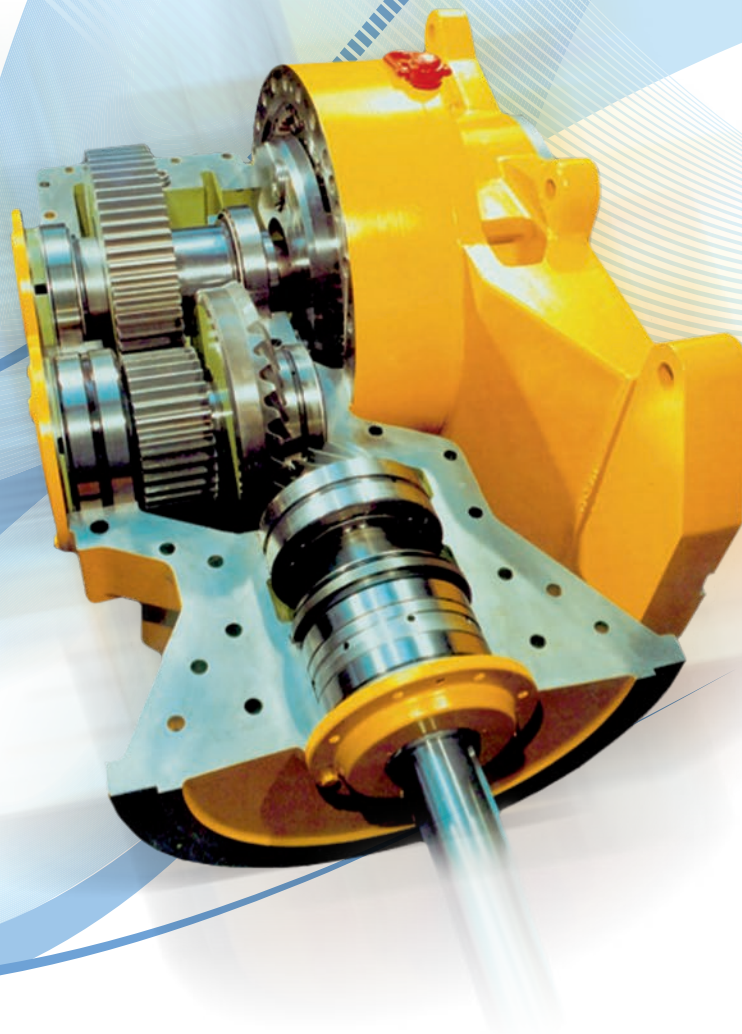




Eickh experience has no substitute

Gearboxes for the Mining Industry



Background and History

The successful history of the Eickhoff Group started over 150 years ago with the set-up of a foundry with mechanical machining workshops which have been serving customers of the hard coal mining industry in the Ruhr Area – and into the rest of the world - from that time on. Despite all its global activities, the Eickhoff Group, as a medium-sized family-owned company, still feels strongly attached to its local roots.

The Group is comprised of a number of subsidiaries. One of these is the Eickhoff Bergbautechnik GmbH which offers a wide variety of mining machines for underground mining operations and is represented with its products as the market leader in all major mining areas of the world. Among these products are chain conveyor gearboxes which Eickhoff successfully started manufacturing in 1987. Since that

time, the company has gained extensive experience in the design and manufacture of highly stressed gearboxes of this type. In close cooperation with our customers, we design long-lived, durable and service-friendly gearboxes, resulting in a lower cost of ownership. Sound expertise, untiring zest for innovation and a passion for technology are our driving force and have always been our trademark.

Technical Information

Eickhoff, as the market leader in the field of mining machinery for underground coal and potash mining, is an established manufacturer of gearboxes for applications presenting the most challenging conditions. Chain conveyor gearboxes of the EP and EKP series meet all the requirements with their two-stage planetary gearboxes or three-stage combinations of bevel wheel, spur wheel and

Gearbox Manufacture within the Group of Companies

Each subsidiary within the Eickhoff Group of Companies benefits from the company's deep vertical range of manufacture and the broad overall expertise of its staff. This knowledge and experience are implemented into each and every product of the Group.

