

SCREW-SERTS FOR THERMOPLASTICS

0890



Screw-sert is a self-tapping insert suitable for installation into a wide range of thermoplastic materials.

They are particularly suitable for applications involving high 'jack-out' loading and materials with low core strengths, e.g., medium density rigid foams.

ADVANTAGES ■

- High pull-out resistance
- Ideal where "jack-out" loading is unavoidable
- Can carry high loads in "weak" plastics

DESIGN GUIDE ■

- **Hole preparation** Hole diameter will vary with the type of plastic material used — hard plastics will require larger holes than softer plastics etc., For this reason the data tables show the hole size range recommended. Exact hole size is best determined by pre-production trials — please consult P.S.M Technology Centre. Holes should be moulded, but drilled holes can be used. A reduction in pull-out performance however, may be encountered. A 60° countersink at the top of the hole is strongly recommended in order to avoid risk of chipping to surrounding surface. The depth of the countersink should be equal to the external thread pitch of the insert. Taper on moulded holes should not exceed 1°.
- **Type of loading** Direct torque loads should be avoided.
- **Installation** The insert is installed using traditional tapping principles. A 'snap-break' tool is required to allow the threaded mandrel to withdraw from the insert after installation. Installation can be carried out using a hand tool (where volumes are small), a tapping head attachment for a pillar drill, a standard tapping machine or fully automatic installation equipment.
- **Applications** Screw-sert is particularly recommended for plastics with inherently weak core structures, e.g., Rigid plastic foams or any application where high pull-out resistance is the major requirement.