

# TECHNICAL INFORMATION ACCESSORIES

## **PRODUCT NAME**

# **Mini-Booster**

IP 2C-160-A

# **MANUFACTURER**

De Neef Construction Chemicals, Inc. 5610 Brystone Houston, TX 77041 1(800) 732-0166

#### PRODUCT DESCRIPTION

The **IP 2C-160-A** is a two-component pump enhanced with a separate flushing pump for cleaning purposes and/or cement injection. The IP 2C-160-A is equipped with only one air motor driving both pistons. This device avoids any mixing ratio errors. The pump can go up to 160 bars.

#### **APPROPRIATE APPLICATIONS**

Although specially designed for acrylate gels, the IP 2C-160-A also fulfils all the requirements to be used with one- and two-component polyurethane resins and organomineral resins. The IP 2C-160-A is suitable for the application of the De Neef Combi-grout system as well.

#### **ADVANTAGES**

- Ideal for the processing of acrylate gels, even those with very short open times
- Can also be used for Combi-grouting: alternating injections of PU materials with micro-fine or OPC cements
- Quick release coupling system for high-pressure hoses
- High-pressure hoses cannot be interchanged due to difference in coupling systems
- Filters at the end of the suction hoses prevent blockage
- Very small dimensions compared to its performance: W 50 cm x D 25 cm x H 82 cm
- Very light system: pump and hoses weigh only 35 kg

TECHNICAL DATA	
Enging Gear Ratio Motor	1:20
Working Pressure	0-160 bars
Mixing Ratio	1:1
Flow per double stroke	3.6 Cubic inches
Max. flow rate	1.4 Gal/minute
Effective air demand	250 l/min.
Length of high pressure hoses	24.5 ft.
Compressor head	3-link mechanics
Dimensions	W 19/7" X D 9.84" x H 32"
Pump weight	66 lbs.



#### **ADVANTAGES** cont.

- Pump is made out of stainless steel
- All hoses are in Teflon non-static
- No mixing errors possible due to 1:1 ratio, both with one air motor system

#### **PACKAGING**

The IP 2C-160-A pump is shipped with the 7.5 m hose in a hard paper carton box. The hard paper carton box contains the necessary oils, in separate bottles, which must be filled daily into the pump before carrying out any injection work. The hard paper carton box has - a weight of approximately 40 kg - dimensions of w 56 cm x d 30 cm x h 93 cm.

# **PROCEDURES**

## Application

The conveyance of the materials (A and B components) is implemented by means of a compressed air motor, which drives the pistons. This results in a forced pumping capacity of 1:1. Ratios to ensure mixing errors do not occur. In the case of acrylate gel injections, one can use the external flushing pump (for the pumping of water as the flushing agent) for the cleaning of the compression head, the static mixer and the packer. Acrylate gels with very short open times (20 - 60 sec)can be processed without problems. In the case of combi-grouting, one can use the external pump for the injection of micro-fine or OPC cements Before starting to use the injection pump, it is necessary to read and understand the health and safety instructions. Before the first start-up of the IP 2C-160-A pump, the information below, relating to resin injections, must be studied carefully.

Fill separation oil into the oil sumps above the cylinder of both piston-housing units, so that the pistons are covered in a lubricating oil film. Before initial operation start-up of the pump, insert suction hose with suction filter for the flushing fluid in a canister with water.

Do not insert suction ends into the resin containers before calibration of the pump in a non-load operational mode.

Connect the compressed air line to the pump and open the red ball valve for airflow. Adjust the inlet pressure at the automatic controller of the airline control unit. The pressure can be read off on the manometer. The flushing pump works as long as the pressure inside the pump is increased. After the start of the pump, open the 2 parallel standing ball valves on the compression head.

Carry out the adjustment of the de-icing oiler. For this, set the adjusting screw, located next to the visual glass for the de-icing oil metering, so that 1 drop of de-icing oil is released for every 20 strokes (10 double strokes). At low temperatures, this level of metering can be increased. To start injection of the material,

place both suction ends for the liquid components into the 2 resin canisters. Close both ball valves after injection of the compressed material and open the single ball valve for the conveyance of the flushing liquid and briefly flush out the compression head, the static mixer and the packer.

On completion of all the operations, the pump parts, which came into contact with the resins, must be flushed out. This is done with Washing Agent ECO (for 1- & 2-componenet PU's and for organo-mineral resins) and with water (for Poly-acrylate resins). Flushing of the pump on completion of the injection operations must be carried out thoroughly, to ensure that parts, prone to wear, such as seal packings and O-rings remain functional for a long period. It is recommended to flush the pump with clean soap water (see remark above). Parts of the pump, which become plugged with acrylate gel, must be cleaned with "Washing Agent ECO".

#### STORAGE & HANDLING

Store in a clean dry environment.

#### **PRECAUTIONS**

The operator must know how the equipment works and understand clearly the dangers connected to pressurized liquid pumping. Before you attempt to clean or service the equipment, one must close the compressed air input and release the pressure contained inside the pump and the pipes connected to it. When you use the pump after a long period of inactivity, make sure that all the parts subject to pressure hold and in good condition. For replacement, use original spare parts. Only authorized and responsible personnel must operate the unit.

#### SAFETY INFORMATION

In the event of an EMERGENCY call: CHEM-TREC 800-424-9300.

#### WARRANTY INFORMATION

De Neef Construction Chemicals, Inc. products are warranted under the policy set forth under the WARRANTY section of the De Neef Construction Chemicals Inc., product catalog. Warranty information can also be obtained via the De Neef Construction Chemicals Inc. website at www.deneef.com, or by calling 713-896-0123 or toll free at 1-800-732-0166.

Rev. 04/2006