ALLOY 625
UNS N06625

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DESCRIPTION

Alloy 625 is a corrosion and oxidation resistant nickel alloy that is used both for its high strength and outstanding aqueous corrosion resistance. Its outstanding strength and toughness is due to the addition of niobium which acts with the molybdenum to stiffen the alloy's matrix. Alloy 625 has excellent fatigue strength and stress-corrosion cracking resistance to chloride ions. This alloy resists a wide range of severely corrosive environments and is especially resistant to pitting and crevice corrosion.

LIMITING CHEMICAL COMPOSITION (%)

C	CR	FE	NI	AL	TI	CO + TA
MAX 0.10	20.0-23.0	MAX 5.0	MIN 58.0	MAX 0.40	MAX 0.40	3.15-4.15

TYPICAL APPLICATIONS

- Aircraft ducting systems
- Aerospace
- Jet engine exhaust systems
- Engine thrust-reverser systems
- Specialized seawater equipment
- Chemical process equipment

TENSILE REQUIREMENTS

TENSILE STRENGTH KSI (MIN.)	YIELD STRENGTH KSI (MIN.)
120	60

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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