Innovative Solutions from

Emhart Teknologies

A BLACK & DECKER COMPANY

Manufacturer of medical products finds prescription for reducing high assembly costs.

Application:
Medical Cabinet Assembly

Challenge

The customer wanted to upgrade their procedures for construction of medical cabinets. The current method used an off-the-shelf self-plugging style blind rivet. Over 50% of the installed rivets required rework to grind down a protruding mandrel after setting. This rework required 10 seconds of additional labor per rivet.

Customer Requirements

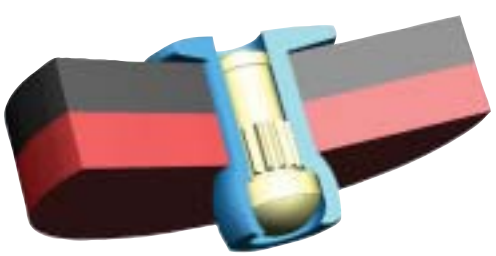
- Increase throughput
- Reduce labor costs
- Minimize noise and vibration harshness

Solutions

Emhart engineers recommended two POP® brand self-plugging rivets with custom flush-breaking mandrels. The combination of the custom domed head and countersink rivets eliminated the inefficient rework requirement completely.

Features & Benefits

- Rattle resistant
- Vibration resistant
- Automation efficient
- Decreased in-place installation cost
- Eliminated grinding procedure



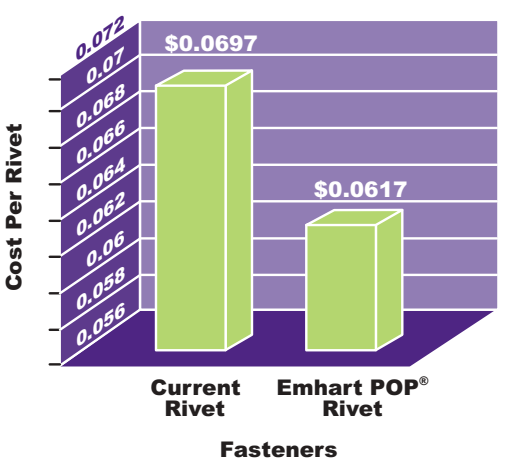
Cost Benefit Analysis

PROJECT DATA

Fasteners per Unit 280
Annual Unit Build 7,000
Total Annual Fasteners. 1,960,000

	Present Method	Proposed Method
	All items per piece	
Installation Time (secs)	6.0	6.0
Secondary Grinding per rivet	$0.018	$0
Installed Cost	$0.0697	$0.0617

Installed Cost



INSTALLED COST ANALYSIS

Savings per Unit $2.24
Annual Cost Savings. $15,680.00

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