RAITECH® HEXA:GRAF® NOX S

The low-oxidation gasket for tongue-and-groove and male-and-female flanges.

The **HEXA:GRAF® NOX™ S** spiral wound gasket is a gasket designed for male-and-female and/or tongue-and-groove joints. The dimensions of the **HEXA:GRAF® NOX™ S** gaskets are directly related to the standard groove dimensions according to ASME B16.5.

Adequate clearance is provided in each gasket design to prevent overlapping in the grooves during installation.

HEXA:GRAF® NOX™ S has a nominal thickness of 0.125" to facilitate alignment during gasket installation.

Compression values are calculated based on a 0.025" reduction in thickness. It can be supplied with a thickness of 0.175" by special order.

Technical Data:

Properties:	Value
Temperature, Max:	+1,202°C (in steam), +1,022°F
Temperature, Min:	-319°F
Pressure, Max:	6,300 Psi
Flange types:	Tongue - Groove Male - Female
Flange surface finish (Ra):	3.2-6.3µ (125-250 µ")

How to order:

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Sealing material: HEXAGRAF® NOX
Gasket type: S1, S3, S4
Inner ring material: ----
Winding material: 316L*
Outer ring material: --
Diameter: 2"
Class: 150#, 300#, 400#, 600#, 900#, 1500#, 2500#

**HEXA:GRAF NOX S uses 316L steel as standard, other alloys upon request.

GFA GASKET FABRICATORS ASSOCIATION — EN FAVOR DE LA COMPETITIVIDAD NO Corrupción

Data Sheet.

Gasket profile:

Recomended compresion:

Initial Thickness	Compressed Gasket Thickness
0.625" (1.6mm)	0.050" – 0.055" (1.3 -1.4mm)
0.100" (2.5mm)	0.075" – 0.080" (1.9 – 2.0mm)
0.125" (3.2mm)	0.090" – 0.100" (2.3 – 2.5mm)
0.175" (4.5mm)	0.125" – 0.135" (3.2 – 3.4mm)
0.250" (6.4mm)	0.180" -- 0.200" (4.6 – 5.1mm)
0.285" (7.2mm)	0.200" – 0.220" (5.1 – 5.6mm)

HEXA:GRAF® NOX™ S-1, S-3 Y S-4

Dimensions for tongue and groove, male and female (ASME B16.5 & EN-1560)

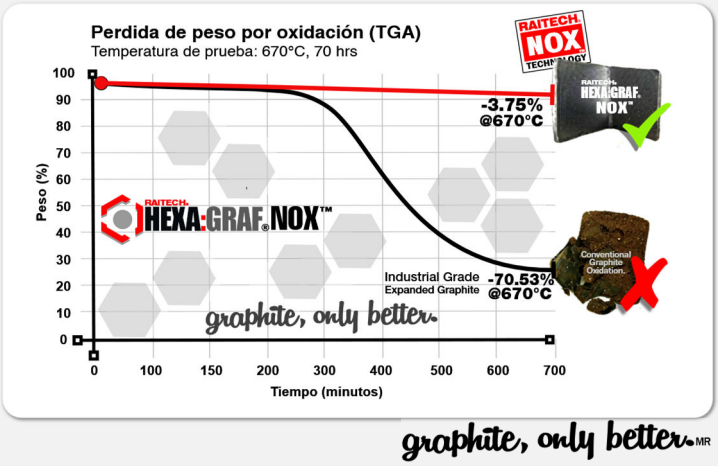
NPS	S1 big male-female flanges				S3 – for big togue and groove flanges		S4 - for small togue and groove flanges	
	Class 150-1500#		Class 2500#		Class 150-2500#		Class 150-2500#	
	ID	OD	ID	OD	ID	OD	ID	OD
1/4	12.7	25.4	-	-	12.7	25.4	-	-
1/2	25.4	34.9	20.6	34.9	25.4	34.9	25.4	35.1
3/4	33.3	42.9	27.0	42.9	33.3	42.9	33.3	42.9
1	38.1	50.8	31.8	50.8	38.1	50.8	38.1	47.8
1 1/4	47.6	63.5	41.3	63.5	47.6	63.5	47.6	57.2
1 1/2	54.0	73.0	47.6	73	54	73	54	63.5
2	73.0	92.1	60.3	92.1	73	92.1	73	82.6
2 1/2	85.7	104.8	76.2	104.8	85.7	104.8	85.7	95.2
3	108.0	127.0	95.3	127	108	127	108	117.5
3 1/2	120.6	139.7	-	-	120.6	139.7	120.6	130.2
4	131.8	157.2	120.7	157.2	131.8	157.2	131.8	144.5
4 1/2	144.5	171.5	-	-	144.5	171.5	-	-
5	160.3	185.7	146.1	185.7	160.3	185.7	160.3	173
6	190.5	215.9	171.5	215.9	190.5	215.9	190.5	203.2
8	238.1	269.9	222.3	269.9	238.1	269.9	238.1	254
10	285.8	323.9	273.1	323.9	285.8	323.9	285.8	304.8
12	342.9	381.0	330.2	381.0	342.9	381	342.9	362
14	374.6	412.8	-	-	374.6	412.8	374.6	393.7
16	425.4	469.9	-	-	425.4	469.9	425.4	447.5
18	489.0	533.4	-	-	489	533.4	489	511.2
20	533.4	584.2	-	-	533.4	584.2	533.4	558.8
24	641.4	692.2	-	-	641.4	692.2	641.4	666.8

**Dimensiones en milimetros (mm)

It is of utmost importance that S gaskets be installed with compression limiters to prevent premature failures. Note: NPS 1/4" S3 gaskets are for classes 150 to 600 only, S3 gaskets for NPS 4-1/2" are for classes 150 to 1500 only.

