

Carbide drawing dies nibs



Properties of grades

Grade	Density (g/cm ³)	Hardness (HRA)	TRS (MPa)	Average Grain size (μ m)
YL01	15.25	93.5	3300	0.8
YL10.2	14.5	92.0	4000	0.8
YG6	14.95	90	2400	1.6
YG6X	14.95	91.5	1900	1.0
YG8	14.75	89.5	2800	1.6
YG11	14.4	87.5	3100	1.6
YG15	14.05	87.0	3000	1.6

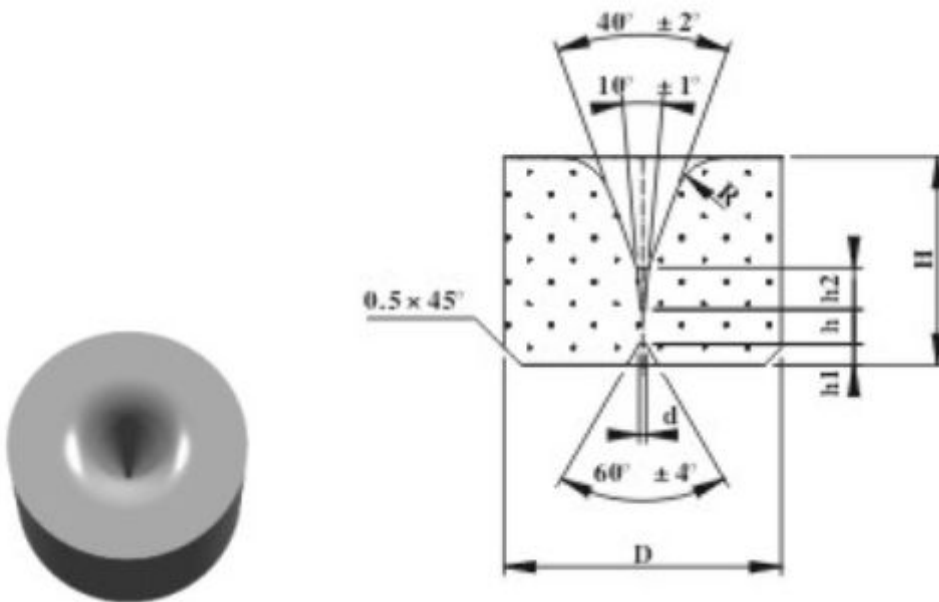
Application recommended

Grade	Applications recommended
YL01	Used for drawing diameter less than 1.5 mm of steel, tungsten and molybdenum wire under high speed drawing as well as nonferrous metals with high requirement on surface finish.
YL10.2	Used for drawing diameter between 1.5 mm to 10mm of steel, tungsten and molybdenum wire under high speed drawing as well as nonferrous tubes with high requirement on surface finish.
YG6	Used for drawing the diameter less than 20mm of steel, nonferrous metals and its alloy wire or bar under a moderate stress. It also used for tubes less than diameter of 10mm.
YG6X	Used for drawing the steel wire, nonferrous metals and its alloy wire or bar under the requirement of good wear resistant.

YG8	Used for drawing diameter less than 50 mm of steel, nonferrous and its alloy wire or bar under a moderate stress. It also used for tubes under 35mm.
YG11	Used for drawing diameter less than 60 mm of steel, nonferrous and its alloy wire or bar under a moderate stress. It also used for tubes under 35mm.
YG15	Used for steel pipe and steel bar as well as alloy steel bolt and head forging of rivet under a certain big stress

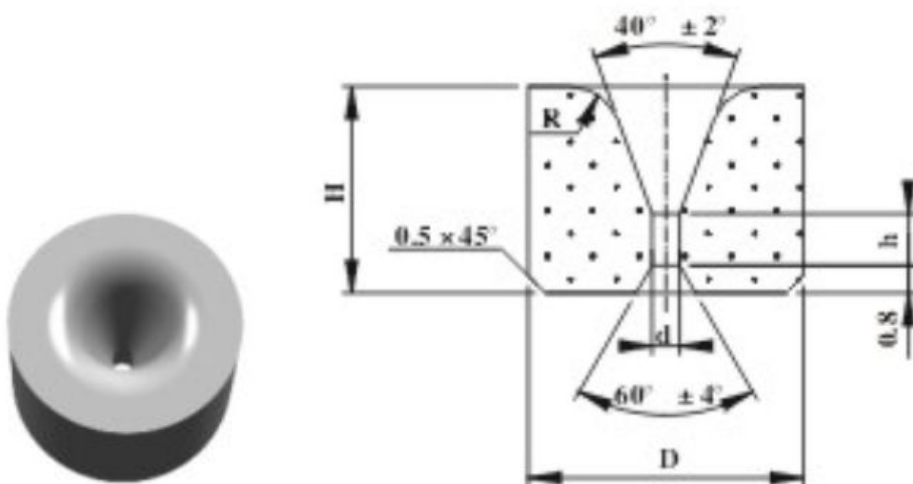
Types as following are: type 01, type 10, type 11, S11, type 12, type 13, S13 ,type 21, type 22, type 23, type 30, type 31, type 40, type41, type42, type60, R-2, R-4, R-5, R-6, R-7, R-8(9,10) , type V , type W, Type W (β), type WTA.

