



CASE STUDY:

# CUSTOM PEM® SOLUTION DELIVERS MECHANICAL FAIL-SAFE FEATURE FOR GLOBAL TECH COMPANY

Currently in pre-production with a planned 2020 launch date, this new custom PEM® fastening solution is a highly modified TD™ cable tie-mount fastener for a leading global technology company.

The TD™ pin product will be installed in the customer’s large 4U server racks and is specifically designed to differentiate between the AC and DC power supplies.

## CHALLENGE

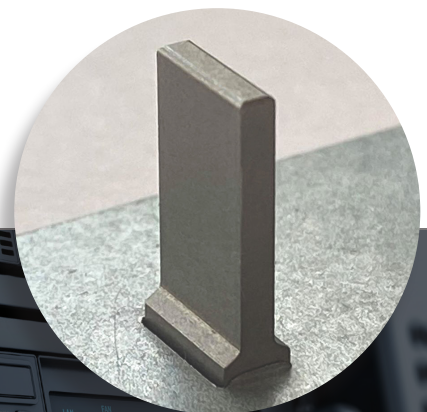
- Customer’s current server rack assembly did not provide any differentiation between the AC and DC power supplies
- The current rack assembly had caused significant, costly errors due to the accidental installation of the wrong power supply into the server unit
- The customer reached out to PennEngineering®, asking for their help to design a solution that would help prevent installation errors from reoccurring

## TOTAL SOLUTIONS

- Considerable time was spent designing, developing and testing a customized fastening solution that would meet the critical specifications for this unique and challenging application
- The new PEM® TD style pin solution is the result of PennEngineering® working closely with the customer’s engineering team during the early design stages for their next generation server chassis
- The new pin design allows it to act as a mechanical fail safe for the server’s power systems – preventing future errors due to the wrong power supply being installed into the wrong server unit

## RECOMMENDATIONS

- Through smart engineering and extensive application testing, PennEngineering® surpassed all customer requirements and created a fully custom pin solution unlike anything else currently offered in the PEM® product catalog
- Production volume is currently estimated at 120,000 parts per year



**Mechanical Fail-Safe Capabilities for Server Application**