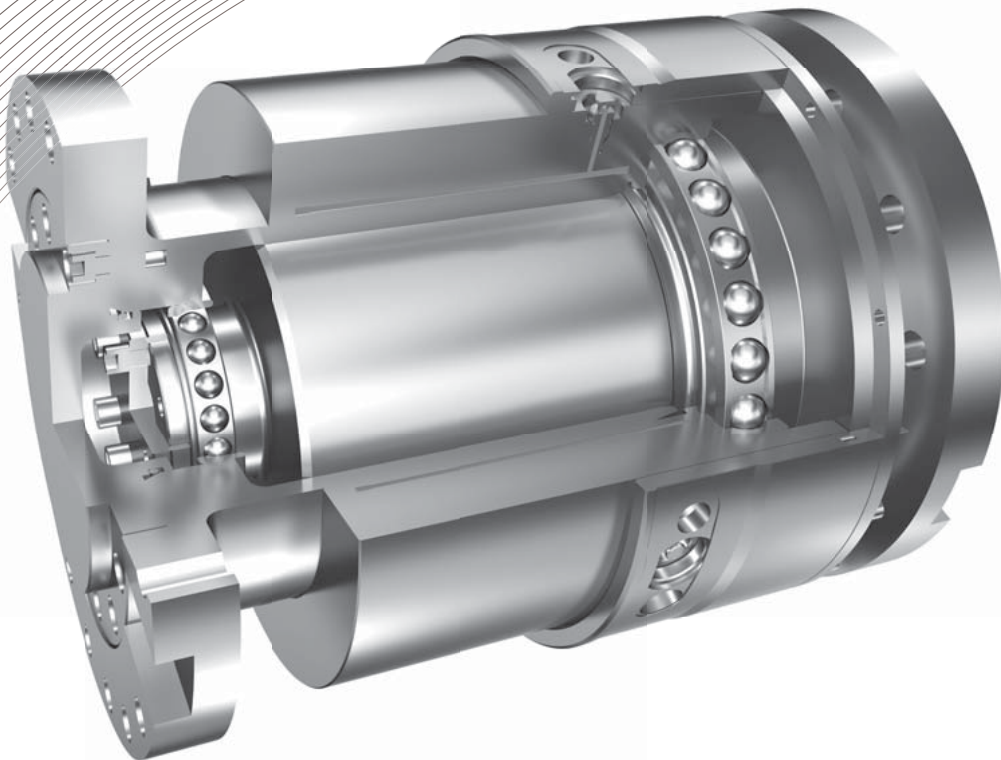


Koyo[®]

