

## HYDRAULIC PULSE TIGHTENER HPU 1701

### Use and description:

Hydraulic pulse tightener **HPU 1701** (hereinafter only tightener) is a handheld tool which is used for tightening or loosening of screw connections with thread up to M 30. The torque is induced by impacts of the rotary impact mechanism – twin hammer.

The tightener consist of following main parts: body, hydraulic motor, hydraulic distribution cube, impact mechanism and handle with trigger mechanism. In the cube there is a throttle valve for controlling the speed of the output squared spindle and a slide valve for changing the direction of rotation.

It is possible to order a auxiliary handle, which is swivelling towards the impact mechanism axis and which enables better hadling in the operation position.

The tightener has been designed and constructed for using on the heading workplaces for the tightening of the screw connections of the steel arch support parts (It is fed from the tunnelling machines, travelling drilling rigs etc.). It is possible to use it on each workplace where the pressure medium source with necessary characteristics is available.

In case that the pressure medium source parameters are  $p > 14 \text{ MPa}$ ;  $Q > 25 \text{ dm}^3 \cdot \text{min}^{-1}$ , the Regulating Block RB 1 must be inserted upstream in the feeding line for setting the necessary parameters (product of the KOEXPRO OSTRAVA, a.s. company).



HPU 1701

### Characteristics:

Type		HPU 1701
Max. operation tightening torque	Nm	1 700 ± 10%
Nominal tightening torque moment	Nm	1 200 ± 10%
Working pressure	MPa	14
Flow rate at max. speed	dm <sup>3</sup> ·min <sup>-1</sup>	25
Working liquid	hydraulic liquid having a viscosity of 46 mm <sup>2</sup> ·s <sup>-1</sup> at 40°C	
Filtration	µm	25
Hydraulic connections	press.(P)	M 16x1.50
	waste (T)	M 18x1.50
Impact mechanism	-	twin hammer
Driving spindle dimensions (4 HR)	mm (")	25.40 (1)
Dimensions (w x h x l)	mm	97x286x298.50
Weight	kg	ca 9.30

Type marking:

**HPU 1701**

HPU HYDRAULIC PULSE TIGHTENER  
1701 type

The product has been designed and constructed as the equipment group I (mine), category M2 according to the Directive 94/9/EC-ATEX of the European Parliament and of the Council and meets the requirements for using in areas "hazardous atmospheric conditions 2" according to EN 1127-2+A1 and "zone 1" on condition that all employer's national regulations are fulfilled.