



SABIC, a global leader in diversified chemicals, operates three LDPE lines at their plant in Geleen, The Netherlands. After the successful compressor overhaul of one line in 2017, Burckhardt Compression was awarded another major overhaul order for the second line. The booster/primary compressor (Ingersoll Rand) and the Hyper Compressor (Burckhardt Compression) have been in operation for over 40 years.

Thanks to the detailed planning we were able to manage the scope, including a challenging foundation repair during the turnaround, according to schedule

CUSTOMER CHALLENGES

- Major overhaul of 40-year-old booster/primary and Hyper Compressor scheduled
- Booster/primary compressor challenges: oil leakage, uncertain foundation condition, removal of the electric motor
- Looking for one contractual partner for entire project scope
- Shortest possible delivery time
- Suspicion of asbestos in compressor and cooling water system

APPLICATION DESCRIPTION

Overhaul of Hyper and other brand booster/primary compressor			
Type	Booster/primary other brand 4HHE-5 Hyper Compressor F8	Gas	Ethylene
Power	1) 2'160 kW / 2'900 hp 2) 6'624 kW / 8'880 hp	Suction pressure Discharge pressure	1) 2.33 bara / 29,00 psia 2) 246 bara / 3'568 psia 1) 272 bara / 3'945 psia 2) 2'696 bara / 39'100 psia
Speed	1) 333 rpm 2) 167 rpm		



Machining of the booster.

BURCKHARDT COMPRESSION SOLUTION

- On-site inspection and revision of both compressors
- Booster/primary compressor:

Complete compressor disassembly on-site and crankcase removal Repair of 44-year-old foundation according to our procedures Repair works (machining) in local Service Center New lubrication piping made in-house

- Hyper/secondary compressor:
 - Reconditioning and replacement of Hyper Compressor components Overhaul of cylinder lubrication pump

CUSTOMER BENEFITS

- Zero safety incidents/accidents due to highest safety standards and own QHSE project manager
- Overall responsibility with one contractual part, reduced coordination efforts
- Job performed on time, despite unexpected challenges during execution
- Minimized oil leakage on booster/primary compressor



 $\label{lem:compressor} \mbox{Compressor before revamp with indications} \\ \mbox{of leakage}.$



"To overhaul both compressors at the same time while repairing the foundation for the booster-primary was a challenge. With Burckhardt Compression we had a partner that was working hand in hand with us and who acted mostly proactive on unanticipated situations. We finished the job on schedule and kept the plant shutdown time to a minimum."

Sjors Slots Maintenance Engineer of SABIC Europe

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