

Metro-FORM

Silicone-based polymer for non-destructive measurement of internal dimensions



Metro-FORM is a silicone based polymer that can be injected into blind holes, internal cavities and threaded components.

Where conventional techniques would involve the destructive testing of a component, Metro-FORM allows a highly accurate internal representation of the component to be made, leaving the original test piece intact. The moulding can then be easily removed and measured using standard non-contact gauging equipment.

Metro-FORM offers a unique solution for rapid, repeatable and accurate gauging of intricate internal features.

- Fast and easy to use
- Minimal shrinkage ensures accurate measurement
- Range of compounds to suit different components
- Suitable for a wide range of measurements including: internal threads, injectors, mould cavities, dies, internal bores, blind holes



The high performance silicone polymer is elastic enough to allow removal, but stable enough to reproduce the moulded shape to a very high level of accuracy. A range of silicon compounds is available to ensure maximum accuracy for component parts.

The easy to use Metro-FORM kit allows for rapid preparation of internal feature mouldings, on the shop floor. In a matter of minutes, these can be removed and accurately measured using non-contact optical measuring systems. The original component is left undamaged.

Everything needed to create the moulding is included in the kit. Production downtime is minimised and test component scrap is eliminated.



Each Metro-FORM kit consists of:

- Rugged carry case
- Two cartridges of each compound type
 - 2 x ZA912 (soft green)
 - 2 x ZA914 (orange)
 - 2 x ZA916 (firm red)
- Dispensing gun
- Assorted nozzle types
- Micro-funnel set (for small orifices)
- Detergent bottle for grease removal
- Putty to seal off open channels & create hand-holds

Technical Specifications

Three compounds of varying hardness are available, the choice of compound depending on the type of feature to be measured.

- Green is the softest compound, suitable for complex internal features or where the most flexibility is needed to remove the moulding from the component.
- Red is the hardest compound, suitable where little manipulation is needed to remove the moulding.

Compounds can be mixed in applications where a range of properties are required.



Technical Data			
Compound	ZA912 Green	ZA914 Orange	ZA916 Red
Hardness (Shore A)	20	40	60
Setting time (mins and 23°C)	25	25	25
Linear shrinkage (max. after 5 days)	0.04%	0.04%	0.04%



For more information...

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