



Burckhardt Compression was chosen as turn-key contractor for a general revamp and modernization of three other brand hyper/secondary compressors at a low density polyethylene plant. The project was initiated due to the insufficient availability and reliability of the three compressors, which were manufactured in 1978 and had logged more than 200'000 operating hours.

CUSTOMER ISSUES

- Insufficient reliability and availability of the three other brand hyper/secondary compressors after 35 years of operation and 200'000 operating hours
- Need to modernize all three compressors
- Looking for a turn-key solution from a single source supplier responsible for the entire project, from the planning to the commissioning stage
- Shortest possible execution time

APPLICATION DESCRIPTION

Revamp of three other brand hyper/secondary compressors			
Type	Other brand F6 hyper/ secondary compressors	Gas	Ethylene
Power	6'130 kW / 8'220 hp	Suction pressure Discharge pressure	240 bara / 3'480 psia 2'000 bara / 29'000 psia
Speed	212 rpm	Lubrication	Forced lubrication to cylinder

BURCKHARDT COMPRESSION SOLUTION

- Retrofit to BC design
- Recalculation and sizing of the compressor and auxiliaries to current process parameters
- Engineering of new capital components, including upgrade to latest BC state-ofthe-art technology for LDPE
- Optimal transport, storage and conservation of materials
- Professional coordination of local sub-suppliers and flexible planning of manpower, infrastructure and logistics
- Successful reassembly and commissioning of the compressor lines according to local and international regulations
- Site installations in three steps (slot of 24 days for each compressor)

CUSTOMER BENEFITS

- Increased compressor availability and reliability, therefore higher productivity of the plant and lower operating costs
- Shortest downtime thanks to a strong Field Service Representative team and detailed resource planning
- Reduced coordination efforts thanks to single source capabilities
- Customized on-site support to optimize start-up procedure and run-in phase



One of the three F6 hyper/secondary compressors



Cylinder disassembly



Compressor after revamp

"Burckhardt Compression proved to be a world class partner for service and maintenance. As turn-key contractor, they managed to deliver on-time with the expected quality and improved the overall performance to our full satisfaction"

LDPE Plant Manager