

Project Detail

Project definition:

The project scope covered design, removal of existing, install new and commission new electrical Turbo-Compressor with significant energy reductions increased efficiency leading to “Life Cycle” operational benefits. The project was run under a ‘Turn-Key’ basis.

Contact:

ENERGETIKA TRINEC, a.s., Mr Jan Cepec, Technical Director

Scope of works:

Design , procurement , fabricate new system, along with disassembly of old technology, completion of civil works for new system , full scope of supply including Mechanical, Electrical, I&C and SW Parts, assembly, commissioning and test parameters to ensure compliance of specified operational parameters.

Period:

2018 – 2019

Project Details:

ENERGETIKA TRINEC, a.s. a energy company, with key significance in the holding company TRINECKE ZELEZARNY – MORAVIA STEEL the largest steel producer in Czech Republic. ENERGETIKA TRINEC duly forms the core to business production success.

As part of a investment plan of ENERGETIKA TRINEC, a.s. the strategy was to support increased production of steel component parts, whilst meeting and supporting European Union grants that save electricity and reduce environmental footprints.



The new replacement turbo compressor has a nominal capacity of 15.500m³/h, with pressure 7bar a dew point of air pressure is +3°C this is achieved by separate Filter and Dry air system. The main electrical engine system equates to a 1600kW capacity, cooling is achieved by utilising ambient air. Thereafter the Hot air from cooling operation of the electrical engine is extracted from the compressor station by the electrical exhaust system. The air pressure cooling as achieved by utilisation of the cooling water system within the steel production facility.

The whole system is designed for continuous operation based on 24hours 7days a week, the system control is centred in the Operator control room and operation is via ‘Siemens Simatic’ system with ‘InTouch’ HMI visualization.

The “turn-key” project is designed and in full compliance with all European Standards. The package included full documentation and operator training to ensure safe, reliable sustained operation.