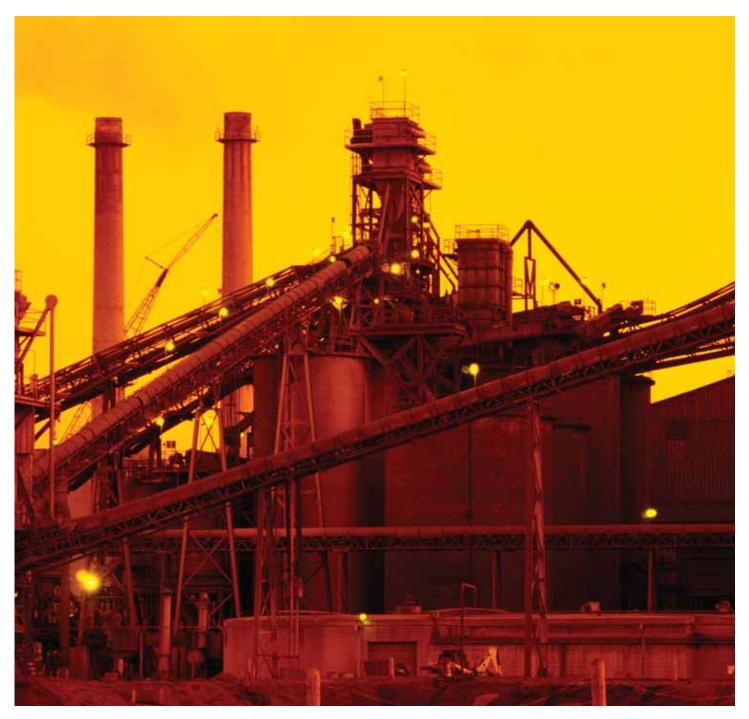


Bearings for the Cement and Ready-Mix Concrete Industries

Market leading NSK technology that increases bearing life and reduces maintenance costs and downtime.





Upgrading to NSK takes your operation to a higher level of efficiency and performance.

From our Tough Steel[™] bearings for demanding environments, to our HPS, High Performance Series, spherical roller bearings, which offer high load carrying capacities and longer bearing life, choosing NSK provides an upgrade for your entire operation.

For quality products and service choose NSK.

UPGRADE TO NSK.

CONSTRUCTIVE SOLUTIONS

In a screw pump conveying system at a cement plant, a large angular contact bearing was experiencing dust contamination. The dust was wearing the raceways and increasing clearance. In order to avoid a catastrophic failure, the bearings needed to be changed prematurely.

NSK recommended Tough Steel[™] by pointing out that Tough Steel[™] would manage the problem by offering resistance to the contamination. In addition, the new bearings with Tough Steel[™] would run quieter and smoother and offer shock load protection. Since installing the new Tough Steel[™] bearings, bearing consumption reduced by more than 50% over a five year period. The plant has since converted other locations to Tough Steel[™].

TOUGH Environment, TOUGH Problems, TOUGH STEEL.

HPS SPHERICAL ROLLER BEARINGS

Raw Grinding, Electrostatic Precipitator, Kiln, Finish Grinding, Conveyors

HPS offers a higher standard in performance by offering higher load carrying capacities, longer bearing life and higher limiting speeds. Advanced material, optimum design and state of the art manufacturing make HPS one of the longest lasting spherical bearings available.

SPHERICAL ROLLING BEARINGS WITH BRASS CAGE

Raw Grinding, Electrostatic Precipitator, Kiln, Finish Grinding, Conveyors

> Brass Cage Sphericals have high load capabilities and are specially designed for shock loading and vibratory applications. Featuring a one piece machined brass cage and optional Tough Steel[™].

High load tapered roller bearings are available in two and four row versions to support high radial and axial loads. They feature an optimized cage design and a range of special materials for arduous conditions.

