SPIRAL-MAX Gaskets

→ Maximize Sealing with the Spiral Effect.

Spiral-Max gaskets can be made from a wide variety of profiled alloy containment strips combined with specified sealing composites. Following ASME B16.20 code, the strips are wound around a mandrel specific to the finished gaskets internal dimensions. The gasket's inside diameter contains, at a minimum, three plies of preformed metal strip without the sealing composite and is spot-welded at least three times at a distance no greater than 3" apart around the inner circumference. The sealing material, also in strip form, is introduced and wound together with the profiled alloy to achieve the total width of the gasket. The external layers, up to three plies, are spot-welded circumferentially with a minimum of three welds.

Designed to achieve an effective seal under the most demanding operating conditions, the Spiral-Max profile is engineered to provide recovery in applications where the load on the gasket may vary due to major temperature fluctuations. While there is not a published standard for the construction of hand-hole and manhole spiral wound gaskets, the industry often categorizes them into pressure ratings 0-999 PSI and greater than 1,000 PSI. The difference between these two designations is the thickness of the sealing composite. A thicker sealing composite results in a lower content of containment strip. Inversely, a thinner sealing composite allows for an increased content of containment strip. The higher the alloy content, the more pressure the gasket can withstand.

The Spiral-Max designation codes for gaskets manufactured utilizing these techniques are OG - representing Outer Ring And Gasket Element; OGI -representing Outer Ring, Gasket Element and Inner Ring; LP (low pressure) and HP (high pressure) for hand/man hole gaskets in applications where pressures exceed 1,000 psi. The use of an internal solid ring is recommended to provide a mechanical stop and prevent over compression which could lead to inward buckling of the gasket. The designation code for this type of ring construction is HPI (High Pressure-Internal Ring).

Ideal Applications for SPIRAL-MAX Steam pressure vessels Hot water heaters De-mineralizers Liquid treatment vessels Compressed air tanks Dryer cans in paper mills

