



# COMPRESSION SOLUTION FOR POLYOLEFINS PRODUCTION

A SUSTAINABLE SOLUTION WITH PROVEN RELIABILITY

## APPLICATION DESCRIPTION

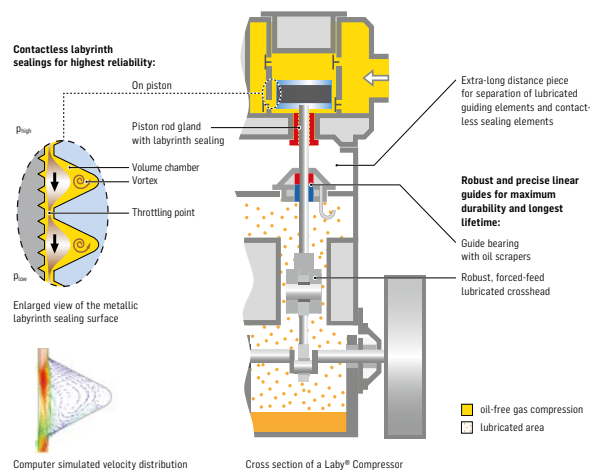
In the polyolefins plants polymer powder is released from reactor and separated from the gas in a discharge cyclone at atmospheric pressure. Any unreacted monomer separated from this powder is compressed and either recycled or returned to the upstream olefin unit for recovery. The final degassing of the polymer is done in a purge silo by flushing with nitrogen. The purge off-gas is sent to a recovery system. In polypropylene process, the gas at the suction of the reciprocating compressor may contain small quantity of polypropylene powder as well as abrasive TEAL (Triethylaluminium). TEAL is a substance which may also burn spontaneously under excessive overheating.

## CUSTOMER BENEFITS

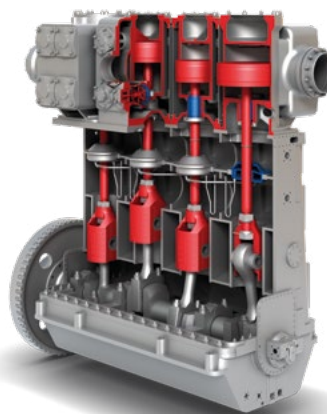
- Increased uninterrupted production, due to true contactless sealing technology preventing unwanted hot spots and polymerization
- Zero gas leak to environment due to gas tight compressor design
- Increased lifetime of crank-gear components, by preventing lube oil contamination with dirty gas in the compressor frame
- Short Mean Time to Repair (MTTR) enabled by the friction-free labyrinth sealing which is insensitive to catalyst particles
- Outstanding execution of commissioning & start-up, operation, maintenance & life cycle support, by our globally trusted services organization

# LABY<sup>®</sup>, LABYRINTH COMPRESSOR TECHNOLOGY THAT MATTERS

## LABYRINTH SEALING TECHNOLOGY



## LABY<sup>®</sup> COMPRESSOR



## TECHNICAL DATA

### D-TYPE COMPRESSORS

Type	Cranks	Stroke mm / in	Max. Speed rpm	Rated Power kW / hp
2D140	2	140 / 5.5	1'000	174 / 233
2D160	2	160 / 6.3	750	304 / 407
2D200	2	200 / 7.9	600	480 / 643
2DL200	2	200 / 7.9	600	480 / 643
2D205	2	205 / 8.1	600	700 / 938
2D250	2	250 / 9.8	520	1'700 / 2'279
2DL250	2	250 / 9.8	520	1'760 / 2'350
3D130	3	130 / 5.1	750	185 / 248
3D160	3	160 / 6.3	750	304 / 407
3D200	3	200 / 7.9	600	490 / 657
4D150	4	150 / 5.9	750	304 / 407
4D200	4	200 / 7.9	600	500 / 670
4D225	4	225 / 8.9	600	726 / 973
4D250	4	250 / 9.8	520	1'025 / 1'374
4D300	4	300 / 11.8	450	1'533 / 2'055
4D375	4	375 / 14.8	380	2'055 / 2'755
6D375	6	375 / 14.8	380	2'055 / 2'755
6LP190	6	190 / 7.4	750	1'500 / 2'010
6LP250	6	250 / 9.8	520	4'000 / 5'360

### K-TYPE COMPRESSORS

Type	Cranks	Stroke mm / in	Max. Speed rpm	Rated Power kW / hp
2K90	2	90 / 3.5	1'000	115 / 154
2K105	2	105 / 4.1	1'000	188 / 252
2K120	2	120 / 4.2	880	226 / 303
2K140	2	140 / 5.5	850	303 / 406
2K158	2	158 / 6.2	750	485 / 665
2K160	2	160 / 6.3	750	485 / 665
2K250	2	250 / 9.8	500	1'660 / 2'226
3K120	3	120 / 4.2	750	350 / 469
3K140	3	140 / 5.5	750	485 / 665
3K160	3	160 / 6.3	750	485 / 665
4K165	4	165 / 6.5	750	1'042 / 1'397



### Burckhardt Compression

24-hour emergency tel.: +41 52 261 53 53  
 info@burckhardtcompression.com  
 www.burckhardtcompression.com