

Semi-automatic grinder PNB-2E

Semi-automatic tool grinder PNB-2E

is used for sharpening tools
of the punching machines type
of Trumpf (Trumpf, Boschert ...) and Thick Turret - (Amada, Finn Power ...).

Design of semiautomatic
grinder combines
the advantages of automatic
and manual grinders.

Advantages:

- grinding can be carried out immediately by operator of the punching machine
- grinding in automatic mode eliminates influence of the human factor on the final quality
- effective internal cooling
- high quality grinding of the surface
- the usage of CBN wheels with long lifetime and without alignment
- compact performance
- minimum operating costs



Technical parameters:

Machine type		PNB-2E
Dimensions	Length	470 mm
	Width	450 mm
	Height	840 mm
Weight		110 kg
Nominal voltage	3/N/PE AC 400/230V	
Nominal frequency	50 Hz (60 Hz)	
Nominal current	max. 2,2 A	
Shielding degree	min. IP 54	
Spindle speed	4 200 / min	
Automatic cut size setting scale increments (approx.)	0,01 mm-per scale division	
Max die diameter	125 mm	
Max. length of punch	118 mm	



The main benefits of timely grinding:

- lower wear and tear parts of punching machine
- lower costs for removing burr – deburring
- extending lifetime of tools - saving costs

Extending lifetime of tools

The speed of the blunting of particular tool depends on many factors (properties of materials, geometry and adjustment of tools etc.). The course of blunting tool is irregular and is shown in the chart (red curve).

After the first deburring of the edge, the tool lasts a long time with minimal blunting. However after exceeding the radius (about 0.5 to 1.0 mm) – the speed of blunting is rapidly increasing. Timely grinding can avoid this final phase of blunting and achieve increased lifetime of tools, as shown in the chart (green curve).

