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Product Name :
Steam Electrical Generator Trainer

Product Code :
LBNY-0005-1060006



Description :

The Steam Electrical Generator Trainer uses a natural gas boiler to generate steam which is then expanded in a steam turbine, converting the heat energy of the steam into electrical energy via the turbo-generator. Steam Electrical Generator Trainer demonstrates the conversion of stored chemical energy to electricity the primary method of generating electricity used today. The Steam Power generation Thermodynamics Trainer is purpose designed and built for hands-on education and training on topics related to steam generation, power generation and control.

Steam Electrical Generator Trainer is a real system that generates electricity from a natural gas fuel on a small scale. Steam Electrical Generator Trainer is mounted complete on a single skid allowing for compact installation. Industrial type process components, process measurement and control devices have been used throughout the trainer to provide the student with a realistic training experience using equipment common to industry. In every other respect the system is designed, operated, controlled, and maintained in the same way as the full-scale industrial electrical generating facilities.

Technical Specification :

Turbine

Centrifugal type condensate return and boiler feed water pumps

Single stage, integrated speed governor and over-speed trip device

Boiler

Full automatic control via integrated PLC and communication with DCS

Natural gas 863 lbs of saturated steam at 150 psi

Electrical generation equipment

Power dissipated in a resistive load bank with variable load controls

Integrated switchgear and safety controls
Alternator developing up to 10-15 kW 3 phase electrical power
All industrial indications and controls.



Laboratory Instrument India