

Steel Pre-Heating Chart

Steel Groups	Steel Designation	% Carbon	Preheat F	Preheat C
Plain Carbon	Plain Carbon	Below 0.20	Up to 200 F	Up to 93 C
	Plain Carbon	0.20 to 0.30	200-300 F	93-140 C
	Plain Carbon	0.30 to 0.45	300-500 F	149-250 C
	Plain Carbon	0.45 to 0.80	500-800 F	260-426 C
Carbon Moly	Carbon moly	0.10 to 0.20	300-500 F	149-260 C
	Carbon moly	0.20 to 0.30	400-600 F	204-315 C
	Carbon moly	0.30 to 0.35	500-800 F	260-426 C
	Silicon structural	0.35	300-500 F	149-260 C
	Medium manganese	0.20 to 0.25	300-500 F	149-260 C
Manganese	SAE T1330	0.30	400-600 F	204-315 C
	SAE T1340	0.40	500-800 F	260-426 C
	SAE T1350	0.50	600-900 F	315-482 C
	12% Manganese	1.25	Usually not	required
	Manganese moly	0.20	300-500 F	149-260 C
	Manten	0.30 max	400-600 F	204-315 C
	Armco high tensile	0.12 max	Up to 200 F	Up to 93 C
High Tensile	Mayari R	0.12 max	Up to 300 F	Up to 149 C
	Nax high tensile	0.15 to 0.25	Up to 300 F	Up to 93 C
	Cromansil	0.14 max	300-400 F	149-204 C
	Corten	0.12 max	200-400 F	93-204 C
	Yolloy	0.05 to 0.35	200-600 F	93-315 C
Nickel	SAE 2015	0.10 to 0.20	Up to 300 F	Up to 149 C
	SAE 2115	0.10 to 0.20	200-300 F	93-149 C
	SAE 2315, 2320	0.15 to 0.20	200-500 F	93-260 C
	SAE 2330, 2340	0.30 to 0.40	400-600 F	204-315 C
Medium Nickel Chromium	SAE 3115, 3125	0.15 to 0.25	300-400 F	149-204 C
	SAE 3130, 3140	0.30 to 0.40	500-700 F	260-371 C
	SAE 3150	0.50	600-900 F	315-482 C
	SAE 3215, 3230	0.15 to 0.30	400-600 F	204-315 C
	SAE 3240, 3250	0.40 to 0.50	800-1000 F	426-529 C
	SAE 3315	0.15	500-700 F	260-371 C
	SAE 3325, 3425, 3450	0.25 to 0.50	900-1100 F	482-593 C
Moly Bearing Chromium/ Chromium Nickel	SAE 4140	0.40	600-800 F	315-426 C
	SAE 4340	0.40	700-900 F	371-482 C
	SAE 4615	0.15	400-600 F	204-315 C
	SAE 4630	0.30	500-700 F	260-371 C
	SAE 4640, 4920	0.40 to 0.20	600-800 F	315-426 C
	2% chrome/.5% moly	Up to 0.15	400-600 F	204-315 C

	2% chrome/.5% moly	0.15 to 0.25	500-800 F	260-426 C
Low Chrome moly	2% chrome/1% moly	Up to 0.15	500-700 F	260-371 C
	2% chrome/1% moly	0.15 to 0.25	600-800 F	315-426 C
	5% chrome/.5% moly	Up to 0.15	500-800 F	260-426 C
Medium Chrome moly	5% chrome/.5% moly	0.15 to 0.25	600-900 F	315-482 C
	8% chrome/1% moly	0.15 max	600-900 F	315-482 C
Plain High Chromium	12-14% chrome/AISI type 410	0.10	300-500 F	149-260 C
	16-18% chrome/AISI type 430	0.10	300-500 F	149-260 C
	23-30% chrome/AISI type 446	0.10	300-500 F	149-260 C

Pipeline Supply and Service Co., Inc. • Houston, TX 77054
Phone 713-747-0090 • Fax 713-747-0855
<http://www.pipelinesupply.com/>