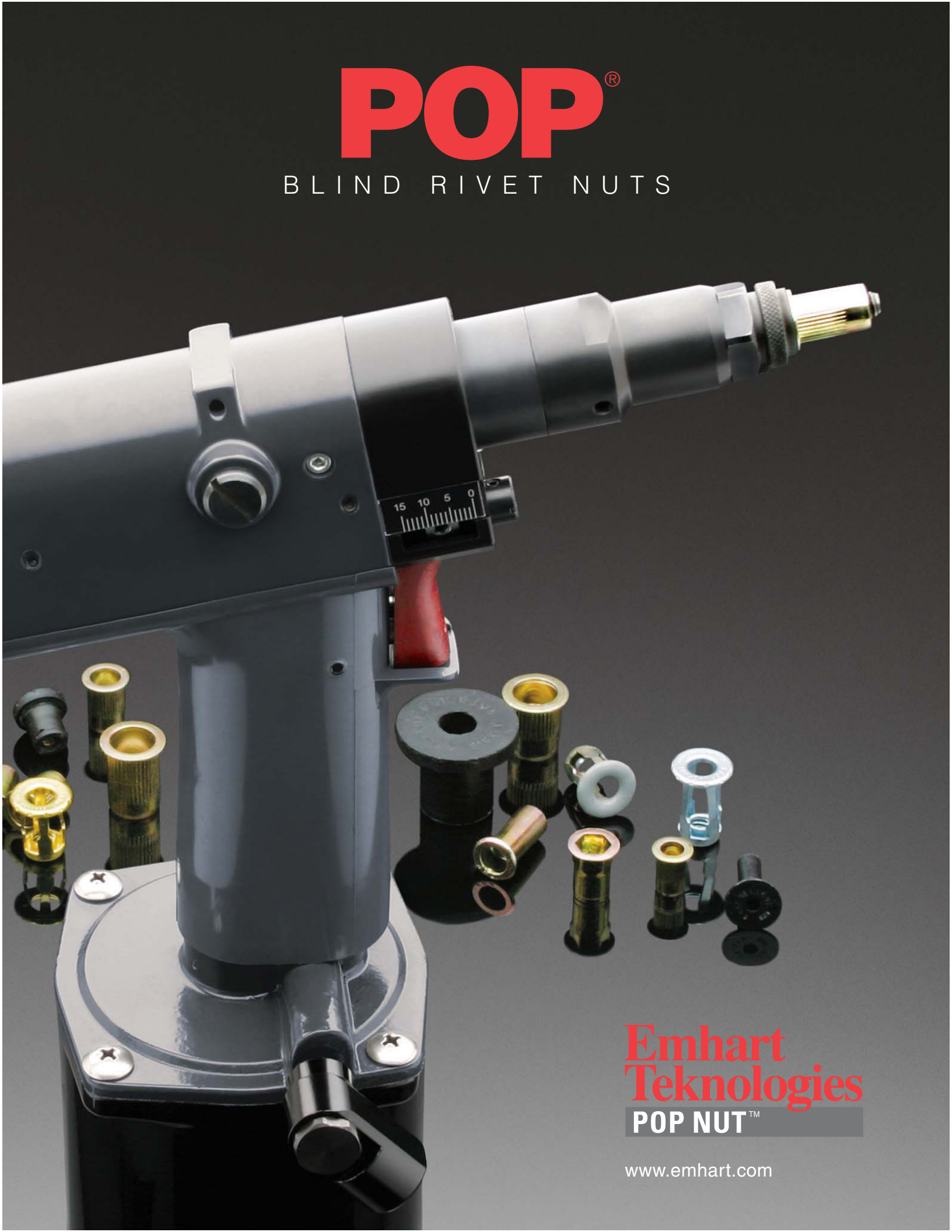
POP®

BLIND RIVET NUTS



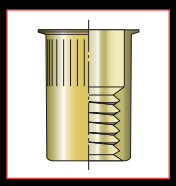
Emhart Teknologies

POP NUT™

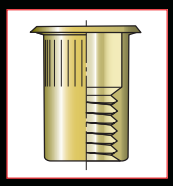
www.emhart.com

POP NUT™ Blind Rivet Nuts Introduction

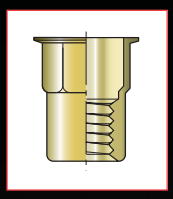
POP NUT brand blind rivet nuts are internally threaded rivets that can be installed into sheet-metal, tubing, extrusions, plastics and other materials.



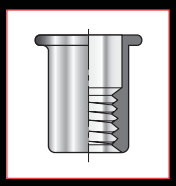
POP NUT™ TK
The POP NUT TK Round body thin head allows the mating part to install nearly flush without a recess or dimple in the parent material.



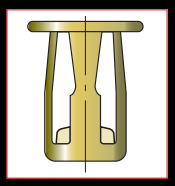
POP NUT™ TL
The POP NUT TL Round Knurled body flat head provides excellent spin out resistance in round drilled, punched or molded holes.



