

MODERN GAS TRANSMISSION SOLUTIONS



Introducing:

3rd Gas Transmission Engineering Concept

GasTEC III

"Modern Gas Transmission Solutions" are

- Technologies developed to transform classic gas transmission systems in order to enhance gas transmission performance, reducing
 - Fuel Consumption
 - Operational Costs
 - Carbon Emission
- Targeting all gas transmission system components:
 - Gas Compressor Station
 - Gas Pipeline
 - Gas Pressure Reduction Station
- Developed by extension of Machinery Engineering and Process Integration experiences in Gas Processing Facilities, LNG Plants, Power Stations and Utility Plants to gas transmission systems
- Comprised of five Gas Transmission Engineering Concepts (GasTEC)

GasTEC III: ICSD (Integrated Compressor Station Design)

Target:

Gas Compressor Stations

Process Integration Idea:

Heat Recovery Steam Generation

Machinery Engineering Idea:

Electric Motor Driven Gas Compressor

Case Study

- A 3 PJ/day Gas Compressor Station
- Classic Design: 6 × Turbocompressor
- ICSD (Based on GasTEC II):
 - 3 × Turbocompressor
 - 3 × Electric Motor - Compressor
 - Variable Speed Drive System
 - Steam Cycle Infrastructure
- **Fuel Gas Saved \approx 2.5 PJ/year**
- **Added Capital Cost \approx US\$ 71 Million**
- **Payback Period \approx 3 Years**



A Similar European Case → [Ruswil Compressor Station](#)

Other GasTEC

- GasTEC I: CCSD
Combined Compressor Station Design
- GasTEC II: OPD
Optimal Pipeline Design
- GasTEC IV: TEPR
Turboexpander Equipped Pressure Reduction
- GasTEC V: UGT
The Ultimate Gas Transmission Solution



Ruswil Compressor Station