Project Case Study: Alderman Tooling Ltd Plymouth, UK

Aldermans is one of the South West's most highly respected metalwork engineers. The loading bay at its busy Plymouth factory now has a repaired and upgraded floor joint, which is benefitting staff and business efficiency.

Alderman Tooling has been in business for over 45 years. Founded by Bill Alderman, a precision toolmaker, the company's ongoing investment and expansion means it boasts one of the most comprehensive metalwork design and fabrication facilities in the South West. Bill's daughter Karen Friendship was appointed Managing Director in 2005.

The company has operated from its purpose-built factory in Plymouth since 1993, and the building has seen layout changes and an extension as the company has grown. The busy loading bay is a hard-working part of the factory, as all deliveries of finished goods and raw materials pass through it daily.

Damaged floor joint

The loading bay and stores are located in an extension area at the rear of the building, accessed from the factory through just one doorway. As a result, the straight joint in the concrete floor was subject to the harsh impact forces of directional traffic as the forklift crossed the joint.

Although the forklift was fitted with pneumatic tyres, the constant use was still enough to cause damage to the joint. Although previous repairs had been undertaken, these were unsatisfactory and further damage occurred.

Permaban Signature AR: the permanent joint repair

Both Permaban and Aldermans are active members of The Plymouth Manufacturers Group (PMG) Network, a thriving business networking group enabling manufacturers in South Devon to collaborate and share best practice.

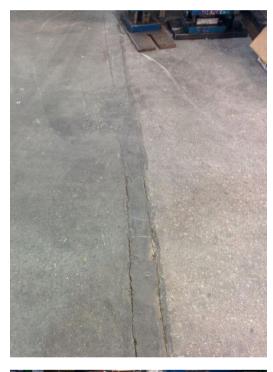
In September 2015 Permaban extended an offer to its fellow group members to trial its latest innovation, the Permaban Signature AR joint repair system. Aldermans readily accepted.

Permaban Signature AR ('arris repair') is designed to replace damaged saw-cut joints, or sections of the floor where a straight armoured joint and the surrounding concrete have become damaged.

Signature AR provides a permanent, professional repair - saving building owners and operators the considerable cost and disruption of future floor repairs.



Project Key Facts	
Project type	Factory joint repair
Location	Plymouth, Devon, UK
Products	Signature AR, 4.8m
Client	Alderman Tooling Ltd
Contractor	Permaban





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Based on Permaban Signature

Signature AR is based on Permaban's highly successful Signature armoured joint, used in new warehouse and industrial floors worldwide. With its distinctive half-hexagonal design, materials handling vehicles can pass smoothly across a Signature joint in the floor, causing no impact and no damage – even when vehicles cross the joint at 90[°]. This saves significant repair costs to both the floor and vehicles, for the lifetime of the building.

Complete repair system

The Signature AR system incorporates all the products needed for a professional joint repair – including a reduced-height length of Signature, along with complementary products from fellow RCR companies Rinol and Rocland, including a concrete bonding agent, resin repair mortar and resin screed finish.

15-hour repair – seamless finish

The joint repair at Aldermans was undertaken on 16th December 2015, and took just 15 hours to complete, so the area was out of use for less than a day. The damaged portion of floor was cut away, creating a channel into which the Signature AR joint was placed. No attachment was needed to the surrounding floor. The repair area was 4.8m long, which constituted four complete 1m lengths of Signature AR, and an additional length cut to size, all designed to be clipped together easily.

The channel was filled with a bonding agent and repair mortar; then the repair area was ground so that the finish was completely seamless with the surrounding floor.

Increased usability

The loading area and store is now back in use, and Aldermans is delighted with the results. The joint 'upgrade' has also helped the company improve the storage efficiency of the area, relocating a material store which has allowed the doorway to be more fully used and to handle increased traffic.

"Aldermans has a busy factory, and the nature of our business means our floor is subject to hard use and considerable wear and tear. The floor joint repair has been a very efficient process, with minimal disruption. Knowing the joint has been repaired once and for all means that we have no further concerns about potential floor maintenance costs and disruption. Our forklift drivers are also noticing the difference. We are sure we will see operational benefits from repairing other joints in a similar way."

Karen Friendship, Managing Director, Alderman Tooling Ltd

