

Fasteners for  
Thermoset Plastics

# POLYMATE TYPE DURO SCREW

The DURO TYPE thread-cutting fasteners are designed to meet the demanding requirements of thermoset plastics with easy assembly coupled with a strong, reliable joint to ensure optimized assembly performance.

## KEY ADVANTAGES

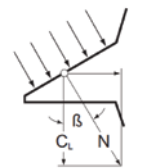
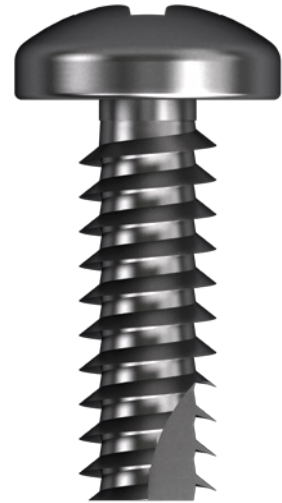
- Capable of cutting threads in harder plastics
- Maximizes assembly performance
- Minimizes installation torque

## SPECIFICATIONS

- Diameter sizes of metric or imperial system and up to 100mm under head (other sizes available upon request)
- Head styles: pan, flat, hex, round washer, oval, button head, filister
- Special Shoulder screws, sems, double end studs, collar studs; others as required

## BENEFITS & FEATURES

- Provides an asymmetrical 30° thread profile, inclined towards load surface to increase friction ( $F_R$ ) between the application and the fastener
- Reduction in radial stress
- Reduction in back-out caused by relaxation
- Increase in strip resistance
- Elimination for the need in supplementary locking devices
- Optimal thread pitch allows for deeper thread engagement
- Increase in pull-out strength
- Increase in resistance to vibration loosening
- Increase in load-carrying capability
- The recessed thread root allows space for displaced material
- Minimization in installation torque
- Minimization in the risk related to clogging and galling of threads during assembly
- The shank slot minimizes chip production
- Through hardened to Rc 33-39



$$F_R = \mu \times N$$
$$N = C_c / \cos \beta$$