JHS Series Hyper Coupling



JTEKT
JTEKT CORPORATION

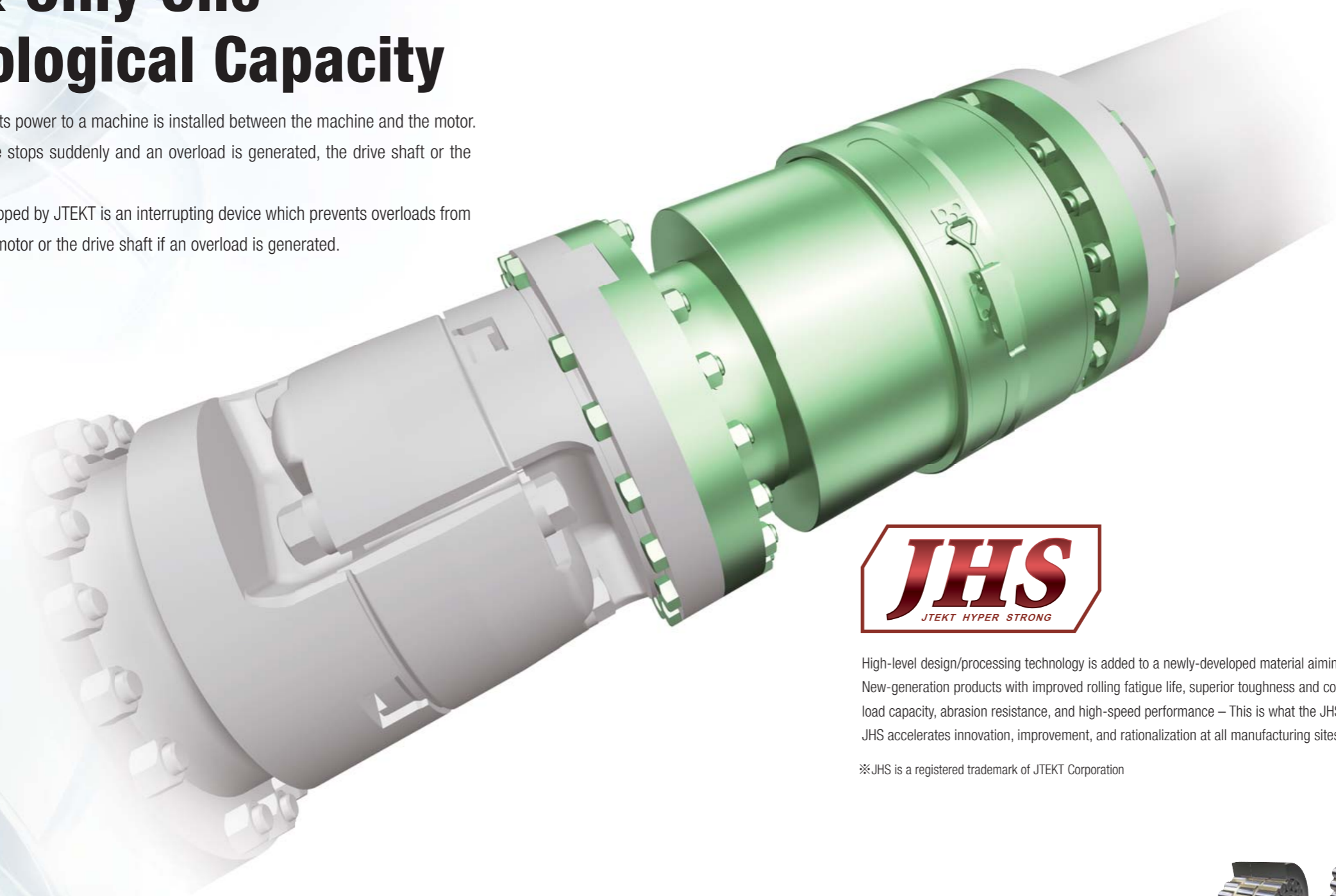
JTEKT
Koyo | **TOYODA**

CAT.NO.B1010E

No.1 & Only One Technological Capacity

A drive shaft that transmits power to a machine is installed between the machine and the motor. Therefore, if the machine stops suddenly and an overload is generated, the drive shaft or the motor may break down.

The hyper coupling developed by JTEKT is an interrupting device which prevents overloads from being transmitted to the motor or the drive shaft if an overload is generated.



High-level design/processing technology is added to a newly-developed material aiming at ultimate performance. New-generation products with improved rolling fatigue life, superior toughness and corrosion resistance, as well as unparalleled load capacity, abrasion resistance, and high-speed performance – This is what the JHS (JTEKT Hyper Strong) Series is about. JHS accelerates innovation, improvement, and rationalization at all manufacturing sites.

※JHS is a registered trademark of JTEKT Corporation



The hyper coupling is a torque limiter that protects drive systems for heavy loads