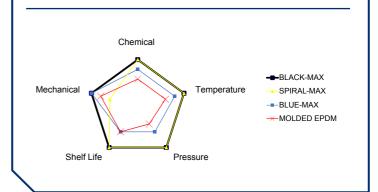
Steam humidifiers

Refrigeration units

Water purifiers

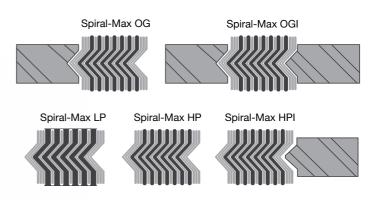
Filtering units

- Water towersWater softeners
- De-aerators
- Make-up tanks









SPIRAL-MAX STYLE LP HAND/MAN HOLE GASKETS

SS304 / GRAPHITE

| Elliptical or Obround Inside Diameters | 3/8 " Width | ½" Width | 9/16" Width | 5⁄8 " Width | 3 ⁄4" Width |
|--|-----------------------|-------------|----------------|-----------------------|-----------------------|
| 2-%" x 3-%" x ³ / ₁₆ " Thick | \$5.68 | \$7.83 | \$8.96 | \$10.10 | \$12.50 |
| 2-¾" x 3-½" x ¾ ₁₆ " Thick | \$5.50 | \$7.60 | \$8.68 | \$9.79 | \$12.14 |
| 2-¾" x 3-¾" x ¾ ₁₆ " Thick | \$5.86 | \$8.07 | \$9.21 | \$10.39 | \$12.86 |
| 2-%" x 3-%" x ³ / ₁₆ " Thick | \$6.02 | \$8.30 | \$9.49 | \$10.70 | \$13.22 |
| 3" x 4" x ¾ ₁₆ " Thick | \$6.20 | \$8.54 | \$9.75 | \$10.99 | \$13.56 |
| 3" x 4-½" x ¾ ₁₆ " Thick | \$6.92 | \$9.49 | \$10.81 | \$12.18 | \$15.00 |
| 3" x 5" x ¾ ₁₆ " Thick | \$7.62 | \$10.45 | \$11.88 | \$13.37 | \$16.42 |
| 3-1/4" x 4-1/4" x 3/16" Thick | \$6.57 | \$9.00 | \$10.28 | \$11.58 | \$14.25 |
| 3-1/4" x 4-1/2" x 3/16" Thick | \$6.92 | \$9.49 | \$10.81 | \$12.18 | \$15.00 |
| 3-1⁄4" x 5" x 3⁄ ₁₆ " Thick | \$7.62 | \$10.45 | \$11.88 | \$13.37 | \$16.42 |
| 3-3/8" x 4-1/4" x 3/16" Thick | \$6.57 | \$9.01 | \$10.29 | \$11.58 | \$14.28 |
| 3-1/2" x 4-1/2" x 3/16" Thick | \$6.92 | \$9.49 | \$10.81 | \$12.18 | \$15.00 |
| 3-½" x 5" x ¾ ₁₆ " Thick | \$7.62 | \$10.45 | \$11.88 | \$13.37 | \$16.42 |
| 4" x 5" x ¾ ₁₆ " Thick | \$7.62 | \$10.45 | \$11.88 | \$13.37 | \$16.42 |
| 4" x 6" x 3/16" Thick | \$9.05 | \$12.33 | \$14.03 | \$15.74 | \$19.27 |
| 6" x 8" x ¾ ₁₆ " Thick | \$11.88 | \$16.13 | \$18.31 | \$20.49 | \$24.98 |

| Elliptical or Obround Inside Diameters | 3 ⁄4" Width | 1" Width | 1-¼" Width | 1-½" Width |
|---|-----------------------|--------------------|----------------------|----------------------|
| 11" x 15" x ¾ ₁₆ " Thick | \$44.98 | \$60.74 | \$77.20 | \$93.96 |
| 12" x 16" x ¾ ₁₆ " Thick | \$47.83 | \$64.55 | \$81.96 | \$99.65 |
| 14" x 18" x ¾ ₁₆ " Thick | \$53.54 | \$72.12 | \$91.45 | \$111.04 |
| 18" x 24" x ¾ ₁₆ " Thick | \$70.66 | \$94.92 | \$119.95 | \$145.22 |
| 11" x 15" x 1⁄4" Thick | \$59.96 | \$80.98 | \$102.94 | \$125.29 |
| 12" x 16" x 1/4" Thick | \$63.77 | \$86.07 | \$109.25 | \$132.87 |
| 14" x 18" x 1⁄4" Thick | \$71.38 | \$96.20 | \$121.92 | \$148.07 |
| 18" x 24" x 1/4" Thick | \$94.22 | \$126.56 | \$159.93 | \$193.63 |

SPIRAL-MAX MAN HOLE AND MAN HOLE GASKETS ARE SOLD IN STANDARD SIX-PACK VACUUM PACKED BUNDLES. FOR MAN HOLE TWO-PACK VACUUM PACKED BUNDLE ADD \$2.00 TO NET GASKET PRICE.

O.G. Supply, LLC
1150 Guadalupe Dr., Cibolo, Texas 78108
www.ogsupply.com



Toll Free: 800.394.7846P: 210.370.7990 • F: 210.314.2295

info@ogsupply.com

STANDARD PACKAGE QUANTITY 1/2" THROUGH 8" - 10 GASKETS PER BUNDLE | 10" THROUGH 24" - 5 GASKETS PER BUNDLE

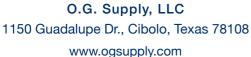
SPIRAL-MAX STYLE OG ASME B16.20 FLANGE GASKETS

