



When to choose POWERLOK® with MATpoint® screws?

POWERLOK® screws combined with MATpoint® are recommended to solve vibrational loosening problems and prevent cross-threading during assembly in tapped holes.

- Ensures consistent locking action in difficult environments: assemblies exposed to vibration, high temperature and expansion/contraction cycles.
- Highly recommended for assemblies on soft metal or nut members with potential thread imperfections.
- Ideal for automated assembly lines, installations in horizontal position and assemblies with high risk of misalignment.

Benefits

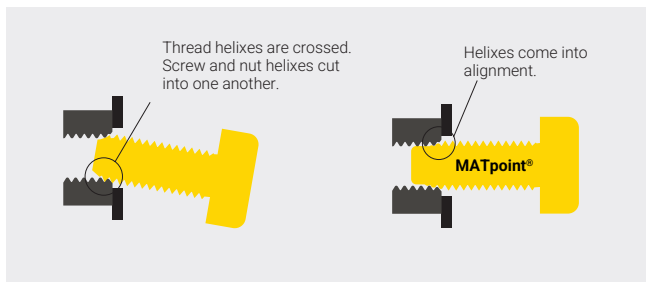
- **Eliminate the need for additional locking elements** such as adhesives or washers, reducing assembly time and cost.
- **Ensure continuous and immediate locking action**, providing reliable resistance to loosening caused by vibration or expansion/contraction cycles.
- MATpoint® **prevents cross-threading and false threading.**
- Enable smooth engagement and precise alignment in horizontal, automated, or robotic assemblies, **minimising line stoppage, scrap and rework.**

How do POWERLOK® with MATpoint® screws work?

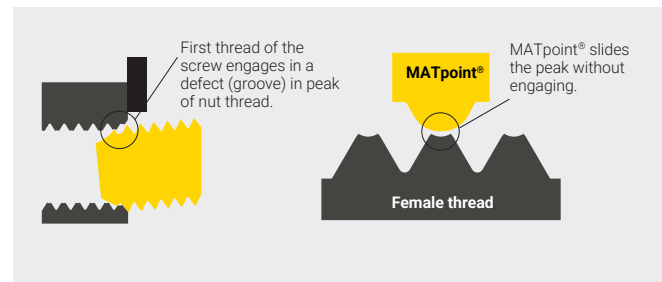
POWERLOK® screws combined with MATpoint® screws address two critical assembly issues:

1. Thread misalignment (mainly cross-threading and false threading)
2. Vibrational loosening

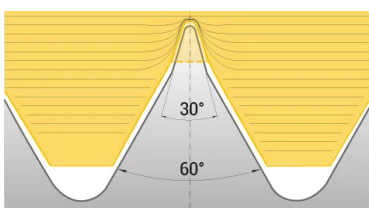
Cross-threading



False threading



MATpoint® guides the screw tip during installation; when encountering thread imperfections, misalignment, or incomplete threads—especially common in soft metals—the rounded thread of MATPoint® slides past these defects and engages reliably without jamming or damaging the nut threads.



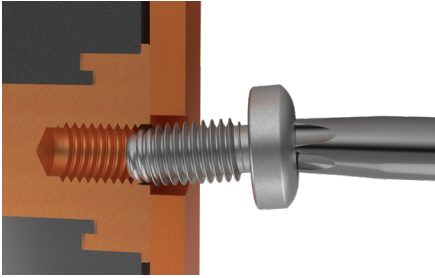
Screw driving
Direction of head

TRILOBULAR® POWERLOK® screw for metal is a unique locking concept solution for tapped holes.

- The innovative Dual-Angle™ thread form provides “live-action” locking along its entire length, regardless of the nut tolerance and operating temperatures.
- The 30° tip interferes with the root of the nut thread, which removes any tolerance and cause the screw to self-lock.

As a result, the combination of POWERLOK® with MATpoint® solves the critical problems of thread misalignment and vibrational loosening, delivering more reliable assemblies and minimising line stoppages, scrap, and rework.

Main POWERLOK® with MATpoint® applications



POWERLOK® with MATpoint® are recommended for:

- Automated and robotic assemblies.
- Assemblies in nut members made from soft metals such as copper or aluminum.
- Installation in horizontal position.
- Components with high electrical grounding requirements.
- Assemblies involving heavy screws, such as screws with washers or extra-long screws that are more difficult to align during installation.

Screw design specifications

POWERLOK® with MATpoint® can be produced under different head designs, recess types, diameters, lengths, and coatings to meet your specific requirements.

This combination is feasible with POWERLOK® II™ screws.

For more information, contact our application engineers.



Further information at: www.celofasteners.com
Contact us by E-mail: celo@celo.com