

#### TOS VARNSDORF a. s.

TOS VARNSDORF a. s., Říční 1774, CZ 407 47 Varnsdorf, CZECH REPUBLIC
Tel.: +420 412 351 200 • Fax: +420 412 371 176 • E-mail: sales@tosvarnsdorf.cz • http://www.tosvarnsdorf.com

Technical presentation of the

### LD 650. FACING HEAD



#### 1. FEATURES of the PRODUCT

LD 650 has been designed for the horizontal boring mills of the type WH(Q) 105 CNC - with the headstock of the N model standardly, with the headstock of the R model after previous discussion with producer, WHN(Q) 13 CNC, WHN 110/130 (Q/MC) - with the headstock of the N model, WRD 130/150 (Q) as an item of the optional equipment.

The facing head (FH) serves for facing and outside turning or boring of cylindrical, conical and otherwise shaped surfaces of large diameters. The equipment is particularly useful for the demanding technological operations where the full CNC control of the slide may be exploited.

Mounting of the FH onto the quill flange of the machine is done manually. For application of the facing head on the WRD 130/150 (Q) machines is offered a variant for semi-automatic setting mode from the PICK-UP column, when after automatic entering of the hollow spindle into center ram face is still the facing head manually fastened with use of four screws (to hollow spindle). The slide position is fully CNC controlled.

#### 2. TECHNICAL DESCRIPTION

The FH consists of the basic cylindrical body with a hole in its axis through which the machine spindle may pass and a crosswise traveling slide (in relation to the spindle axis). The slide (U-axis) is backlash free driven by the spindle travel. The transmission rate is 1:1.

All the slide-driving mechanisms are inside the facing head's body except for the rack, which is clamped in the spindle taper.

The clamping T-slots on the slide provide for fixing of a tool holder, into which lathe or special tools may be clamped.

At the basic position of the slide, the excluded input mechanism member as well as its drive and the dismounted tool holder, can be use for a machining the machine spindle (except WRD 150).

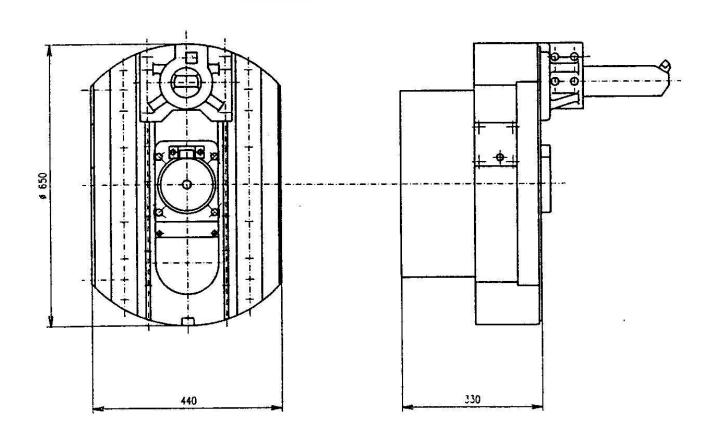
With the machines WHQ 105 CNC, WHQ 13 CNC, WHN 110/130 Q(MC), WRD 130/150 Q, that are fitted with the equipment for automatic tool change in the machine spindle, is this function in the state of the mounted face-board not possible to use. The lubricant for the slide is grease, which has to be added whenever necessary.

Lubrication of the FH drive mechanisms is permanent, with grease charge.

## 3. EQUIPMENT SPECIFICATIONS

Facing Head dia Slide travel U	mm mm	650 170
FH speed max.	RPM	150
Spindle speed max. with FH on	RPM	200
Torque max. for the individual machines:		
WH(Q) 105 CNC - the headstock of the N model	Nm	1170
WHN (Q) 13 CNC	Nm	2760
WHN 110 (Q/MC) - the headstock of the N model	Nm	2110
WHN 130 (Q/MC) - the headstock of the N model	Nm	2360
WRD 130 (Q)	Nm	3200
WRD 150 (Q)	Nm	2290
FH slide feed range	mm/RPM	1 - 1000
Rapid traverse of the slide	mm/min	1000
Dimension/pitch of the clamping T-slots	mm	12H11 / 180
Facing dia max.	mm	1000
Boring dia range	mm	300 - 1000
Cylindrical surface machining accuracy		IT 7
Total weight	kg	200

# 4. Design and Configuration - LD 650



## 5. Standard equipment list:

- Operational tool kit
- Technical documentation including the Operating Manual.