# **Tool sharpeners SVmetal**

are used for sharpening tools of the punching machines type of Trumph (Trumpf, Boschert ...) and Thick Turret Ultra - (Amada, Finn Power ...). All machines are developed for use directly near the punch press machine, provide the maximal quality of tools grinding used the minimum of operators time and attention.

#### Advantages:

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

## ANB-5E

Full automatic control saves time and ensures the optimal result of grinding. Simple and practical operation of the machine requires that the operator only has to fix a tool and set the thickness that has to be removed. The performance of grinding and all the processes are steered automatically. Limited maximal removing thickness furthers more often sharpening to extend tools life. Very simple and intuitive operation. Safety and diagnostic system enabled.

### PNB-2E

and most economical solution for the most common tools types. Provided the maximal quality of grinding against the minimal costs. Design of semiautomatic grinder combines the advantages of automatic and manual grinders. The 0 point should to be set manually, but the grinding is providing automatically. Not possible to grind Classic Amada Style punches.

### PNB-5E

is the compromised solution provided the maximum quality of grinding for a wide selection of types of punching tools. It combine the semiautomatic system and the mechanical advantages the same as in ANB-5E. Twice bigger possible upstroke than in PNB-2E and automatic steering of the speed of grinding.





Machine type		ANB-5E	PNB-5E	PNB-2E	
Dimensions:	Length	550 mm	470 mm	470 mm	
	Width	500 mm	450 mm	450 mm	
	Height	1010 mm	840 mm	840 mm	
Weight		115 kg	110 kg	90 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		
Max. removing size ( approx.)			0,2 mm		
Min. removing size ( approx. )		0,04 mm	0,02 mm	0,01 mm	
Step of the setting ( approx.)			0,02 mm		
Max. die diameter			158 mm		
Max. length of punch			208 mm 1		

### The main benefits of timely grinding:

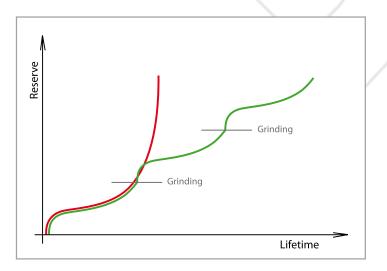
- lower wear and tear parts of punching machine
- lower costs for removing burr deburring
- extending lifetime of tools saving costs

### **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 ourse 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).

SV metal



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