JHS Series Hyper Coupling

High operation accuracy

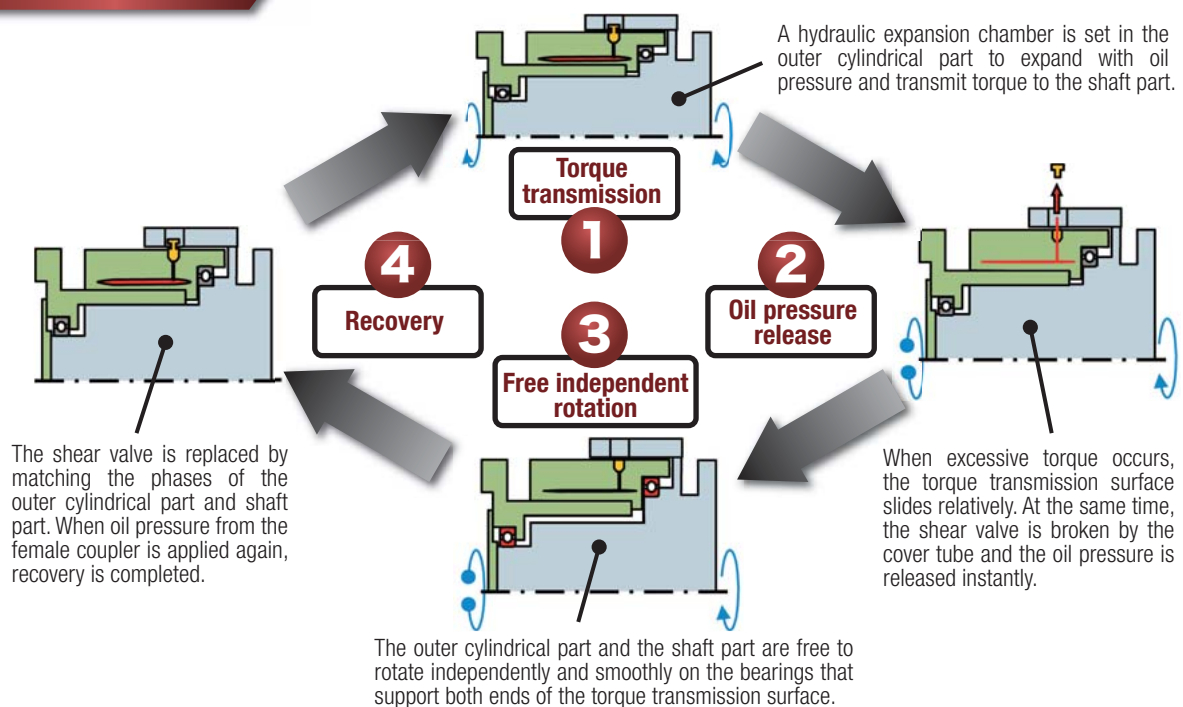
High durability performance

Significant reduction of maintenance man-hours

Extensive lineup

Reliable know-how as a drive shaft/bearing manufacturer

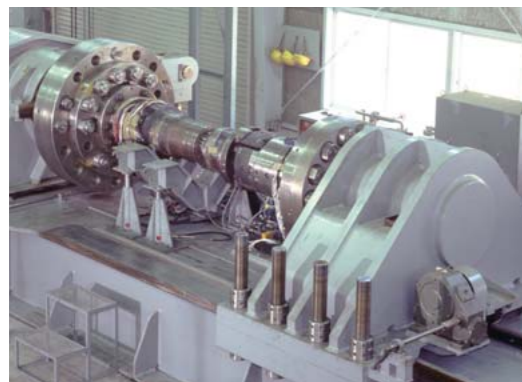
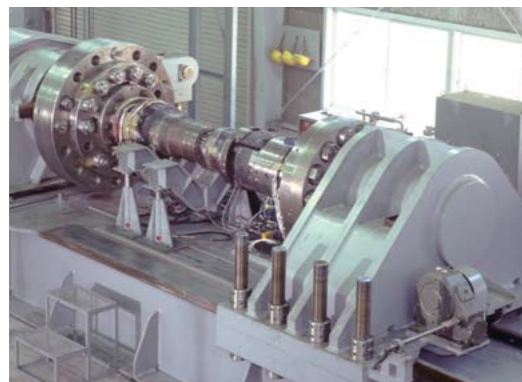
Operating principle



High operation accuracy

Operating torque accuracy within $\pm 10\%$ is realized

The relationship between the operating torque and oil pressure value was obtained with analysis and verified with a large static torsion testing machine to improve reliability.



