

Precise Power Group manufactures:

- ✓ Punching tools (punches and dies) for automatic lines, ironworkers and punching presses
- ✓ Industrial blades for cutting metal: flats, profiles and armature for all kind of machinery
- ✓ Accessories and additional equipment for punch presses and iron workers

Precise Power Group was established in 2008. At present, it has about 25 employees and three offices in Vilnius (EU), Minsk (Belarus) and Saint Petersburg (Russia). We export our tools to the European Union, the USA, Canada, Israel, Russia, Kazakhstan and other countries.

We are the biggest supplier of punching tools for ironworkers, punching presses and automatic lines in the EurAsEC countries (Russia, Belarus and Kazakhstan).

Our specialists always stay in touch with users of punching and shearing tools throughout the world with various equipment types and models and therefore they can give you exhaustive consultation. Our multinational team organized by the latest software works for your top result.

Standard punching and cutting tool warehouses allow us to perform deliveries promptly. We also manufacture special punching and cutting tools according your drawings or develop them to suit your tasks.

The constant strong desire for the development of our company has made the tool under the trademark "Precise Power" the trusted example for comparison.

Contact us today for advice and to order.



CATALOG
OF PUNCHING TOOLS
AND INDUSTRIAL BLADES

Order No.

Date

PRECISE POWER

Customer

City

	Tool Type as per Catalog	Punch	Die	Size, mm	Round	Oblong	Rec tangle	Special	Quantity, Pcs	Comments
1		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
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11		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
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13		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
14		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
15		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
16		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
17		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
18		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
19		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
20		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
21		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
22		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
23		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
24		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

- We would like Precise Power to organize delivery of this order at our expense on the current tariffs
- Other wishes for the order (delivery address different from the legal one, desired deadlines, packaging, etc.).

Order written up by (Name, Last name) Telephone / e-mail

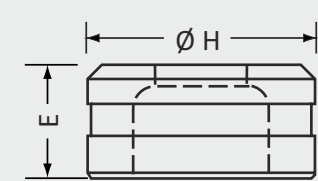
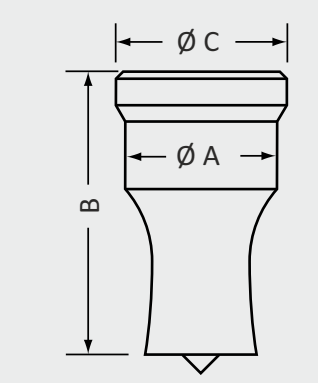
Position Signature

- The contact person in our company is different from the signatory of this order. Please contact the following person on issues related to this order:

Contact person (Name, Last name) Position Telephone / e-mail

ORDER@PUNCHING.TOOLS
Thank you for your order!

Punch type	B	C	A	Die Type	E	H	Chamfer
001	53,00	30,50	27,00	001	25,00	50,80	-
002	58,00	31,50	28,00	002	28,50	46,00	-
003	64,00	35,00	31,00	003	32,00	60,00	-
014	89,00	35,00	31,00	004	32,00	73,00	-
005	64,00	43,50	40,00	005	28,50	78,00	-
006	73,00	35,00	31,00	006	28,50	100,0	-
007	73,00	43,50	40,00	007	28,50	125,00	-
008	58,00	54,00	50,00	015	31,80	63,50	-
009	58,00	79,00	75,00	016	41,27	79,37	-
010	58,00	104,00	100,00	017	40,00	150,00	-
011	73,00	54,00	50,00	022	25,40	50,80	-
012	73,00	79,00	75,00	023	25,40	50,80	+
013	73,00	104,00	100,00	024	31,75	60,32	+
023	60,30	46,00	40,00	025	31,75	73,02	-
024	60,30	57,00	51,00	026	31,75	73,02	+
030	85,72	21,50	18,00	027	35,00	90,02	-
031	85,72	31,75	26,98	028	19,00	29,00	+
033	85,72	34,92	32,40	029	19,00	30,00	-
034	68,26	42,86	38,89	030	20,00	45,90	+
035	85,72	47,50	39,68	031	20,00	50,80	-
036	85,72	50,80	45,24				



IMPORTANT: The diameter of the die hole must be bigger than the punch diameter by the gap width

The diameter of the punch hole must be bigger or equal to the workpiece thickness

Die Clearance Table

Standard Die Clearance	Thickness of Steel Workpiece to be punched	
	Min., mm	Max., mm
0,2	1	3
0,7	4	10
1,2	10	15
1,7	15	20
2,2	20	25
2,7	25	30

If the size you use cannot be found in the table you can order from us:

- adapters for your machine in order to use standard tools;
- your non standard tools based on the drawing or tool vendor code by its manufacturer's catalog or a sample.

We manufacture punches and dies for punching holes of various shapes: round, oblong, rectangular/square, shaped. We shall willingly consult you by telephone or reply on your request by e-mail.