CARBON STEEL - SS304 / GRAPHITE

| Nominal Pipe Size | 150# | 300# | 600# | 900# | 1500# | 2500# |
|-------------------|---------|----------|----------|----------|----------|----------------------------|
| 1/2" | \$1.71 | \$1.82 | | \$2.27 | | \$2.61 |
| 3/4" | \$2.10 | \$2. | .58 | \$2.33 | | \$2.97 |
| 1" | \$2.33 | \$2. | .57 | \$2.50 | | \$2.95 |
| 1-1/4" | \$2.61 | \$2. | .84 | \$3.39 | | \$4.90 |
| 1-1/2" | \$3.04 | \$3.54 | | \$3.83 | | \$5.49 |
| 2" | \$3.58 | \$3.94 | | \$6.90 | | \$7.65 |
| 2-1/2" | \$4.44 | \$4.84 | | \$8.15 | | \$8.97 |
| 3" | \$4.89 | \$5.98 | | \$8.88 | \$9.06 | \$11.59 |
| 3-1/2" | \$8.59 | \$9.06 | \$11.24 | \$12.66 | \$13.49 | \$17.18 |
| 4" | \$7.93 | \$8.36 | \$10.36 | \$11.67 | \$12.47 | \$15.86 |
| 5" | \$10.46 | \$13.28 | \$19.27 | \$19.82 | \$22.22 | \$27.22 |
| 6" | \$10.98 | \$14.64 | \$18.21 | \$21.35 | \$23.61 | \$27.18 |
| 8" | \$16.04 | \$19.86 | \$23.86 | \$30.50 | \$31.19 | \$38.85 |
| 10" | \$18.83 | \$23.86 | \$36.68 | \$39.55 | \$43.29 | \$52.26 |
| 12" | \$27.71 | \$31.35 | \$45.29 | \$52.36 | \$58.45 | \$69.68 |
| 14" | \$33.01 | \$41.37 | \$48.52 | \$53.92 | \$67.68 | Gaskets in |
| 16" | \$45.12 | \$50.96 | \$64.37 | \$68.82 | \$85.90 | this area are |
| 18" | \$49.22 | \$66.47 | \$71.52 | \$76.75 | \$114.98 | required by ASME B16.20 |
| 20" | \$57.59 | \$75.86 | \$86.24 | \$82.93 | \$127.09 | to have an |
| 24" | \$75.01 | \$101.30 | \$102.01 | \$112.47 | \$153.32 | inner ring. |

PLEASE CHECK WITH YOUR O.G. SUPPLY SALES REPRESENTATIVE FOR APPLICABLE DISCOUNTS. MINIMUM ORDER \$30.00 FOR DISTRIBUTED GOODS/ \$50.00 FOR MANUFACTURED GOODS.







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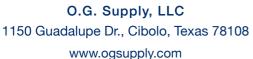
SPIRAL-MAX STYLE OGI ASME B16.20 FLANGE GASKETS

CARBON STEEL - SS316L / GRAPHITE - SS316L

| Nominal Pipe Size | 150# | 300# | 600# | 900# | 1500# | 2500# |
|-------------------|----------|----------|----------|----------|----------|----------------------------|
| 1/2" | \$2.35 | \$2.50 | | \$2.36 | | \$3.39 |
| 3/4" | \$3.10 | \$3. | .54 | \$3.35 | | \$3.95 |
| 1" | \$3.36 | \$3. | .54 | \$3.34 | | \$3.96 |
| 1-1/4" | \$5.34 | \$5. | .59 | \$5.28 | | \$6.54 |
| 1-1/2" | \$5.99 | \$6.54 | | \$6.17 | | \$7.52 |
| 2" | \$8.40 | \$8.78 | | \$8.29 | | \$9.80 |
| 2-1/2" | \$10.19 | \$10.53 | | \$9.93 | | \$11.59 |
| 3" | \$13.77 | \$14.92 | | \$15.76 | \$16.55 | \$17.33 |
| 3-1/2" | \$21.04 | \$21.52 | \$21.89 | \$23.11 | \$24.63 | \$28.31 |
| 4" | \$19.43 | \$19.86 | \$20.21 | \$21.35 | \$22.74 | \$26.14 |
| 5" | \$30.59 | \$33.66 | \$35.17 | \$35.82 | \$37.34 | \$42.25 |
| 6" | \$27.18 | \$28.23 | \$29.01 | \$32.07 | \$33.54 | \$39.55 |
| 8" | \$29.62 | \$33.36 | \$38.33 | \$47.13 | \$48.79 | \$52.26 |
| 10" | \$33.82 | \$40.95 | \$54.36 | \$63.50 | \$69.61 | \$72.12 |
| 12" | \$51.39 | \$54.97 | \$67.50 | \$83.01 | \$88.94 | \$95.55 |
| 14" | \$58.72 | \$67.08 | \$71.87 | \$90.15 | \$108.80 | Gaskets in |
| 16" | \$75.51 | \$81.27 | \$96.00 | \$105.76 | \$131.45 | this area are |
| 18" | \$89.46 | \$106.19 | \$119.08 | \$130.40 | \$168.20 | required by ASME B16.20 |
| 20" | \$102.01 | \$119.95 | \$138.94 | \$142.08 | \$169.52 | to have an |
| 24" | \$129.36 | \$155.14 | \$175.80 | \$183.89 | \$226.14 | inner ring. |

