CARPENTER

Bar (Round, Hex, Square, Flats, Hollows) | Rod and Wire | Fine Wire and Ribbon | Precision Strip | Billet | Plate | Sheet | Powder

HIGH TEMPERATURE ALLOYS

GRADE	UNS
CarTech™ 422/636 Alloy	
CarTech ACUBE®100	
CarTech C263	
CarTech Alloy W	
CarTech Custom Age 625 PLUS®	N07716
CarTech Custom Age 625 PLUS® HS	
CarTech Custom Age 725™	
CarTech Greek Ascoloy (AMS 5616)	S41800
CarTech 418	
CarTech L-605	R30605
CarTech Alloy 2 (AMS 5842)	
CarTech 159	
CarTech MP35N[1]	R30035
CarTech NiMark® 250	K92890
CarTech NiMark® 300	K93120
CarTech 286-LNi	S66285
CarTech Alloy 925	N09925
CarTech Customet® A-286	
CarTech A-286	S66286
CarTech CTX-1	N11903
CarTech CTX-3	N11907
CarTech CTX-909	N11909
CarTech X-750	N07750
CarTech 26	
CarTech 31V	N07032
CarTech 41	N07041
CarTech 80A	N07080
CarTech 120	
CarTech 188	
CarTech 600	N06600
CarTech 617	N06617
CarTech 625	N06625
CarTech 625 Weld/WELD 6	
CarTech 680	N06002
CarTech 718	N07718
CarTech 720	
CarTech 751	
CarTech 882	T20811
CarTech 901	N09901
CarTech CASQ/72 W	
CarTech Thermo-Span®	
CarTech Waspaloy	N07001
CarTech Jethete M152	S64152

ALLOY STEELS *(including bearing and gear steels)*

GRADE	UNS
CarTech AerMet®100	K92580
CarTech AerMet 310	
CarTech AerMet 340	
CarTech PremoMet®	
CarTech Temper Tough™	
CarTech Pyrowear® 53	
CarTech LESCO® 53	
CarTech 300M	
CarTech M-50	K88165
CarTech Ferrium® M54®[2]	
CarTech Ferrium® S53®[2]	
CarTech 52100	
CarTech 4340	
CarTech 9310	
CarTech No. 158®	T51606
CarTech 21-2N	
CarTech 21-4N	
CarTech 21-12N	K63017
CarTech 23-8N	
CarTech CBS-223	
CarTech CBS-600	K21940
CarTech CSS-42L	S42640
CarTech 16NCD13	
CarTech 35NCD16	
CarTech 4330	K23080
CarTech 4335	K33517
CarTech AF1410/AF1410 Mod	K92571
CarTech D6AC	K24728
CarTech HP 9-4-20	K91472
CarTech HP 9-4-30	K91283
CarTech HY-180	K91971
CarTech HyTuf	K32550
CarTech 6305	K14675
CarTech UT-18	
CarTech BG-42	S42700
CarTech Nitralloy N	
CarTech Nitralloy 135M	K24065
CarTech Ferrium® C61™®[2]	K93061
CarTech Ferrium C64®[2]	

STAINLESS STEELS

Standard Austenitic Stainless Steels

GRADE	UNS
CarTech 302	S30200
CarTech Custom Flo 302HQ	S30430
CarTech 302HQ-FM®	S30431
CarTech 302HQ-SFQ	S30430
CarTech 303 Project 70®+	S30300
CarTech 303/303 HS	
CarTech 303-Se	S30323
CarTech 304/304L Project 70+	S30400
CarTech 304/304L	S30400 S30403
CarTech 305	S30500
CarTech 309	S30900
CarTech 310	S31000
CarTech 316/316L Project 70+	S31600
CarTech 316/316L	S31603
CarTech 316L-SCQ®	S31603
CarTech 321	S32100
CarTech 330	S38400
CarTech 347	

Martensitic Stainless Steels

GRADE	UNS
CarTech 410	S41000
CarTech L410CB/403CB+	
CarTech 416 Project 70+	S41600
CarTech 416 (No. 5)	S41600
CarTech 416BQ (No. 5BQ)	S41600
CarTech 416 Low Sulfur	
CarTech T416 Modified Sulfur	
CarTech 420	S42000
CarTech 420F	S42020
CarTech 431	S43100
CarTech 440A	S44002
CarTech 440C	S44004
CarTech TrimRite®	S42010
CarTech Trinamet®	
CarTech Trinamet® 300	
CarTech Pyrowear® 675	

