



**Technical Data Sheet**

**1. General**

The SuperJet is designed for placing telecommunication cables (optical fibre, coaxial or multipair) in preinstalled ducts. The SuperJet operates according to the "Jetting" or "Blowing" method that combines a mechanical pushing force and a high-speed air stream along the cable surface. Please consult us for any application not indicated above.

"Jetting" offers many advantages:

- Pushing Force loads are spread over the whole length of the cable, virtually eliminating cable damage experienced when pulling methods are used.
- Bends or undulations have a low influence on the jetting performance.
- Safe operation for personnel and equipment.
- Easy to operate
- Reduced infrastructure and manpower costs
- High daily production.

This results in, and allows the operator to:

- install very long single sections of cable up to 3000m
- place cables into their final location eliminating joints and reducing costs
- direct bury the protection duct into the ground without worrying about the route
- pull several sub-ducts simultaneously, without concern about twisting in the main duct
- secure a quasi constant daily installation capacity whatever the complexity of the duct run
- remove a cable from a duct and replace it by another one in one operation.

**2. Field of application**

The SuperJet operates within following recommended conditions:

- Cables: diameter between 14\* and 32\*mm  
The adaptation to different cable diameters is secured by a set of interchangeable cable inserts in the following cable diameters: Ø 14-15,5 ; 15,5-18 ; 17,5-22 ; 22-24 ; 24-28 and 28-32 mm.
- Ducts: outer diameter between 25 and 63 mm  
The adaptation to different duct diameters is secured by a set of interchangeable duct inserts in the following outside diameters: Ø 25, 32, 34, 37, 40, 42, 48, 50, 60 and 63 mm.

\* To jet cables with a diameter ranging from 9 to 14 mm and from 32 to 36 mm, requires specific precautions when using a SuperJet, please consult us.

The duct and cable inserts for the air inlet chamber are red and grey coloured, anodized, aluminium alloy components.





### 3. The pusher (cable feeder)

A feeder fitted with 2 chains with a synthetic rubber lining pushes the cable, driven by 2 hydraulic motors. The linear pressure exerted by the chain, on the cable, is pre-selected and kept constant by a spring mechanism, thus preventing any crushing of the cable.

- Single Direction only
- Maximum pushing force 60 bar
- Hydraulic pressure on the motors 60daN
- Maximum linear pressure exerted on the cable 9.4 daN/cm
- Adjustable speed 0-60 m/min
- Recommended speed 40 m/min

The speed of the pusher is controlled by a by-pass valve coupled to the hydraulic hoses connecting the power pack to the motors of the SuperJet.

### 4. The hydraulic power pack

The power pack is driven by a petrol engine (Honda GXV 160 4 Stroke air cooled) fitted on the hydraulic oil tank. The power pack has the following characteristics:

- Rewind start
- Cubic capacity: **163** cm<sup>3</sup>
- Maximum power : **4,1** kW (5,5 HP)
- Speed: **3600** min<sup>-1</sup>
- Sound level: **85** dB at 7 m and 3600min<sup>-1</sup>
- Cylinder capacity of the gear pump: **3,8** cm<sup>3</sup>
- Delivery rating: **12,5** l/min
- Hydraulic pressure: **60** bar
- Oil tank capacity: **27** l
- Required oil quality **ISO VG 46-HVI (ISO 48)**

### 5. Compressed air supply

Each SuperJet must necessarily be supplied with air by a compressor having the following characteristics:

- Nominal pressure : **8-12** bar
- Minimum delivery :
  - for ducts up to 27 mm external Ø: **4** m<sup>3</sup>/min
  - for ducts up to 32 mm external Ø: **5** m<sup>3</sup>/min
  - for ducts up to 40 mm external Ø: **7** m<sup>3</sup>/min
  - for ducts up to 50 mm external Ø : **10** m<sup>3</sup>/min
  - for ducts up to 63 mm external Ø: **15** m<sup>3</sup>/min

For safety reasons, compressors with a nominal pressure of over 12 bar should be equipped with a device limiting this pressure to 12 bar.

If ambient temperatures are over 25 °C, it is highly recommended to use an air Aftercooler.



**SuperJet**  
Cable Jetting Machine for cables  
between 14 and 32mm Ø

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#### 6. Dimensions and weights

|                             |                          |                    |              |
|-----------------------------|--------------------------|--------------------|--------------|
| SuperJet only:              | 1 900 x w 345 x h 350 mm | Weight:            | <b>35 kg</b> |
| SuperJet with steel box:    | 1 960 x w 370 x h 435 mm | Weight:            | <b>50 kg</b> |
| Tools and accessories case: | 1 550 x w 350 x h 250 mm | Weight:            | <b>17 kg</b> |
| Hydraulic power pack:       | 1 550 x w 330 x h 600 mm | Weight (with oil): | <b>65 kg</b> |

#### 7. Compliance to regulations

Specific acoustic emission at the work station:  $L_{pA} = 77$  dB(A)

Designed in accordance with EC Directive for Machinery No 89/392/CEE and annexes.

#### 8. Standard equipment

Each hydraulic SuperJet is supplied as a kit including the following:

- A steel box for the SuperJet
- A case containing tools, inserts wear parts and consumables (seals, lubricants, etc.)
- 3 duct inserts with outer Ø : 32, 40, 50 mm
- 4 cable inserts: Ø 15,5-18 ; Ø 17,5-22 ; Ø 22-24 ; Ø 24-28 mm
- 10 m 1 1/2" air hose with couplers and ball valve.
- a speed and length measuring device
- an exhaust chimney
- a hydraulic power pack, 60 bar
- 2 x 4 m flexible hydraulic hoses with by-pass valve
- a user's and maintenance manual
- spare parts list.

#### 9. Optional accessories

Intermediate cable storage device FIGARO

Air Aftercooler AHP 400 with water separator

Sonic heads for duct inner diameters within 26-32; 32-40 and 40-51 mm

Y connector

Duct inserts (others than the 3 included in the standard equipment): Ø 25, 34, 37, 42, 48, 60, 63 mm

Cable insert Ø 14-15,5; 28-32 mm

Cable inserts Ø 9-11; 11-12,5; 12,5-14 and 32-36 mm can be used with specific precautions

Lubricant foam spreaders Ø 60, 80 and 100 mm

"Jetting Lube" duct lubricant (box of 12 bottles of 95 CL each)

Hydraulic power pack, 140 bar (for limited application with cables > Ø 25 mm)

Fixing clamps for struts Ø 48 and 60 mm

Calibrating equipment for ducts

Special connectors for ducts

Kit for measuring coefficients of friction and stiffness

"JETPLANNER" calculation software for maximum installation lengths

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**SuperJet**, shown in standard configuration



**Figaro**, Intermediate Cable Fleeting Device. Used to increase installation distance and manage cables more efficiently. For further details please request Technical Data Sheet – Figaro.

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