Our design engineers, backed by their long-standing experience in the construction of heavy-duty machinery, are specialists in the development and manufacture of highly stressed gearboxes and the optimum quality components that go into them.

Benefits of using Eickhoff Gearboxes:

- Long-term durability thanks to the high quality standard
- Robustness through the incorporation of application-oriented safety factors
- Service-friendliness incorporated throughout the design phase
- Smooth running characteristics through optimal design of the gear meshings
- Good lubrication properties through a corresponding design of the housings



one-stage planetary gearbox. Eickhoff manufactures chain conveyor gearboxes up to size 65 for a maximum output torque of 650 kNm. Self-aligning sun gears ensure a uniform load distribution on the three planet wheels. A total of five different reduction ratios can be achieved by exchanging the first planet stage of the EP series or a spur stage of the EKP series.

The gearboxes are extraordinarily compact. Planetary gearboxes manufactured by Eickhoff are up to 50% smaller, 15% lighter and 37% shorter than conventional gearboxes. The resultant cost benefits are directly passed on to the customers.

A special advantage of the Eickhoff gearboxes is the integrated oil cooler which ensures an optimal heat exchange within the entire housing. All gearboxes are supplied with integrated cooling water chambers for cooling the high-speed components as standard equipment. The

output end connection flange of the gearboxes is made of best quality nodular cast iron and specifically designed for the extreme and alternating loads on the chain conveyor. A taper bush connects the planet carrier of the gearbox to the drive shaft of the conveyor. If necessary, the bush can be replaced with little effort, without having to dismantle the gearbox.

Exchangeable input and output shafts ensure smooth compatibility with the most diverse technical environments. Optimal lubrication is ensured even in strongly inclined applications by a splash lubrication system.

A broad range of accessories for monitoring the cooling and lubrication systems is also available and rounds out the product portfolio. Both the connections for flow switches and oil temperature sensors and the connections for electrical cooling water flow rate measurements and oil pressure sensors are provided.

Essential properties:

EKP -15 / -25 / -35 / -45 / -65

- Integrated cooling system with optional flow rate and temperature monitoring devices
- Variable reduction ratios by exchanging a spur stage
- Heavy-load bevel wheel gearboxes (cyclo-paloid toothing)
- Output end hollow shaft with exchangeable wear bush, identical to the EP series
- Output end flange and torque arm adaptable to the conveyor system

EP -15 / -25 / -35 / -45 / -65

- Integrated cooling system with optional flow rate and temperature monitoring devices
- Variable reduction ratios by exchanging the first planet stage
- Output end hollow shaft with exchangeable wear bush, identical to the EKP series
- Output end flange adaptable to the conveyor system

EICKHOFF Face Conveyor Drive Gearboxes				Reduction Ratio (other ratios on request)				
				21 : 1	28 : 1	33 : 1	40 : 1	50 : 1
				input speed: 1750 rpm				
Model	Size	Short Time Torque 3 sec/hr	Weight	max. installable motor power				
EP EKP	15	150,000 Nm	1100 kg 1760 kg	400 hp	400 hp	395 hp	335 hp	265 hp
EP EKP	25	250,000 Nm	1780 kg 2800 kg	630 hp	630 hp	630 hp	630 hp	500 hp
EP EKP	35	350,000 Nm	2780 kg 4320 kg	870 hp	870 hp	870 hp	850 hp	675 hp
EP EKP	45	450,000 Nm	3480 kg 5890 kg	1200 hp	1200 hp	1200 hp	1150 hp	920 hp
EP EKP	65	650,000 Nm	5110 kg 9170 kg	1870 hp	1870 hp	1870 hp	1715 hp	--



