**HAZARD IDENTIFICATIONS**

Abrasive Blasting Nozzles cannot be returned for credit or replacement after being placed into service. Damage to abrasive blasting nozzle liner or jacket may occur during shipping. If you receive a damaged abrasive blasting nozzle, contact your distributor immediately for replacement.

**NOTICE**

- Abrasive Blasting Nozzles cannot be returned for credit or replacement after being placed into service. Inspect abrasive blasting nozzle for damage before use. If damage is found, contact Marco.
- Do not use abrasive blasting nozzle as a hammer or drop on hard surface. Doing so may crack liner. Failure to comply with the above notice could pose a hazard to personnel or property.
- Point the abrasive blasting nozzle only at the surface being abrasive blasted. Never point the abrasive blasting nozzle or abrasive stream at yourself or others. Failure to comply with the above notice could pose a hazard to personnel or property.
- Cutting tools and holders may fragment in use. Always wear proper PPE and keep machine guards in place.
- Use this product in an abrasive blasting applican can expose user to chemicals including cobalt and/or nickel, which are known to cause cancer.

**WARNING**

- Before using this equipment, read, understand and follow all instructions in the Operator's Manuals provided with this equipment. If the user and/or assistants cannot read or understand the warnings and instructions, the employer of the user and/or assistants must provide adequate and necessary training to ensure proper operation and compliance with all safety procedures pertaining to this equipment. If Operator's Manuals have been lost, please visit www.marco.us, or contact Marco at 563.324.2519 for replacements.
- Using this product in an abrasive blasting applican can expose user to chemicals including cobalt and/or nickel, which are known to cause cancer.

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**Air & Abrasive Consumption Chart**

<table>
<thead>
<tr>
<th>Pressure at the Nozzle (PSI)</th>
<th>Air &amp; Compressor Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nozzle Orifice</td>
<td>Air (cfm), Abrasive (lbs/hr), &amp; Compressor Horsepower</td>
</tr>
<tr>
<td>No. 2 (1/8&quot;)</td>
<td>11 7 15 17 18 20 25 28</td>
</tr>
<tr>
<td>No. 3 (3/16&quot;)</td>
<td>26 30 33 38 41 45 55 62</td>
</tr>
<tr>
<td>No. 4 (1/4&quot;)</td>
<td>47 54 61 68 74 81 98 110</td>
</tr>
<tr>
<td>No. 5 (5/16&quot;)</td>
<td>77 89 101 113 126 137 168 188</td>
</tr>
<tr>
<td>No. 6 (3/8&quot;)</td>
<td>108 126 143 161 173 196 237 265</td>
</tr>
<tr>
<td>No. 7 (7/16&quot;)</td>
<td>147 170 194 217 240 254 314 352</td>
</tr>
<tr>
<td>No. 8 (1/2&quot;)</td>
<td>195 224 252 280 309 338 409 458</td>
</tr>
<tr>
<td>No. 10 (5/8&quot;)</td>
<td>308 356 404 452 504 548 663 742</td>
</tr>
<tr>
<td>No. 12 (3/4&quot;)</td>
<td>432 504 572 644 692 784 948 1062</td>
</tr>
</tbody>
</table>

*Abrasive consumption is based on abrasive with a bulk density of 100 lbs per Cubic Foot*
ADDITIONAL TECHNICAL DATA

The associations listed below offer information, materials and videos pertaining to abrasive blasting and safe operating practices.

- American Society for Testing and Materials (ASTM)
  100 Barr Harbor Drive
  West Conshohocken, PA 19428-2959
  Phone: (610) 832-9585
  FAX: (610) 832-9555
  www.astm.org

- Occupational Safety & Health Administration (OSHA)
  United States Department of Labor
  200 Constitution Avenue
  Washington, DC 20210
  Phone: (800) 321-OSHA
  FAX: (610) 832-9585
  www.osha.gov

- The National Board of Boiler & Pressure Vessel Inspectors
  1055 Crupper Avenue
  Columbus, Ohio 4322
  Phone: (614) 888-8320
  FAX: (614) 888-0750
  www.nationalboard.org

- National Association of Corrosion Engineers (NACE)
  1440 South Creek Drive
  Houston, TX 77084-4906
  Phone: (281) 228-6200
  FAX: (281) 228-6300
  www.nace.org

- The Society for Protective Coatings (SSPC)
  40-24th Street, 6th Floor
  Pittsburgh, PA 15222-4656
  Phone: (412) 281-2331
  FAX: (412) 281-9992
  www.sspc.org

- American National Standards Institute (ANSI)
  1899 L Street, NW, 11th Floor
  Washington, DC 20036
  Phone: (202) 293-8020
  FAX: (202) 293-9287
  www.ansi.org

LIMITED WARRANTY

Seller warrants to the original purchaser that the Product covered by this Limited Warranty will remain free from defects in workmanship or material under normal commercial use and service for a period of one year from the date of shipment to the original Purchaser. This Warranty shall not apply to defects arising, in whole or in part, from any accident, negligence, alteration, misuse or abuse of the Product, operation of the Product which is not in accordance with applicable instructions or manuals or under conditions more severe than, or otherwise exceeding, those set forth in the written specifications for the Product, nor shall this Warranty extend to repairs or alterations of the Product and/or any maintenance part by persons other than Seller or Seller’s authorized representatives. This warranty does not apply to accessory items. Further, this Warranty does not apply to damage or wear to the surface finish or appearance of the Product or normal wear and tear to the Product. This Warranty is limited to a purchaser who purchases the Product either directly from the Seller or from one of Seller’s “Authorized Distributors”. An Authorized Distributor is a Seller approved distributor that purchases the Product directly from the Seller for the sole purpose of re-selling the Product at retail, without any use or modifications whatsoever, to an end-purchaser. This warranty is specifically non assignable and non-transferable.

DISCLAIMER OF WARRANTY

The foregoing Limited Warranty is exclusive and is in lieu of all other warranties, whether oral or written and whether express, implied, or statutory. SELLER HEREBY DISCLAIMS ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE AND ALL SUCH OTHER WARRANTIES ARE HEREBY EXCLUDED AND ARE INAPPLICABLE TO THE PRODUCT. Seller makes no warranties or representations of any kind concerning respirators, or equipment made by other manufacturers. Seller’s agents and representatives are not authorized to offer any further warranties.

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THE SOLE AND EXCLUSIVE REMEDY UNDER THE FOREGOING LIMITED WARRANTY, AND TO THE EXTENT PERMITTED BY LAW, ANY WARRANTY OR CONDITION IMPLIED BY LAW, COVERING THIS PRODUCT SHALL BE, AT THE SELLER’S OPTION, THE REPAIR OR REPLACEMENT, FREE OF CHARGE, F.O.B. POINT OF MANUFACTURE, OF ANY DEFECTIVE PART OR PARTS OF THE PRODUCT THAT WERE MANUFACTURED BY SELLER, AND WHICH ARE RETURNED TO SELLER AT SELLER’S PRINCIPAL PLACE OF BUSINESS, POSTAGE PREPAID BY THE PURCHASER. THIS SOLE AND EXCLUSIVE REMEDY IS CONDITIONED UPON PURCHASER’S PROMPT WRITTEN NOTICE TO SELLER AT SELLER’S PLACE OF BUSINESS THAT A DEFECT HAS BEEN DISCOVERED, TOGETHER WITH A REASONABLY DETAILED DESCRIPTION OF THE DEFECT IN THE PRODUCT, PROOF OF PURCHASE OF THE PRODUCT, AND THE MODEL AND IDENTIFICATION NUMBER OF THE PRODUCT WITHIN THIRTY (30) DAYS AFTER DISCOVERY OF THE DEFECT, OTHERWISE SUCH CLAIMS SHALL BE DEEMED WAIVED. NO ALLOWANCE WILL BE GRANTED FOR ANY REPAIRS OR ALTERATIONS MADE BY PURCHASER OR OTHERS WITHOUT SELLER’S PRIOR WRITTEN CONSENT. IF SUCH NOTICE IS TIMELY GIVEN, SELLER WILL HAVE THE OPTION TO EITHER MODIFY THE PRODUCT OR COMPONENT PART THEREOF TO CORRECT THE DEFECT, REPLACE THE PRODUCT OR PART WITH COMPLYING PRODUCTS OR PARTS, OR REFUND THE AMOUNT PAID FOR THE DEFECTIVE PRODUCT, ANY ONE OF WHICH WILL CONSTITUTE THE SOLE LIABILITY OF SELLER AND FULL SETTLEMENT OF ALL CLAIMS. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY OBLIGATION GREATER THAN THE ORIGINAL PURCHASE PRICE OF THE PRODUCT UNDER THIS WARRANTY, PURCHASER SHALL AFFORD SELLER PROMPT AND REASONABLE OPPORTUNITY TO INSPECT THE PRODUCT FOR WHICH A CLAIM IS MADE. THE SOLE PURPOSE OF THE FOREGOING STIPULATED EXCLUSIVE REMEDY SHALL BE TO REPAIR OR REPLACE DEFECTIVE PRODUCTS OR COMPONENTS THEREOF, OR TO REFUND PURCHASER THE PURCHASE PRICE THEREOF. THIS STIPULATED EXCLUSIVE REMEDY SHALL NOT BE DEEMED TO HAVE FAILED OF ITS ESSENTIAL PURPOSE SO LONG AS SELLER IS WILLING AND ABLE TO REPAIR OR REPLACE THE DEFECTIVE PARTS OR REFUND THE PURCHASE PRICE IN ACCORDANCE WITH THE TERMS HEREOF. PRODUCTS THAT HAVE BEEN REPAIRED OR REPLACED UNDER THIS WARRANTY DO NOT RECEIVE A NEW WARRANTY AND ARE ONLY COVERED BY THE REMAINING PORTION OF THE ORIGINAL WARRANTY.

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