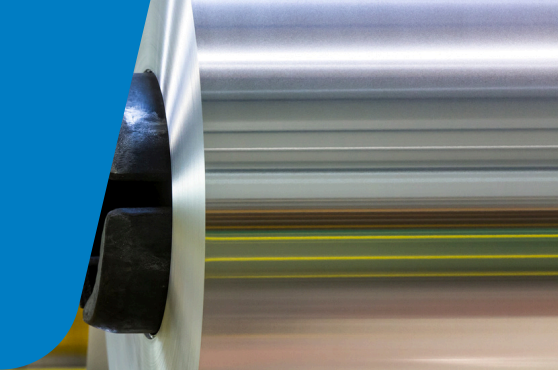
MILL STEEL COMPANY

Stainless & Aluminum

QUICK REFERENCE I GRADES & ALLOYS



STAINLESS STEEL GRADES

Grade	Known for	Common uses
304/304L	All-purpose workhorse	Trim, panels, HVAC, food & ag washdown
301	Harder, less nickel	Clips, clamps, springs, roll-formed parts
201	Lower-nickel option	Indoor, dry fixtures and trim
316L	Salt & chemicals	Coastal, pools, chemical & water plants
430	Magnetic, economical	Interior trim, appliances, kick plates
409/439	Heat resistant	Heat exchangers, venting, exhaust
436/441	Ferritic, heat & corrosion	Exhaust, heat exchangers, appliances, auto trim
321/309/310	High heat, austenitic	Furnace and oven parts, heat shields, exhaust

300 series: nickel added, non-magnetic, most corrosion resistant.
400 series: magnetic, lower cost. L = low carbon, better for welding.

ALUMINUM ALLOYS

Alloy	Known For	Common Uses
3003	General purpose	Trim, flashing, ductwork, perforated panels
3105	Painted-coil alloy	Painted roofing, soffit, fascia, gutters
5052	Stronger, marine grade	Coastal panels, architectural, trailers
6061	Structural	Brackets, framing (plate & extrusion)

Temper = hardness: O = soft · H14 / H24 = half-hard · H32 = typical for 5052. Aluminum weighs about ⅓ as much as steel.

Processing: slitting · cut-to-length sheet · #4 polishing · PVC film · samples & trial coils

CHOOSING THE RIGHT METAL

SIDE BY SIDE

	Coated Steel	Aluminum	Stainless
Weight	Heavy	Lightest (about ⅓)	Heavy
Corrosion	Good (coating)	Very good	Best
Heat	Moderate	Low	High
Look	Painted	Mill, painted, embossed	Brushed or bright
Cost	$	$$	$$$

FINISHES

Stainless	
2B	Smooth mill finish — the standard
2D	Dull matte — forming, paint
#4	Brushed satin — architectural
#3	Coarser brushed polish
BA	Bright, reflective
No. 1 / HRAP	Hot rolled, annealed & pickled — industrial, heavy gauge

Aluminum	
Mill	Natural, as rolled
Painted	PVDF, SMP, polyester
Embossed	Stucco texture, hides marks

PVC film: Peel-off protection for polished stainless during fabrication.

WHERE WILL IT LIVE? WHAT WILL IT TOUCH?

If the Job Is…	Consider
Near salt, ocean or a pool	316L stainless · 5052 aluminum
Needs to be light or easy to form	3003 · 3105 aluminum
Brushed look, no paint	304 #4 with PVC film
Food, washdown or livestock	304 (316L with harsh chemicals)
Indoor and cost-driven	430 · 201
High heat — furnace, exhaust	409 · 439
Matching a painted color	Painted 3105 aluminum

TO QUOTE FAST, TELL US:

1. Stainless or aluminum
2. Grade / alloy & temper
3. Thickness (decimal, e.g. .024")
4. Width & tolerance
5. Coil, slit coil or sheet (length)
6. Finish, PVC film?
7. Quantity & annual usage
8. Application
9. Specs or certifications
10. Need date, ship-to, samples?

***Tip**: Give thickness in decimals; a gauge number differs by metal.*