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Terms and Conditions of Sale

- 1. ACCEPTANCE: All orders are subject to approval and acceptance by an authorized officer of the Seller. Acceptance of orders, whether oral or written is conditioned upon the Buyer's agreement to ALL the Seller's terms and conditions of sale (the "Terms"). Acceptance of delivery by Buyer shall constitute Buyer's assent to the Terms. The Terms represent the complete agreement of the parties and no terms and conditions modifying the Terms shall be binding upon Seller unless agreed to in writing by an authorized officer of the Seller. No modification of the terms will be effected by Seller's shipment of goods following receipt of buyers purchase order, shipping request, or similar form containing printed terms and conditions conflicting or inconsistent with the Terms.
- 2. PAYMENTS: Unless otherwise provided, terms of payments are net 30 days. Prices are subject to change without notice, and all goods shall be billed at the prices then in effect at the time of shipment. Seller will notify Buyer of any price increase and Buyer may cancel any undelivered portion of the order by written notice to the Seller provided such written notice is received by Seller not more than ten (10) days after Buyer's receipt of notice of the price increase. Upon such cancellation, Buyer shall have no liability for the canceled portion of the order except as to goods then manufactured or in process, components procured by Seller from outside source, and special tooling and equipment procured for the execution of the order.
- 3. CAUTION: Gasket materials are known to contain fibers and particulates. Avoid creating dust. Breathing this dust may cause lasting lung damage. See Safety Data Sheet (SDS) for hazards identification, Buyer agrees to warn its employees, agents, representatives and customers of these dangers and to ensure that SDS's are made available to these persons. Buyer further agrees that the workplace in which the procured material is cut, installed, removed, handled or otherwise used by the Buyer and its employees, agents, representatives and customers shall fully comply with applicable OSHA and all other governmental laws and regulations and any recommendations of professional bodies such as the American Conference of Governmental and Industrial Hygienist (ACGIH). Buyer shall use its most diligent efforts to assure that its customers advise their employees, agents, representatives and customers of the described warnings for which requirement shall continue for each subsequent customer in the chain of distribution.
- 4. LIMITED WARRANTY: All goods are sold by Seller are warranted to be free from defects in material and workmanship for a period of thirty (30) days from the date goods are shipped. Damage due to transit, improper installation, misuse, field alterations, lack of maintenance, improper storage, neglect, accident or any other reason of any description not under the control of the seller is excluded from this limited warranty. Any claim by the buyer with reference to the goods sold herein shall be deemed waived by the Buyer unless submitted to Seller in writing within thirty (30) days from the date the Buyer discovered or should have discovered any claimed breach.
- 5. DAMAGES LIMITATION: In no event, shall Seller be liable for consequential, incidental, direct or special damages arising, directly or indirect from the goods or the use or failure thereof, whether based on breach of warranty, negligence, strict liability in tort or otherwise. The information provided the Buyer about the product and its use only serve as guidelines since actual conditions of use are beyond Seller's control, the Buyer and/or the users must satisfy themselves that the product is suitable for the intended application.
- 6. INDEMNIFICATION: Buyer shall indemnify, hold harmless and defend Seller from and against all liability and expenses based upon personal injury, property damage or economic loss arising directly or indirectly from Seller's goods or the use or failure therefore as are caused by the negligent act or omission of the Buyer, its employees, agents, representatives and or customers.
- 7. SAMPLES: In the event that the Seller has furnished samples to the Buyer, Seller has no liability connection with these samples and there is no warranty as to these samples. Paragraphs 3 and 6 hereof apply to these samples.
