

 A JOULON COMPANY	SARA SAE ENGINEERING SPECIFICATION		
	Section: SES 26 – 820		
	Issue: “A”	Rev No: “0”	
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**MATERIAL SPECIFICATION FOR INCONEL 625, 50- 60 KSI
(345- 414 MPa) FOR RING GASKETS, H2S COMPATIBLE**

Rev	Reason of Change	Date	Made By	Reviewed By	Approved By	Status
0	Initial release	31-05-2017	MN	AS	KKD	Released

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1.0 SCOPE

1.1 This specification describes the requirements for UNS N06625 Inconel 625.

2.0 APPLICABLE SPECIFICATIONS

2.1 Ni-Cr-Mo Alloy UNS N06625

3.0 MELTING

The material shall be melted by electric furnace or vacuum induction melting (VIM), followed by vacuum arc remelting (VAR) or electroslag remelt (ESR). Melting practices shall facilitate production of homogenous ingot with minimal non-metallic inclusions, banding, flake, pipe or other defects.

4.0 CHEMICAL COMPOSITION

4.1 The chemistry shall be as follows:

Chromium..... 20.0 - 23.0%

Iron, max 5.0%

Molybdenum..... 8.0 - 10.0%

Columbium & Tantalum 3.15 - 4.15%

Carbon, max..... 0.10%

Manganese..... 0.50%

Silicon, max 0.50%

Phosphorus, max..... 0.015%

Sulfur, max 0.015%

Aluminum, max..... 0.40%

Titanium, max..... 0.40%

Cobalt, max1 0%*

Nickel Balance

* Not required for routine inspection.

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5.0 MECHANICAL PROPERTIES

Tensile Strength, min.	110 ksi (759 MPa)
Yield Strength min.	50 – 60 ksi (345 – 414 MPa)
Hardness, max.	95 HRB (209 HBW)

6.0 HEAT TREATMENT

6.1 Solution Annealed

6.1.1 Heat to 1950°-2200°F for up to one hour.

6.1.2 Air cool or water quench.

7.0 MARKING

Each piece of material shall be identified with the material designation 625-4.