



# CARR'S UPDATE

## Laser Welding with Angled Head

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### Toolroom services at

#### Carr's:

- Laser welding all metals.
- Cold pulse welding to steel.
- Brush-on metals to steel & copper alloys.
- Hard banding with PTA.
- Ali-weld brazing to aluminium.
- Welding on site.
- Polish and texture repairs.

Carr's have found their new laser's angled head a great advantage in their flexibility for welding tools. Larger inserts can be laid flat on the machine and the correct angle can be achieved. This ensures the welding conditions are just right. The correct angle is so important, if there are to be no undercuts or sinks around the welds. Also the reflection damage can occur if the angle of incidence on the tool surface is too steep, the angled head helps minimise this effect.

For more information talk to Bob or Phil.



*Carr's new laser welder with angled head allowing better access to the welded area.*

### Mould repair with Pulse Welding.

Cold pulse welding has been offered by Carr's for 10 years this year. After 10 years, the jobs that it can do are well defined. Yes, the laser has taken away a lot of the small edge, damage type jobs, but the pulse welding still comes up trumps, when a controlled thickness of metal is needed. This cavity needed 2 areas, one at 0.3mm and one at 0.5mm. Allowing 0.05mm for sparking, the tool is modified with no distortion or sinks. Don't forget that the pulse welding comes to you on site, if a large tool needs welding in the press.



*The cavity needed modifying by a controlled thickness.*

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Now includes this newsletter and the last few newsletters.

Send mail and photos  
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## Profile on Ian McLachlan

Ian McLachlan has been with Carr's for a few years now. He has spread the Carr's word in the North and has worked closely with a few companies, whose high quality tooling has benefited enormously from the laser work that Carr's have done for them.



*Ian McLachlan, Carr's agent in North England.*

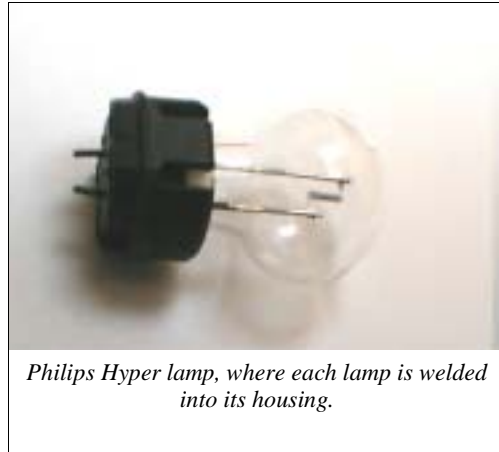
Some toolmakers doing mobile phone work, cannot believe the accuracy of the laser. They now use welding where they would not have been able to, and consequently Carr's have saved these companies a fortune. Less re-makes and more on-time deliveries.

***You still cannot see where you have laser welded a tool.***

## Philips Hyper Lamp

Philips, the automotive lighting giant have designed a new fit-for-life lamp. The new design has incorporated a larger tungsten filament and with the increased pressure and mounting arrangements, the lamp will now last the length of the car itself.

The savings to be made are that no removable parts and bayonet connectors are necessary. Carr's are the approved laser welding contractor for the UK to weld these lamps to their housings.



*Philips Hyper lamp, where each lamp is welded into its housing.*

## Interplas Show

Carr's Welding teamed up with their name-sakes, Carr's Tool Steels for the Interplas Show at the NEC Birmingham, last year.

Carr's Welding Technologies met a number of Carr's Tool Steels' customers and a few of the technical representatives of some of the biggest European tool steel manufacturers on the stand. A good transfer of technological information changed hands over the few days, to benefit both parties.

Carr's Welding Technologies hope to further their relationship with Tool Steels for future cross referencing of information and technology.



*Alistair Houghton at the Interplas Show in 2002. Carr's showed live laser welding at the show on the Carr's Tool Steel stand.*