

Powerite[®]

Next generation thread tapping - optimised for load capacity and climate-friendly

The market's demands

- + Secure assembly and maximum operational reliability
- + Optimising installation space
- + Reducing weight
- + Increasing productivity
- + High assembly clamping forces
- + Vibration resistance
- + Insensitive to tolerances
- + Repairability ensured

ARNOLD provides the solution

Powerite[®]

- + Optimised for load capacity
- + Smaller installation space
- + Climate-friendly
- + Cutting costs



Watch how Powerite[®] works

ARNOLD UMFORMTECHNIK provides an extensive selection of videos and animations. Just scan the QR code above or visit our website and click on our Youtube channel ARNOLD TV.

www.arnold-fastening.com

Powerbite®

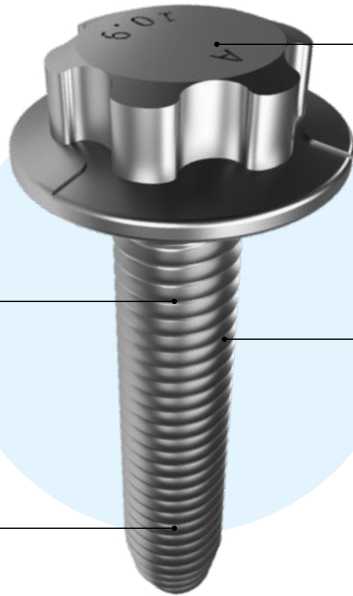
Characteristics and Applications

Round cross-section in load area

- + Over-dimension generates a fully load-bearing nut thread
- + Can be designed for over-elastic assembly and to reduce screw-in depth

TRIOBULAR® thread-forming zone

- + Low tapping torques
- + High level of process reliability during assembly



Low Profile Head

Customized solutions also available

Higher load capacity

- + Greater stress cross-section generates higher tension failure forces
- + Core diameter as per DIN
- + External diameter > tolerance 6h

Technical advantages of Powerbite®

- + Tapped nut thread has increased load-bearing capacity > 20% compared to other thread tapping screws
- + Larger core hole tolerances are possible to optimize lightweight metal casting processes
- + Clamping force level similar to metric screws possible
- + High assembly reliability
- + Tapping torque conformity to standards
- + Over-elastic assembly is made possible, even in conical core holes cast in die-cast aluminum
- + Can be used in steel, aluminium and other lightweight metals
- + Repeatable screw fastening possible
- + Can be replaced by metric screw if needed during a service

→ Applications



Aluminum direct screw fastening



Steel direct screw fastening



Magnesium direct screw fastening



Direct screw fastening into sheet-steel

Commercial advantages of Powerbite®

- + Overall fastening costs reduced by up to 85%
- + Opportunity to reduce size
- + Optimising installation space and weight
- + Slimmer upstream processes in lightweight metal component manufacture
- + Efficient solution without ancillary elements
- + CO₂ savings up to 20%



Learn more
about the load capacity optimized thread-forming screw Powerbite® and its applications

www.arnold-fastening.com