framatome

Electrical Panelboard Retrofit and New Replacement Solutions

Improve equipment reliability, enhance operational excellence and lower cost through a new replacement panelboard chassis with simple installation and an optional one-piece busbar design

Challenge

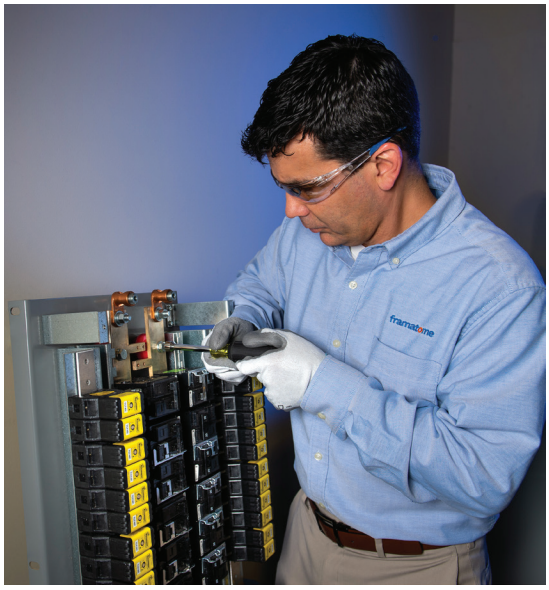
AC and DC panelboards are essential to the operations of nuclear plants, providing both control and current protection for vital loads. Plant operators are facing panelboard obsolescence and aging issues, especially with vintage breakers and switches. The reliability of the power distribution system is critical, and the consequence of a failed circuit can be significant.

Solution

Framatome provides custom retrofit panelboards to the nuclear industry. Replacement solutions are provided for both Class 1E safety-related and non-safety-related applications to ensure reliable plant operations beyond the initial licensed plant life. Framatome can also provide retrofit panelboards with Framatome's one-piece busbar design, which eliminates the need for inspection and maintenance of bolted connections.

Retrofits are a cost-effective solution to address obsolete components, loose connections and overheating concerns. Retrofits may be used to support upgrading protective device interrupting ratings and providing additional load growth. Framatome solutions include panelboard parts manufactured by Eaton, a world leader in breaker technology and full custom-built components.

In addition to the equipment, Framatome can offer the engineering analysis for short circuit coordination, voltage drop and equivalency evaluation up to a complete engineering package to support your upgrade.



Customer benefits

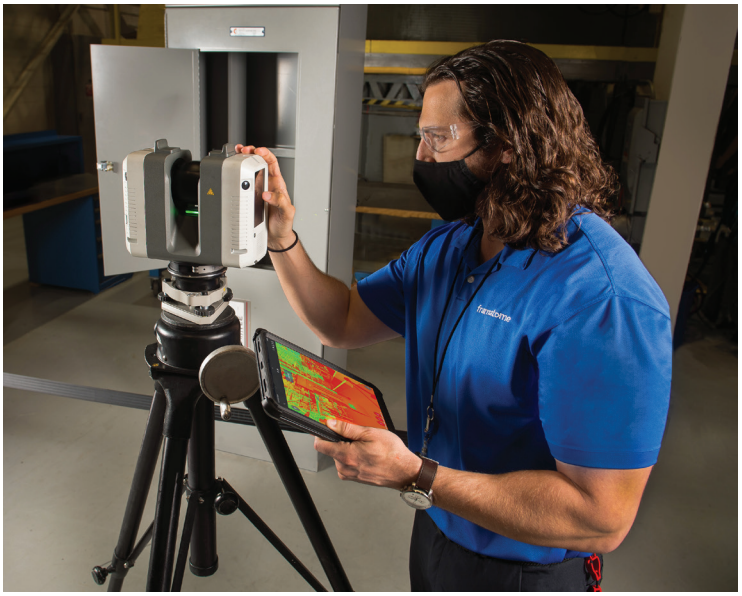
- Reduce both replacement costs and operational costs
- Online, non-contact laser measurement
- Custom buswork, configurations and dimensions
- High-quality Class 1E products
- Simplified outage schedule
- Optional custom one-piece busbar to reduce or eliminate chassis maintenance
- Address component obsolescence through use of readily available current production panelboard parts, breakers and switches

Online Non-contact Laser Measurement

Framatome now offers non-contact laser measurement to measure the dimensions for the chassis configurations for the panelboards. The 3D data obtained from the scanning will assist with replacement panel analysis and the development of the replacement chassis design. The scanning can be performed while online often without removing the dead-front cover. This feature increases personnel safety and reduces the risks of potential breaker trips while taking physical measurements.

One-shift Installation

With Framatome's panelboard solution, the full removal of the old panel and the installation of the new panel can be accomplished within one shift. Using existing panelboard enclosures and conduit runs can save labor and cost. Our retrofit solutions fit into existing enclosures with equipment configured to your precise specifications for any manufacturer's existing panelboard enclosure. This custom fit results in ease of installation, while reducing cost and risk.



Technical Information

Circuit Breakers or Fusible Switches

- 240, 480 or 600 Vac; 600 Vdc maximum
  Main lugs only
  1200A maximum
- Main circuit breaker
  1200A maximum
- Main fusible switch
  1200A maximum
- Branch circuit breakers
  1200A maximum
  Single-, two- and three-pole
- Branch fusible switches
  1200A maximum
  Two- and three-pole

Engineering Solutions to Improve Performance

Framatome can customize a solution to fit your needs, including a full solution of custom products, design verification testing, seismic testing, commercial grade dedication, project management, installation, and modification engineering. Framatome delivers equipment modernization solutions to improve your plant's performance.

Your performance
is **our** everyday **commitment**

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