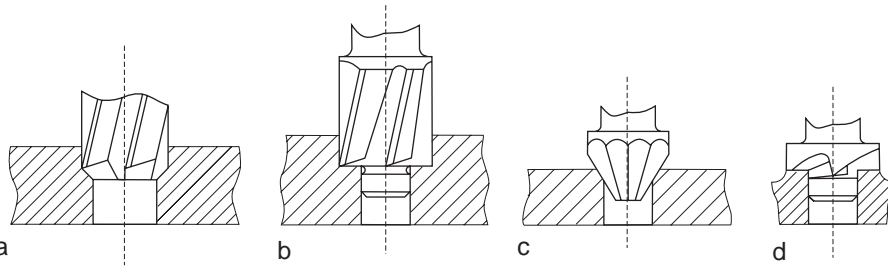


UPUŠTAČI



a, b, c, d - razni oblici (razne površine) upušta a prema obliku obradivane površine (rupe);

VRSTE UPUŠTAČA (PODJELA)

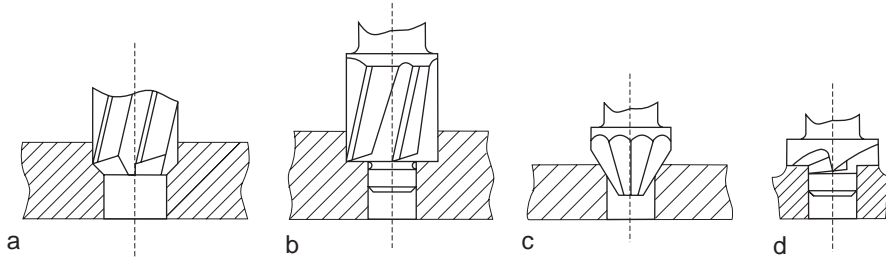
Prema obliku obrđivane površine	Prema načinu prihvatanja	Prema upotrebi
<ul style="list-style-type: none"> - valjkasti (sl.a); služe za proširivanje rupe na veći prečnik; - konični (sl.b); služe za obradu upušta za glavu vijaka koja treba da bude upuštena; - kupasti (sl.c); služe za obradu kupastih upušta i gnijezda pod uglom od 60°, 90° ili 120°; - cilindrični (sl.d); služe za poravnavanje površine; 	<ul style="list-style-type: none"> - sa valjkastom drškom; - sa MK drškom; 	<ul style="list-style-type: none"> - sa vodicom (promjenjiva ili fiksna); - bez vodiča.

Preporuke za najmanje prečnik predhodno obradene rupe i to za upuštače sa zavojnim zubima, DIN 343, (d₂) i nasadne upuštače prema DIN 222, (d₃).

Prečnik upuštača	Predhodna rupa	
	d ₁	d ₂
10	7	-
12	8,4	-
14	9,8	-
16	11,2	-
18	12,6	-
20	14	-
22	15	-
24	17	20
26	18	22
28	20	24
30	21	25

Prečnik upuštača	Predhodna rupa	
	d ₃	d ₄
32	22	27
34	24	29
36	25	31
38	27	33
40	28	34
42	29	36
44	31	38
46	32	40
48	34	42
50	35	43

CORE DRILLS



a, b, c, d - core drill different shapes (different surfaces) according to hole (surface) shape;

CORE DRILL TYPES

<i>According to machined surface shape</i>	<i>According to chucking type</i>	<i>According to use</i>
<ul style="list-style-type: none"> - straight (fig.a); for hole diameter enlarging ; - face core drills (fig.b); for screw head counterbore; - taper(fig.c); for sinking tapers (counterbores) and nests at an angle of 60°, 90° or 120°; - face core drills (fig.d); to even (hone) a surface; 	<ul style="list-style-type: none"> - with straight shank; -with Morse taper shank; 	<ul style="list-style-type: none"> - with leading part (changeable or fixed); - without leading part.

Recommendations for the smallest diameters of previously machined hole and namely for core drills with helix land, DIN 343, (d_2) and shell core drills according to DIN 222, (d_3).

<i>Core drill diameter</i>	<i>Previous hole</i>	
	d_1	d_2
10	7	-
12	8,4	-
14	9,8	-
16	11,2	-
18	12,6	-
20	14	-
22	15	-
24	17	20
26	18	22
28	20	24
30	21	25

<i>Core drill diameter</i>	<i>Previous hole</i>	
	d_3	d_4
32	22	27
34	24	29
36	25	31
38	27	33
40	28	34
42	29	36
44	31	38
46	32	40
48	34	42
50	35	43