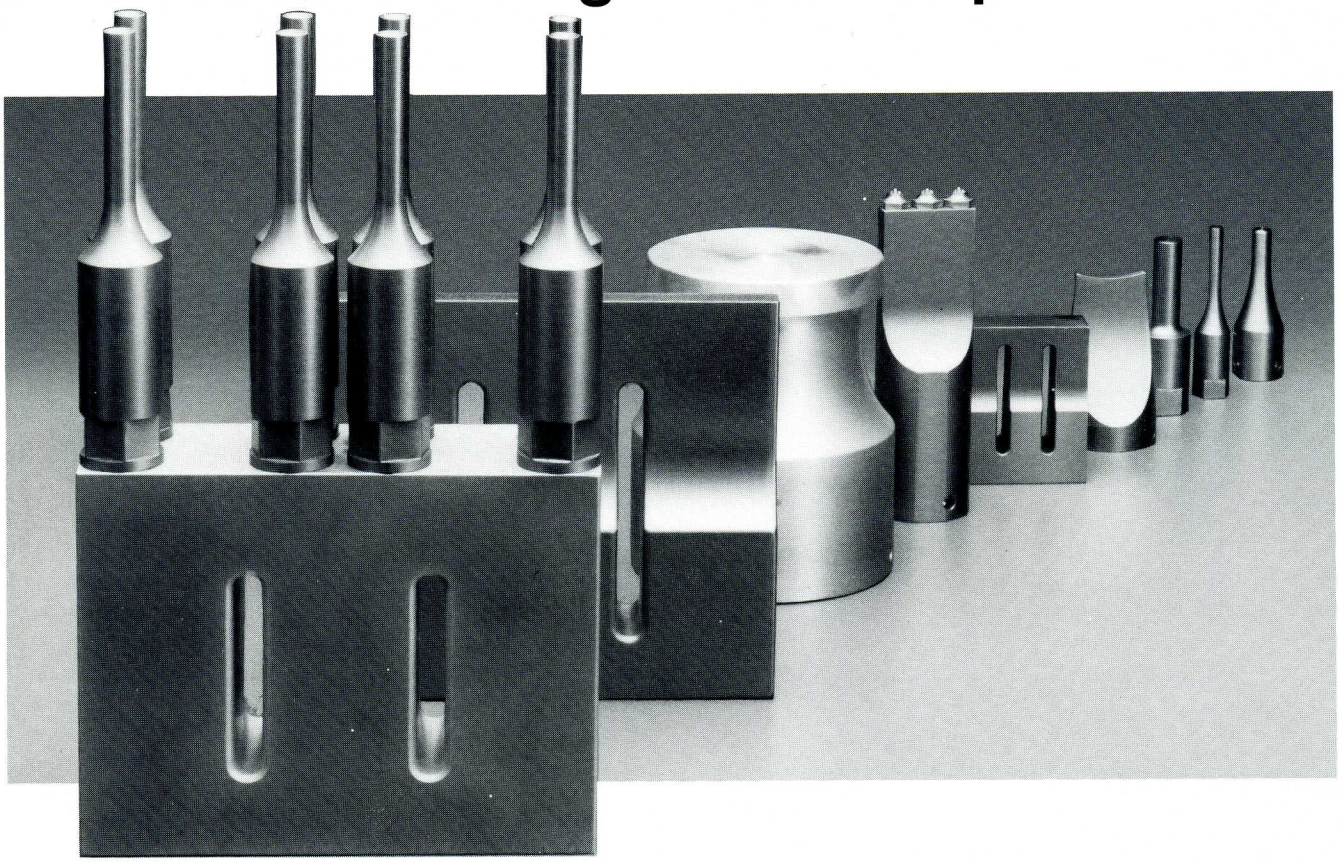
HARD FACTS

UNION CARBIDE COATINGS SERVICE

UCAR® D-Gun™ Coatings can improve wear life on Ultrasonic welding horns and tips.



Ultrasonic welding horns and tips are subjected to abrasive wear from aggressive fillers in the resins.

Horns have limited cycles and are expensive to replace. Tips often are part of an automated procedure where limited cycles cause production shutdowns.

When either part wears, it is very costly—both in replacement and downtime.

Two case studies.
An automotive customer staked some 15 areas in a single automated operation on a glass-filled resin making dashboards.

When the tips wore, he had to stop the line and install replacements, which were quite costly. Another customer who made computer components encountered expensive horns wearing at an extremely high rate in mineral and TiO_2 filled resin.

Re-engineering the part was considered, even though the cost would have been substantial.

Fortunately, the popular tip and horn base metals—titanium, aluminum and D-2 steel can have a thin, hard, tough material applied by the Union Carbide D-Gun coating process which will allow these tools to produce about five times more product before replacement.

The results:
The automotive customer's tips received .001″ to .002″ of a D-Gun applied alloy which resulted in eight times the normal wear life.

The computer component customer's horns were also coated with the same D-Gun alloy and were able to produce four times more product.

Then he sent the tool back to Union Carbide, where the residual coating was stripped and the part recoated, which saved the tool from having to be scrapped time and time again.

For details and pricing call 1-800-822-7284 (1-800-UCAR CTG) or (317) 240-2400. In Canada, call 1-800-441-7717.

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