Raw Grinding, Finish Grinding

TAPERED ROLLER BEARING Utilizing a patented high strength cage of pressed steel, the EW series offers low noise and heat generation characteristics. As a standard cylindrical bearing, the EW series is an easy interchange across the globe.

concrete

Raw Grinding, Kiln, Finish Grinding

CYLINDRICAL ROLLER BEARINGS

TOUGH STEEL[™] BEARINGS

Preheater, Conditioning Tower, Electrostatic Precipitator

For extremely demanding environments and ideal for vibratory applications, bearings with Tough Steel[™] reduce flaking and wear caused by contamination. These bearings also have increased resistance to seizure resulting in longer bearing life.

SAF SPLIT HOUSINGS

Head Pulley, Tail Pulley

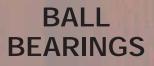
Ideal for handling heavy radial loads, SAF split housings are made of cast iron or other materials with multiple grease fittings. They are easy to mount and come with optional accessories including seals, end covers and fixing rings.

Solutions

1117 B

Provide outstanding performance in a wide range of applications. Incorporating the highest quality steel, precision balls, superfinished raceways and a variety of patented sealing arrangements.

Preheater, Conditioning Tower, ID Fan, Electrostatic Precipitator, Conveyors



Lubricated with oil-impregnated material, oil seeps from the material providing ample and continuous lubrication making them relatively maintenance -free. Molded oil bearings come in a variety of bearing types.

