

NICKEL-IRON-CHROMIUM ALLOY REFERENCE

INCOLOY 800 800H / 800HT MATERIAL DATA SHEET

UNS N08800 / N08810 / N08811

Source composition, ASTM product references and typical tensile properties

ALLOY 800**ALLOY 800H****ALLOY 800HT****CHEMICAL LIMITS****ASTM REFERENCES****MECHANICAL DATA**

Technical reference prepared for product and project requirement review.

Confirm final material, dimensions, testing and documentation before ordering.

UNS N08800 / N08810 / N08811

Technical data navigation

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REFERENCE NOTE

Source dimensional values and footnotes are retained. Confirm the applicable material, grade, schedule and project specification before ordering.

MATERIAL IDENTITIES AND SOURCE LIMITS

Grades and chemical composition

All values below are reproduced from the supplied 800 / 800H / 800HT source sheet.

Grade	Common designation	UNS	W.Nr.
800	Incoloy 800 / Alloy 800	N08800	1.4876
800H	Incoloy 800H / Alloy 800H	N08810	1.4958
800HT	Incoloy 800HT / Alloy 800HT	N08811	1.4959

Chemical composition, %

Material grade	Ni	Cr	Fe	C	Al	Ti	Al + Ti
Incoloy 800	30.0-35.0	19.0-23.0	39.5 min	.10 max	.15-.60	.15-.60	.30-1.20
Incoloy 800H	30.0-35.0	19.0-23.0	39.5 min	.05-.10	.15-.60	.15-.60	.30-1.20
Incoloy 800HT	30.0-35.0	19.0-23.0	39.5 min	.06-.10	.25-.60	.25-.60	0.85-1.2

SOURCE-SCOPED REFERENCE

The source sheet reports the grade-specific carbon, aluminum, titanium and combined aluminum-plus-titanium limits shown above. Final chemistry acceptance must follow the applicable product specification and purchase requirements.

PRODUCT-FORM REFERENCES

ASTM specifications stated in the source

The same product-form references are printed for Alloy 800, Alloy 800H and Alloy 800HT.

Alloy / UNS	Pipe smls	Pipe welded	Tube smls	Tube welded	Sheet / plate	Bar	Forging	Fitting
800 / N08800	B407	B154	B163	B515	B409	B408	B564	B366
800H / N08810	B407	B154	B163	B515	B409	B408	B564	B366
800HT / N08811	B407	B154	B163	B515	B409	B408	B564	B366

SOURCE NOTATION RETAINED

The welded-pipe entry is printed as ASTM B154 in the supplied sheet. It is retained here exactly as supplied and should be checked against the current governing product specification before procurement.

PROJECT CONFIRMATION

Confirm the intended alloy grade, product form, dimensional standard, specification edition, heat treatment, inspection, testing and documentation requirements before ordering. A source reference is not a substitute for the applicable purchase specification.

TYPICAL SOURCE VALUES

Mechanical properties and product forms

Typical room-temperature tensile properties of annealed material, as printed in the supplied source.

Product	Tensile, ksi	0.2% yield, ksi	Elongation, %
Rod & bar	75-100	30-60	60-30

SOURCE NOTATION RETAINED

The elongation entry is printed as 60-30 in the supplied source. It has not been silently reordered. Confirm the governing acceptance value against the applicable product specification.

Available forms listed in the supplied source

● Sheet

● Plate

● Bar

USE OF TYPICAL VALUES

The mechanical values above are typical source values, not procurement acceptance limits. Final requirements follow the selected alloy grade, product specification and project documentation.

Send your requirement

Send a drawing, product list, size, material grade, standard, schedule or wall thickness, testing and project document requirements.

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RESPONSE AND DOCUMENT COORDINATION

Initial enquiries are answered within 24 hours, including weekends, by email or WhatsApp. Drawing review, material/standard matching and project document requirements can be discussed and organized with the buyer. Third-party inspection can be buyer-nominated or coordinated on request.

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