Type 01 – carbide drawing die nibs for drawing ferrous and non-ferrous metal wires



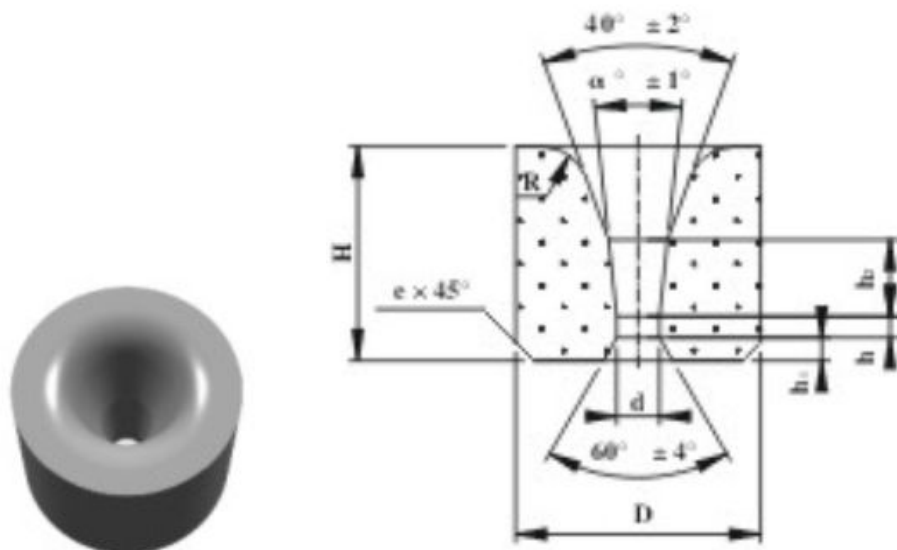
Type	D	H	Range of d	h
01-	6	4	0.2-0.8	0.8
	8	6	1.0	1.0

Type 10 – carbide drawing die nibs for drawing ferrous and non-ferrous metal wires



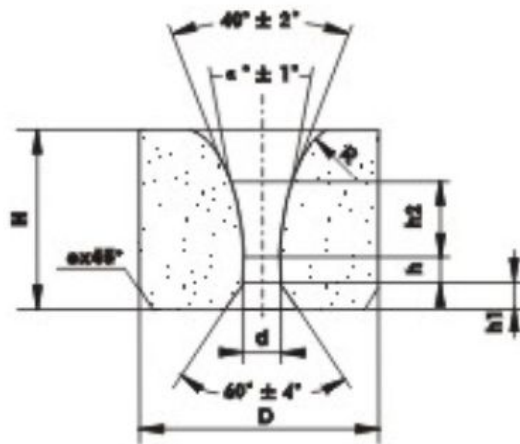
Type	D	H	Range of d	h
10-	6	4	0.4-0.8	0.8-1.2
	8	6	0.2-0.8	1.0-1.5

Type 11 –carbide drawing die nibs for drawing ferrous and non-ferrous metal wires



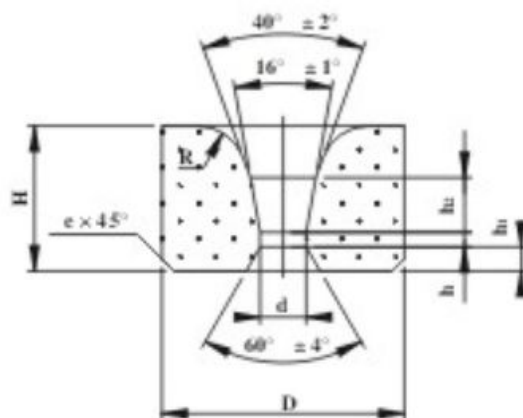
Type	D	H	Range of d	h	α°
11-	8	8	8	8	10°
	13	13	13	13	10°
	16	16	16	16	12°
	22	22	22	22	14°
	30	30	30	30	14°

Type S11–carbide drawing die nibs with large reducing angles for drawing ferrous metal wires.



Type	D	H	Range of d	h	α°
S11-	8	6	0.3-1.0	0.3-1.0	14°
	10	8	0.7	0.7	14°
	13	10	0.4-2.8	0.4-2.8	16°
	15	13	0.5-3.0	0.5-3.0	16°
	16	14	0.4-3.8	0.4-3.8	16°
	20	17	1.2-4.7	1.2-4.7	18°
	21	17	1.8-5.7	1.8-5.7	18°
	22	18	1.7-6.4	1.7-6.4	18°

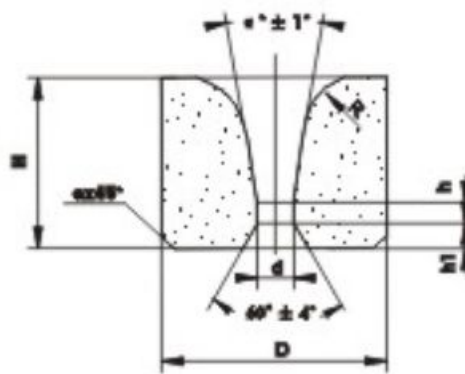
Type 12–carbide drawing die nibs for drawing non-ferrous metal wires and rods



Type	D	H	d	h
12-	8	6	0.4-0.8	0.3-0.6

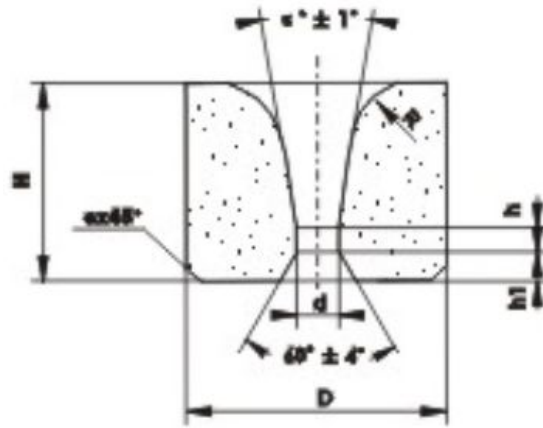
	13	8	0.4-2.3	0.3-1.0
	16	10	0.8-3.0	0.5-1.2
	20	12	1.0-5.0	1.0-1.4
	22	14	4.2-5.7	1.6-2.0
	26	16	6.4-8.0	2.0
	28	14	2.6-4.6	1.3-2.5