High durability performance

Operating durability of 150 times or more is realized

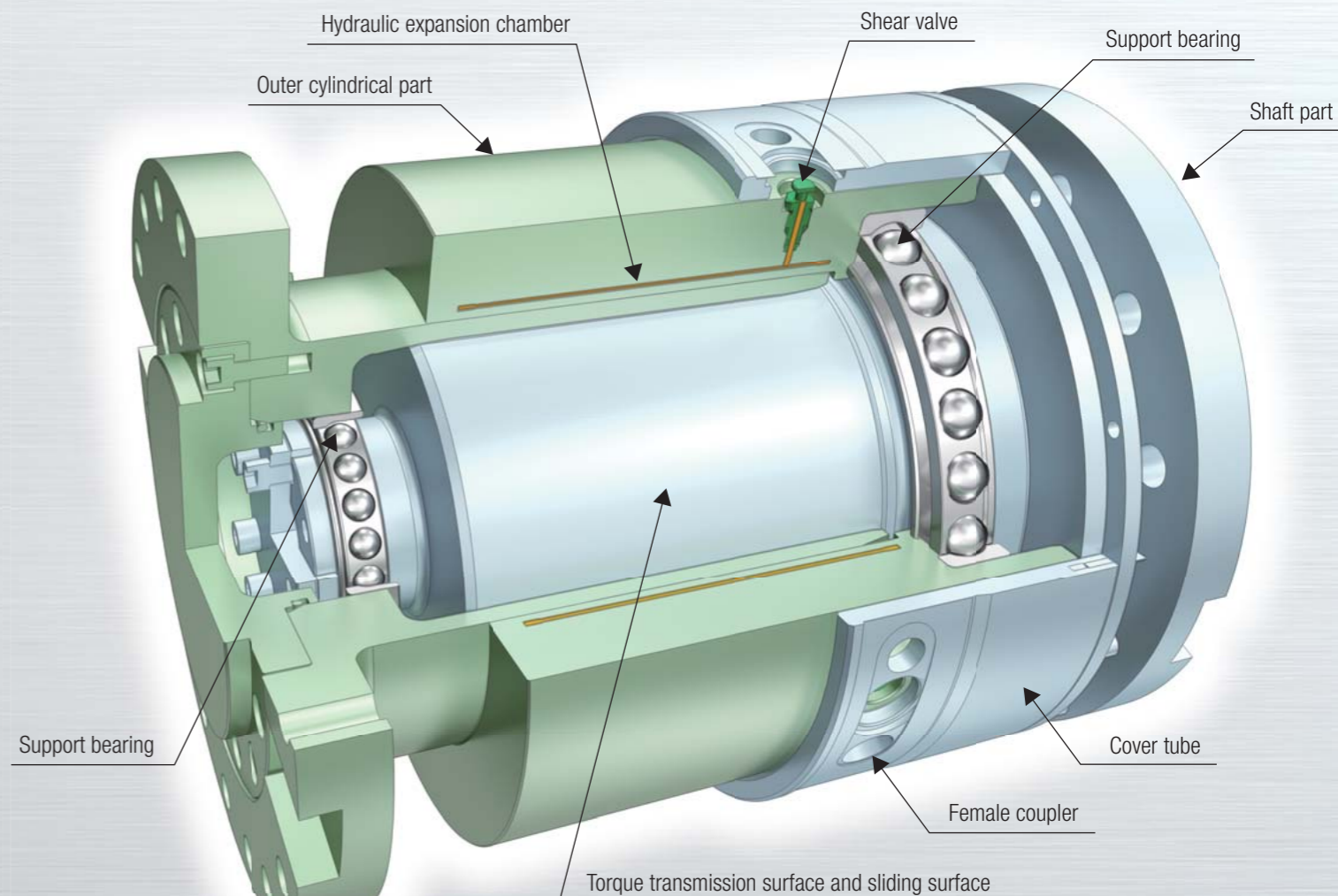
- Special surface treatment is applied to the operating surface to improve durability.
- The oil pressure release performance is improved by establishing an analysis method of the oil pressure release time.
- A high degree of free independent rotation performance after the release of the oil pressure is secured by utilizing our know-how as a bearing manufacturer.



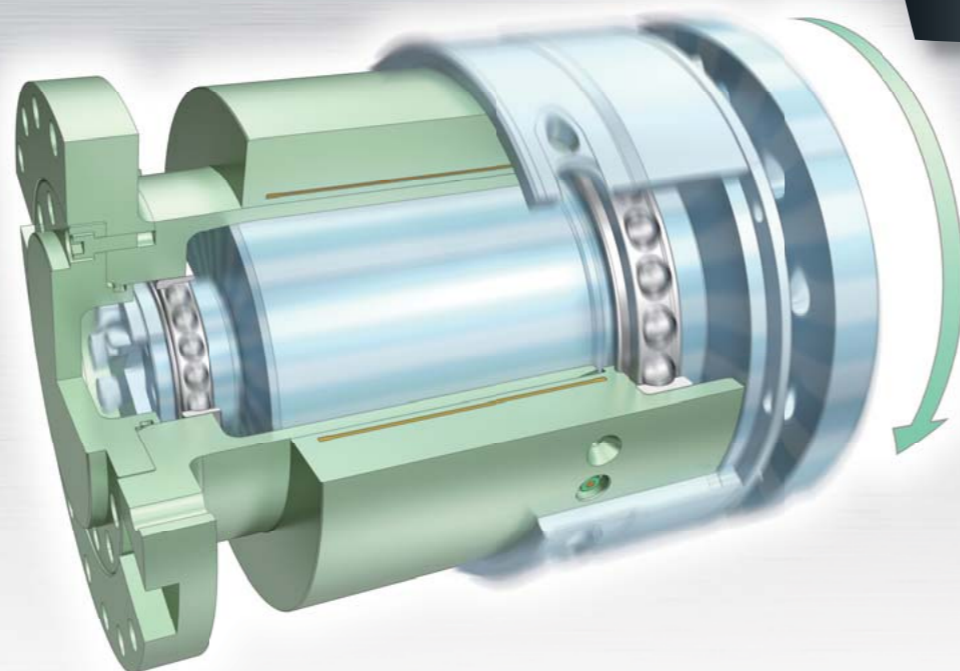
Excellent operating surface state after evaluation