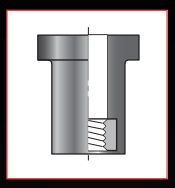
POP NUT™ TH
The POP NUT TH Hex body flat head provides excellent spin out in hex punched, laser cut or molded holes.



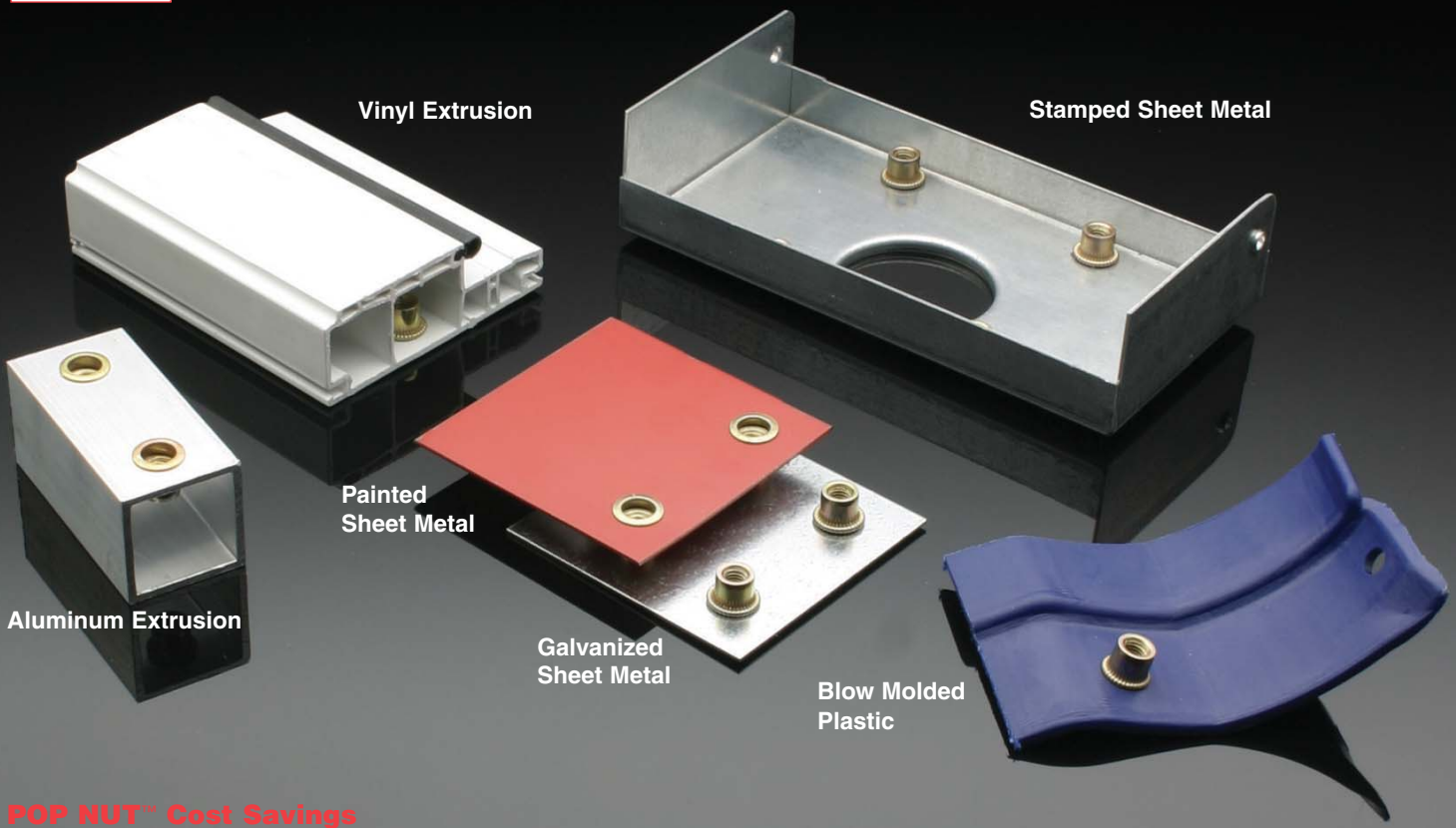
POP NUT™ ST
The POP NUT ST Round body flat head features a thick wall design that is ideal for push out applications such as leg leveling screws.



JACK NUT™
The JACK NUT Slotted body flat head design that is ideal for soft materials.



WELL NUT™
The WELL NUT is a rubber blind nut that is ideal for sealing and isolation against vibration, electrical conductivity and galvanic corrosion.



POP NUT™ Cost Savings

POP NUT brand blind rivet nuts offer various in place cost saving advantages.

- Installs blind using hand held or fully automated tool systems.
- Installs before or after paint as the installation tool and process will not damage the finish on the parent material.
- Can be installed into materials as thin as .020" (0.5mm) saving weight.
- Can be installed into galvanized or pre-painted materials without damage to the finish eliminating any rework.
- Can be installed with 100% assurance and accuracy of count with the POP NUT SmartSet tool system.
- Installation time is 2-3 seconds for an operator with a power tool, and 4-6 seconds for automation feeding, pick up and installation.