Type 13–carbide drawing die nibs for drawing non-ferrous metal rods



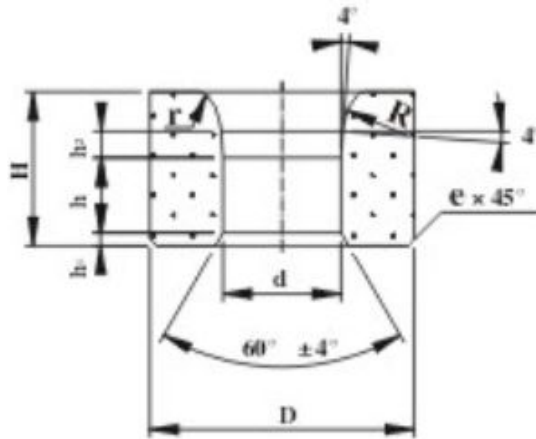
Type	D	H	d	h	α°
13-	30	21	3.7-9.6	1.5-4.0	14°
	40	24	9.0	6	
	40	25	10.5-15.5	5	
	50	28	16.5-24.5	5.5-6	18°
	60	35	25.5-34.5	7-7.5	
	75	35	35.5-43.5	8	20°
	90	35	45-47	9	
	110	40	59-69	10-11	
	140	50	71-81.5	12	

Type S13–Carbide drawing dies nibs with large reducing angles for drawing ferrous and non-ferrous metal wires



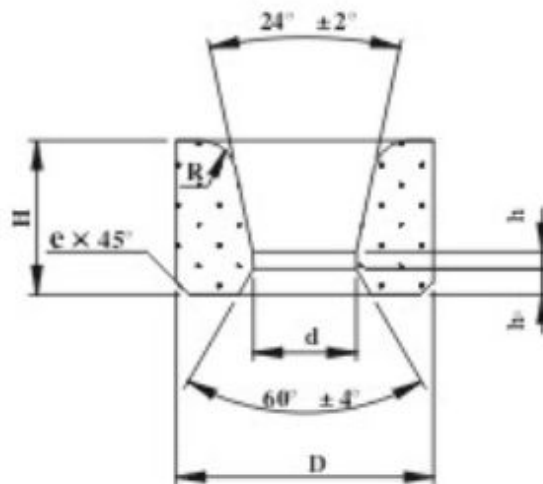
Type	D	H	d	h	α°
S13-	25	18	5.8	2.5	20°
	28	19	6.0-10.9	3-5	
	27	18	4.7-6.7	2.5	
	28	20	3.7-9.6	2.5	
	30	21	2.8-12.0	2.5-3.5	
	35	24	9.6-12.0	5	
	28	24	9.6-15.5	5	
	40	25	9.0-15.5	5	
	40	28	10.3	6	
	50	28	16.5-24.5	5.5-6	
	60	35	25.5-34.5	7	
	75	35	35.5-4 .5	8	
	90	35	45-57	9-10	
110	40	59-69	10-11		
140	50	71-84	12		

Type 21– Wall thickness reducing carbide die nibs for drawing metal tubes.



Type	D	H	d	h
21-	50	50	20.0-24.0	17
	60	60	26.0-30.0	
	70	70	32.0-40.0	
	80	80	42.0-46.0	20
	90	90	48.-54.0	
	100	100	58.0-62.0	

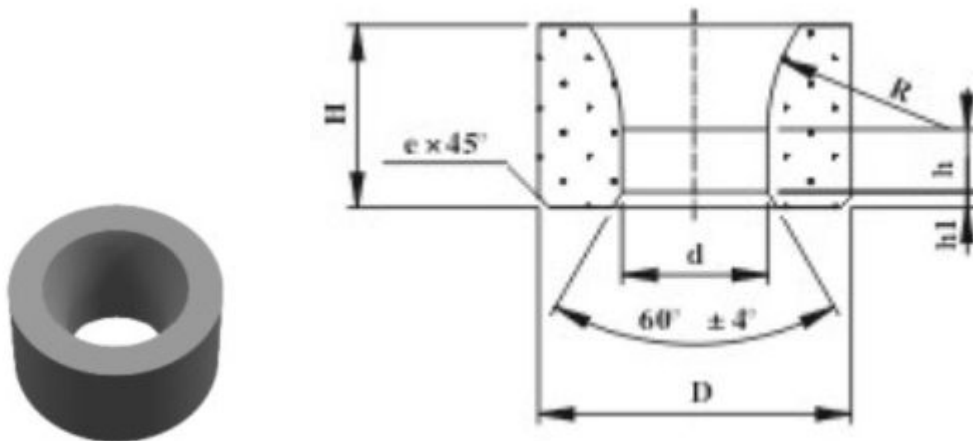
Type 22– Carbide drawing die nibs for drawing non-ferrous metal tubes



Type	D	H	d	h
22-	20	13	2.8-5.7	1.5
	30	18	6.7-13.5	2-4
	35	18	14.5-17.5	4
	45	24	12.5-13.5	3

