#### PRESSURE SEAL GASKETS

# PRESSURE SEALS

The MONTERO® PRESSURE SEAL gasket is designed to replace the metallic gaskets in the Globe, Gate and Check Pressure Seal type valves. It is composed by a central expanded graphite body surrounded by two stainless steel braids with graphite core, which provide stiffness and anti-extrusion properties to the gasket. Possibility to manufacture in different materials according to the specifications of the customer, and in diameters up to 1000mm and bigger.



#### **EXPANDED GRAPHITE SEALS**

## EXPANDED GRAPHITE



High purity expanded graphite moulded seals, specially conceived for high temperature applications and available in 4 different graphite qualities depending on customer requests.

With our year long experience in the **Ball Valve Industry** we are able to provide state-of-the-art solutions in **Body and Seat seals** in numerous sizes and shapes

#### **NON-METALLIC AND METALLIC GASKETS**

#### GASKETS

As one of the world leaders in **compressed gasket materials manufacturing**, **MONTERO®** is able to provide cut gaskets in multiple different qualities, satisfying the need of every customer. Every gasket material is tested in our Fugitive Emission Laboratory under the most strict regulations.



AMTEC gasket test machine



Custom cut gaskets **BELPA®**Spiral Wound Gaskets **BELPAFLEX®**RTJ gaskets **BELPAFLEX®** 



SWG machine

Durability and good operation of the sealing products depends mainly on the working conditions and manipulation of them, in which the supplier has no control. All information contained in this datasheet shall be used as a guidance in order to select the appropriate materials. Montero can only guarantee the quality and the information given about our products. For further information ask MONTERO FYE for specific datasheets.





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# MONTERO VALVE SEALING SOLUTIONS







#### **GRAPHITE QUALITIES**

	Montero GTC	Grafoil GTK	Grafoil GTX	Grafoil GTJ
Carbon content	>98,2%	>98,2%	>99%	>99,5%
Leachable Chloride	<10ppm	<10ppm	<10ppm	<10ppm
Sulfur Content	<550ppm	<550ppm	<750ppm	<450ppm
Creep Relaxation (44Mpa 600°C)	<3%	<3%	<3%	
Oxidation Weight Loss (593°C 24h)	3%	3%	4%	-
Ash content	<1%	1,8%	1%	0,5%
Scope of use:	Heavy Industry	Heavy Industry	SHELL MESC 85/203	Nuclear Industry







#### **FUGITIVE EMISSION CONTROL**



#### MONTERO® MG1000R FUGITIVE EMISSION PACKING

MONTERO® MG 1000R fugitive emission control packing is made of high purity expanded graphite material (C>99% carbon content) overknitted with Inconel wire. Ideal long lasting valve packing, it requires minimum adjustment.

Furthermore, the special knitted braid doesn't score the stem while its selflubrication provides an outstanding performance in reducing friction.

It is certified under the most demanding Fugitive Emission Standards.

API622 test has yielded the best emission results of the market, with no readjustments and a measured leakage rate of:

> Average 1 PPMv Maximum 7 PPMv



on MG 1000 R Style Packing Test Start Date: May 4, 2016 SEARCH AND TECHNOLOGY, LLA

API 622 2nd Edition, 2011



Fugitive Emission test rig

# Static Leakage Chart 7 (PPMv) Cycle Number

Yarmouth Research and Technology, LLC

#### **EXPANDED GRAPHITE MOULDED PACKINGS**

### EXPANDED GRAPHITE

MONTERO® graphite moulded rings are available in four different qualities, fulfilling the needs of every customer.

- · AGC: Moulded rings made of GTC graphite.
- · AGK: Moulded rings made of GTK graphite.
- · AGX: Moulded rings made of GTX graphite.
- AGJ: Moulded rings made of GTJ graphite.

#### Characteristics

- Expanded mineral graphite without any binders.
- · Contains a corrosion and oxidation inhibitor.
- · Low creepage at high temperature, reducing the need to tighten the packing periodically.
- · Self-lubricating.
- · Low coefficient of friction with increased durability.

For FDA and oxygen applications please ask for MF245 & MF250 PTFE packings.



Graphite ring die forming

#### **COMBINATION SETS**



#### MONTERO® AGK + MG780R

Universal packing particularly designed for valve use, which incorporates a corrosion inhibitor. Additionally, its low friction coefficient enables to reduce the required actuating torque.

The packing set is comprised of high purity graphite rings together with braided mineral graphite packing, knitted with an inconel wire core. Valid for high temperature and pressure, the MG780R packing complies with the API607:589 Fire Safe Test Approval.

#### MONTERO® AGK + MG420

Specially conceived for the petrochemical industry, it can withstand highly demanding pressure and temperature conditions.

The packing set is comprised of high purity graphite rings together with braided continuous filaments of high quality carbon, coated with graphite powder.





#### MONTERO® AGX + MG1000R COMBINATION **PACKING SET**

Our two cutting-edge products in fugitive emission control team up to produce the MONTERO® AGX + MG 1000R compression packing.

Central rings are manufactured in AGX C>99% high purity expanded graphite, meeting requirements of SHELL MESC SPE 85/203 regulation.

Both end rings are manufactured in MG1000R Fugitive Emission Graphite Packing. It can be manufactured either in Ecograflex® Wedge shape or in traditional cross section.