TECHNICAL BULLETIN

FIP Gaskets – Cheaper Than You Think?

Form-in-place (FIP) gaskets have been part of the mainstream enclosure industry for many years, but the cost and physical size of robotic application has been a major constraint for SMEs — until now.

We have focused on **bench-top robotics** and matched compliant gasket materials to provide low cost equipment to suit boxes or housings from 200mm x 150mm, e.g. junction boxes, terminal boxes, control boxes, electronic housings, small mechanical gearboxes or other. They have dramatically cut entry cost to around £5,000 on the smallest — with larger standard equipment running right up to 800mm x 600mm machines, and larger still on a custom basis.
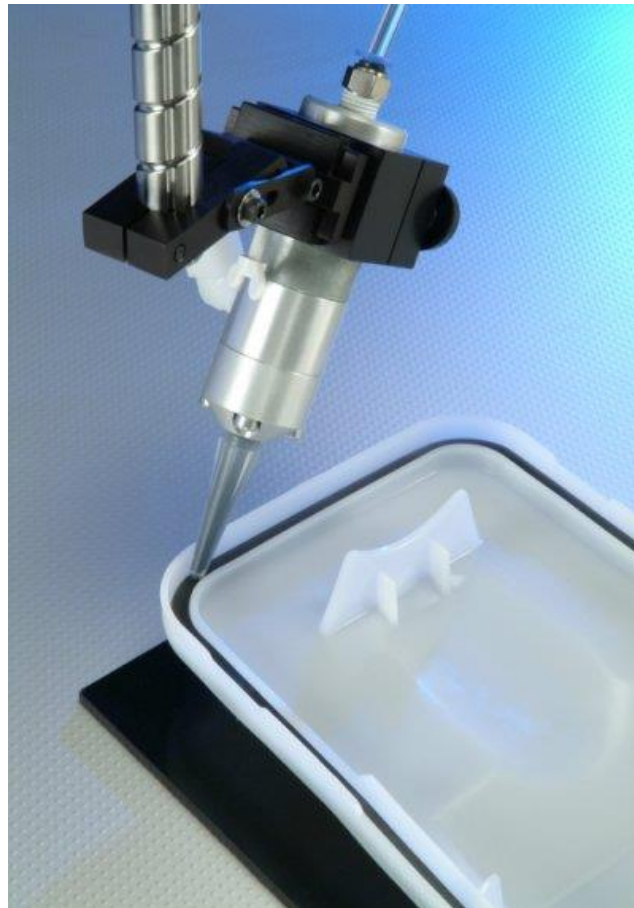
FIP gaskets are a recognised, well proven, low cost and high speed cure alternative to manually applied 'O' rings or expensive, complex pre-moulded gasket. However, FIP is a process that is impossible to achieve successfully by hand - but very successfully achieved, cost effectively even for small numbers, with a Fisnar bench-top robot which has the flexibility to program quickly, save programs and change set-up at the push of a button. A wide range of dispensing set-ups and **dispensing valves** can be added to the robot to give very fine control over materials bwhich are fed from cartridges or bulk.

When matched with **RTV silicones** or light-curing gasket materials from DYMAX, this equipment enables complex 2D and 3D gasket shapes to be dispensed at high speed and with 100% repeatable accuracy. UV

light curing FIP or CIP (Cure-In-Place) gasket materials offer significant advantages in cases of high throughput or fast turn-around.

Fast cure FIP gaskets eliminate many manual and 'waiting' processes of other systems, as well as the high investment and stocking costs of pre-moulded injected gaskets. FIP gaskets offer design and production flexibility as well as very high quality sealing — they are now also cost effective for small batches, prototypes and even one-offs.