



## HOT ROLLED ALLOY GRADES

WCI Steel's hot rolled alloy steels are a custom product line that differs from carbon steels in chemical composition, forming characteristics and strength levels. A variety of alloying elements and thermal treatments can be combined to produce a material with characteristics best suited to particular customer applications. Alloying elements enhance properties such as hardenability and toughness in heat-treated applications. These grades are produced using WCI Steel's ULTIMET™ process for high-purity steel sheet, unless specified otherwise, and are available as unprocessed or processed sheets.

**Grades:** Typical SAE Grades include SAE 4130, 4140, 4340, 5150, 6150, and 8620. Many other standard and non-standard grades (including Hardenability grades) are also available.

**Qualities Available:** Structural Quality, Drawing Steel, Bearing Quality, Aircraft Quality.

**Size Range, Inches:** Mill edge capabilities are 3/4" greater than those stated below.

**Coil ID:** 30" unprocessed, 20" or 24" available for processed coils.

**Coil Weights:** Subject to slab weight and welding restrictions.

**Applicable Specifications:** ASTM A505, ASTM A506, ASTM A507, ASTM A1031, SAE J404.

## HOT-ROLLED ALLOY SHEET – CUT EDGE

### Category I

Typical SAE alloy grades that fall into this category are 3140, 4118, 4130, 4140, 4340, 5046, 5120, 5140, 8620 and associated hardenability (H) grades.

Thickness Range	PHR	Maximum Width	Pickled *
Ordered Minimums			
0.085"-0.119"	36"		36"
0.120"-0.200"	36 ½"		36 ½"
0.201"-0.257"	42"		39 ½"
0.258"-0.625"	42"		-

### Category II

SAE 1012/1015 Ni-Cr Bearing Quality Grades

Thickness Range	PHR	Maximum Width	Pickled *
Ordered Minimums			
0.085"-0.100"	44 ½"		39 ½"
0.101"-0.250"	45"		39 ½"
0.251"-0.257"	46 ½"		39 ½"
0.258"-0.625"	46 ½"		-

### Category III

Grades D6A, 6150, and other Ni-Cr-Mo-V or Cr-Mo-V Grades

Thickness Range	PHR	Maximum Width	Pickled *
Ordered Minimums			
0.086"-0.089"	28"		28"
0.090"-0.120"	32"		32"
0.121"-0.195"	36"		36"
0.196"-0.257"	40"		39 ½"
0.258"-0.500"	40"		-

### Category IV

Grades 9260, 8660, NS801 and other Ni-Cr-Mo Grades Greater Than 0.60% Carbon

Thickness Range	PHR	Maximum Width	Pickled *
Ordered Minimums			
0.090"-0.130"	32"		32"
0.131"-0.250"	36"		36"



**Notes:** \* These widths represent WCI's current in-house pickling capability at the maximum hot rolled width available. All other items within plain hot-rolled capabilities will be handled by an outside processor.

Temper Pass: Gauges through 0.090" require a temper pass and must be ordered as such. This applies to Carbon, Structural Steel, HSLAS, and PVQ product.

Product must be ordered as pickled on anneal orders.

Not responsible for rust on pickle dry product.

Unless specified, Inclusion Shape Control (ULTIMET™) is required on all hot-rolled high carbon sheet orders.

For applications where the specific properties of the ULTIMET™ product are undesirable, WCI Steel can design a low sulfur, non-ULTIMET™ product to meet these special needs.

Category III and IV grades require a 24" ID minimum.