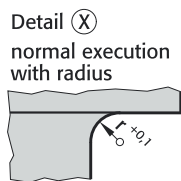
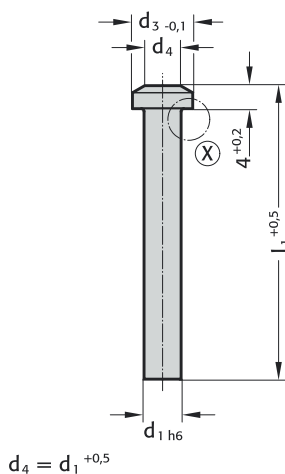


Punch DIN 9844, Shape A



220.



Material:

HSS
Order No 220.3.
Hardness:
Shaft 64 ± 2 HRC
Head 52 ± 3 HRC

HST
Order No 220.4.
Hardness:
Surface ≥ 950 HV 0,3
Head 52 ± 3 HRC

Description of FIBRO materials for tool and die components see at the beginning of Chapter E.

Execution:

Punch head hot upset-forged.
Shaft and shoulder precision plunge-ground.

Stock lengths: 71, 90, 112 mm.
other lengths and diameters on request!

220. Punch DIN 9844, Shape A

d ₁	Gradation			l ₁	71	90	112
	d ₁	d ₃	r				
2 - 2.2	0.1	3.6	0.2		●	●	●
2.3 - 2.5	0.1	4	0.2		●	●	●
2.6 - 2.8	0.1	4.5	0.3		●	●	●
2.9 - 3.2	0.1	5	0.3		●	●	●
3.3 - 3.5	0.1	6	0.3		●	●	●
3.6 - 4	0.1	7	0.3		●	●	●
4.1 - 4.5	0.1	8	0.5		●	●	●
4.6 - 5	0.1	8.5	0.5		●	●	●
5.1 - 5.4	0.1	9	0.5		●	●	●
5.5 - 5.9	0.1	9.5	0.5		●	●	●
6 - 6.4	0.1	10	0.5		●	●	●
6.5 - 7	0.5	10.8	0.7		●	●	●
7.5 - 8	0.5	12	0.7		●	●	●
8.5 - 9	0.5	13	0.7		●	●	●
9.5 - 10	0.5	14.5	0.7		●	●	●
10.5 - 11	0.5	16	1		●	●	●
11.5 - 12.5	0.5	18	1		●	●	●
13 - 14.5	0.5	20	1		●	●	●
15 - 16	0.5	22	1		●	●	●

Ordering Code (example):

Punch DIN 9844, Shape A	= 220.
Material MAT	HSS = 3.
Cutting diameter d ₁	2 mm = 0200.
Length l ₁	71 mm = 071
Order No	= 220. 3.0200. 071