POP NUT™ Advantages

POP NUT fasteners can provide in-place cost savings versus other typical fasteners.

POP NUT™ vs. Weld Nuts

- The POP NUT does not require back side access in the design of the parent material. They are installed blind from the front side.
- The POP NUT can be installed after paint to avoid thread masking or plugging costs as with weld nuts.
- Weld nuts can warp thin materials due to heat. Thinner materials can be used with POP NUT.
- Weld splatter can clog threads causing 100% inspection of weld nuts to ensure no clogged threads. This does not happen with POP NUT.
- POP NUT can be installed without damaging galvanized or pre-painted materials. The dust and gas caused by weld nuts is eliminated.

POP NUT™ vs. Clinch or Pierce Nuts

- The POP NUT does not require backside access in the design of the parent material. They are installed blind from the front side.
- POP NUT has a wider grip range than clinch nuts so the number of parts can be reduced.
- POP NUT can be installed into pre-painted materials without damaging the paint.

POP NUT™ vs. Loose Hardware and Tapping Screws

- POP NUT is captive in the parent material.
- POP NUT makes the joint one sided for a cleaner appearance especially in tubing.
- POP NUT provides 6 full threads for increased thread strength in thinner materials resulting in overall lighter weight.
- POP NUT is a better alternative to tapping or forming screws when the consumer must install the screw.

POP NUT™ Installation Sequence

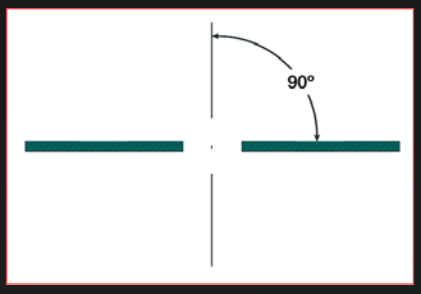
The POP NUT™ installation sequence is simple.

1. Push the POP NUT on the tool mandrel and it automatically spins on.
2. Place the POP NUT in the hole in the parent material.
3. Pull the trigger on the tool. The POP NUT collapses and forms a flange on the back side of the parent material. The tool automatically reverses and unthreads from the POP NUT.
4. Attach the mating part with a screw and tighten.

POP NUT™ Joint Design

The information on this page gives some best practice guidelines about proper joint design for the POP NUT.

Making the Hole in the Parent Material



The hole for the POP NUT must be square to the parent material. Holes drilled or punched on an angle can cause premature tool mandrel wear issues. Back side burrs or punch tabs should also be removed so the back side flange can form symmetrically and flat. A tapered parent material will cause tool mandrel wear issues.

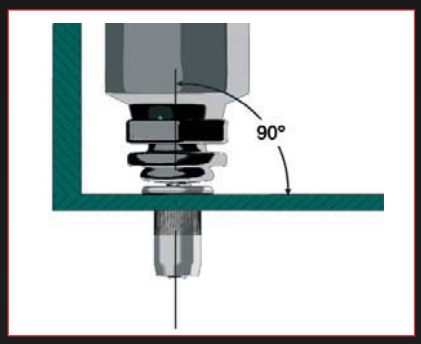
Grip Range

The parent material thickness must be within the grip range of the POP NUT. Softer materials such as plastic allow the POP NUT to expand in the hole reducing grip range. Testing is required to determine the optimum grip in plastics.

Backside Clearance

If the POP NUT will be used in a tube, extrusion or other application that is closed on the back side, there must be sufficient space for the POP NUT to fit in the hole before installation.

Installation Tool Access

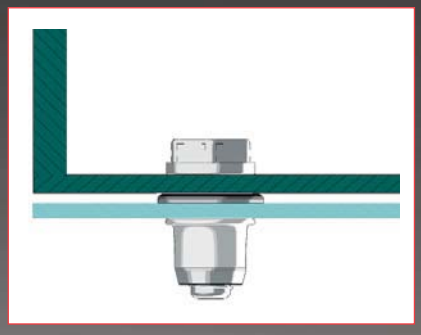


The POP NUT tool must have perpendicular access to the parent material. If the tool is held on an angle, premature mandrel wear can occur. Special nose pieces can be developed to avoid obstacles.

The Mating Part

The mating part should have a hole size that is smaller than the POP NUT head diameter to assure contact with the head. If alignment tolerances are needed then the hole in the mating material should be slotted so the parent material remains in contact with the head of the POP NUT.

The POP NUT™ Joint and Mating Screw



The ideal POP NUT joint is one where the mating part is non-rotational and contacts the head of the POP NUT. The tighter the screw gets the tighter the POP NUT becomes. The mating screw can be up to Grade 5 or metric class 8.8. If the mating screw has a prevailing torque locking device, it is best to choose a hex body POP NUT. The mating screw should thread through the POP NUT by 2 threads.