



CARR'S UPDATE

New Laser Technology

Inside this issue:

New Company Name	1
New Laser Technology	1
Services available	1
Profile on Brian Waite	2
Production type work	2
Waste Minimisation	2
Company address & no.s	2

Carr's have been laser welding for 12 months now and are still breaking new ground. New materials and techniques have allowed Carr's to weld small steel assemblies, as well as recover damaged or cracked tooling. The steel core shown in the photograph was re-designed and a radial groove was moved by 0.5 mm. With a water way running inside the core, the added metal needed to be added carefully and precisely.

The small 0.3 mm wide beads are lasered on slowly and with minimal heat, until the diameter was built up. The toolmaker then re-ground the cores to size.

Carr's Welding Technologies are still the only company offering laser welding to the toolmakers in the U.K.



Snatch groove needed to be moved by 0.5mm, laser welded for re-grinding.

Toolroom services at Carr's.

- Laser welding all metals.
- Cold pulse welding to steel.
- Brush-on metals to steel, copper and aluminium.
- Cold pulse welding to Aluminium.
- Ali-weld brazing to aluminium.
- Welding on site.
- Polishing and texturing

New Logo



Carr's Welding Technologies Ltd has been formed from Carr's Brush-on Metals on the 1st May 2000. As you can see, the logo above is very similar to that of Carr's Brush-on Metals. However we have tried to incorporate the new laser system in the logo and we changed the name to better reflect our current business. The transfer to limited has been necessary for the company to attract new contracts and new investments. It will also enable the company to introduce an employee share option scheme.

Carr's Welding Technologies Ltd

Enterprise Close
Telford Way Ind. Estate
Kettering
NN16 8NS

Phone: 01536 412828

Fax: 01536 310262

Email: Phil.Carr@carrswelding.co.uk

Web site <http://www.carrswelding.co.uk>

Now includes this newsletter and the last newsletter.

Send mail and photos
to : "phil@carrswelding.
co.uk"

Profile on Brian Waite



Brian Waite, a loyal member of the team.

experience, not only to add to the jobs we do at Carr's, but to pass on to the younger employees, who have not benefited from an apprenticeship. Thank you Brian and keep up the good work.

Brian Waite has been with Carr's since it started in 1992. A loyal member of the team, Brian has seen the business grow from doing 1 or 2 jobs a week and working in a mobile home, to doing nearly 100 jobs a month working at extended premises at Enterprise Close in Kettering. Brian's experience in engineering is extensive; from an apprenticeship with Thurgar Bolle and a number of skilled manufacturing jobs including work with the engineering group Timpsons. He brings a wealth of ex-

WASTE MINIMISATION PROGRAMME

Recently an audit has taken place to review where savings on waste can be made within the company. The primary area of savings are in waste reduction through reduced and re-using packaging, segregating and recycling waste and general good housekeeping. We are looking to save at least 1% of turnover with this programme. Kathryn Carr, director of the company is presently attending a course run by the Northamptonshire Chamber called the Kettering Action on Resource Efficiency Programme. These programmes have been taking place all over the county to encourage companies to start waste minimisation programmes.

Production Laser Welding



Stainless steel spring valve assembly laser welded together.

Carr's Welding Technologies have recently taken on small batches of laser fabrication work. This involves small assemblies (usually steel or stainless steel) being clamped into position and welded. Valve and spring plate assemblies are typical, where a neat laser weld makes the assembly one. The example in the photograph shows a valve arrangement welded on the end to make an air-tight seal.

Another application is to weld copper or brass wire or switch terminals onto semi-conductor bases. The laser welds non-ferrous materials very neatly with minimal heat input to surrounding electronics. Wires or terminals as small as 25 microns can be welded.

A fully welded connection is better than a soldered or brazed join as it would withstand higher temperatures. For example thermocouples, working in a high temperature environment can be welded into place rather than brazed.

If you have an application for this process, please contact Phil Carr.