Support bearings



When excessive torque occurs



Reduction of maintenance man-hours

Recovery operation man-hours reduced to 1/4 (compared with the shear pin type)

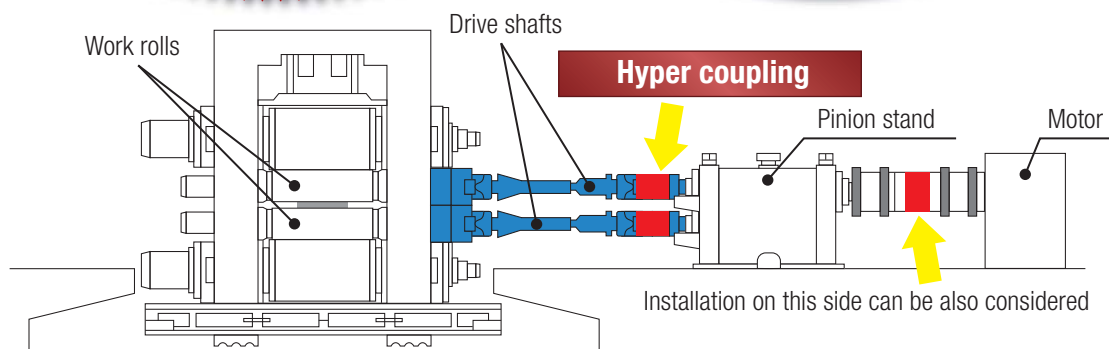
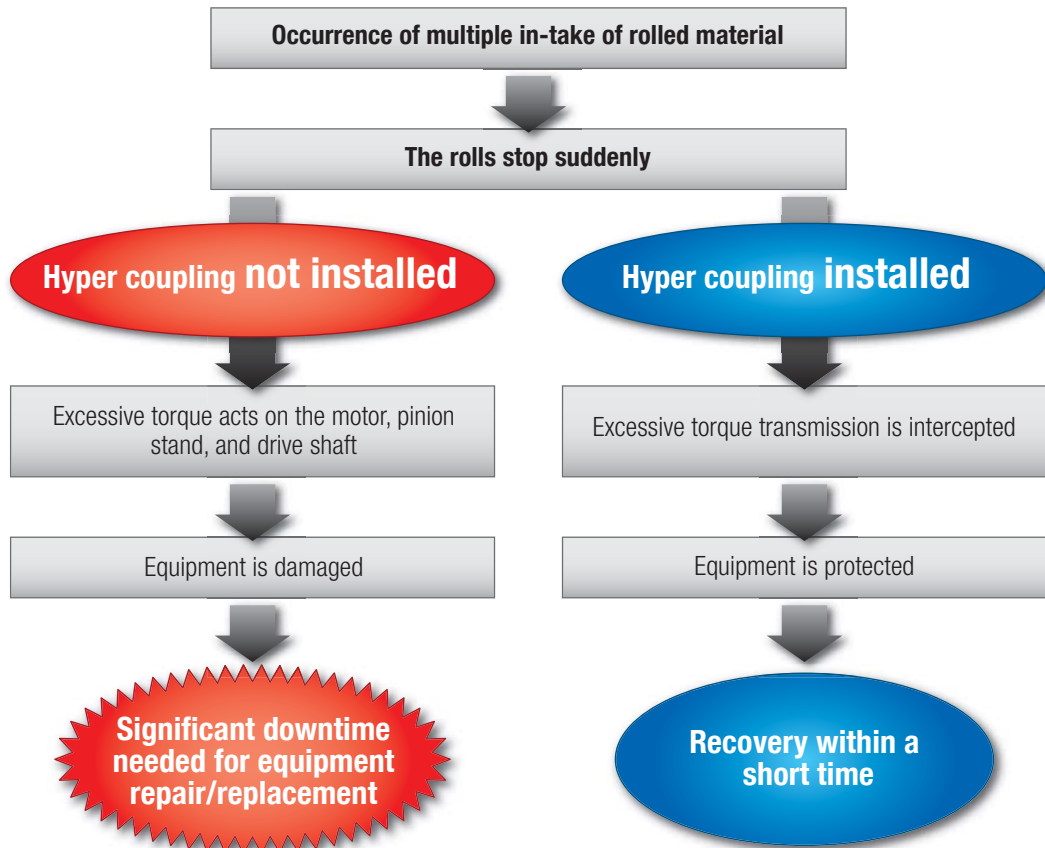
Only the shear valve is required to be replaced during operation, thus improving maintenance man-hours and the cost of replacement parts.

