

30CrMo

Steel: 4130

Corresponding Steel Grade and Chemical Composition:

Standard/Steel Grade		Chemical Composition(%)								
		C	Si	Mn	Cr	Mo	Ni	P	S	
GB	30CrMo	0.26~0.34	0.17~0.37	0.40~0.70	0.80~1.10	0.15~0.25	≤0.30	≤0.035	≤0.035	
AISI	4130	0.28~0.33	0.15~0.35	0.40~0.60	0.80~1.10	0.15~0.25		≤0.035	≤0.040	
DIN	1.7218	0.22~0.29	≤0.40	0.60~0.90	0.90~1.20	0.15~0.30		≤0.035	≤0.035	
JIS	SCM430	0.28~0.33	0.15~0.35	0.60~0.90	0.90~1.20	0.15~0.30	≤0.25	≤0.030	≤0.030	

Brief Introduction:

This steel has high strength and toughness, good hardenability, critical diameter reach to 15 ~ 70mm when oil quenching; heat intensity is also good enough. It provide enough high-temperature strength at 500°C but when its 550 °C intensity decreased significantly; as alloying elements down to the time-limited welding pretty well, but close to the upper limit welding moderate, and it need to preheat to 175 °C above before welding; good mechinability, moderate cold plastic deformation. This steel usually used after quenching state, In the medium-sized machinery manufacturing industry is mainly used for manufacturing large cross-section quenched and tempered parts, such as shafts, spindles, as well as by the high-load manipulation of wheels, bolts, double-headed bolt, gear, etc.

Shape & Dimension:

Forged Rounds:180-800mm

Delivery Condition:

EAF+LF+VD, Rolled/Forged, Annealed/ Q+T, Black/Turned

Note:

20CrNiMo

Steel: 8620

Corresponding Steel Grade and Chemical Composition:

Standard/Steel Grade		Chemical Composition(%)								
		C	Si	Mn	Cr	Mo	Ni	P	S	
GB	20CrNiMo	0.17~0.23	0.17~0.37	0.60~0.95	0.40~0.70	0.20~0.30	0.35~0.75	≤0.035	≤0.035	
AISI	8620	0.18~0.23	0.15~0.35	0.70~0.90	0.40~0.60	0.15~0.25	0.40~0.70	≤0.035	≤0.040	
DIN	1.6523	0.17~0.23	≤0.040	0.65~0.95	0.35~0.70	0.15~0.25	0.40~0.70	≤0.035	≤0.035	
JIS	SNCM220	0.17~0.23	0.15~0.35	0.60~0.90	0.60~1.00	0.15~0.25	0.40~0.60	≤0.030	≤0.030	

Brief Introduction:

AISI 8620 is a low alloy carburizing steel capable of producing high core strength and toughness. Commonly used in the manufacture small and medium sized cars, tractor engine and gear in transmission, can also replace 12CrNi3 to produce carburized parts that require high core properties,cyanide parts, such as oil drilling and metallurgical jaws and cones used in open-pit mine.

Shape & Dimension:

Rolled Round: 50mm-130mm
Forged Round: 180-800mm

Delivery Condition:

EAF+LF+VD, Rolled/Forged, Annealed, Black/Rough Groud or Turned

Note:

40CrNiMo

Steel: 817M40

Corresponding Steel Grade and Chemical Composition:

Chemical Composition(%)

Standard/Steel Grade		C	Si	Mn	Cr	Mo	Ni	P	S
GB/T 3077	40CrNiMo	0.37~0.44	0.17~0.37	0.50~0.80	0.60~0.90	0.15~0.25	1.25~1.65	≤0.035	≤0.035
ASTM A29	4340	0.38~0.43	0.15~0.35	0.60~0.80	0.70~0.90	0.20~0.30	1.65~2.00	≤0.035	≤0.040
DIN EN10083	³⁴ CrNiMo6(1.6582)	0.30~0.38	≤0.40	0.50~0.80	1.30~1.70	0.15~0.30	1.30~1.70	≤0.025	≤0.035
BS970-1	817M40	0.36~0.44	0.15~0.35	0.45~0.70	1.00~1.40	0.20~0.35	1.30~1.70	≤0.035	≤0.040