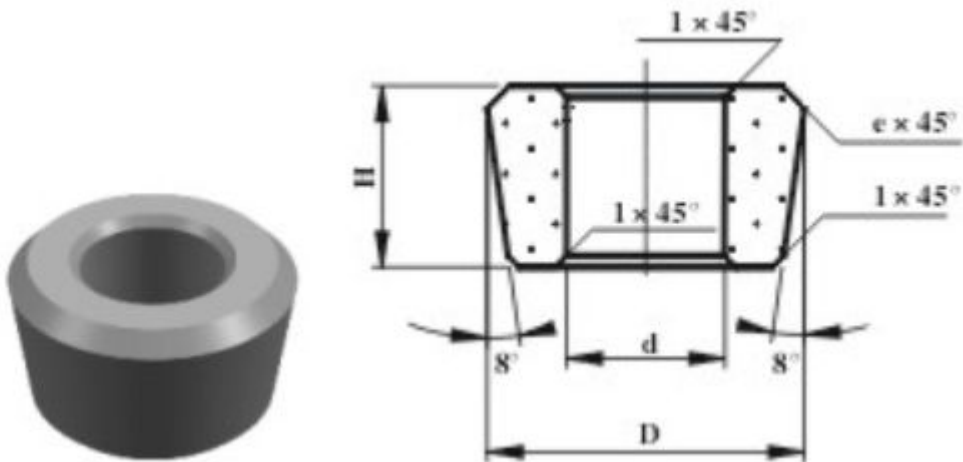
	50	25	24.5-30.5	5-6
	60	30	24.5-33.5	3.5
	65	32	34.5-39.5	6
	70	35	34.5-35.5	6.5
	75	35	40.5-42.5	6.5
	85	40	47.5	6.5
	80	35	34.5-47	6.5
	90	40	46-53	6.5
	100	40	55-57	6.5
	120	45	59-67	6.5
	130	50	69-77	6.5
	140	50	79-88	6.5

Type 23– Diameter and wall thickness reducing carbide die nibs for drawing metal tubes.



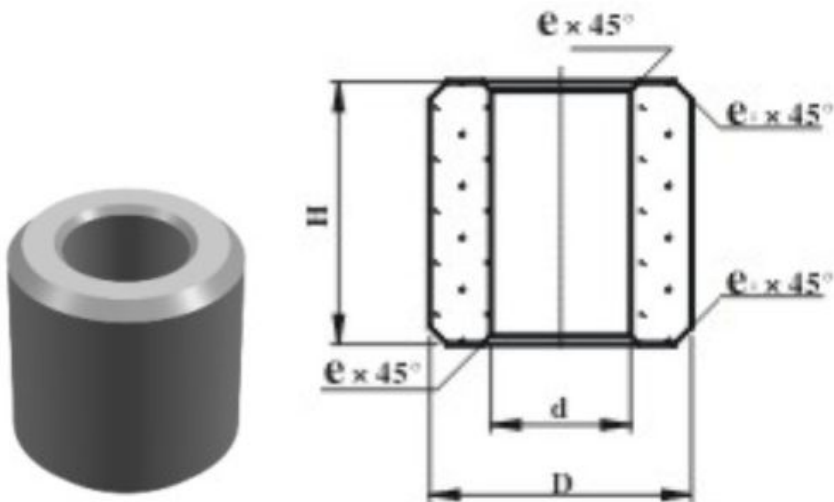
Type	D	H	d	h
23-	50	50	50	12
	60	60	60	
	70	70	70	
	75	75	75	15
	85	85	85	
	100	100	100	18
	110	110	110	
125	125	125	20	

Type 30– Carbide floating plugs for drawing metal tubes



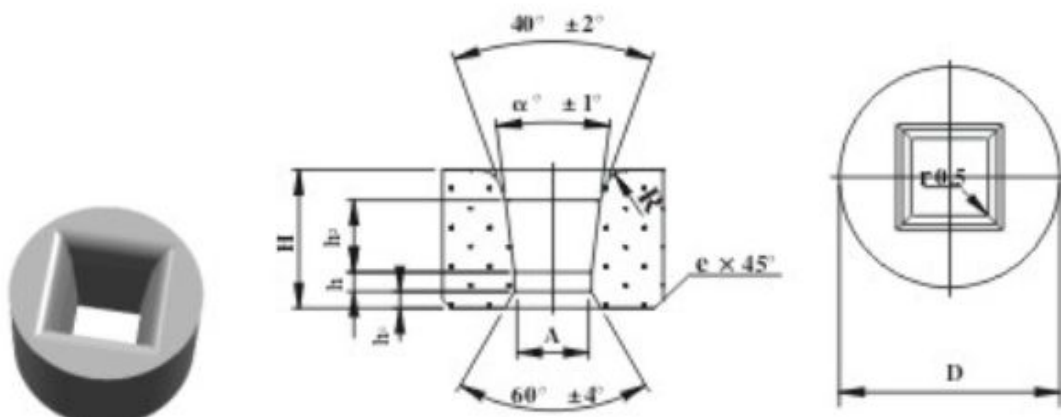
Type	D	H	d	e
30-	4	10	11	1
	6	12	13,15	1
	8	12	17	1
	10	14	19.5,21.5	1
	12	16	23.5	1
	14	16	25.5,27.5	1-2
	17	27	28-37	2
	19	27	38.2,39.4	2
	21	27	40-43	3
	23	32	44-46	3-4
	25	32	47-53	4
	27	32	54-57	4
28	35	58-64	4	

