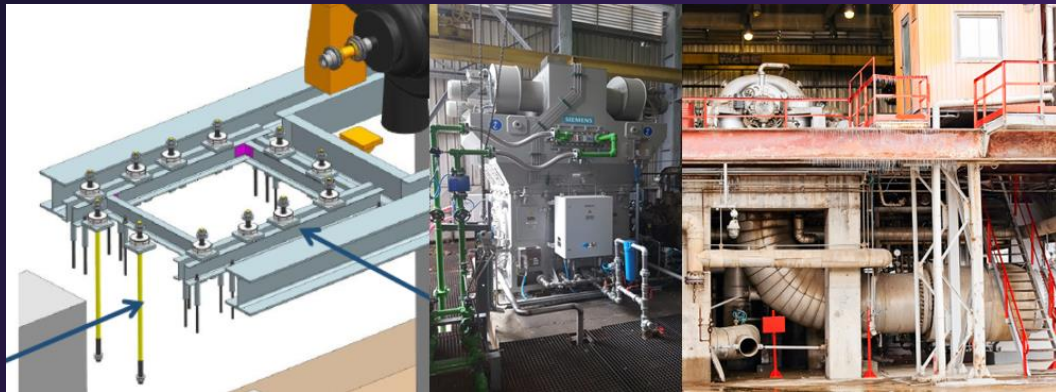
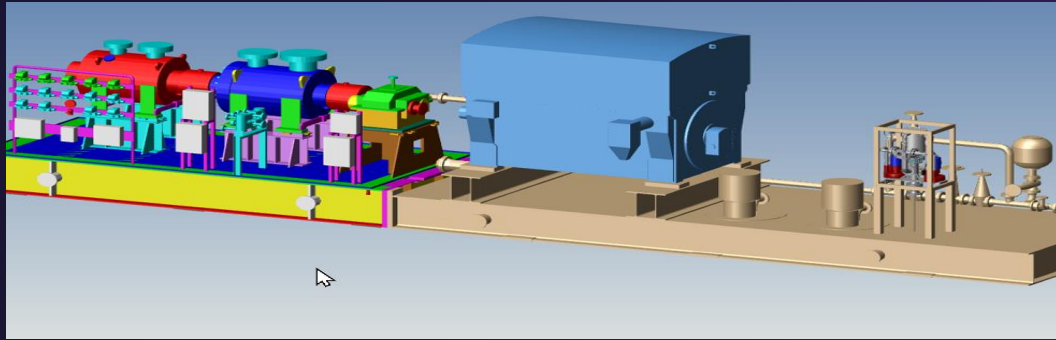


Decarbonization via Driver Electrification of Turbo Compressor Drive for an Oil & Gas Customer in Serbia

Driver Electrification of Compressors



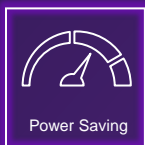
Reliability



Efficiency



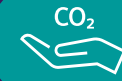
Extended Lifetime



Power Saving



Increased Efficiency



upto 100% less
CO₂ due to
driver switch

Client Needs & Challenge

An oil & gas customer in Serbia was exploring the options for their compressor train to significantly improve operation flexibility, availability and reliability. Customer was looking to reduce the operating cost & steam saving and get the asset ready for better remote operation capability. Customer accepted the Siemens Energy proposed solution that included driver electrification, controls upgrade and changes to process & electrical connections.



Solution and Improved Features

Driver electrification was a big boost towards a CO₂ free site.

- Various tailor-made concepts available:
 - High speed direct drive
 - Low speed drive with gear box
 - Fixed speed drive with compressor flow control by IGV or throttle valve



Benefits

- Up to 100% CO₂ emissions reduction by utilizing renewables
- No local emissions
- Robust driver with low maintenance requirements
- High efficiency also in part load
- Siemens Energy provides complete solution out of one hand including possible upgrades of compressor and auxiliaries



Scope of work & Implementation

- E-motor, gear box and couplings
- Inverter driver and transformer
- New or adapted base frame to accommodate the E-motor
- Modified or new integrated lube oil unit
- Controls upgrade possible
- Complete engineering including torsional analysis