- 8. METHOD OF TRANSPORTATION: Seller will use all reasonable efforts to comply with Buyer's request as to the method of shipment, but Seller reserves the right to use an alternate method of transportation or route of shipment in its discretion. In such cases, the Seller will notify the Buyer of such change as soon as reasonably possible.
- 9. DELIVERY OF GOODS: FOB Shipping Point. Delivery of goods to the carrier shall be deemed delivery of goods to the Buyer and thereupon title of goods and risk of loss or damage shall be the Buyer's. Any claim by the Buyer against the Seller for shortages or damage prior to such delivery must be made within seven (7) days after receipt of shipment and accompanied by the original transportation bill signed by the carrier noting that the carrier received goods from the Seller in the condition claimed.
- 10. DELAYS: Seller shall not be liable for delays in performance or nonperformance of this agreement or for delays in shipment or default in delivery for any cause beyond Seller's reasonable control including but not limited to, government action, shortage of labor, raw material, production or transportation facilities, labor difficulties, fire, flood or another casualty. In the event of any such delay in Seller's performance due in whole or part to any cause beyond Seller's reasonable control. Seller shall have such additional time for performance as may be reasonably necessary under the circumstances. Seller may fill other parts of the order, as it is capable of filling on schedule and in the event Buyer places any other part of the order elsewhere. Seller shall be entitled to fill the unplaced portion. Acceptance by Buyer of any goods shall constitute a waiver by Buyer of any claim for damages on account of any delay in delivery of such goods.
- 11. HOLD ON DELIVERY: Each shipment shall be treated as a separate and independent sale, but if Buyer fails at any time to pay any amount due hereunder or otherwise fails to fulfill the terms and conditions of this or other agreements between the parties. Seller may, without prejudice to other remedies defer further shipments until all defaults of Buyer have been fully cured, recall, countermand, or divert any shipment to buyer and revest title in Seller: or cancel any unshipped balance and terminate this agreement.
- 12. TAXES: Buyer shall pay all federal, state, territorial or municipal sales. Use, or similar taxes and other levies applicable to the goods or the sale or use thereof. All such taxes and charges are payable with the purchase price.
- 13. COLLECTION AND SECURITY INTEREST: Buyer shall make payments without expense to Seller and shall pay all reasonable attorneys' fees and other costs of collection incurred by Seller unless and until the goods are fully paid for. Seller reserves a security interest in the goods to secure the unpaid balance of the selling price and all other obligations of the Buyer to the Seller. Buyer hereby grants Seller a power of attorney to execute and file on behalf of Buyer all necessary financing statements and other similar documents required to perfect the security interest herein granted.
- 14. TERMINATION: This agreement cannot be terminated and goods cannot be returned without Seller's prior written consent.
- 15. SUCCESSORS AND ASSIGNS: This agreement shall bind and ensure to the benefit of the successors and assigns of the parties hereto. This agreement is not assignable or transferable by Buyer in whole or part except upon written consent of Seller.
- 16. WAIVER: Waiver by Seller of any breach of the Terms shall not be construed as a waiver of any other breach and Seller's failure to exercise any right arising from any default hereunder shall not be deemed a waiver of such right which may be exercised at any subsequent time. If any provision of this agreement shall be held invalid, illegal or unenforceable. The balance of the agreement shall remain in full force and effect as if such provision had not been included. The enumeration herein of certain rights does not exclude Seller from asserting other available legal or equitable rights.
- 17. JURISDICTION: This agreement shall be governed and construed in accordance with the laws of the state of Texas. Buyer's order is deemed acceptable at Cibolo, Texas.