To reduce welding costs when joining linear or circumferential seams, a backing tape can be applied to the underside of the weld seam allowing the tapes’ glass fibre matting to leave a smooth, oxide-free weld root.

Backing tapes offer a number of advantages over alternative methods of weld root protection;

- The integrated self-adhesive aluminium part provides an effective seal against contamination and oxidation from atmospheric gases.
- Compared with the eb insert it is much less costly and easier and less time-consuming to apply.
- No special skills are required.
- Removal following welding is simple.
- Little, if any, post weld treatment such as grinding or pickling is needed.
- Tapes can be used for single pass or multi-pass welding.

Huntingdon Fusion Techniques HFT®, manufactures 4 grades of backing tape, suitable for different weld current levels.

A light duty grade for welding up to 80 Amps, a medium current version for welding up to 160 Amps, a heavy-duty grade for welding up to 240 Amps and an extra heavy duty grade up to 600 Amps are all available.

KEY ADVANTAGES

- Welding can be carried out by operatives with lower skill levels.
- The amount of post-weld root grinding and cleaning is minimised.
- Allows for higher welding speeds.
- Tape rolled up and delivered in a multilingual labelled box complete with comprehensive user instructions.
**GRADE ABT0004 - LIGHT DUTY TAPE**

Light-duty Backing Tape® supplied in 25 metre lengths. The light duty Backing Tape® with its weave thickness of 1.5 mm (0.06"), will help to produce a positive weld underbead with minimum oxidation and contamination.

**TYPICAL APPLICATIONS:**

- Suitable for fabrication using up to 80 Amps.
- Typical customers are pipework fabricators for the dairy, brewery and pharmaceutical industries.
- Use on flat sheet metal, as well as cylindrical structures nominally up to 1.6 mm thick.

**GRADE ABT0005 - MEDIUM DUTY TAPE**

Medium duty tape supplied in 12.5 metre lengths. The medium duty Backing Tape® with its weave thickness of 2.5 mm (0.098"), allows for welding up to 160 amps with any arc process, and faster welding with lower skilled labour.

**TYPICAL APPLICATIONS:**

- Suitable for medium duty stainless steel fabrication up to 160 Amps in the dairy industry, using flat sheet metal, as well as cylindrical structures nominally up to 2.4 mm thick, pipework fabricators for the pharmaceutical, petrochemical industry and vessel manufacturers.
**GRADE ABT0006 - HEAVY DUTY TAPE**

Heavy duty Backing Tape® pre-cut 12.5 metre lengths. The heavy-duty backing tape with its weave thickness of 3.0 mm (0.120”) can be used for welding at up to 240 amps with any arc process. Faster welding with lower skilled labour.

This produces a flat weld underbead which minimises oxidation and contamination. Additional benefits arise from the potential to reduce the need for post-weld grinding and cleaning.

**TYPICAL APPLICATIONS:**
- Heavy duty requirements such as welding of plate in the shipbuilding and ship repair industries.
- Also for use with boilers, heat exchangers and pipelines.
- It helps to produce controlled oxide-free underbeads.

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**GRADE ABT0007 - EXTRA HEAVY DUTY TAPE**

Extra heavy-duty Backing Tape® for use up to 600 Amps consisting of 75 mm (3 inch) adhesive heat-resistant aluminium tape with 25 mm (1 inch) wide, glass fibre tape in the centre. Roll length is 12.5 metres.

**TYPICAL APPLICATIONS:**
- Suitable for heavier use than the standard heavy tape, typically in applications involving thick section plate in the shipbuilding and ship repair industries, boilers, heat exchangers and pipelines.
- It helps to produce controlled underbeads without oxidation or contamination

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Weld bead achieved with Heavy Duty tape. 8 mm Plate with a 3 mm root gap at: 250 Amps.

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Close-up of a finished weld
**APPLYING THE BACKING TAPE®:**

The following illustration is a typical profile, showing the recommended application of the Argweld® Weld Backing Tape®.

![Illustration of Weld Backing Tape application](image)

**Adhesive Bonding Strip**
(an acrylic adhesive, covered with an easy-peel silicone-treated paper.)

**Glass Fibre Weave**
(the thickness of fibreglass will vary depending upon the grade selected. Filament diameter size will be typically between 6 and 25 microns)

**Metallic Aluminium Tape**
(a robust 3" (75 mm) tape offers both support and a non-porous seal.)

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**Step 1:** Simply stick the tape onto the pre-cleaned weld joint area.

**Step 2:** Weld onto the Argweld® Purge Tape®

**Step 3:** Remove the tape to see a flat, well-formed bead

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**ADDITIONAL / SUPPORTING LITERATURE:**

- A material safety data sheet.
- An application guide.
- Training poster.
- User list.

Published technical papers:

- *Mechanical Weld Backing Methods for Overcoming Skill Limitations in The Fabricator and Glass Fibre Tape Materials – the cost-effective solution to weld backing in Welding & Cutting.*

All are available at request. Sample packs are available by contacting HFT® with a description of your application. The sample pack contains a small trial strip of each grade of Weld Backing Tape®.

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**HUNTINGDON FUSION TECHNIQUES® - HFT**

Other HFT® Weld Purging Products
- Argweld® Inflatable Tube Pipe & Pipeline Weld Purging Systems
- Argweld® PurgEye® Weld Purge Monitors® and Dew Point Meter
- Argweld® Weld Purge Film® & Weld Purge Super Adhesive®
- Argweld® Weld Purge Tape®
- Argweld® Weld Trailing Shields®
- Argweld® Flexible Welding Enclosures®
- Argweld® Weld Purge Plugs™ & Orbital Welding Plugs
- Techweld® MultiStrike® Tungsten Electrodes

Our HFT Pipestoppers® Division
- Nylon, Aluminium, Steel and Rubber Pipe Plugs and Inflatable Stoppers

Made in Wales “Manufacturer of the Year” & Welsh Business Awards “Exporter of the Year”