically reducing the safety of operation.

Daily maintenance should be carried out to keep the machine in perfect condition and to avoid unwanted failures.

It is very important to keep the chrome-plated piston rods that push the cartridges clean, to avoid deterioration of the collars and to prevent air leaks.

In the event that these are soiled with resin or any other compound, clean them with a section as soon as possible, at no time operate the machine by picking up the rods until they are properly cleaned.

6.2 Periodic maintenance

The maintenance orders must be carried out within the specified time intervals in order to keep the machine in perfect working order.

EVERY YEAR

1. Check the condition of the pneumatic cylinder and replace if necessary.
2. Check the condition of valves and selectors.
3. Check all pneumatic connections and replace hoses if necessary.