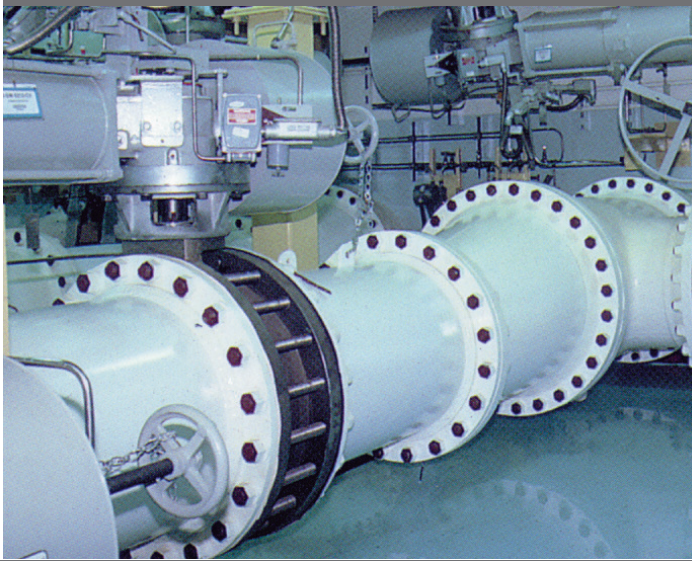


**CURTISS -
WRIGHT**

AP Services Certified Low Emission Valve Packing



Style 7050

Style 7050 Valve Packing

AP Services

AP Services, a business unit of Curtiss-Wright Nuclear Division, is a leading supplier of fluid sealing technologies and services to the refinery, petrochemical, chemical, nuclear and fossil power generation industries. We are recognized as an industry leader in providing fluid leak products and management solutions.

AP Services sealing solutions are a blend of proprietary manufactured and distributed products including mechanical valve and pump packing, metal and fabricated gaskets and a wide variety of specialized fluid sealing products. Services include fluid sealing on-site support, turn-key repacking, warehouse evaluation, product and application training, obsolescence solutions, reverse engineering, web-based valve packing databases, and fluid leak management programs to improve equipment reliability and reduce operation costs. Our state-of-the-art manufacturing facility operates under AP Services commercial and nuclear QA programs. We are NUPIC audited to the requirements of 10CFR50 Appendix B Part 21.

“Invest in a sealing program not just a box of packing.”



Certified Low Emission Valve Packing

Style 7050 low emission packing was developed to meet the most demanding fugitive emissions requirements and regulations for the refinery, petrochemical, and chemical industries. Style 7050 is manufactured from high purity flexible graphite in a multiple braid construction. An Inconel filament jacket is added for greater mechanical integrity and to prevent graphite extrusion. It can be used as a stand-alone packing with no containment end rings required.

Style 7050 is resilient, compressible, and thermally conductive. Because the packing is self-lubricating, it requires little or no product lubrication. Braided flexible graphite packing provides long life, low maintenance and leak free operation in most all applications.

Tested and Documented Performance

The unique sealing characteristics of Style 7050 have allowed it to successfully pass the requirements of API Standard 622, 2nd Edition. During this stringent test Style 7050 achieved an incredibly low average emissions rate of 2.3 ppm in a static environment and an average of 3 ppm in a dynamic environment. These results are well below the allowable leak rate of 100 ppm.

Style 7050 took on the challenge of the Chevron Texaco Fugitive Emissions Test and passed with flying colors. The test was independently performed at Yarmouth Research and Technology. This rigorous test requires 5,000 cycles and a maximum allowable leak rate of 500 ppm.

Basic Specifications

Material:	Braided Flexible Graphite with Inconel Filament Jacket
Temperature:	850°F Atmosphere, 1200°F Steam
Pressure:	5000 psi
PH Range:	0-14

API 622, 2nd Edition Testing Summary

Test Criteria	
EPA Maximum Allowable Leakage:	100PPM
Test Pressure (Ambient):	600 psig
Test Pressure (500°F):	600 psig
Test Media:	99% Methane
Recommended Gland Nut Torque:	30 ft-lb
Tested Stem Travel Per Stroke:	4.00 inches
Cycling Speed:	0.2 in/sec
Cycling Rate:	40 sec per cycle

Stem Seal Leakage (PPMv)			
Static Leakage		Dynamic Leakage	
Avg.	Max.	Avg.	Max.
2.3	10	3	15

Results	
Number of Mechanical Cycles Required:	1510
Number of Mechanical Cycles Completed:	1510
Number of Thermal Cycles Required:	5
Number for Thermal Cycles Completed:	5
Number of Packing Adjustments:	0



API 622, 2nd Edition Test

<p>Fugitive Emission Test Report</p> <p><i>Performed for</i></p> <p>AP Services, LLC</p> <hr/> <p>AP Services Style 7050</p> <p><small>The above mentioned packing has completed and successfully passed all of the requirements of API 622 2nd Edition.</small></p> <p>Start Date: October 6, 2013 End Date: October 11, 2013</p> <hr/> <p><i>Performed by</i></p> <p>United Valve</p> <p><small>9916 Gulf Freeway Houston, TX 77034 Phone: 713-944-9852 Fax: 713-944-5964 www.unitedvalve.com</small></p>
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Chevron Texaco Emission Test

<p>Fugitive Emission Test Report</p> <p><u>ChevronTexaco Test Standard</u></p> <p><i>Performed for</i></p> <p>Curtiss-Wright Corporation</p> <p>www.curtisswright.com</p> <hr/> <p>AP Services 7050 Packing</p> <p>Project Number: 213309 Test Start Date: December 31, 2013</p> <hr/> <p><i>Performed by</i></p> <p>YARMOUTH RESEARCH AND TECHNOLOGY</p> <p><small>434 Walnut Hill Road North Yarmouth, ME 04097 USA (207) 829-5359 info@yarmouthresearch.com www.yarmouthresearch.com</small></p>
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AP Services

AP Services is a manufacturer and integrated supplier of mechanical valve and pump packing, metal and fabricated gaskets, and a wide variety of specialized fluid sealing products and services. The web-based SealPRO™ software is a key tool to enhance plant equipment reliability and our fluid leak management program helps identify and solve critical sealing problems to improve plant reliability and safety.



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