

# MATHread® Anti Cross-Threading Feature

*PennEngineering is a licensee for MATHread® anti cross-threading technology. Originally developed for the demands of the automotive industry, this patented design helps speed assembly and reduces or eliminates failures, repairs, scrap, downtime, and warranty service associated with thread damage.*

*This unique anti cross-threading feature is offered on most PennEngineering® externally threaded products including studs and panel fasteners. Now, in addition to automotive, other manufacturers of medical, recreation, telecom/datacomm, avionics, and computer equipment can all benefit from this advanced thread technology.*

*Try it for yourself or go to [www.mathread.com](http://www.mathread.com) for a demonstration.*

- **Never cross threads!**
- **Eases assembly!**
- **Aligns components!**
- **Slides through clogged internal threads!**
- **Available on all externally threaded fasteners!**

*MATHread is a registered trademark of MATHread Inc.*



*PEM® studs with MATHread design*



## How it works:



- ▶ **Misaligned Axis:** The versatile MATHread design allows the designer to select the point shape best-suited to feed well in the application.



- ▶ **Threads Cam:** As the threads come into contact, the patented anti-cross MATHread design begins to cam over the female thread.



- ▶ **Threads Drive Normally:** The MATHread design forces the two thread helixes to align every time without fail. The fasteners then drive easily with reduced effort.

## PennEngineering®

[www.pemnet.com](http://www.pemnet.com)