

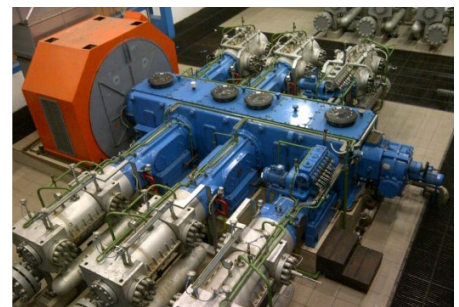
CASE STUDY

To suit new process conditions and cut energy costs, a German natural gas distributor upgraded the compressors at its gas storage plant in Hungary.

Reduction of energy costs through optimized process conditions

Compressor manufacturer: MB HALBERSTADT

Type	2HB6K-400	Gas	CH ₄ mix
Power	1840 kW (2502 hp)	Suction pressure	variable
Speed	370 rpm		
Lubrication	yes		



6-crank machine with HydroCOM and monitoring system



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Facts in Brief

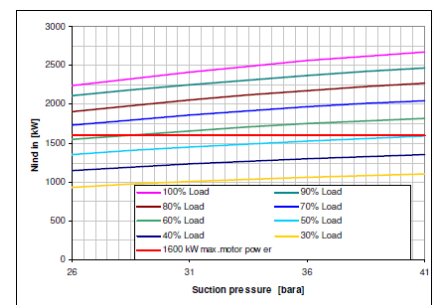
- Upgrade existing 2HB6K-400 compressors in response to an energy rationalization project
- Gas storage was required to operate at higher suction and discharge pressures than previously
- Thorough investigation of all possible conversion alternatives: new motor, new first-stage cylinders, HydroCOM control system

Solution applied

- HydroCOM flow control system identified as the most economic solution for this project
- Capacity of the first stage can be adjusted to match available motor power
- HydroCOM ensures that intermediate pressure ratings are not exceeded
- No modifications to cylinder diameters required
- Only the suction valves needed to be changed
- No danger of cylinder oil accumulating in idle cylinders
- Products fitted: valves, monitoring system with HydroCOM, explosion relief valves

Results

- Effective and safe gas storage operation thanks to HOERBIGER's HydroCOM flow control and monitoring system
- The storage reservoir can now be filled to the required higher pressure in a much shorter time
- As storage requirements change over time, HydroCOM adjusts the gas flowrate accordingly
- For each operating condition the compressor can be operated at the maximum installed drive power level



Power consumption at different operating conditions and load steps