Unlike the current shear pin type, this product does not require regular part replacement unless it is used.

The maintenance man-hours are greatly reduced, contributing to improvement of availability.

		Shear pin type	Hyper coupling
At the time of recovery	Replacement part	◆ Shear pin: 4 pieces ◆ Nut: 4 pieces ◆ Bush: 8 pieces	◆ Shear valve: 4 pieces
	Ratio of required man-hours for part replacement	1	1/4
At the regular inspection time		Regular inspection/replacement of the shear pins is required	Regular inspection/replacement of the shear valves is not required

Example of use of hyper coupling (rolling mill)



Examples of other applications

- Crusher
- Sizing press mill
- Plastic molding machine
- Electric resistance welded tube mill

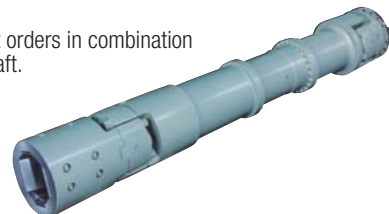
Extensive lineup

- (1) Supported torque : 80 to 4200kN · m
- (2) Supported size : Outside diameter ϕ 280 to 1090 mm
Full length 350 to 1500 mm

※We propose installation in your current facility by providing individual design.

Drive shaft rotation diameter of supported size : ϕ 160 to 840 mm

We also accept orders in combination with a drive shaft.



OFFICES

KOYO CANADA INC.

5324 South Service Road, Burlington, Ontario L7L 5H5, CANADA
TEL : 1-905-681-1121
FAX : 1-905-681-1392

JTEKT NORTH AMERICA CORPORATION

-Main Office-

47771 Halyard Drive, Plymouth, MI 48170, U.S.A.
TEL : 1-734-454-1500
FAX : 1-734-454-7059

-Cleveland Office-

29570 Clemens Road, P.O.Box 45028, Westlake,
OH 44145, U.S.A.
TEL : 1-440-835-1000
FAX : 1-440-835-9347

KOYO MEXICANA, S.A. DE C.V.

Av. Insurgentes Sur 2376-505, Col. Chimalistac, Del. Álvaro
Obregón, C.P. 01070, México, D.F.
TEL : 52-55-5207-3860
FAX : 52-55-5207-3873

KOYO LATIN AMERICA, S.A.

Edificio Banco del Pacifico Planta Baja, Calle Aquilino de la
Guardia y Calle 52, Panama, REPUBLICA DE PANAMA
TEL : 507-208-5900
FAX : 507-264-2782/507-269-7578

KOYO ROLAMENTOS DO BRASIL LTDA.

Avenida Reboucas, 2472 Jardim America, CEP 05402-300 São
Paulo, BRAZIL
TEL : 55-11-3372-7500
FAX : 55-11-3887-3039

KOYO MIDDLE EAST FZE

6EA 601, Dubai Airport Free Zone, P.O. Box 54816, Dubai, U.A.E.
TEL : 97-1-4299-3600
FAX : 97-1-4299-3700

KOYO BEARINGS INDIA PVT. LTD.

C/o Stylus Commercial Services PVT LTD, Ground Floor, The
Beech, E-1, Manyata Embassy Business Park, Outer Ring Road,
Bengaluru-560045, INDIA
TEL : 91-80-4276-4567 (Reception Desk of Service Office)
FAX : 91-80-4276-4568

JTEKT (THAILAND) CO., LTD.