Type 31– Carbide floating plugs for drawing metal tubes



Type	D	H	d
31-	7	25	14.0-16.0
	8	25	17.0-18.0
	10	30	19.0-22.0
	12	30	23.0-27.0
	16	35	28.0-32.0
	20	35	33.0-42.0
	22	40	43.0-44.0
	26.5	45	45.0-47.0

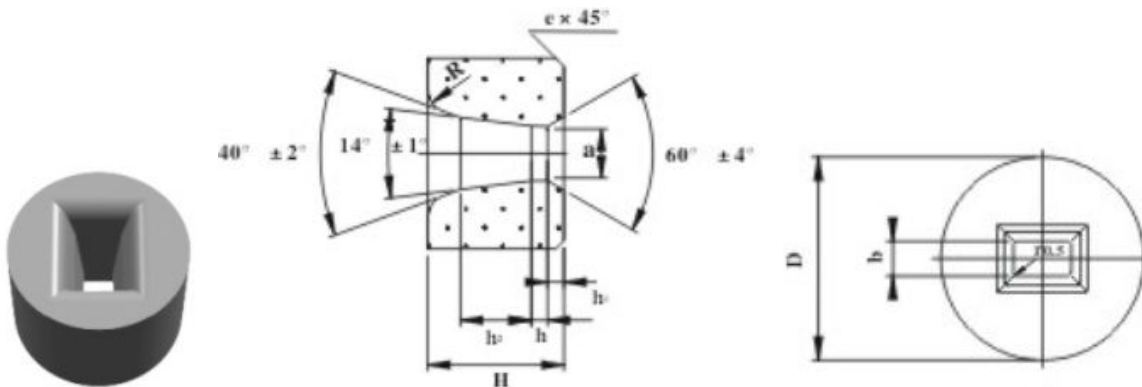
Type 40– Carbide drawing nibs for drawing square metal bars.



Type	D	H	Range of A	h	α°
40-	16	12	1.8-2.4	1	14°
	22	18	2.8-4.0	1.5	

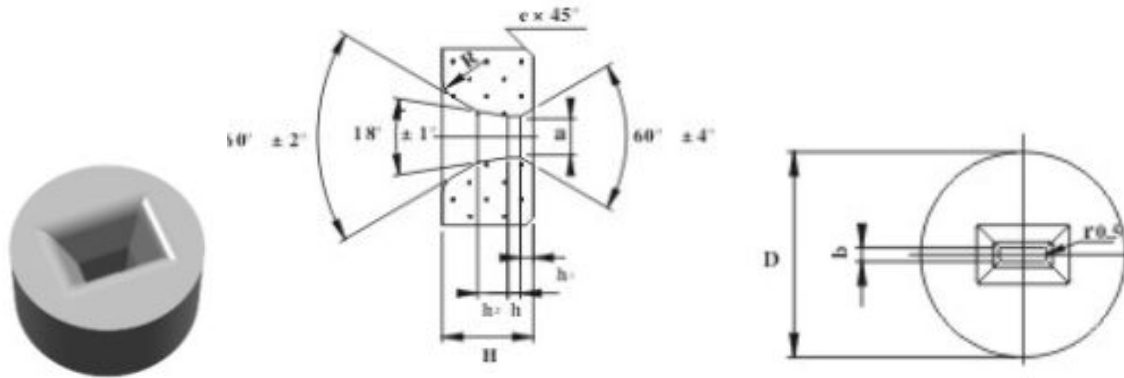
	30	21	4.6-4.7	2	
	35	25	7.7-9.7	3	
	45	25	10.7-14.7	3.5	
	50	28	15.7-18.7	4	
	60	30	19.7-23.7	5	16°
	65	32	24.7-27.5	6	
	70	35	28.5-31.5	8	20°
	80	35	32.5-37.5		
	90	40	38.5-41.5		
	100	40	42.5-47.5		
	129	45	49.5-53.5		

Type 41– Carbide drawing dies nibs for drawing rectangular non-ferrous metal bars.



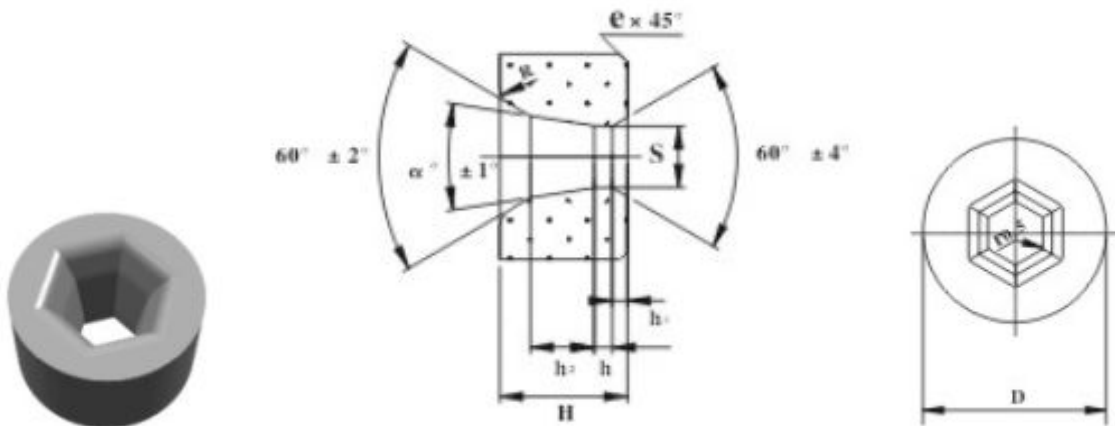
Type	D	H	Range of a	Range of b	h
41-	30	21	6.7	4.7	2
	35	25	7.7-9.7	5.7-7.7	3
	45	25	11.7	5.7-9.7	3.5
	50	28	13.7-17.6	6.7-15.7	4
	60	30	19.2-23.6	7.7-14.7	5

Type 42– Carbide drawing dies nibs for drawing non-ferrous metal strips.