Brief Introduction: A general purpose steel used for a wide range of engineering parts. It is capable of being heat treated to produce a wide range of tensile

Shape & Dimension: Φ 50-1000mm

Delivery Condition: EAF+LF+VD, Rolled/Forged, Annealed/ Q+T, Black/Turned

Note:

20Cr2Ni4

Steel: 655M13

Corresponding Steel Grade and Chemical Composition:

Standard/Steel Grade		Chemical Composition(%)								
		C	Si	Mn	Cr	Mo	Ni	P	S	
GB/T 3077	20Cr2Ni4	0.17-0.23	0.17~0.37	0.30~0.60	1.25~1.65	-	3.25~3.65	≤0.035	≤0.035	
JIS G4053	SNC815	0.12~0.18	0.15~0.35	0.35~0.65	0.60~1.00	-	3.00~3.50	≤0.030	≤0.030	
DIN EN10084	15NiCr13 (1.5752)	0.14~0.20	≤0.40	0.40~0.70	0.60~0.90	-	3.00~3.50	≤0.035	≤0.035	
BS970-1	655M13	0.10~0.16	0.15~0.35	0.35~0.60	0.70~1.00	≤0.15	3.00~3.75	≤0.035	≤0.040	

Brief Introduction:

A nickel-chromium alloy case-hardening steel that is specified for heavy duty highly stressed applications. When carburised and hardened cores strengths of 850 – 1230 N/mm² are attainable. The presence of chromium increases hardenability whilst the nickel content increases toughness and resistance to stock. Typically applied in high duty gears for aircraft, heavy vehicles and automobile transmission components, steering worms, track rod pins, timing wheels, breech mechanisms and small arms parts.

Shape & Dimension:

Φ 50-700mm

Delivery Condition:

EAF+LF+VD, Rolled/Forged, Annealed/ Q+T, Black/Turned

Note:

Steel: 665M17

Corresponding Steel Grade and Chemical Composition:

Standard/Steel Grade		Chemical Composition(%)								
		C	Si	Mn	Cr	Mo	Ni	P	S	
ASTM A29	4615	0.13~0.18	0.15~0.35	0.45~0.65	-	0.20~0.30	1.65~2.00	≤0.035	≤0.040	
BS970-1	665M17	0.14~0.20	0.15~0.35	0.35~0.75	≤0.030	0.20~0.30	1.50~2.00	≤0.035	≤0.040	

Brief Introduction:

A medium alloy nickel-molybdenum case-hardening steel which may be carburised and hardened to produce a hard wear resistance case and developing a core strength of the order of 770N/mm². It has good impact properties, very good resistance to stock and freedom from temper brittleness. Typically applied in gears, shafts, pinions, tappets, valve rockers, collets, track pins, steering balls and worms, transmission components, breech mechanisms and small arms parts.

Shape & Dimension: Φ 50-1000mm

Delivery Condition: EAF+LF+VD, Rolled/Forged, Annealed/ Q+T, Black/Turned

Note:

35CrMo

Steel: 4135

Corresponding Steel Grade and Chemical Composition:

Chemical Composition(%)

Standard/Steel Grade	C	Si	Mn	Cr	Mo	Ni	P	S
GB/T 3077 35CrMo	0.30~0.40	0.17~0.37	0.40~0.70	0.80~1.10	0.15~0.25	≤0.30	≤0.035	≤0.035
ASTM A29 4135	0.33~0.38	0.15~0.35	0.70~0.90	0.80~1.10	0.15~0.25	-	≤0.035	≤0.040
EN 10083/1 1.7220(34CrMo4)	0.30~0.37	≤0.40	0.60~0.90	0.90~1.20	0.15~0.30	-	≤0.035	≤0.035
JIS G4053 SCM435	0.33~0.38	0.15~0.35	0.60~0.90	0.90~1.20	0.15~0.30	≤0.25	≤0.030	≤0.030

Brief Introduction: Structural alloyed carbon steel. Application: Low and moderately stressed parts for vehicles, engines and machines. Axles, turbine components, chains, forgings, ect