Preheater, Conditioning Tower, ID Fan, Electrostatic Precipitator, Conveyors

> MOLDED-OIL BEARINGS



Worldwide Sales Offices

NSK LtdHeadquarters, Tokyo, Japar		Philippines:		Turkey:	
Americas & Europe Department Asia Marketing & Sales Department	tel: 03-3779-7120 tel: 03-3779-7121	NSK representative office		NSK Bearings Middle East Trading Co	
Africa	101.00-0773-7121	Manila	tel: 02-759-6246	Istanbul	tel: 90-216-442-7106
South Africa:		Singapore:	-1	United Kingdom:	
NSK South Africa (Pty) Ltd.		NSK International (Singapore) Pte Lte		NSK Bearings Europe Ltd.	
Johannesburg	tel: (011) 458 3600	Singapore NSK Singapore (Pte) Ltd.	tel: (65) 273 0357	Peterlee, England	tel: 0191-586-6111
Asia and Oceania			tel: (65) 278 1711	NSK UK Ltd.	
Australia: www.nskaustralia.com.au		Singapore Taiwan:	tel: (65) 278 1711	Newark, England	tel: 0163-660-5123
NSK Australia Pty. Ltd.		Taiwan: Taiwan NSK Precision Co., Ltd.		NSK Steering Systems Europe Ltd.	
Melbourne	tel: (03) 9764-8302		1-1-00-0501-0050	Coventry, England	tel: 024-76-588588
China:		Taipei Thailand:	tel: 02-2591-0656	North and South America	
NSK Hong Kong Ltd. Hong Kong	tel: 2739-9933			NSK Americas, Inc. (American Hea	dauarters)
Kunshan NSK Co., Ltd.	lei. 2733-3353	NSK Bearings (Thailand) Co., Ltd.	1-1-00-0440450-50	Ann Arbor, Michigan, U.S.A.	tel: 734-913-7500
Kunshan	tel: 0520-7305654	Bangkok	tel: 02-6412150~58	Arin Arbor, Michigan, 0.3.A.	tei. 734-913-7300
Guizhou HS NSK Bearings Co., Ltd		NSK Safety Technology (Thailand) Co			
Anshun	tel: 0853-3521505	Chonburi	tel: (038) 214-317-8	NSK Argentina SRL	
NSK (Shanghai) Trading Co., Ltd.		Siam NASTECH Co., Ltd.	. ()	Buenos Aires	tel: 011-4762-6556
Shanghai	tel: 021-62099051	Chachoengsao	tel: (038) 522-343~350	Brazil:	www.br.nsk.com
NSK representative office	tel: 010-6590-8161	Europe		NSK Brasil Ltda.	
Beijing NSK representative office	lei: 010-6590-8161	NSK Europe Ltd.		São Paulo	tel: 011-3269-4700
Shanghai	tel: 21-6209-9051	(European Headquarters)	www.eu.nsk.com	Canada:	www.ca.nsk.com
NSK representative office	101.21 0200 0001	Maidenhead, England	tel: 0162-850-9800	NSK Canada Inc.	
Guangzhou	tel: 020-8732-0583	France:		Toronto	tel: 905-890-0740
NSK representative office		NSK France S.A.		Mexico:	
Anshun	tel: 0853-3522522	Paris	tel: 01 30 57 39 39	NSK Rodamientos Mexicana, S.A. de	CV
India:		Germany:		Mexico City	tel: 5-301-2741
Rane NASTECH Ltd. Chennai tel: 04114-65313. 65314	65365 66003	NSK Deutschland Gmbh		United States of America:	www.us.nsk.com
NSK representative office	, 05505, 00002	Düsseldorf	tel: 02102-481-0	NSK Corporation	www.us.nsk.com
Chennai	tel: 044-4334732	NSK Steering Systems Europe Ltd.		Ann Arbor, Michigan	tel: 734-913-7500
Indonesia:	1011 0 1 1 100 11 02	Stuttgart	tel: 0771-79082-277	Sales Offices:	tel. 734-913-7500
P.T. NSK Bearings Manufacturing Indone		Neuweg Fertigung Gmbh	1011 011 1 1 00002 211		1-1-704 040 7500
Jakarta	tel: 021-898-0155	Munderkingen	tel: 07393-540	Ann Arbor, Michigan	tel: 734-913-7500
Korea:		Italy:		Santa Fe Springs, California	tel: 562-968-1000
NSK Korea Co., Ltd.	1-1-00-0007-0000	NSK Italia S.P.A.		NSK American Technical Center	
Seoul NSK Korea Co., Ltd., Changwon Pla	tel: 02-3287-0300	Milano	tel: 02-995-191	Ann Arbor, Michigan	tel: 734-913-7500
Changwon	tel: 0551-287-6001	Poland:	102-333-131	NSK Precision America, Inc.	
Malaysia:	tel. 0331-207-0001	NSK Europe Ltd. Warsaw Liaison Off	ice	Franklin, Indiana	tel: 317-738-5038
NSK Bearings (Malaysia) Sdn. Bhd.		Warsaw	tel: 48-22-645-1525, 1526	San Jose, California	tel: 408-944-9400
Kuala Lumpur	tel: 03-7958-4396	NSK Iskra S.A.	101. TOZZTONO IJZJ, IJZO		www.npa.nsk.com
NSK Micro Precision (M) Sdn. Bhd.		Kielce	tel: 48-41-366-6111	NKS Steering Systems America	
Kuala Lumpur	tel: 03-961-6288	Spain:	101.4041-300-0111	Bennington, Vermont	tel: 802-442-5448
	www.nsk-rhp.co.nz	NSK Spain S.A.		NSK Latin America Inc.	www.la.nsk.com
NSK New Zealand Ltd. Auckland	tel: (09) 276-4992	Barcelona	tel: 93-575-4041	Miami, Florida	tel: (305) 477-0605
AUCRIAIIU	101. (03) 270-4992	Dalcelolla	tel. 93-375-4041	Marii, Fonda	101. (000) 477-0000

NSK Ltd. has a basic policy not to export any products or technology designated as controlled items by export-related laws. When exporting the products in this brochure, the laws of the exporting country must be observed. Specifications are subject to change without notice and without any obligation on the part of the manufacturer. Every care has been taken to ensure the accuracy of the data contained in this brochure, but no liability can be accepted for any loss or damage suffered through errors or omissions. We will gratefully acknowledge any additions or corrections.