Type	D	H	Range of a	Range of b	h
42-	20	12	1.9-3.1	0.6-1.9	2
	25	15	3.9-6.2	1.0-3.9	2.5
	35	18	7.2-11.4	1.1-6.3	2.5
	45	20	12.8-14.6	1.4-5.9	3
	50	20	16.5-23.2	1.9-6.3	3
	60	20	24.5-31.0	1.0-3.8	3

Type 60– Carbide drawing dies nibs for drawing hexagonal ferrous metal bars



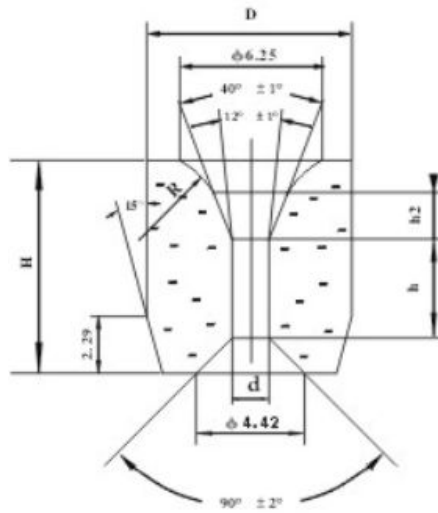
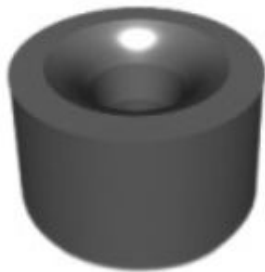
Type	D	H	Range of S	h	α°
60-	30	21	2.5-7.7	1.5-2	14°
	35	21	8.6-10.6	3	
	40	25	11.5-12.5	3.5	
	45	25	13.5-18.5	4	
	55	28	19.5-23.5	5	
	65	30	24.5-28.5	6	16°

	75	35	29.5- 37.3	7	
	90	35	38.0-49.0	7	
	100	40	52.0-57.5	8	
	120	42	59.5-74.5	8	

Note:

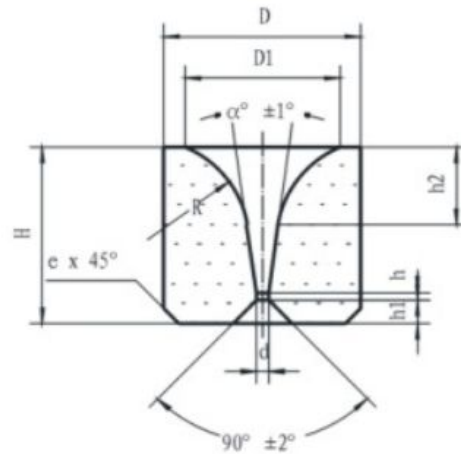
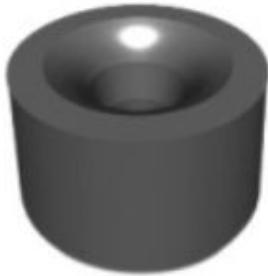
Dimensions for h, h1, h2 and (a, b) are to be agreed upon by the seller and the buyer

Type R -2



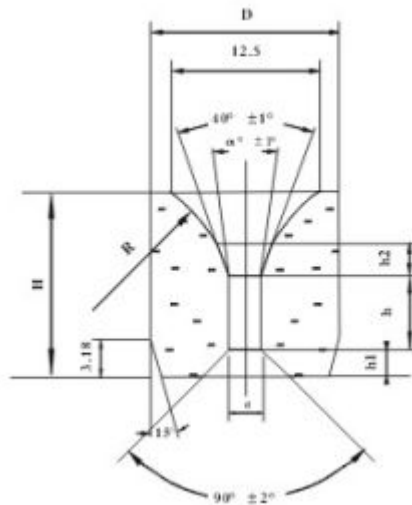
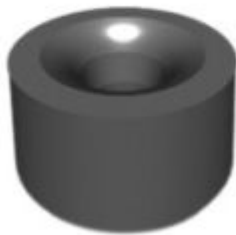
Type	D	H	d	h	α°
R-2-d	8.5	8.64	0.51-2.54	1.93-4.39	12

Type R -4



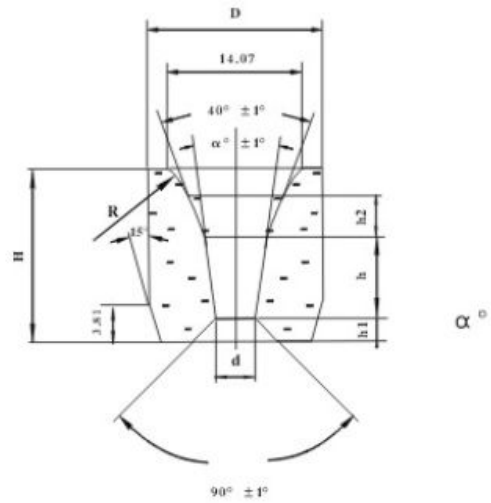
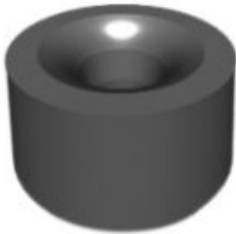
Type	D	H	d	h	α°
R4-d-12	12.7	11.4	1.9-4.6	0.5-1.6	12
R4-d-16	12.7	11.4	0.3-4.6	0.5-1.8	16

