

Inch

Drill Rods / Round Bar Stock

Pouce

Tiges à forets / Barre ronde



PRECISION GROUND & POLISHED
A Necessity For Any Machine Shop!

What's a machine shop without drill rod? Keep plenty on hand. Use for small tools and dies, keys, taps, arbors, special threaded rods, roller bearings, mandrels, punches, pinions, knock-out pins, dowel pins.

AISI W-1 TOOL STEEL
For Water Hardening

Standard Manufacturing Tolerances

INCH SIZES	
SIZE RANGE	PLUS OR MINUS
Up to 0.124"	.0003"
0.125" to 0.499"	.0005"
0.500" to 2.000"	.001"

AISI W-1 TOOL STEEL
For Water Hardening

Furnished in annealed condition, ready for machining and heat treating.

Typical Analysis:

Carbon (C) 1.05% Manganese (Mn) 0.20% Silicon (Si) 0.20%

INCH SIZES 36" Lengths (91.44 cm)		
SPAENAUR No.	Diameter (inches)	PKG QTY.
864-200	1/16"	10
864-201	5/64"	10
864-202	3/32"	10
864-203	7/64"	10
864-204	1/8"	10
864-205	9/64"	10
864-206	5/32"	10
864-207	3/16"	1
864-208	7/32"	1
864-209	1/4"	1
864-210	9/32"	1
864-211	5/16"	1
864-212	11/32"	1
864-213	3/8"	1
864-214	13/32"	1
864-215	7/16"	1
864-216	15/32"	1
864-217	1/2"	1
864-218	9/16"	1
864-219	5/8"	1
864-220	11/16"	1
864-221	23/32"	1
864-222	3/4"	1
864-223	13/16"	1
864-224	7/8"	1
864-225	15/16"	1
864-226	1"	1
864-227	1-1/8"	1
864-229	1-1/4"	1
864-228	1-3/8"	1

CATALOG 14

SPAENAUR

Drill Rods / Round Bar Stock

Inch and Metric

Tiges à forets / Barre ronde

Pouce et Métrique

Drill Rod Rounds

Chromium Vanadium Steel

**PRECISION GROUND
and POLISHED**

METRIC SIZES **DIN 175** (Tolerance: h9)

Rod Dia. (mm)	2 METRE (78.74") Length	
	SPAENAUR No.	PKG QTY.
2	865-244	5
2.2	865-245	5
2.5	865-246	5
2.6	865-A03-1Y	5
2.8	865-A05-1N	5
3	865-249	5
3.5	865-250	5
4	865-251	5
4.5	865-252	5
5	865-253	5
6	865-254	5
7	865-255	1
8	865-A01-1A	1
9	865-257	1
10	865-258	1
11	865-259	1
12	865-260	1
13	865-261	1
14	865-262	1
15	865-263	1
16	865-A02-1P	1
17	865-265	1
18	865-266	1
19	865-267	1
20	865-268	1
21	865-269	1
22	865-270	1
23	865-271	1
24	865-272	1
25	865-273	1
26	865-274	1
27	865-275	1
28	865-276	1
30	865-278	1
33	865-280	1
35	865-281	1
36	865-282	1
40	865-283	1

MATERIAL: 115 CrV3 Chromium Vanadium Steel
CHEMICAL COMPOSITION: C 1.15% CR 0.65% V 0.10%
CONDITION: Up to dia. **1.99 mm**, precision drawn – larger sizes are drawn, ground and polished. Annealed max., hardness 98 HRB
HEAT TREATMENT SPECIFICATIONS:
 Hot forming: **850 - 1050° C** (1562 - 1922°F)
 Annealing: **710 - 750° C** (1310 - 1382°F)
 Hardening: Up to dia. **12 mm, 810 - 840° C** (1490 - 1544°F) quenched in oil. Above **12 mm, 760 - 810° C** (1400 - 1490°F) quenched in water.
TEMPERING: **100 - 300° C** (212 - 572°F)
MECHANICAL PROPERTY:
 Approximate expected hardness – 64 HRC (related to **25 x 25 mm** material thickness)
 Approximate hardness after tempering:
 Tempered to **100° C** (212°F) = 65 HRC
 Tempered to **200° C** (392°F) = 62 HRC
 Tempered to **300° C** (572°F) = 57 HRC