Ferritic Stainless Steels

GRADE	UNS
CarTech 409Cb	S40940
CarTech 409Cb-FM	
CarTech 409Cb Nigh Ni	
CarTech 430	S43000
CarTech 430F	S43020
CarTech 430FR Solenoid Quality	
CarTech XM-27	

Precipitation Hardenable Stainless Steels

GRADE	UNS
CarTech Custom 450®	S45000
CarTech Custom 455®	S45500
CarTech Custom 465®	
CarTech Custom 475®	
CarTech Custom 630 (17Cr-4Ni) Project 70+	S17400
CarTech Custom 630 (17Cr-4Ni)	S17400
CarTech Custom 631 (17Cr-7Ni)	S17700
CarTech 15Cr-5Ni	S15500
CarTech 15Cr-5Ni Project 70+	S15500
CarTech 15-7PH	
CarTech 13Cr-8Ni	S13800
CarTech 350	S35000
CarTech 355	S35000
CarTech Tourralloy 230 Plus	

Super Austenitic Stainless Steels

GRADE	UNS
CarTech 20Cb-3®	N08020
CarTech C-276	N10276
CarTech 20Mo-6® HS	N08036

Nitrogen Strengthened Austenitic Stainless Steels

GRADE	UNS
CarTech 15-15HS® Max	
CarTech 15-15LC® Modified	
CarTech 201 Modified	
CarTech 18Cr-2Ni-12Mn	S24100
CarTech 18-3-12	
CarTech 21Cr-6Ni-9Mn	S21904
CarTech 22Cr-13Ni-5Mn	S20910
CarTech Gall-Tough®	S20161
CarTech Gall-Tough Plus	S21800
CarTech SCF 19® Max	
CarTech SCF 260™	

Duplex Stainless Steels

CarTech 2205
CarTech Micro-Melt® 2101 Lean Duplex
CarTech Micro-Melt 2304 Lean Duplex
CarTech Micro-Melt 2205 Duplex
CarTech Micro-Melt 2505 Super Duplex
CarTech Micro-Melt 100 Super Duplex
CarTech Micro-Melt 2507 Super Duplex

Continued on next page

Want to know more? Technical datasheets for Carpenter's products are available at the Alloy TechZone at **www.yttzhj.com**

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GRADE	UNS

Borated Stainless Steels
CarTech Micro-Melt® NeutroSorb®
CarTech Micro-Melt® NeutroSorb-Plus® S30460 S30467

DYNAMET TITANIUM
6Al-2Sn-4Zr-2Mo
6Al-4V
6Al-4V Eli
6Al-4V Eli WW
6Al-4V Rotor Quality
6Al-6V-2Sn
6Al-7Nb
CP Grade 1
CP Grade 2
CP Grade 3
CP Grade 4 Ti Pd
Ti Cb
15V-3Cr-3Sn-3Al
3Al-2.5V
3Al-8V-6Cr-4Mo-4Zr
15Mo

NICKEL-COPPER ALLOYS
CarTech Ni-Cu 400 ..... N04400 CarTech Ni-Cu 400 HS
CarTech Ni-Cu 405 CarTech Ni-Cu K500

MAGNETIC, CONTROLLED EXPANSION, ELECTRICAL, AND ELECTRONIC ALLOYS

High Permeability Alloys
CarTech Hy-Ra "49" ..... K94840 CarTech High Permeability "49"® ..... K94840 CarTech High Permeability "55"
CarTech HyMu "77" CarTech HyMu "80"® CarTech HyMu "800" CarTech Hiperco® 15 CarTech Hiperco 27
CarTech Hiperco 50 CarTech Hiperco 50A CarTech Hiperco 50 HS CarTech Rotelloy 3
CarTech Rotelloy 8

Magnetic Core Irons
CarTech Electrical Iron
CarTech Vacumet® Consumet® CarIron CarTech Chrome Core® 12-FM
CarTech ChromeCore 13-FM CarTech ChromeCore 13-XP
CarTech ChromeCore 18-FM CarTech Silicon CarIron "A"
CarTech Silicon CarIron "B" CarTech Silicon CarIron "B-FM" CarTech 430FR Solenoid Quality

Temperature Compensator Alloys
CarTech Temperature Compensator "30"® (Type 2, 3, 4)
CarTech Temperature Compensator "32" (Type 1)

High Expansion Alloys
CarTech High Expansion "19-7"
CarTech High Expansion 20-6

GRADE	UNS

CarTech High Expansion 22-3 CarTech High Expansion 25-8
CarTech High Expansion "72"

