

## METAL SHRINKING SERVICE

MCL offer a 24 hour Metal Shrinking service. Our technicians will shrink components to be fitted by our customer using liquid nitrogen immersion.

## **Benefits**

- Fast and predictable. May take only minutes
- Can provide a precision fit
- Components reach ambient temperature more quickly than if heated
- Will not cause damage to most ferrous and non ferrous metals
- No metal discolouration which may be produced by heating
- Heating is slow, may take hours, and may cause distortion and damage
- Metal Shrinking may eliminate the need for machined keyways
- Shrinking may be used to dismantle assemblies
- Shrinking is precise

Metal	Shrinkage*
Aluminium	3.8
Brass	3.4
Steel	1.9
Cast Iron	1.8
Copper	3.0
Magnesium	4.5
Nickel	2.1
Zinc	5.4

Cooling from ambient to -196°C
Liquid nitrogen Metal Shrinking can
accommodate the majority of interferences
found in engineering assemblies
\*Thousands of an inch per inch or
microns per mm diameter







We welcome evaluating your application and advising on the most suitable process for pipework isolation.

## MIDLAND CRYOGENICS LIMITED

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