

# **Ceramic backing**

Elga Ceramic Backing is used to provide root pass support when welding from one side only and is an extremely effective way to rationalise welding procedures and reduce production costs. Welding of root passes is normally the most critical part of the weld and hence the most costly. By using Elga ceramic backing, you can reduce production costs substantially.

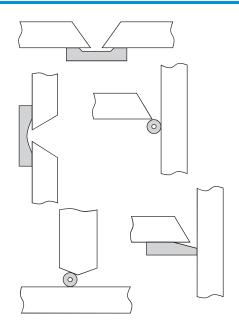
#### Benefits with Elga Ceramic Backing

#### Reduced production costs:

- Eliminates the need for back-gouging, grinding and rewelding operations on the reverse side.
- Significant savings in costs associated with turning large and heavy plates or structures in order to weld the second side in the flat position.
- Increased productivity when welding root runs in position 1G/PA, 2G/PC and 3G/PF.
- Simpler joint preparation and reduced set-up time because tolerances for the root gap are greater.
- Use of higher welding currents, which means higher deposition rates and increased productivity.

#### **Quality improvements:**

- Smooth, even root bead with slightly convex profile and excellent blend-in with base material.
- The ceramic material does not emit fumes and contains no moisture. Ideal for low-hydrogen applications.
- When welding in enclosed spaces the working environment is not polluted by fumes from arc-air gouging, grinding and rewelding operations.



Typical examples of ceramic backing applications.

#### Useful tips when using Elga Ceramic Backing

- Use relatively low current/welding speed.
   For Elgacore < 200A and < 200 mm/min, for Cromacore < 160A.</li>
- Dirt, mill scale, coatings and other contamination to be removed from the joint faces before welding.
- End craters should be fully ground out.
- Maximum 1 m root run at a time, before next pass applied.

## Elga ceramic backing

### Valid for all ceramic backing from Elga:

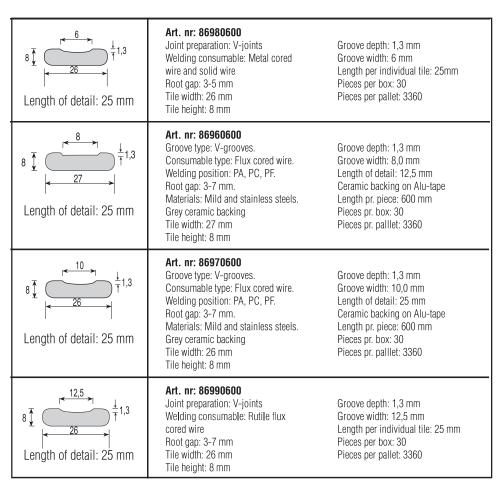
Grey ceramic backing on Alu-tape Welding positions: PA, PC, PF Base material: stainless and mild or low

alloy steels

Length per piece: 600 mm

Length of detail: 30 mm	Art. nr: 86640600  Joint preparation: X and K-joints  Welding consumable: Rutile and  metal cored wire  Root gap: 3-5 mm	Diameter: 6,0 mm Length per individual tile: 30 mm Pieces per box: 40 Pieces per pallet: 4480
8,0	Art. nr: 86650600  Joint preparation: X and K-joints  Welding consumable: Rutile and  metal cored wire  Root gap: 4-6 mm	Diameter: 8,0 mm Length per individual tile: 30 mm Pieces per box: 40 Pieces per pallet: 4480
Length of detail: 30 mm	Art. nr: 86660600  Joint preparation: X and K-joints  Welding consumable: Rutile and  metal cored wire  Root gap: 5-7 mm	Diameter: 10 mm Length per individual tile: 30 mm Pieces per box: 40 Pieces per pallet: 4480
Length of detail: 30 mm	Art. nr: 86670600 Joint preparation: X and K-joints Welding consumable: Rutile and metal cored wire Root gap: 7-10 mm	Diameter:12 mm Length per individual tile: 30 mm Pieces per box: 30 Pieces per pallet: 3360
Length of detail: 30 mm	Art. nr: 86680600 Groove type: X and K-grooves. Consumable type: Flux cored and metal cored wires. Welding position: PA, PC, PF. Materials: Mild and stainless steels. Root gap:10-12 mm.	Mat Grey ceramic backing Diameter: 15mm Length of detail: 30 mm Pieces per box: 20 Pieces per pallet: 2240
$ \begin{array}{c c}  & 13 \\  & 13 \\  & 7$	Art. nr: 86800600 Joint preparation: V-joints Welding consumable: Rutile flux cored wire Root gap: 3-8 mm Tile width: 26 mm Tile height: 8,5 mm	Groove depth: 1,3 mm Groove width: 13 mm Length per individual tile: 25 mm Pieces per box: 30 Pieces per pallet: 3360

Please visit www.elga.se to see our updated range of Elga ceramic backing!



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