



304 Stainless Steel Foil Technical Datasheet

Type 304 | UNS S30400

Myriad supplies 304 stainless steel foil for industrial manufacturing. Use the specifications below to select the size and material condition for your application.

Supply range

Parameter	Supply information
Product	304 stainless steel foil in coils or slit coils. Agree the configuration with us.
Thickness range	Approx. 0.000394"–0.003937" (0.01–0.10 mm).
Width range	Approx. 0.118"–28.346" (3–720 mm); at 0.000394" (0.01 mm) thickness, minimum width is 0.157" (4 mm).
Surface	BA and 2B. Ask us to confirm availability of a mirror finish for your specification.
Edge options	Slit, deburred, rounded/conditioned or scraped edges. Confirm the edge treatment with us for your size and material condition.
Material condition	Agree the condition and mechanical limits with us for your application. We do not specify a single temper or maximum hardness for the full foil range.
Coil configuration	Specify the core/inside diameter, maximum outside diameter, coil weight and winding requirements for agreement.

These dimensions cover Myriad's stainless steel foil range. Ask us to confirm availability for your required 304 thickness, width and condition. Use millimetres for the supply limits shown here; inch values are rounded conversions. For a standards-based specification, choose one unit system and use its tables throughout.

Technical enquiries

info@myriadsteel.com | +86-1588-8149-352

Dimensions and measurement

Thickness tolerances

Nominal thickness	Deviation	Resulting limit
0.000394" (0.010 mm)	+0.000079" / 0 (+0.002 / 0 mm)	0.010–0.012 mm
0.000591" (0.015 mm)	+0.000079" / 0 (+0.002 / 0 mm)	0.015–0.017 mm
0.000787"–0.003937" (0.020–0.100 mm), inclusive	±0.000079" (±0.002 mm)	Nominal t ±0.002 mm

Myriad specifies the thickness tolerances above for supply; they do not reproduce an ASTM or ISO table. Confirm them with us for your selected 304 size and condition. For other thicknesses between 0.010 and 0.020 mm, agree a tolerance with us rather than interpolate between the listed values.

All thickness tolerance boundaries in the table are defined in mm. Inch values are rounded conversions, not independent acceptance limits.

Measurement

Agree the measurement method, sampling locations and acceptance rule with us before supply. For thin foil, specify handling tension and instrument contact conditions. Include limits for burr height, camber over a defined length, flatness or coil set, and surface defects where these affect your process.

Dimensional standards

For ISO dimensional tolerances, select the ISO 9445 part that matches the manufacturing route. Use Part 1 for narrow-rolled strip and Part 2 for narrow strip slit from wide strip. Confirm the applicable thickness and width table before you specify compliance.

304 grade and material properties

Identifier	Meaning
Type 304 / UNS S30400	US grade designation; select the governing product specification.
EN 1.4301	Related European grade. Confirm dual certification with us if you require both designations.

Reference chemical composition

C max	Mn max	Si max	P max	S max	Cr	Ni	N max
0.07	2.00	0.75	0.045	0.030	17.5–19.5	8.0–10.5	0.10

Mass %. Fe balance. Use these values as a grade reference, not as Myriad heat-analysis results or a table from an agreed standard edition. For acceptance, use the agreed product standard and its heat/product analysis requirements.

Mechanical properties

Item	What to specify
Delivery condition	Agree the delivery condition and acceptance limits with us.
Tensile and proof strength	Specify tensile strength Rm and, if required, proof strength Rp0.2. Include the test method and direction.
Elongation	Specify elongation with the gauge length, specimen geometry and test direction.
Hardness	Specify the test method, force, dwell time and acceptable range. Check that the method suits the foil thickness.

Agree hardness and strength limits with us for your selected foil. We do not guarantee one set of values across the full range. For soft, half-hard or full-hard material, specify numerical acceptance limits and a test method suited to the thickness.

Mechanical behavior and welding

304 is an austenitic stainless steel. Cold working raises strength and hardness and reduces ductility. You may find a stronger magnetic response after cold working, so do not identify the grade by magnetic attraction. Run forming trials at the thickness and condition you plan to use.

To weld 304 foil, confirm that your procedure suits the thickness and joint. Control heat input, fixturing and shielding to limit burn-through, distortion and oxidation. Consider 304L for welded service where sensitization is a concern. Do not assume 304/304L dual certification from this datasheet.

Product standards

Agree the governing product standard and edition with us. Check the scope before specifying ASTM A240/A240M with the applicable A480/A480M requirements, or ASTM A666/A666M for the selected material condition. Treat ASME SA-240/SA-240M as a separate specification; we make no ASME compliance claim here. Confirm compliance for the size and condition you need.