

Our customer, PTT Global Chemical Public Company Limited (PTT), a leading global polymer company known for its innovative products and services, operates an LDPE line equipped with a Hyper Compressor from Burckhardt Compression at their Rayong plant in Thailand.

During a recent visit by a Burckhardt Compression field service expert, significant fretting marks were discovered on the distance piece and small end pin. This issue led to unscheduled shutdowns, increased wear, and excessive vibration, resulting in high maintenance costs for PTT. As specialists in parts repair and refurbishment, Burckhardt Compression identified the root cause and implemented a sustainable solution to enhance reliability. This implementation highlights our dedication to sustainability across all our services and products, emphasizing the long-term environmental and operational benefits.

Customer challenges

- Need for maximum compressor uptime
- Tight budget for parts and repair
- Tight schedule for job execution
- Avoiding waste, as many parts as possible should be re-used

Burckhardt Compression solution

In-house machining

Burckhardt Compression Thailand machined the parts in their workshop to avoid lengthy and costly transportation.

Precision and quality

All repair work was done within given, stringent tolerances adhering to the highest quality standards.

On time

By working in day and night shifts, the execution of the project could be expedited to stay within the tight time frame.

Preparation is key

All work was planned for execution in Burckhardt's primary workshop, but a backup workshop was in place in case any additional workforce was needed.

Communication and coordination

Open lines between the on-site team, the workshop team and the customer for most effective communication and project coordination.

Customer benefits

- Bad actors were eliminated and refurbished parts delivered
- Substantial increase in lifetime of parts to minimum 2 years
- Significant reduction in maintenance costs of approx. 60%
- Sustainability improved reduced waste and reduced carbon footprint by re-using parts



Small end pin

Compressor data

Burckhardt Compression			
Type	Hyper Compressor K10	Gas	C ₂ H ₄
Power	22'500 kW / 30'160 hp	Suction pressure Discharge pressure	240 bar / 3'480 psi 2'700 bar / 39'160 psi
Speed	200 rpm	Lubrication	yes



Distance piece

"We were amazed by the level of performance achieved! Burckhardt Compression quickly identified the problem and carried out the repairs with great precision. Given the outstanding results of this project, we plan to involve Burckhardt Compression in many more overhaul projects at other facilities."

PTT Global Chemical Public Company Limited