172/1 Moo 12 Tambol Bangwua, Amphur Bangpakong,
Chachoengsao 24180, THAILAND
TEL : 66-38-533-310~7
FAX : 66-38-532-776

PT. JTEKT INDONESIA

Jl. Surya Madya Plot I-27b, Kawasan Industri Surya Cipta,
Kutanegara, Ciampel, Karawang Jawa Barat, 41363 Indonesia
TEL : 62-267-8610-270
FAX : 62-267-8610-271

KOYO SINGAPORE BEARING (PTE.) LTD.

27, Penjuru Lane, Level 5, Phase 1 Warehouse #05-01.
SINGAPORE 609195
TEL : 65-6274-2200
FAX : 65-6862-1623

PHILIPPINE KOYO BEARING CORPORATION

6th Floor, One World Square Building, #10 Upper McKinley
Road, McKinley Town Center Fort Bonifacio, 1634 Taguig City,
PHILIPPINES
TEL : 63-2-856-5046/5047
FAX : 63-2-856-5045

JTEKT KOREA CO., LTD.

Seong-do Bldg 13F, 207, Dosan-Dearo, Gangnam-Gu, Seoul,
KOREA
TEL : 82-2-549-7922
FAX : 82-2-549-7923

JTEKT (CHINA) CO., LTD.

Room.25A2, V-CAPITAL Building, 333 Xianxia Road, Changning
District, Shanghai 200336, CHINA
TEL : 86-21-5178-1000
FAX : 86-21-5178-1008

KOYO AUSTRALIA PTY. LTD.

Unit 2, 8 Hill Road, Homebush Bay, NSW 2127, AUSTRALIA
TEL : 61-2-8719-5300
FAX : 61-2-8719-5333

JTEKT EUROPE BEARINGS B.V.

Markerkant 13-01, 1314 AL Almere, THE NETHERLANDS
TEL : 31-36-5383333
FAX : 31-36-5347212

-Benelux Branch Office-

Energieweg 10a, 2964 LE, Groot-Ammers, THE NETHERLANDS
TEL : 31-184606800
FAX : 31-184606857

KOYO KULLAGER SCANDINAVIA A.B.

Johanneslundsvägen 4, 194 61 Upplands Väsby, SWEDEN
TEL : 46-8-594-212-10
FAX : 46-8-594-212-29

KOYO (U.K.) LIMITED

Whitehall Avenue, Kingston, Milton Keynes MK10 0AX,
UNITED KINGDOM
TEL : 44-1908-289300
FAX : 44-1908-289333

KOYO DEUTSCHLAND GMBH

Bargkoppelweg 4, D-22145 Hamburg, GERMANY
TEL : 49-40-67-9090-0
FAX : 49-40-67-9203-0

KOYO FRANCE S.A.

6 avenue du Marais, BP20189, 95105 Argenteuil, FRANCE
TEL : 33-1-3998-4202
FAX : 33-1-3998-4244/4249

KOYO IBERICA, S.L.

Avda.de la Industria, 52-2 izda 28820 Coslada Madrid, SPAIN
TEL : 34-91-329-0818
FAX : 34-91-747-1194

KOYO ITALIA S.R.L.

Via Stephenson 43/a 20157 Milano, ITALY
TEL : 39-02-2951-0844
FAX : 39-02-2951-0954

-Romanian Representative Office-

24, Lister Street, ap. 1, sector 5, Bucharest, ROMANIA
TEL : 40-21-410-4182
FAX : 40-21-410-1178

PUBLISHER

JTEKT CORPORATION NAGOYA HEAD OFFICE

No.7-1, Meieki 4-chome, Nakamura-ku, Nagoya, Aichi 450-8515, JAPAN TEL : 81-52-527-1900 FAX : 81-52-527-1911

JTEKT CORPORATION OSAKA HEAD OFFICE

No.5-8, Minamisemba 3-chome, Chuo-ku, Osaka 542-8502, JAPAN TEL : 81-6-6271-8451 FAX : 81-6-6245-3712

Sales & Marketing Headquarters

No.5-8, Minamisemba 3-chome, Chuo-ku, Osaka 542-8502, JAPAN TEL : 81-6-6245-6087 FAX : 81-6-6244-9007

Value & Technology