



CASE STUDY: PEM® SPOTFAST® FASTENERS FOR SERVER MOUNTING RAILS

When a new rack-mountable server from a leading tech company (and PennEngineering® client) entered the market, it was considered a breakthrough product - streamlined with considerable flexibility in storage, serviceability, and remote management.

CHALLENGE

The server was produced by the tech giant for nearly a decade. During that time, several hardware upgrades were made to the product, including a move to different processors. The design of the new processors required our client to create a more dense server in a smaller profile, which required a new configuration for their rackmount rails.

SOLUTION

PennEngineering® was tasked with designing an alternative fastening solution for the current rail configuration. The client needed a low profile and strong attachment point for their rackmount rails, and the PEM® SpotFast® self-clinching fastener was the ideal solution for the application.

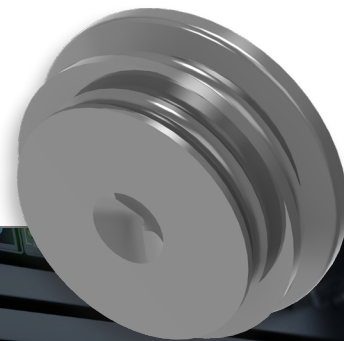
- SpotFast® fasteners create a permanent, flush joining of 2 sheets
- Designed for metal to metal attachments and metal to PCB/ plastic panels
- Unlike rivets that 'bulb' during installation, the flush profile of SpotFast® fasteners allow for unobtrusive attachment requiring minimal space
- A smooth surface is retained for finishing, and fasteners can be easily concealed with paint or powder coatings

RECOMMENDATIONS

Working closely with our client, PennEngineering® developed and tested a new SpotFast® design that would work with the rackmount rails' stainless panels and meet the low profile and strong attachment point specifications.

The custom solution - the YC-18869 SpotFast® Fastener - helped our client meet their challenge of creating a more dense server in a smaller profile.

Approximately 1.5 million SpotFast® fasteners were produced annually by PennEngineering® until our client stopped production of the rack-mountable product.



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