Nylon 6/6 (101) Rod Rounds



Unthreaded – Natural Finish

... provide a good combination of high tensile and compressive strength, and resistance to abrasion and heat. General purpose nylon, 6/6 natural without fillers. It is an excellent high voltage insulator, but it is not suitable for high frequency applications. Its relative toughness, high strength, ability to hold a good thread, and short time resistance to soldering temperatures make it an ideal low frequency insulation. Nylon 101 may be machined, tapped, turned, threaded, drilled, sawed and centerless ground. This rod meets federal specification L-P-410a.

Dia. Tolerances: **1/16" to 1"** +/- .001"
1-1/8" to 2" *.005" to .000"

SPAENAUR No.	Diameter (inches)	PKG QTY.
864-400	1/8"	10
864-401	3/16"	10
864-402	1/4"	10
864-403	5/16"	10
864-404	3/8"	10
864-405	7/16"	5
864-406	1/2"	5
864-407	5/8"	5
864-408	3/4"	1
864-409	7/8"	1
864-410	1"	1
864-411	1-1/8"	1
864-413	1-3/8"	1
864-414	1-1/2"	1
864-415	1-5/8"	1
864-416	1-3/4"	1
864-417	1-7/8"	1
864-418	2"	1

All Nylon Rods 8 Foot Length

CATALOG 14

SPAENAUR

Inch

Round Bar Stock / Drill Rods

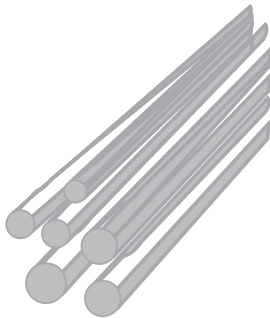
Pouce

Barre ronde / Tiges à forets

STEEL C1018

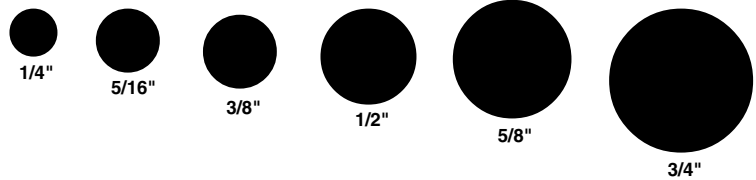
COLD DRAWN

**Zinc
Plated
Finish**



Made from special bar-quality steel. Can be cut, riveted and drilled. **(Not Tool Steel grade)**. Tolerances will run plus .000" to minus .002".

ROUND BAR STOCK

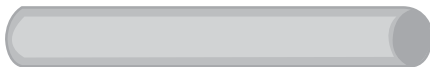


Keep plenty on hand. Use for making arbors, axles, drive-shafts, mandrels, punches, knock-out pins, dowel pins, etc.

Tensile Strength: 65,000 lbs. per sq. inch
Yield: 45,000 lbs. per sq. inch.

Elongation in 2" 20% min.
Rd. of area 45% min.
Brinell Hardness 126 min.

**COLD DRAWN
Steel Rounds**



12" Lengths

SPAENAUR No.	DIAMETER		PKG QTY.
	Inch Sizes	Metric (mm)	
131-350	3/16"	3.18	10
131-351	1/4"	6.350	10
131-A06-1A	5/16"	7.938	10
131-353	3/8"	9.525	10
131-354	7/16"	11.113	5
131-355	1/2"	12.700	5
131-356	5/8"	15.875	3
131-357	3/4"	19.050	3
131-358	7/8"	22.225	3
131-359	1"	25.400	3

PKG QTY. 1

**PLAIN
YELLOW BRASS RODS**

Free-turning, for converting continuous hinges to "BP", Brass Pin style.

SPAENAUR No.	Diameter	Length
BR-2	3/16"	96"
BR-3	1/4"	72"
BR-5	3/8"	84"

See page L90 for Steel Pin Rods for Continuous Hinges.