

An introduction to Alderman Tooling

Our history

Aldermans was founded in 1969 by Bill Alderman, a former toolmaking apprentice, supported by his wife, Lyn.

The company has grown steadily since by investing in staff and machinery and expanding its services into the full manufacture of metal parts and assemblies.

Aldermans remains a family-owned and managed business. Bill and Lyn's younger daughter Karen Friendship (a civil engineer) joined the company in 1998 and became Managing Director in 2005.

The company operates from its factory at Newnham, Plymouth and employs 50.

Annual turnover is currently £3.8m.

What we do

Aldermans is a bespoke metal fabricator. We don't make our own products - we make metal parts and assemblies for other companies.

Often our customers incorporate these parts into their own products. For example, we make metal feet which Vispring fits to its luxury beds. We supply metal brackets, struts and plates to CareFlex for use in its specialist chairs. We make metal handrails which GM Coachwork builds into its mobility vehicles.

We also make complete assembled units for the furniture and retail sectors. For example, we have made metal clothing rails and stands for brands such as Dorothy Perkins and Hobbs.

We also serve the IT sector, as we make large components for server cabinets.

How we do it

Our customers often provide us with precise drawings of what they require. Others explain to us what they want and we create the drawings.

Our skilled design engineers work out the best way to make the product, deciding which of our many factory processes we need to use. This enables them to quote for the product accurately and give clear manufacturing instructions to the factory.

Most of our products are made from large sheets of steel. Some are made from long strips of steel which are supplied on a coil. Others are made from long cylindrical steel bars or tubes.

We pride ourselves on having one of the most comprehensive metal fabrication facilities in the South West. Our key processes are as follows – the video links included demonstrate each process:

- Turning. We shape and cut long, cylindrical steel bars by programming our automatic lathes. <https://www.youtube.com/watch?v=cSGFIpRnE9o>
- Laser cutting. We feed large sheets of steel into one of our two laser machines, and cut shapes from the metal by burning through it. We can also punch holes in the metal shapes at the same time if required. Our machines have automatic sheet material feeders, so they can run 'lights out' for quick manufacturing with minimal human intervention. <https://www.youtube.com/watch?v=OFJtHFMeaKU>
- Punching. We have a CNC Turret Punch, which can punch multiple holes in metal sheet quickly and efficiently. It also has an automatic sheet feeder.
- Folding. We create bends and folds in large pieces of metal using powerful machines called press brakes. <https://www.youtube.com/watch?v=K3Fyc477x2k>
- Welding. We can weld together aluminium, stainless steel and mild steel. <https://www.youtube.com/watch?v=2WCIHWGRK00>
- Powder coating. We spray coloured powder onto cut metal parts, then bake them at a high temperature in our furnace. This gives an attractive and protective coating. <https://www.youtube.com/watch?v=2xns8hd8Hf0>
- Toolmaking. It's more cost effective to make a specialist machine tool for some long production runs. These tools, which are created and maintained in our toolroom, fit inside our machines to cut and shape the metal in one efficient process. <https://www.youtube.com/watch?v=IQKZvpEcwjA>
- Press work. Our power presses use tooling combined with weight to shape complex metal parts <https://www.youtube.com/watch?v=yQPPkMwtzF4>

This video gives the full tour of the factory and an explanation, showing how our processes work together in making products: https://www.youtube.com/watch?v=KS4JtF_1F80

Key business factors

Our customers expect high quality parts, quick lead times and competitive prices – so our constant mission is to achieve all three.

Because every product is different we need our staff to be versatile and to work in the most efficient way. Therefore we invest heavily in staff training, particularly in manufacturing efficiency skills. We grow our talent in-house as much as possible. We strongly support apprenticeships and have won awards for our apprenticeships, training and employment practices. We enjoy strong staff loyalty: 40% of our staff have been employed with us for over 10 years.

Our major raw material is steel, so we need to carefully manage the effect of rising steel prices. We always seek to minimise wastage and streamline our production processes to help control costs.

To control our processes and ensure quality we are registered to the ISO 9001:2015 international quality management standard. We have also attained ISO 14001:2015 for environmental management, and ISO 45001:2018 for health & safety management.

Community involvement

Karen is a local ambassador for STEM education, particularly championing engineering amongst girls. She is also a University of Plymouth volunteer employer mentor.

She chairs the PMG Network, Plymouth's association of smaller manufacturers, promoting collaboration and best practice. She is also vice chair of the PMG's main group of larger manufacturers.

We regularly welcome factory visitors from education and business, including local business groups and Bank of England representatives.

We work with local charity Shekinah to provide employment opportunities to disadvantaged adults.

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