RAITECH® HEXA:GRAF® NOX S

RAITECH® NOX™ Technology.



graphite, only better.MR

Our **RAITECH® NOX™** technology allows materials manufactured with it to better resist the natural oxidation caused by high temperatures in the carbon content found bonded within the amorphous structures of the graphite.

With our **NOX™** technology, we have minimized the natural porosity of the graphite by using additives that coat the carbon molecules, thereby minimizing their oxidation compared to common graphites on the market.

This translates into greater safety and longer application life, thus reducing costs and increasing production.

HEXA:GRAF® NOX™ advantages:

Outstanding Sealing Properties
- Low permeability to gases and liquids.
- No cold or hot flow (deformation) up to the maximum permissible gasket pressure.
- Smooth performance in response to temperature changes.

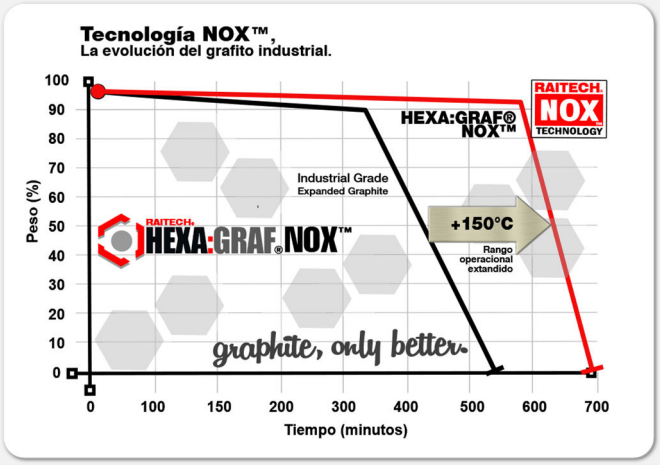
Stability
- High resistance to chemical media and radiation.
- Absence of binders means no aging or embrittlement.
- High residual stress.
- Long-term stability in compressibility and recovery over a wide temperature range.

Application Range
- From -269 °C (-452 °F) up to approx. 3000 °C (5432 °F):
- Depending on installation and operating conditions.
- Up to approx. 800 °C (1472 °F) in an inert atmosphere (limits imposed by metallic reinforcement must be observed).
- In air: from approx. 400 °C (752 °F) to 600 °C (1112 °F).

User Benefits
- Flexibility and softness.
- No health or environmental risks.

**We are glad to provide specific recommendations.*

NOX™ Technology extended range.



RAITECH® NOX™ Technology.

This technology allows the materials manufactured with it to better resist the natural oxidation caused by high temperatures in the carbon content present within the amorphous structures of the graphite.

Thanks to our **NOX™** technology, we have minimized the natural porosity of the graphite by using additives that coat the carbon molecules, thereby reducing their oxidation compared to common graphites on the market. This translates into greater safety and a longer service life in the application, helping to reduce costs and increase productivity.

RAITECH® lo hicimos fácil pensando en ti.

www.hexagraf.mx

Juntas espirometalicas
HEXA:GRAF® NOX™ S

NOTE: The following HEXA:GRAF® NOX S gaskets are interchangeable:

Juntas estilo S1 y S3
- 1/4” Classes 150, 300, 400 and 600#
- 1/2” Classes 150, 300, 400, 600, 900, 1500 and 2500# (Only S3 is interchangeable)
- All S1 and S3 gaskets in classes 300, 400, 600# are interchangeable according to size.
- All S1 and S3 gaskets in classes 900 and 1500# are interchangeable according to size.

Style S4 gaskets
- 1/2” - Interchangeable with all NPS S1 and S3 of the same pressure class.
- 3/4” - Interchangeable with all 3/4” S1 and S3 gaskets of the same pressure class.
- All S4 gaskets in classes 300 up to 2500# are interchangeable according to their size.

Important Notes:

Spiral wound gaskets are delicate materials, especially in larger diameters.
Never carry the gaskets by the inner rings or the spiral.

Recommendations:

1-. Never reuse any type of sealing gaskets; this is for your safety.
2-. You must only use standard-compliant gaskets and never use non-standard gaskets.
3-. Large dimension spiral wound gaskets are prone to unraveling due to the flexibility of the metal at such diameters.
4-. Spiral wound gaskets must have perfectly flat rings for proper operation.
5-. Ensure that the spiral wound gaskets to be used comply with the thicknesses of the applicable standard or specification.
6-. For proper operation, the flange surfaces must be in perfect condition, complying with a concentric surface finish between 3.2-6.3µ. Likewise, the flanges must be perfectly aligned and parallel.

Storage:

1-. Store the gaskets in a dry place at room temperature.
2-. If the gaskets are exposed to greases, oils, or solvents, clean them before use.
3-. Protect the sealing faces to prevent damage.
4-. Store the gaskets horizontally to avoid tension in spiral wound gaskets.