Eickhoff Bergbautechnik GmbH

Am Eickhoffpark 1
44789 Bochum

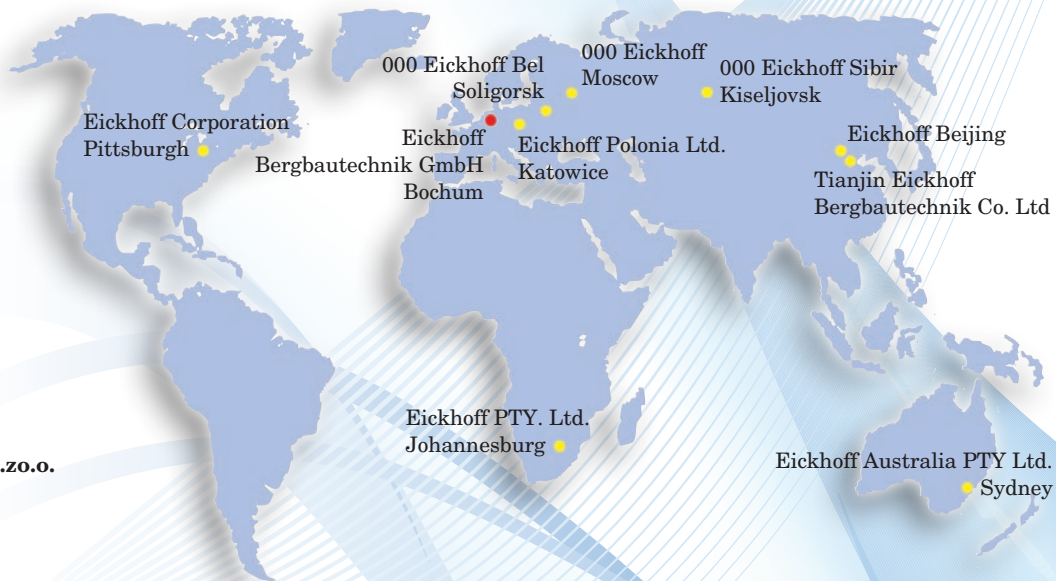
GERMANY

Phone: +49 234 975-0
Fax: +49 234 975-2676
contact@eickhoff-bochum.de
www.eickhoff-international.com

experience has no substitute
experience has no substitute

Subsidiaries

worldwide



Eickhoff Corporation

200 Park West Drive
Pittsburgh, PA 15275
USA
Phone: +1 412 78 8 1400
Fax: +1 412 78 8 4100
sales@eickhoff.us
www.eickhoffmining.com

Eickhoff Polonia Ltd.Sp.zo.o.

ul. Lwowska 38
40-389 Katowice
POLAND
Phone: +48 32 2066011
Fax: +48 32 3558754
eickhoff_sekretariat@onet.pl

Eickhoff PTY. Ltd.

12 Strauss Crescent
1422 Wadeville, Ext. 6
SOUTH AFRICA
Phone: +27 11 9025630
Fax: +27 11 9025830
sales@eickhoff.co.za
www.eickhoff.co.za

OOO Eickhoff Moscow

Wolokolamskoje Chaussee 73
Office 207
125424 MOSCOW
RUSSIA
Phone: +7 495 363 43 17
Fax: +7 495 363 43 17
eickhoff-moscow@mail.ru

OOO Eickhoff Sibir

Gogolstreet 25
562700 Kiseljovsk
Kemerovo Region
RUSSIA
Phone: +7 38464 20131
Fax: +7 38464 20131
eickhoff_sibir@mail.ru

Eickhoff Office Beijing

Room A0708, Huixin Plaza,
No. 8 Beichen East Road,
Chaoyang District
Beijing 100101
P.R. CHINA
Phone: +86 10 51662022
Fax: +86 10 51662021
eickhoff_bj@126.com

Tianjin Eickhoff

Bergbautechnik Co. Ltd.
No.19 Saida No.2 Avenue,
Xiqing Economic Development Area,
Tianjin 300385
P.R.China
Phone: +86 22-23962699
Fax: +86 22-23962698
eickhoff_liuxin@126.com

Eickhoff Australia PTY. Ltd.

41 Prince William Drive
Seven Hills NSW 2147
AUSTRALIA
Phone: +61 2 9674-6733
Fax: +61 2 9674-6581
john.smallwood@eickhoff.com.au

Eickhoff Australia PTY Ltd.

Sydney

IOOO EickhoffBel

St. Kali-1, Soligorsk County
Minsk Region
PO Box 81
223710 Soligorsk
BELORUSSIA
Phone: +375 174200889
Fax: +375 174200688
ms_eickhoffbel@hotmail.com