

PEM® TSO4™ Self-Clinching Threaded Standoff Fasteners Securely Stack or Space Components in Ultra-Thin Stainless Steel Assemblies

PEM® TSO4™ self-clinching threaded standoffs from PennEngineering® offer reliable fastener solutions to securely stack or space components in ultra-thin stainless steel assemblies. These hardened stainless steel fasteners clinch into stainless sheets as thin as .025" / 0.63mm and become permanent parts of an assembly. The standoffs ultimately will reduce the amount of required hardware in an assembly, promote thinner and lighter designs, and minimize typical handling issues associated with loose hardware.

Among unique design features, the fastener's thread design at the barrel end minimizes the length for a mating screw. Shorter standoffs are typically thru-threaded and longer standoffs are blind. Thread-type variations with a thicker wall can further be specified to provide increased bearing surface for the mating component or panel. For applications in potentially corrosive environments, an optional nickel plating can be added for excellent corrosion resistance.

PEM TSO4 standoffs are available in thru-threaded or blind threaded versions and in a variety of lengths and several standard thread sizes (#2-56, #4-40, and #6-32 / M2.5, M3, and M3.5). They are manufactured from hardened 400 Series stainless steel for use in stainless sheets with maximum hardness up to HRB 88 on the Rockwell "B" scale or HB 183 on the Brinell scale.

The standoffs mount simply and quickly by pressing the fastener into a round hole in the host sheet and applying sufficient squeezing force using a standard press to embed the standoff's head flush in the sheet and complete the process. A single mating screw completes the attachment process.

Detailed specifications, fastener drawings and 3D models, and performance data (Bulletin SO) for these RoHS-compliant fasteners can be viewed and downloaded for free at www.pemnet.com.

Founded in 1942, PennEngineering (Danboro, PA, USA) is a global leader in the fastening industry with technical and manufacturing facilities in North America, Europe, and Asia supported by a global engineering-focused sales force and a worldwide network of authorized distributors.

For more information, visit www.pemnet.com, email info@pemnet.com, or contact Michael J. Rossi, PennEngineering®, 5190 Old Easton Road, Danboro, PA 18916-1000 USA. Phones: +1-800-237-4736 (toll-free in the U.S.) and +1-215-766-8853.

