

## ETP HYDRO-GRIP C OPERATING INSTRUCTION

### Description

ETP HYDRO-GRIP type C for interchangeable assembly and pressurizing with a high pressure grease pump. Several tools can be mounted simultaneously on the same sleeve. It is designed and manufactured to a spindle tolerance of g6 and a tool bore tolerance of H7.

### Remember!

ETP HYDRO-GRIP sleeves **MUST ONLY** be pressurized when mounted on a spindle of the correct size and tolerance **AND** completely covered with tools or spacers. Failure to follow these assembly instructions may result in permanent and not repairable damage to your sleeve.

A normal balanced (G 6.3) sleeve and tool unit can be used up to a maximum speed of 9,000rpm.



### Assembly



**1.** The tool and the hydro sleeve must be thoroughly cleaned, removing all traces of grease and other impurities.



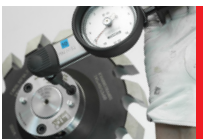
**2.** Mount the tools and spacers onto the hydro sleeve. Insert locking screws through the flange of the sleeve and tighten the screws finger tight.



**3.** Mount the whole unit onto the grinding machine spindle. Tighten the pressurizing release nipple, maximum 3 Nm-27lbf.in.



**4.** Connect the high pressure pump and increase pressure in 50 bar (700 psi) increments until all the tools are centered.



**5.** Tighten the locking screws (M8) through the flange to a min. 8 Nm (6lbs).



**6.** Connect the high pressure pump and increase the pressure to 400-450bar (5800-6500 psi).

**7.** Grind the tool



**8.** Release the pressure reduction screw on the release nipple. Remove the tool unit from the grinding machine and it is now ready to be installed on the machine.

### Attention!

Prior to installation on the machine ensure that the spindle is free from all traces of grease and other impurities.

Before the grease pump is removed – release the restoring screw, indicated on photo, in order to avoid damage of the grease nipple or the hydraulic connector.

It is essential to use the correct quality of grease and we strongly recommend to use Blasolube 301 also provided by ETP.



### Safety instructions

A) A retaining device must always be fitted to the end of the machine spindle, either a locknut on spindles with threaded ends (but axial loads must not be applied) or a slotted safety ring on plain spindles.

B) The screws securing the tool to the sleeve must always remain in position and fully tightened. They should be securely bonded using, for example Loctite.

C) The pressure of the sleeve is to be checked on a regular basis especially at high temperature variations.

D) Any machining of the sleeve must only be carried out in accordance with fully approved, written instruction from ETP.

E) Carrier is to be used together with ETP HYDRO-GRIP. ETP HYDRO-GRIP has two carrier holes and some dimensions have additional threaded holes for carrier pegs.

### Cleaning instructions

Ultrasonic cleaning is in general not recommended as this may force cleaning emulsion into the pressurizing system. We recommend a quick wash in max 80°C (175°F) emulsion, containing anticorrosion medium.