ALLOY 20
UNS N08020

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DESCRIPTION

Alloy 20 is a nickel-iron-chromium austenitic alloy that was developed for maximum resistance to acid attack, specifically sulfuric acid. This superalloy has excellent resistance to general corrosion, pitting, and crevice corrosion in chemicals containing chlorides and sulfuric, phosphoric, and nitric acids.

LIMITING CHEMICAL COMPOSITION (%)

C	CB	CR	CU	MN	MO	NI	P	S	SI	TA
MAX 0.07	8 Times Carbon 1.00	19.0-21.0	3.0-4.0	MAX 2.0	2.0-3.0	32.0-38.0	0.045	MAX 0.035	MAX 1.0	8 Times Carbon 1.00

TYPICAL APPLICATIONS

- Chemical and allied industries
- Food and dye production
- Heat exchangers
- S02 scrubbers and other severe environments
- Tanks

TENSILE REQUIREMENTS

TENSILE STRENGTH KSI (MIN.)	YIELD STRENGTH KSI (MIN.)
80	35

PRODUCT CAPABILITIES

J&J Alloys produces a wide selection of fittings, flanges, and custom components tailored to customer specifications and technical drawings. For custom inquiries or additional details, please contact your J&J Alloys sales representative.

PRODUCT	SIZE (NPS)	PRODUCT	SIZE (NPS)	PRODUCT	SIZE (NPS)
SW/THRD Couplings	1/8” - 8”	SW/THRD 90s	1/2” - 4”	BW Tees	1/2” - 10”
SW/THRD Half Couplings	1/8” - 8”	SW/THRD 90s (Block Pattern)	1/2” - 4”	BW LR/SR 90s (Block Pattern)	1/2” - 4”
THRD Plugs (Hex/Round/Square)	1/8” - 6”	SW/THRD Tees	1/2” - 4”	BW Cross (Block Pattern)	1/2” - 12”
THRD Hex Bushings	1/8” - 6”	SW/THRD Cross (Block Pattern)	1/2” - 4”	Pipe Nipples	1/4” - 8”
SW/THRD Inserts	1/8” - 4”	SW/THRD Caps	1/2” - 6”	Studding Outlets (Flat Bottom)	1/2” - 24”
BW/SW/THRD Unions	1/8” - 4”	BW Caps (Dome Shaped)	1/2” - 24”	ASME B16.5 (dims) Flanges	1/2” - 24”
Olets (TOL, SOL, WOL, EOL, LOL)	1/8” - 24”	MSS (Short) Stub Ends	1/2” - 60”	ASME B16.47 Flanges Series A&B	26” - 60”
Conc/Ecc Swages	1/2” - 8”	ASA (Long) Stub Ends	1/2” - 60”	Taper Bore BW 45s	1/2” - 30”
SW/THRD 45s	1/2” - 4”	BW Concentric Reducers	3/4” - 30”	Taper Bore BW 90s	1/2” - 30”
SW/THRD 45s (Block Pattern)	1/2” - 4”	BW Eccentric Reducers	3/4” - 24”	Taper Bore BW Tees	1/2” - 30”

NOTE: The information on this sheet have been compiled from a variety of sources, and should be considered as a general guide only. The information and data included are accurate to the best of our knowledge, and may be revised at any time without notice. J&J Alloys assumes no responsibility for the accuracy of this information.

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