ETP HYDRO-GRIP EI2 / EI / EIS
OPERATING INSTRUCTION

Description
ETP HYDRO-GRIP EI2, EI, EIS for interchangeable tool assembly and machines with hexagonal spindle profile. Pressurizing with an Allen T-wrench and the sleeve expands both against the tool and the machine spindle. 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. Please also visit etp.se for more detailed instructions and in other languages.

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. Pressurize the sleeve by turn the Allen T-wrench a few turns to approx. 2 Nm (1.5 ft lbs) until you feel the tool/s are centered.

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

5. Tighten the pressurizing screw until it stops, max 10 Nm (7.4 lbs). Any higher tightening force will not increase the fastening force.

6. Grind the tool

7. Release the pressurizing screw with an Allen T-wrench. Remove the tool unit from the grinding machine and it is now ready to be installed on the machine.

Safety instructions
A) The safety disc must always be fitted on the spindle end.
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) Any machining of the sleeve must only be carried out in accordance with fully approved, written instruction from ETP.

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. After cleaning the pressurizing screw should be lubricated with molybdenum disulfide grease.

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