Type R -5



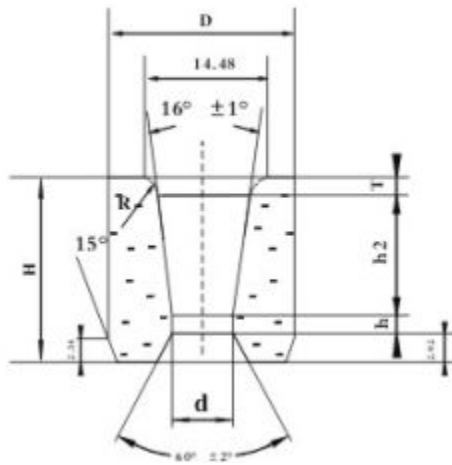
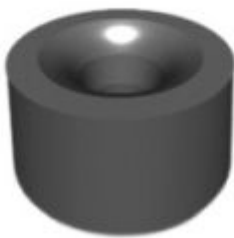
Type	D	H	d	h	α°
R-5 -d	16.1	15.5	0.76-6.86	3.05-9.3	12
			0.76-3.56	3.05-6.9	16

Type R -6



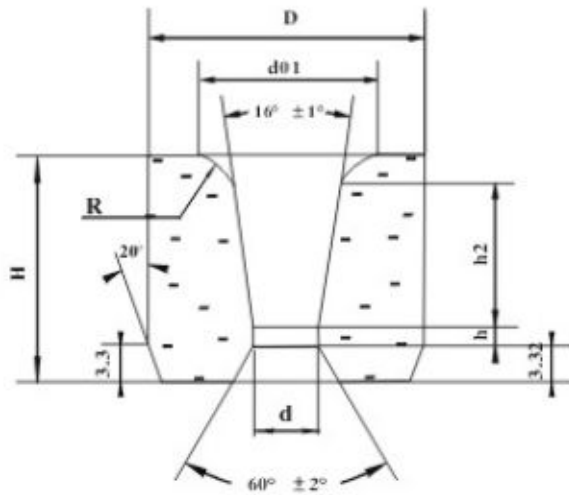
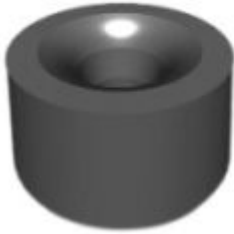
Type	D	H	d	h	α°
R-6 -d	18.3	18.1	2.03-9.14	5.08-13.9	16
	18.0	17.7	1.3-6.3	1.0-2.0	12

Type R -7



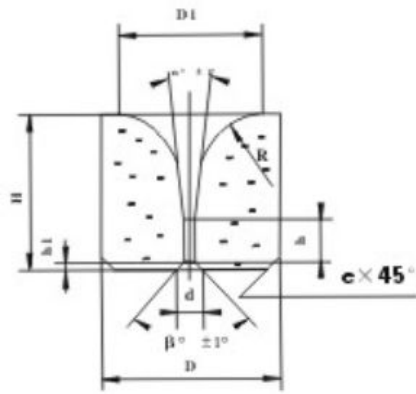
Type	D	H	d	h
R-7 -d	19.8	19.5	6.35-10.67	1.9-3.2

Type R -8 (9, 10)



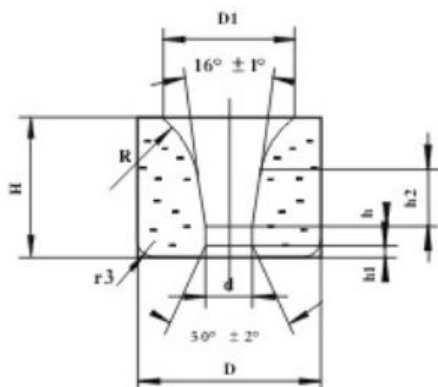
Type	D	H	d	h
R-8 -d	25.6	21	6.1-12.7	1.83-3.81
R-9 -d	30.4	21	10.16-16.51	3.05-4.95
R-10 -d	38.4	26	12.7-21.59	3.81-6.84

Type V



V型

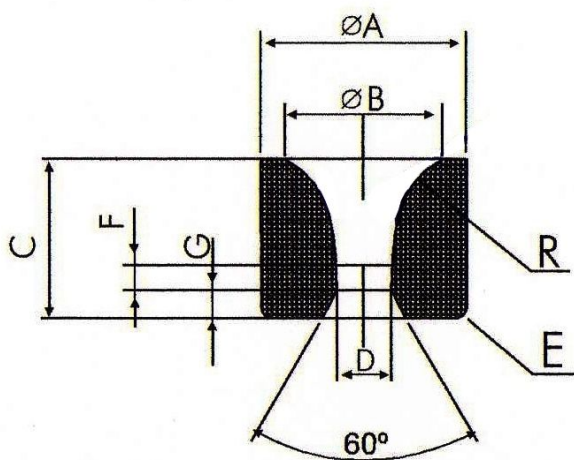
Type	D	H	d	h	α°
V-	15	13	0.6-3.6	3-5.5	12°
	19	17	1.8-6.5	6-7	14°
	25	20	5.7-7.7	7-8	14°
	35	21	8.2-11.5	8-10.5	14°



