

- Successfully used Common Design System (TrafostarLite) design platform to develop and prototype testing of 30.24MVA 220kV 1-phase Railway Tracksider feeder transformers
- Carried out touchless inspection of power transformers using TXplore™ – an inspection robot remotely operated by service personnel without the need to remove oil offering time and cost advantage in transformer inspections
- New design and development of 145 kV vertical break disconnectors for 75/63kA 3150/4000A for American National Standards Institute as well as International Electrotechnical Commission markets
- New design and development of 145 kV Center Break Disconnector for 40kA 1250/1600A
- New design and development of 500Nm Worm Geared Drive with reduced cost as well as complying to American National Standards Institute market requirements
- Technology transfer of DDHV145
- Qualification of existing products for American National Standards Institute market requirements (SDF & eDB - 72.5kV to 362kV)
- BOM structure synchronization between SAP and PLM for Disconnector Switch products
- Introduction of IMB 73 cost out in line with IMB145 cost out
- Introduction of bellow design in IMB145 cost out
- Validation of SDF145 2500A to enhanced rating of 3150A
- Class B feature adaption in DEB420 Earth Switch
- Extended product ratings for BTS to SDF 36 & 72.5 kV
- Type testing of current transformer - IMB420, 2kA SWIFT design
- Technical and operational knowhow systematically adopted to apply on new Digital technologies and products like CoreSense, CoreTec and Ellipse APM edge (Transformer predictive monitoring and asset management)
- SDF 420 Disconnector type tested for 50kA for 3s
- Synchro Phasors measurement and monitoring Systems
- Railway electrical protection system
- Multiprotocol Label Switching (MPLS) -Broadband Fiber optic communication system for power utility & oil & gas sector applications
- Asset Performance Management (APM)
- Improvement in design of COMBITEST test switches to handle Current Transformer secondary side interruptions while diagnostic testing of numerical relays
- Improvement in design of Fuse failure relay with contact configurations as per new market demand
- Design and development of new Bust Potential Transformer selection relay on COMBIFLEX platform
- Virtual Reality (Power Twin) technologies for power equipment
- High Voltage Direct Current Control & Protection Latest Technology: Digitally enabled and flexible, natural cooling and compact
- Cyber security assessment and compliance
- Collaboration with R&D for new technologies in renewable energy integration, cyber security and latest digital technologies
- Flexible AC Transmission System - Collaboration with regional and global engineering, local resources hired for engineering and bids and proposal
- Prefabricated Substation - Collaboration with global engineering; Developed in-house competency through Learning by doing
- Grid-eMotion™ Flash - Collaboration with Global Product Group engineering; Developing in house competency through pilot project
- Offshore wind substation - Collaboration with global engineering; Deputed engineer to Germany to develop such competency
- Digital Substation and Data Center Substation - Developed competency through execution
- Reliability centered substation operation and maintenance (RelCare) - Secured Service Level Agreement with Customer
- Underground Substation - Presently bidding for an Engineering Consultancy Services in Collaboration with global center of excellence
- Flexible AC Transmission System - Localization of components and solutions

2. The benefits derived as a result of technology absorption:

- Securing and enhancing market offerings
- Improved market penetration of various products
- Improving product margins
- Reducing quality issues and cost of poor quality
- Fulfilling customer and market special requirements
- Cost effective engineering and solutions to customers
- Avoiding outages in power system, grid and operation
- New applications for utilities, industries, infrastructure and transport segments
- Improved customer satisfaction and possibility of better market penetration
- Supporting country initiative, localization and local opportunities
- Making power equipment, devices, systems and operation cyber secure