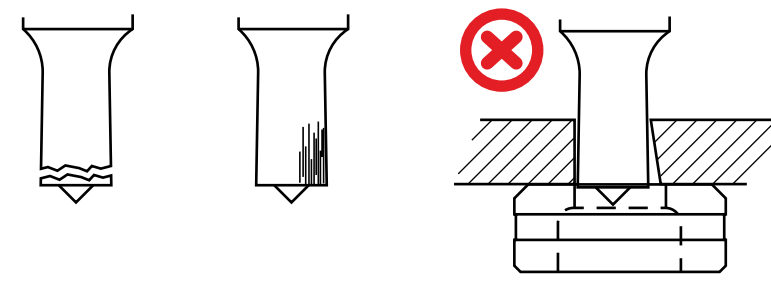
Table for Determining the Maximum Thickness of Material for Various Hole Diameters and Popular Press Tonnages

Round hole diameter, mm	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	32	34	36	38	40	
Oblong or rectangle perimeter, mm	44	47	50	53	57	60	63	66	69	72	75	79	82	85	88	91	94	100	107	113	119	126	
Press tonnage	30 T	14,0	14,2	13,3	12,5	11,8	11,2	10,6	10,1	9,7	9,2	8,8	8,5	8,2	7,9	7,6	7,3	7,1	6,6	6,2	5,9	5,6	5,3
	40 T	14,0	15,0	16,0	16,7	15,7	14,9	14,2	13,5	12,9	12,3	11,8	11,3	10,9	10,5	10,1	9,8	9,4	8,8	8,3	7,9	7,4	7,1
	60 T	14,0	15,0	16,0	17,0	18,0	19,0	20,0	20,2	19,3	18,5	17,7	17,0	16,3	15,7	15,2	14,6	14,2	13,3	12,5	11,8	11,2	10,6
	80 T	14,0	15,0	16,0	17,0	18,0	19,0	20,0	21,0	22,0	23,0	23,6	22,6	21,8	21,0	20,2	19,5	18,9	17,7	16,7	15,7	14,9	14,2
	100 T	14,0	15,0	16,0	17,0	18,0	19,0	20,0	21,0	22,0	23,0	24,0	25,0	26,0	26,2	25,3	24,4	23,6	22,1	20,8	19,7	18,6	17,7
120 T	14,0	15,0	16,0	17,0	18,0	19,0	20,0	21,0	22,0	23,0	24,0	25,0	26,0	27,0	28,0	29,0	28,3	26,5	25,0	23,6	22,3	21,2	
Example: a press can punch a hole having 24 mm in diameter (or 75 mm in perimeter) in steel having maximum thickness 17.7 mm																							
Adjustments: Working with copper, the max thickness must be multiplied by 3; with low-carbon steels, by 1.15, with many stainless steels, by 0.55																							
IMPORTANT: The punch hole diameter must be bigger or equal to the workpiece thickness!																							

IMPORTANT TO KNOW

Problem: the cutting edge chips off or has an excessive wear on one side

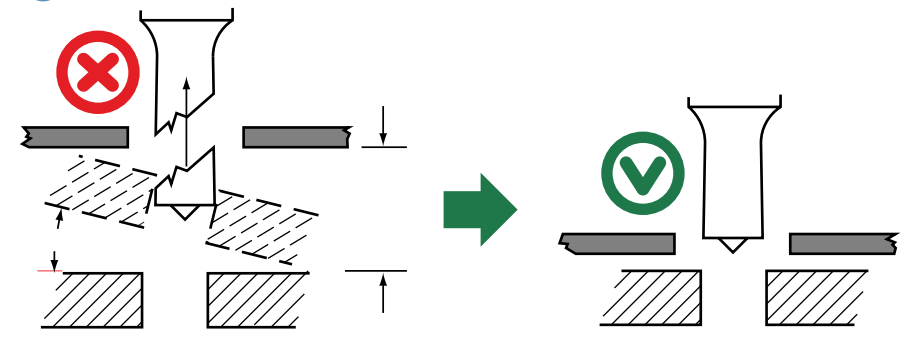
Reason: the punch and the die are not centered



Possible solution:
center the punch and die, set them so that their axes coincide.

Problem: The punch working part breaks off

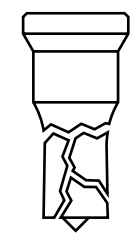
Reason: The stripper is set askew and/or set too high.



Possible solution:
Lower the stripper so that it is 5-10 mm above the workpiece.

Problem: The punch breaks down

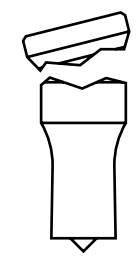
Reason: The punch contacted the die during punching as a result of tool misalignment and/or the punch diameter was smaller than the workpiece thickness



Possible solution:
Check the clearance evenness throughout the cutting edge, as well as the clearance width. Make sure the hole diameter is bigger than or equal to the workpiece thickness.

Problem: The punch head brakes off

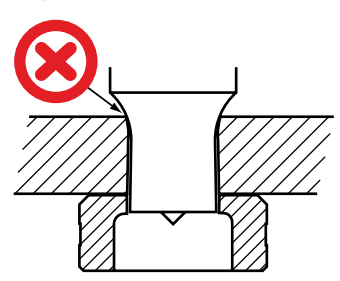
Reason: The coupling nut got loose or the punch is not fastened properly to the punchholder, possibly because the coupling nut is not tightened properly or is worn out



Possible solution:
Before installing a tool make sure that it is clean and there are no objects on it. Fasten the tool thoroughly before working, avoiding looseness.

Problem: The material is deformed and rings remain on the punch

Reason: The punch enters the die too far and/or its working part is too short for this work.



Possible solution:
Adjust the limit switch lower position of the punching hydraulic cylinder so that the punch enters the die with the depth not exceeding 2 mm. If the working part of the tool is too short, consult our specialist and order longer punches.