Type W (B)

Type	D	H	d	h
W107-d-Dβ	30	23	7.5	3.2
W108-d-Dβ	35	26	19.0	3.8
W109-d-Dβ	40	28	12.3	5
W110-d-Dβ	50	30	15.3	45.
W111-d-Dβ	60	36	21	6

Type WTA



Type	A	B	C	D	E	F	G	R
WTA001	30.00	23.00	24.00	08.00	1.0×45*	04.00	04.00	10.00
WTA002	30.00	23.00	24.00	09.00	1.0×45*	04.00	04.00	10.00
WTA003	30.00	23.00	24.00	10.00	1.0×45*	04.00	04.00	10.00
WTA004	30.00	23.00	24.00	11.00	1.0×45*	04.00	04.00	10.00
WTA005	30.00	23.00	24.00	12.00	1.0×45*	04.00	04.00	10.00
WTA006	35.00	26.00	25.00	10.00	1.0×45*	04.00	04.00	12.00
WTA007	35.00	26.00	25.00	11.00	1.0×45*	04.00	04.00	12.00

WTA008	35.00	26.00	25.00	12.00	1.0×45*	04.00	04.00	12.00
WTA009	35.00	26.00	25.00	13.00	1.0×45*	04.00	04.00	12.00
WTA010	35.00	26.00	25.00	14.00	1.0×45*	04.00	04.00	12.00
WTA011	35.00	26.00	25.00	15.00	1.0×45*	04.00	04.00	12.00
WTA012	40.00	32.00	28.00	12.50	2.0×45*	06.00	05.00	12.00
WTA013	40.00	32.00	28.00	14.00	2.0×45*	06.00	05.00	12.00
WTA014	40.00	32.00	28.00	15.00	2.0×45*	06.00	05.00	12.00
WTA015	40.00	32.00	28.00	16.00	2.0×45*	06.00	05.00	12.00
WTA016	45.00	37.00	28.00	15.00	2.0×45*	06.00	05.00	12.00
WTA017	45.00	37.00	28.00	17.00	2.0×45*	06.00	05.00	12.00
WTA018	45.00	37.00	28.00	18.00	2.0×45*	06.00	05.00	12.00
WTA019	45.00	37.00	28.00	19.00	2.0×45*	06.00	05.00	12.00
WTA020	45.00	37.00	28.00	20.00	2.0×45*	06.00	05.00	12.00
WTA021	50.00	40.00	30.00	21.00	2.0×45*	06.00	05.00	12.00
WTA022	50.00	40.00	30.00	22.00	2.0×45*	06.00	05.00	12.00
WTA023	50.00	40.00	30.00	24.00	2.0×45*	06.00	05.00	12.00
WTA024	55.00	45.00	30.00	25.00	2.0×45*	06.00	05.00	12.00
WTA025	55.00	45.00	30.00	27.00	2.0×45*	06.00	05.00	12.00
WTA026	55.00	45.00	30.00	28.50	2.0×45*	06.00	05.00	12.00
WTA027	55.00	45.00	30.00	30.00	2.0×45*	06.00	05.00	12.00
WTA028	60.00	45.00	30.00	30.00	2.0×45*	06.00	05.00	12.00
WTA029	60.00	45.00	30.00	33.00	2.0×45*	06.00	05.00	12.00
WTA030	65.00	50.00	30.00	34.00	2.0×45*	06.00	05.00	12.00
WTA031	65.00	50.00	30.00	36.00	2.0×45*	06.00	05.00	12.00
WTA032	65.00	50.00	30.00	38.00	2.0×45*	06.00	05.00	12.00
WTA033	70.00	55.00	30.00	38.00	2.0×45*	06.00	05.00	12.00
WTA034	70.00	55.00	30.00	40.00	2.0×45*	06.00	05.00	12.00
WTA035	75.00	60.00	30.00	42.00	2.0×45*	06.00	05.00	12.00
WTA036	75.00	60.00	30.00	44.00	2.0×45*	06.00	05.00	12.00
WTA037	80.00	65.00	30.00	46.50	2.0×45*	06.00	05.00	12.00
WTA038	80.00	65.00	30.00	48.00	2.0×45*	06.00	05.00	12.00
WTA039	85.00	70.00	30.00	50.00	2.0×45*	06.00	05.00	12.00
WTA040	85.00	70.00	30.00	52.00	2.0×45*	06.00	05.00	12.00

WTA041	90.00	75.00	32.00	53.00	2.0×45*	07.00	05.00	12.00
WTA042	90.00	75.00	32.00	55.00	2.0×45*	07.00	05.00	12.00
WTA043	95.00	80.00	32.00	57.00	2.0×45*	07.00	05.00	12.00
WTA044	95.00	80.00	32.00	60.00	2.0×45*	07.00	05.00	12.00
WTA045	100.00	85.00	35.00	64.00	2.0×45*	07.00	05.00	12.00
WTA046	100.00	85.00	35.00	66.00	2.0×45*	07.00	05.00	12.00
WTA047	110.00	95.00	35.00	70.00	2.0×45*	07.00	05.00	12.00
WTA048	110.00	95.00	35.00	73.00	2.0×45*	07.00	05.00	12.00
WTA049	120.00	105.00	35.00	76.00	2.0×45*	07.00	05.00	12.00
WTA050	120.00	105.00	35.00	78.00	2.0×45*	07.00	05.00	12.00

All dimensions in (mm)

Note: We also produce special carbide drawing die s upon the drawings.