Shape & Dimension: Forged Products:
Round: 140mm-1300mm

Rolled Products:
Round: 50mm-130mm

Delivery Condition: EAF+LF+VD, Rolled/Forged, QT, Black/Turned

Note:

42CrMo4

Steel: 4142

Corresponding Steel Grade and Chemical Composition:

Standard/Steel Grade		Chemical Composition(%)								
		C	Si	Mn	Cr	Mo	Ni	P	S	
GB/T 3077	42CrMo4	0.38~0.45	0.17~0.37	0.50~0.80	0.90~1.20	0.15~0.25	≤0.30	≤0.035	≤0.035	
ASTM A29	4142	0.40~0.45	0.15~0.35	0.75~1.00	0.80~1.10	0.15~0.25	-	≤0.035	≤0.040	
EN 10083/1	1.7225(42CrMo4)	0.38~0.45	≤0.40	0.60~0.90	0.90~1.20	0.15~0.30	-	≤0.035	≤0.035	
JIS G4053	SCM440	0.38~0.43	0.15~0.35	0.60~0.90	0.90~1.20	0.15~0.30	≤0.25	≤0.030	≤0.030	

Brief Introduction:

This is one of the chromium, molybdenum, manganese low alloy steels noticed for toughness, good torsional strength and good fatigue strength. Application: Statically and dynamically stress components for vehicles, engines and machines. For parts of large cross-sections, crankshafts, gears.

Shape & Dimension:

Forged Products:
Round: 140mm-1300mm

Rolled Products:
Round: 50mm-130mm

Delivery Condition:

EAF+LF+VD, Rolled/Forged,QT,Black/Turned

Note:

30Mn2

Steel: 30Mn2

Corresponding Steel

Grade and Chemical

Composition:

Standard/Steel Grade		Chemical Composition(%)								
		C	Si	Mn	Cr	Mo	Ni	P	S	
GB/T 3077	30Mn2	0.27~0.34	0.17~0.37	1.40~1.80	≤0.30	≤0.15	≤0.30	≤0.035	≤0.035	
ASTM A29	1330	0.28~0.33	0.15~0.35	1.60~1.90	-	-	-	≤0.035	≤0.040	
EN 10083/1	1.1170	0.25~0.32	≤0.40	1.35~1.65	≤0.40	≤0.10	≤0.40	≤0.035	≤0.035	
JIS G4053	SMn433	0.30~0.36	0.15~0.35	1.20~1.50	≤0.35	-	≤0.25	≤0.030	≤0.030	

Brief Introduction:

Manganese steel for moderate and lower temperature use in pressure vessels. Application: Used for weld fabrication of pressure vessels that require improved notch toughness for lower than ambient temperature service. Low and moderately stressed part for vehicles, machines and engines

Shape & Dimension:

Forged Products:

Round: 140mm-1300mm

Rolled Products:

Round: 50mm-130mm

Delivery Condition:

EAF+LF+VD, Rolled/Forged,QT,Black/Turned

Note:

40CrNiMo

Steel: 40Cr

Corresponding Steel Grade and Chemical Composition:

Chemical Composition(%)

Standard/Steel Grade	C	Si	Mn	Cr	Mo	Ni	P	S
GB/T 3077 40Cr	0.37~0.44	0.17~0.37	0.50~0.80	0.80~1.10	≤0.15	≤0.30	≤0.035	≤0.035
ASTM A29 5140	0.38~0.43	0.15~0.35	0.70~0.90	0.70~0.90	-	-	≤0.035	≤0.040
EN 10083/1 1.7035(41Cr4)	0.38~0.45	≤0.40	0.60~0.90	0.90~1.20	-	-	≤0.035	≤0.035
JIS G4053 SCr440	0.30~0.43	0.15~0.35	0.60~0.90	0.90~1.20	-	≤0.25	≤0.030	≤0.030

Brief Introduction: Structural alloyed carbon steel. Application: Low and moderately stressed parts for vehicles, engines and machines where hard, wear resisting surface is needed.

Shape & Dimension: Forged Products:
Round: 140mm-1300mm

Rolled Products:
Round: 50mm-130mm

Delivery Condition: EAF+LF+VD, Rolled/Forged, QT, Black/Turned

Note: