ARGOSHIELD® Heavy

Argoshield® Heavy has been formulated for welders using the GMAW process on constructional steelworks typically greater than 10 mm thick. Its higher carbon dioxide content gives welds in carbon steel good rounded penetration profiles that are deep and wide. This produces consistently reliable strong welds, which can be used for bridges, buildings, boilers, plant and machinery. Argoshield® Heavy is ideal for multi-pass welds in spray mode on heavy sections, allowing fast welding speeds which reduce costs. It also has the advantage of tolerating contaminants such as dirt, oil, grease and rust and poor joint fit-up.

Afrox MSDS number:  SG/MSDS 3

Hazards

- Asphyxiant in high concentrations
- Compressed – high pressure gas mixture in cylinders.

Classifications

Gas Components

<table>
<thead>
<tr>
<th>Argon</th>
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<tr>
<td>Carbon dioxide</td>
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<tr>
<td>Oxygen</td>
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Material Description | Mass (kg) | Cylinder Capacity (l) | Pressure @ 20°C (Bar) | Valve Outlet Connection | Item Number |
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<tbody>
<tr>
<td>ARGOSHIELD® HEAVY CYL 19.6 KG</td>
<td>19.6</td>
<td>50.0</td>
<td>200</td>
<td>5/8” BSPF right hand female</td>
<td>25-SE</td>
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Applications

- Heavy engineering
- Heavy structural steel
- Boiler manufacture
- Shipbuilding and repair
- Heavy vehicle manufacture
- Thick-walled pipes and pressure vessels
- Pad-eyes and lifting lugs
- Earth-moving equipment.

Features

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
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<tr>
<td>Good arc stability</td>
<td>Easy to use. Low spatter</td>
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<tr>
<td>Low oxidation potential</td>
<td>Reduced spatter. Good weld appearance. Low weld clean-up</td>
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<tr>
<td>Used in dip, pulsed and spray metal transfer modes</td>
<td>Good appearance and finish</td>
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<tr>
<td>Low levels of nitrogen and moisture</td>
<td>Minimises distortion and maximises productivity</td>
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<td>High levels of accuracy and quality control during production</td>
<td>Suitable for automated applications</td>
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<tr>
<td>Reproducible weld quality from cylinder to cylinder</td>
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Precautions in Use

- Use only approved pressure rated equipment
- Use only in well ventilated areas
- Open cylinder valve slowly
- Close cylinder valve when not in use
- Do not allow oil or grease on cylinder or valve
- Cylinders should be secured from falling over
- Refer to MSDS for more information.

Material Compatibility

Argoshield® Heavy is inert and non-corrosive and so any common metal is acceptable, provided the equipment is designed to withstand process pressure.

Current/Voltage Envelope

Operating limits for 0.8 mm, 0.9 mm, 1.0 mm and 1.2 mm diameter wires.

Electrode stick out, contact tip-to-work distance 18 mm for spray,
15 mm for dip, gas flow rate 16 l/min