

# Section 2

## Non-Threaded Fasteners, Etc.



### DRILL ROD # 175

Ref: DIN 175

In one or two meter lengths (One meter approx. 39")

Chrome - Vanadium, Cold Work Tool Steel 115 Cr V3 - Water or Oil Hardenable  
Tolerance h9 - Ground & Polished



NOM. DIA. mm	TOLERANCE h9	WEIGHT/Meter lbs.
1	+0/-0.025mm	.013
1.3	+0/-0.025mm	-
1.4	+0/-0.025mm	-
1.5	+0/-0.025mm	-
1.6	+0/-0.025mm	-
1.7	+0/-0.025mm	-
1.8	+0/-0.025mm	-
2	+0/-0.025mm	.05
2.2	+0/-0.025mm	-
2.5	+0/-0.025mm	-
2.6	+0/-0.025mm	-
2.8	+0/-0.025mm	-
3	+0/-0.025mm	.121
3.5	+0/-0.030mm	.17
4	+0/-0.030mm	.22
4.5	+0/0.030mm	.29
5	+0/-0.030mm	.34
6	+0/-0.030mm	.46
7	+0/-0.036mm	.66
8	+0/-0.036mm	.87
9	+0/-0.036mm	1.10
10	+0/-0.036mm	1.40

NOM. DIA. mm	TOLERANCE h9	WEIGHT/Meter lbs.
11	+0/-0.043mm	1.60
12	+0/-0.043mm	2
13	+0/-0.043mm	2.3
14	+0/-0.043mm	2.7
15	+0/-0.043mm	3
16	+0/-0.043mm	3.5
17	+0/-0.043mm	3.9
18	+0/-0.043mm	4.4
19	+0/-0.052mm	4.9
20	+0/-0.052mm	5.4
22	+0/-0.052mm	6.6
23	+0/-0.052mm	7.2
24	+0/-0.052mm	7.8
25	+0/-0.052mm	8.5
27	+0/-0.052mm	9.9
30	+0/-0.052mm	12
32	+0/-0.062mm	13.9
33	+0/-0.062mm	14.8
35	+0/-0.062mm	17
36	+0/-0.062mm	17.6
40	+0/-0.062mm	22
45	+0/-0.062mm	28
50	+0/-0.062mm	34

**Approximate Chemical Composition:**

C: 1.10-1.25%    Si: 0.15-0.30%    Mn: 0.20-0.40%    P: 0.030% max.    S: 0.030% max.    Cr: 0.50-0.80%    V: 0.07-0.12%

Chrome - Vanadium Steel 115 Cr V3, # 1.2210 (Similar to AISI # L2)

Cold work tool steel - Recommended for Drills, Taps, Reamers, Milling Cutters, etc

Heat treatment: (REF = Stahlschlüssel - 1986 # 1.2210) Hot working 1050 850°C (1920 - 1560°F)

Soft Annealing: 710 - 740°C (1300 - 1360°F)

Hardening Water or Oil: 800 - 830°C (1470 - 1520°F)

Tempering 180 - 250°C (350 - 480°F)

After Tempered: to 100°C (212°F) - Hardness 64 HRC

to 200°C (390°F) - Hardness 61 HRC

to 300°C (570°F) - Hardness 58 HRC

**How to Order**

Item #: 175

Size: 20

Quantity: 3 (Meters)

Tel: 1-888-966-MMCC

\*Please note: Diameters other than listed - **Please inquire.**