Low Expansion Alloys
CarTech Invar "36"® / Free Cut ..... K93601/03 CarTech Low Expansion "38-7"
CarTech Low Expansion "39"
CarTech Low Expansion "42"® ..... K94101 CarTech Low Expansion 43-PH
CarTech Low Expansion "49"

Glass and Ceramic Sealing Alloys
CarTech Glass Sealing "27"
CarTech Glass Sealing "42" ..... K94100 CarTech Glass Sealing "42-6"
CarTech Glass Sealing "52" K95050
CarTech Kovar® K94610

Magnetic Alloys
CarTech MagneDur® 20-4 CarTech P6

Electrical Resistance Alloys
CarTech Manganin 13
CarTech No. 1 JR® (Types 1 and 2)

TOOL AND DIE STEELS

Micro-Melt® High Speed Steels
CarTech Micro-Melt Maxamet®
CarTech Micro-Melt M3 Class 2 ..... T11323 CarTech Micro-Melt M4 ..... T11304
CarTech Micro-Melt M42 ..... T11342
CarTech Micro-Melt M48 ..... T11248
CarTech Micro-Melt M62 ..... T11362 CarTech Micro-Melt 60
CarTech Micro-Melt T15 ..... T12015 CarTech Micro-Melt T15 Plus
CarTech Micro-Melt 23 (M3) ..... T11323 CarTech Micro-Melt HS30
CarTech Micro-Melt M4+5

High Speed Steels
CarTech M1 ..... T11301
CarTech M2 ..... T11302
CarTech M4 ..... T11304
CarTech M7 ..... T11307
CarTech M10 ..... T11310 CarTech M11
CarTech M42 ..... T11342

Ultra-High Combined Strength and Toughness Alloy
CarTech AerMet® for Tooling K92580

Micro-Melt® Cold Work Tool Steels
CarTech Micro-Melt® A11-LVC CarTech Micro-Melt A11
CarTech Micro-Melt CD#1 CarTech Micro-Melt PD#1
CarTech Micro-Melt PD#5 CarTech Micro-Melt TD1

Micro-Melt® Corrosion and Wear Resistant Cold Work Tool Steels
CarTech Micro-Melt® 440C ..... S44004 CarTech Micro-Melt 440-XH®
CarTech Micro-Melt 420-CW CarTech Micro-Melt 20-4

GRADE	UNS

Cold Work Tool and Die Steels
CarTech A2 ..... T30102
CarTech A6 .....
CarTech D2 ..... T30402
CarTech D3 ..... T30403
CarTech L6 ..... T61203
CarTech O1 ..... T31501
CarTech O6 ..... T31506
CarTech S2 ..... T41902
CarTech S5 ..... T41905
CarTech S7 ..... T41907
CarTech A8 ..... T30108 CarTech A18
CarTech 144CRMO

Hot Work Tool and Die Steels
CarTech H11 ..... T20811
CarTech H13 ..... T20813
CarTech H19 ..... T20819 CarTech Extendo-Die®
CarTech Pyrotool® A K66286
CarTech Pyrotool 7 ..... N07718

Mold Steels
CarTech No. 158® (P6) T51606
CarTech 420 ..... S42000

LOOSE POWDER ALLOYS - CPP
Carpenter also offers a broad range of gas atomized loose metallic powder alloys:

- Hot isostatically pressed (HIP'd) billets and near net shape (NNS) products
- Metal injection molding (MIM)
- Hardfacing and weld overlays by PTA and laser welding
- Thermal spray and gas turbine refurbishment
- High-temperature braze applications Laser additive manufacturing

CUTTING BLADE ALLOYS
CarTech CTS® Alloys
Request the Cutting Blade Line Card for more info on Carpenter and Latrobe knife and blade steels.

MEDICAL IMPLANT ALLOYS
CarTech BioDur® Alloys
Request the Medical Market Line Card for more info on cobalt base, stainless, and titanium medical alloys.

REINFORCING BAR ALLOYS
CarTech EnduraMet® Stainless Steels

HEATING ELEMENT ALLOYS
CarTech Taphet® Alloy A
CarTech Taphet Alloy C

RESISTANCE ALLOYS
CarTech Evanohm® Alloy R
CarTech CBX Cupron®

CARPENTER®

Carpenter Technology Corporation
Wyomissing, PA 19610 U.S.A. | www.CarTech.com

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