





Case Study Highlights:

- Urgent coupling interchange for a compressor drive rebuild at a large industrial chemical producer
- Euroflex solution met torsional stiffness requirements and exceeded torque capacity of existing diaphragm coupling
- 24 hours: The amount of time it took Rexnord to provide direct interchange design with Euroflex
- 3 weeks: The amount of time (from date of purchase order) it took Rexnord to supply the Euroflex coupling to the customer

Euroflex delivers savings on both lead time and cost

A large industrial chemical producer was in urgent need of a coupling for a compressor drive rebuild. A high performance diaphragm coupling had originally been installed in this application. However, due to the long lead times and high cost typically associated with diaphragm-style couplings, the customer was eager to find an alternative solution.

Rexnord received a copy of the existing diaphragm coupling drawing from the customer and, within 24 hours, provided a direct interchange design with a Euroflex High Performance Disc Coupling. In this solution, Rexnord was able to provide a custom design to meet the same torsional stiffness requirements as well as exceed the torque capacity of the

existing diaphragm coupling. Once the design was approved, Rexnord supplied a complete unit to the customer within 3 weeks time from the date of purchase at an economical price. Rexnord not only saved the customer weeks of waiting on design and manufacturing lead times, but also delivered significant cost savings when compared to a diaphragm coupling solution.

The custom design nature of Euroflex easily allows for exact torsional stiffness or inertia requirements to be met. Euroflex can also modify the design to meet the exact mass and elastic requirements for a high performance disc coupling or a diaphragm coupling interchange.

Coupling Interchange Comparison

Customer Specification		Coupling Parameters	Existing Diaphragm Coupling	Rexnord Euroflex Coupling
Normal Power	500 HP (373 Kw)	Continuous Torque	375 Nm	1500 Nm
Normal Speed	9505 RPM	Peak Torque	1313 Nm	2000 Nm
Normal Torque	375 Nm	Max. Transient	2372 Nm	3000 Nm
		Inertia (WK²)	0.04 Kgm²	0.02 Kgm²
		Torsional Stiffness (Includes 1/3 shaft penetration)	0.16 MNm/Rad	0.16 MNm/Rad
		Lateral Critical Speed	51,685 RPM	43,200 RPM
		Actual S.F.	3.506	4.0
		Required S.F.	1.5	1.5

New Rexnord Euroflex Coupling Drawing — Designed in 24 Hours

