Outstanding Valve Stem Packings

den a

for Petroleum and Chemical Process Industry



Teadit[®] Style Packings for sealing Valve Stems: 2235 - 2236 - 2222

COMBO SET TEADIT® 010-ELE EXTREMELY LOW EMISSIONS

TEADIT® 010-ELE COMBO SET has an excellent sealability for applications where a rigid control of fugitive emissions is required due to hazardousness of fluids or risks involved.

TEADIT® 010-ELE COMBO SET combines 4 rings of *"Packing A"* plus one ring of *"Packing B"*, following the arrangement *"A-A-B-A-A"*. This provides incomparable performance in the control of fugitive emissions. Laboratory tests by internationally recognized authorities in the field confirm the impressive results. It's high temperature flexible graphite and Inconel® filament jacket affords mechanical stability while the advanced construction provides the best leakage control and high integrity in hydrocarbon and steam services.

TEADIT® 010-ELE COMBO SET is self-lubricating, nonhardening, dimensionally stable and resistant to gases and fluids as well as heat, pressure and chemicals.

THE GOAL ACHIEVED

Maximum 10PPMv in 5000 cycles, as can be seen in the approval of the product in Yarmouth Research and Technology LLC by the strict Chevron method testing.





Complete report available upon to request. See on back page report summary.

KEY FEATURES

- » Certified Low-Leakage Packing Technology
- » Extreme Emission Control
- » Fire Safe
- » Definitive Combo Set in Valve Sealing

Specifications

- -					
Temperature:	-240°C (-400°F) to 650°C (1,200°F) steam 455°C (850°F) atmosphere				
pH range:	0 - 14				
Pressure:	To 310 bar (4,500 psi)				
Packing B	Packing A				



TYPICAL TEADIT[®] 010-ELE ARRANGEMENT



GLAND FACKIN

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2236

STOPFBUCHSPACKUNG

°C m/s

DIMENSIÓN

Kg 2.00

TRECCU



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TA-Luft

KEY FEATURES

- » Certified Low-Leakage Packing Technology
- » TA-Luft aproved
- » Suitable to VOC and VHAP emissions regulations
- » Environment friendly valve stem packing with supreme emissions control

PACKING
2236



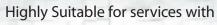
TEADIT® PACKING 2236 is self-lubricating, nonhardening, dimensionally stable and resistant to gases and fluids as well as heat, pressure and chemicals. It's high temperature flex to graphite and Inconel® filament jacket affords mechanical stability while the advanced construction provides leakage control and high integrity in steam service.

Due to it's physical properties and ability to minimize friction, **TEADIT® STYLE 2236** is ideal for valves and can be used within a broad range of applications.

Packing 2236 - Specifications

Temperature:-240°C (-400°F) to 650°C (1,200°F) steam
455°C (850°F) atmospherepH range:0 - 14 (except strong oxidizers)

Pressure: To 450 bar (6,500 psi)



Fugitive Emissions

PACKING 2235

TEADIT® PACKING 2235 is ideal for valves and can be used within a broad range of applications. It is well suited for power plants, refineries, petrochemical industry, and chemical processing as well as sealing applications in steam at high pressure and temperature. It is self-lubricating, non-hardening, dimensionally stable and resistant to gases and fluids as well as heat, pressure and chemicals.

KEY FEATURES

» Certified Low-Leakage Packing Technology

- » Superior performance for high temperature steam service
- » Excellent sealing, thermal and pressure properties contribute to the reduction of "fugitive emissions"

» Fire Safe

» Suitable for steam, hydrocarbon and chemical processing services



Approval for Fire Test and Fugitive Emissions



Fire Test

Packing 2235 - Specifications

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5 Rings of Teadit 2235 a 6 inch Class 300 Gate

Number: 205112 he: December 13, 200

Temperature: -240°C (-400°F) to 650°C (1,200°F) steam 455°C (850°F) atmosphere

pH range: 0 - 14 (except strong oxidizers)

Pressure: To 450 bar (6,500 psi)

Highly Suitable for services with

High Pressure and Temperature

PACKING 22222

PROPERTIES

TEADIT® PACKING 2222 stands out for its characteristic of compatibility with most industrial fluids except in the presence of oxidizing agents. Ideal for severe services in high-temperature and pressure valves, it is indicated for hydrocarbons, steam, water, gases, chemicals, synthetic and mineral oils.

Packing 2222 - Specifications

Temperature: -240°C (-400°F) to 650°C (1,200°F) steam 455°C (850°F) atmosphere

pH range: 0 - 14 (except strong oxidizers)

Pressure: To 275 bar (4,000 psi) without end rings

KEY FEATURES

» Superior performance » Heat, pressure and chemically resistant





Approval for TEADIT® 010-ELE Combo Set

Extreme Emission Control – Maximum 10ppmv in 5,000 cycles

Yarmouth Research and	Technology, LLC PROJECT SUMMARY		Yarmouth Research and Technology, LLC Static Leakage Chart
Customer: Teadit North America	Start Date: 1	22-Sep-10	Maximum Reading
Packing Manufacturer: Tendit	Project #:		
Packing Description: Teadit 020-ELE Comb-	o Set		
Test Fixture: 4" Cl300 Volan Gate V	alve		
danufacturer's Recommended Packing Torque:	35 ft-lb		
Stem Diameter:	0.999 inches		
Bore Diameter:	1.510 inches	80	1
Number of Handwheel Turns During Cycling:	11.5 (such direction)		
Stem Travel During Cycling: Cycling Speed:	4.1 inches 43 RPM		
Cycling Spred: Cycling Rate:	75 seconds per cycle		
Cycling hate:	10 secondas per cycas		
Maximum Allowable Leakage:	500 PPMv (stem static)		
Maximum Allowable Handwheel Torque:	83 ft-lb-(based on 2008b)	sall forces	
Test Pressure:	600 pnig		
Test Media: 9			
RESULTS	14.5000000	Leakage (PPMo)	
Reason for Test Completion: 5	but day merchant	§ ~	
Number of Mechanical Cycles Completed:	5000		
Number of Thermal Cycles Completed:	10		0
Number of Packing Adjustments Required:	0		a-
Stem Seal Leakage Readings (PPMc) Opening Closing		
Statie Dynam		30	£
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Average: 2 2 2	3 15 20		
Maximum: 9 10 19	28 18 25	20	i
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			Cycle Number

CONCLUSION: TEADIT® 010 ELE COMBO SET successfully completed test **without any packing adjustments** throughout the 5,000 mechanical cycles and maintained leakage below 10 PPMv.

USA

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