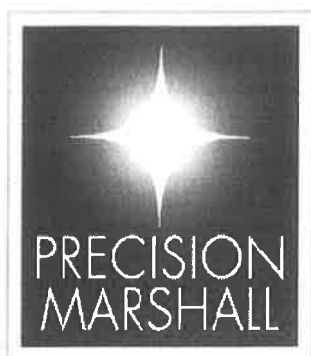




The Deluxe Company

420 SS Oversize GFS

With an excellent polishability and high hardness, Type 420 stainless steel is ideal for manufacturing plastic molds. It is also used for knives, shafts, and surgical instruments. Its composition and properties fall between Type 410 and Type 440C stainless steels. Type 420 can be heat treated and is magnetic. Maximum temperature to maintain corrosion resistance is 1150 degrees Fahrenheit; minimum temperature is not rated.

Hardness: 255 Brinell Hardness
Yield Strength: 50,000 psi
Annealed

Can be heat treated to a maximum attainable hardness of 52 – 54 HRC.
Width and thickness tolerances are $+.010'' / +.015''$. Standard Length: 24".
Length tolerance is $+.1875'' / +.3750''$

Typical Chemistry:

Carbon (C)	Manganese (Mn)	Silicon (Si)	Chromium (Cr)	Vanadium (V)
.46	0.40	0.40	13.00	0.30

Chemical Compositions (%) (Typical)

Grade	A.I.S.I.	Carbon	Maganese	Silicon	Phosphorus (max)	Sulfur (max)	Chromium	Vandium	Tungsten	Molybdenum
PRESCO	O-1	.90/1.00	1.00/1.15	.20/.35	.020	.020	.40/.60	.08/.15	.45/.60	-
AIR-TRUE	A-2	.90/1.05	.40/.60	.20/.35	.025	.005	4.90/5.30	.15/.20	-	.90/1.10
SUPER-7	S-7	.48/.53	.50/.70	.20/.40	.025	.003	3.10/3.40	.20/.30	-	1.30/1.60
NUTEC 42	4142	.38/.46	.70/1.00	.15/.30	.035	.040	.80/1.15	.030 Max	-	.15/.25
ARISTOCRAT	D-2	1.50/1.60	.20/.40	.20/.60	.030	.020	11.25/12.00	.80/1.00	-	.70/.80
MARSHALLCRAT	C-1018	.15/.25	.60/.90	-	.040	.050	-	-	-	-
PREMAR 440C	440C	1.05	.40	.40	-	-	17.00	-	-	.40
PREMAR 410	410	.13	.05	.40	-	-	12.00	-	-	-
RUETOM SPECIAL 420 SS	420	.46	.40	.40	-	-	13.00	.30	-	-
FIRECHROME	H-13	.40	.40	1.00	.030	.030	5.00	1.00	-	1.20
WATERCRAT	W-1	.95/1.05	.30/.40	.10/.25	.025	.025	.15 Max	.10 Max	.15 Max	.10 Max

*C-1018 modified for sizes below 5/32". W-1 is cold drawn, not ground.

Specifications and Physical Properties

Grade	A.I.S.I.	UNS				Hardness		Machinability
		Designation	S.A.E.	A.S.T.M.	Federal	Brinell	Rockwell	
PRESCO	O-1	T31501	J-437	A-681-07	QQT-570 Rev. C.	177-212	Rb88-95	95
AIR-TRUE	A-2	T30102	J-437	A-681-07	QQT-570 Rev. C.	200-235	Rb93-99	65
SUPER-7	S-7	T41907	J-437	A-681-07	QQT-570 Rev. C.	188-223	Rb90-97	95
NUTEC 42	4142	G41420	-	A-322	-	261-321	Rc26-34	85
ARISTOCRAT	D-2	T30402	J-437	A-681-07	QQT-570 Rev. C.	220-255	Rb97-102	50
MARSHALLCRAT	C-1018	-	-	-	635	168 Max	Rb85 Max	78
PREMAR 440C	440C	-	-	-	-	229-269	Rc21-28	45
PREMAR 410	410	-	-	-	-	217	Rb96	54
RUETOM SPECIAL 420 SS	420	-	-	-	-	255	Rc25	45
FIRECHROME	H-13	-	-	A-681-07	-	230	Rb98	75
WATERCRAT	W-1	T72301	J-437	A-686-79	QQT-580 Rev. C.	200	Rb93	100

*C-1018 modified.

*Compared to 1.0% Carbon Tool Steel.

Tolerances

Thickness.....+/- .001"
 Thickness (Oversize).....+.010/.015"
 Thickness (Metric).....+.05mm/-.00
 Thickness 72" Nutec 4142.....+/- .002
 Width.....+.000/.005
 Width (Oversize).....+.010/.015"
 Width (Metric).....+.2mm/-.0
 Squares (Regular).....+/- .001"
 Squares (Oversize).....+.010/.015"
 *Widths of more than 50mm are Blanchard ground.

Length 18".....+.125/.250"
 Length 24".....+.1875/.375"
 Length 24" Stainless.....+.500/-.000
 Length 36".....+.250/.500"
 Length 72" Nutec-42.....+.1.000/-.000
 Length (Metric).....+5mm/+8mm
 Squareness Edge......003" per inch
 Squareness End......004" per inch
 (Regular and Oversize)

Please Order From:

Clark & Osborne, LLP
 Industrial Distributor
 6617 Ferguson Avenue
 Indianapolis, IN 46240

(317) 255-5668 Phone
 (317) 253-4486 Fax

sales@clarkandosborne.com
 www.clarkandosborne.com

Cold Drawn W-1		
Size	Standard Tolerance* (section)	Standard Tolerance (length)
1.000" through 0.750" (largest dim.)	±.0015"	+1/8",-.0"
0.749" through 0.250" (largest dim.)	±.001"	+1/8",-.0"
0.249" and smaller	±.0005"	+1/8",-.0"

*Closer tolerances than standard can be produced by request.