MaggCert ® Threaded Insert for Magnesium



Acument Global Technologies

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Applied soutions.

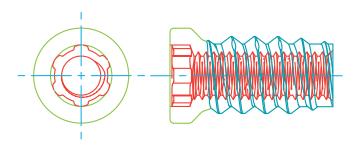
MaggCert® threaded insert is a thread forming insert for magnesium automotive components that allows machine screws to be applied at final assembly and later removed and reinstalled for servicing. It bypasses the need for hole tapping operations, minimizes debris generation during installation, virtually eliminates serviceability problems caused by galvanic corrosion. MaggCert® threaded inserts combine high mechanical strength and quick removal and reinsertion of screws, without serious concerns over galvanic corrosion. They provide a securely anchored joint and establish a fastening point for standard machine screws."

Features

- MagForm® external threads
- Standard Machine Screw interal threads
- Torx Plus® Drive System

Benefits

- · Eliminates need to tap threads
- · Makes magnesium joints fully serviceable
- · Requires minimal end load to start
- · Virtually eliminates thread forming debris
- Eliminates magnesium thread damage during service
- · Uses machine screws at final assembly





Specifications

• Available in sizes M4, M5, M6, M8 and M10

Industry Applications

- Engine Block
- Seat Frames
- Power Tools
- · Radiator Supports
- Cross Car Beams

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MaggCert steel inserts have the same broad flank angle as Acument Mag-Form® thread forming screws, compressing rather than roll forming threads into die-cast magnesium. The Mag-Form design eliminates thread fractures while decreasing shear stress. MaggCert external threads and machine screw internal threads are packaged into a thin head design installed by an Acument Torx Plus® drive bit, elliptically shaped to broaden contact surfaces while maximizing driver engagement and torque transfer. A zero degree drive angle eliminates radial stresses and straight sidewalls prevent camout.

Magnesium applications offer significant cost savings and numerous other benefits versus steel and aluminum, but present a new variety of challenges due to its low ductility and corrosion concerns. MaggCert® Threaded Inserts overcome those typical fastening problems, providing cost savings and improved product.





Threaded Insert for Magnesium

With TORX Plus® Drive System as a base, MaggCert™ Threaded Inserts take on an impressive role.

MaggCert™ threaded inserts use all the features and benefits of TORX Plus® Drive System to your best advantage. It's longer tool life and optimal torque transfer have increased product reliability, increased productivity, and reduced total assembly costs on assembly lines in a multitude of industries around the world.

Features

- 0° drive angle
- · Elliptical geometric configuration
- · Large cross-sectional area at lobes
- · Vertical sidewalls

Benefits

- Provides an average 100% improvement in drive bit life
- Can reduce assembly downtime by reducing the number of bit changes and rework
- · Optimizes torque transfer
- · Virtually eliminates camout
- · Reduces end load and worker fatigue
- · Reduces annual drive bit costs

Acument Value Analysis / Value Engineering Services

Acument® Global Technologies' VA/VE is a cross-functional, highly creative, systematic approach in which cross-disciplined Acument® engineers interact directly with your team to help you eliminate or prevent unnecessary costs. However, Acument® VA/VE means much more than cost reduction. Acument® VA/VE engineers work directly with your team to effect changes that while reducing overall costs will improve the process efficiency and/or product quality. Acument® offers seven distinct VA/VE programs to help you realize the highest value for your product.

Product Assembly Map

The Acument® Product Assembly Map program engages a cross-functional, cross-disciplined team to review your finished product through disassembly and breakdown of individual subcomponents to help us determine our capacity to supply you with the best fastening solutions.

Product Teardown

The Acument® product teardowns/dissassemblies are conducted to help you reduce your overall costs through product dissassemblies. The teardowns target design changes that reduce overall product cost or improve product quality, while increasing process efficiency.

Line Review

The Acument® VA/VE team conducts a thorough review of your assembly line with the objective of increasing value by reducing assembly costs through part or process changes and at the same time increasing your product quality.

Line Touch

An Acument[™] engineer focuses on a single application or station on your assembly line to solve a single problem with a limited scope.

Cost Reduction

An Acument® engineer focuses on optimizing part design and reducing the manufacturing cost of a part to help you meet your price reduction targets.

Benchmarking

An Acument® team reviews similar products from multiple companies to determine our ability to supply you with the best solutions.

Fastener Consolidation Program

The Acument® team reviews and filters all of your fasteners for commonization and consolidation into like products. This program simplifies your bill structure and part management costs and reduces your total purchased cost.



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