

COBRA GROUP

June 2007



The COBRA group was formed in 2001 by combining three 70 year old established businesses:



- conveyor belts.



- mechanical fasteners for conveyor belts.



Vulcanising presses

COBRA's objective is to offer a wide variety of specialised products and services for the conveyor systems used by the bulk material handling industry, such as the conveyor belts, mechanical fasteners, special glues for belt jointing, rubber and ceramic lagging for pulleys, belt cleaners, vulcanising presses,...





DEPREUX CONVEYOR BELTS



1/ The Company

DEPREUX has manufactured conveyor belts for more than 70 years and becomes COBRA in 2001.

COBRA EUROPE is the group holding company and the operating company in West Europe/Mediterranean/Middle East/North and Central Africa

COBRA Group employs 150 people in Europe and 1 000 people in China with a combined turnover of 100 million Euro
With subsidiaries in

- Australia : COBRA SOUTH PACIFIC
- USA : COBRA AMERICA
- South Africa : COBRA SOUTH AFRICA
- Russia : COBRA EURASIA
- Poland : COBRA POLSKA
- China YINHE DEPREUX Rubber



2/ Manufacturing

COBRA Group owns following manufacturing plants :

- in France, located in Luxeuil les Bains, the historical mother company Depreux
- in Poland, Katowice, a new factory of 6000 m2, including weaving machines and 3 production lines for textil monopoly and multiply belts
- in China (Shandong Province), with 12 steel cord belt production lines, 15 textil belt production lines



3/ *DEPREUX strong points in design and manufacturing*

DEPREUX is one of the three world technological leaders in the field of robust belts for mining.

DEPREUX has always optimised in its designs, robustness and durability, whether in textile belts, rubber plied belts or in steel-cord belts with specially designed textile or steel breakers.

DEPREUX belts are known to be particularly resistant to impact and all kind of incidents that can happen in the mining and quarrying sector as well as in the main conveyors of the heavy industry sectors.

DEPREUX is also one of the top experts in the manufacture of Fire-Resistant belts to be used for overground and underground in compliance with the different World Standards.

DEPREUX is also one of the very few International belt suppliers fully dedicated to conveyor belts manufacture.

DEPREUX is only one of the very few manufacturers to fully own a complete weaving unit, that can produce both standard and special EP fabrics as well as Solid-Woven fabrics to suit the most stringent customer specifications and requirements.

DEPREUX also specialises in the manufacture of belts capable of finding solutions for the transport of materials in all kinds of conditions and environments: belts suitable for oily and fat material, hot material transport, tubular belts, FDA approved white fire-resistant belts for the food industry...



4/ Technical back-up, close to the clients

DEPREUX has no salesmen, but experienced engineers who can help the clients design, operate and maintain their conveyor systems to provide optimum performance. This back-up is done locally through our subsidiaries in: France, Germany, United Kingdom, Poland, Australia, USA, China, Tunisia, South Africa, Russia.

This group of people work very closely with the factories to find the most suitable solution to the clients requirements.

5/ A will to satisfy the needs for the end-user

DEPREUX is one of the very rare manufacturers to have understood that the access to the final customer and that the service offered was a key parameter for including/understanding the user's needs and developing products and services



6/ Depreux conveyor belts

DEPREUX offers the following selection :

Fire-resistant belts for underground mines

- multiply textile belts, up to 2500 N/mm.
- solid-woven PVC covered belts, up to 3150 N/mm.
- solid-woven rubber covered belts, up to 3150 N/mm.
- steel-cord belts, up to ST 6300.

Standard and specialised belts for the aboveground mining or bulk material handling in the different sectors (cement, steel, power plants, recycling industries,...)

- multiply textile belts, solid-woven belts with rubber covers, steel-cord belts for abrasion and impact resistant applications.
- same construction for transport of oily and fat material, hot material and/or where fire-resistance is required
- elevator belts
- tubular conveyors.
- chevron belts.

White belts for the food industry

- medium and heavy duty multiply white rubber belts for normal application or application which require in addition the belt to be antistatic and fire-resistant.
- medium and heavy duty solid-woven PVC covered belts for the same applications
- elevator belts



7/ DEPREUX list of approvals for underground mining use

COUNTRY	COUNTRY NORM	DEPREUX APPROVALS
CHINA	MT 147-1995 MT 668-1997	PVC 680/1 to 2000/1 PVG 680/1 to 3150/1 ST 630 to ST 4000
GERMANY	DIN 22109-1 DIN 22109-2	PVC 800/1 to 1600/1 PVG 800/1 to 2500/1 GI 800/2 - GI 1000/2
France	NF M 81-671	PVC 500/1 to 1600/1 PVG 800/1 to 2500/1 Multiply belts
UNITED KINGDOM	BS 3289-1990 BC 158 -1989	PVC 500/1 to 2625/1 PVNI 500/1 to 2625/1
SPAIN	LOM 98021 LOM 97038 LOM 99001 LOM 992148 LOM 022206	PVC 630/1 to 1250/1 PVCNI 500/1 - 1000/1 - 1250/1
POLAND	PN 93/C - 05013	PVC 1000/1 PVG 800/1 to 2500/1 GI 1000/2 - GI 1250/2
RUSSIA	GOST 12.1.044.089	PVG and PVNI
AUSTRALIA	AS 4606 - 2000	PVC 875/1 to 2500/1 PVG 875/1 to 3150/1 PVNI 1400/1 FRAS 1400/4
INDIA	IS 3191	PVC 610/1 - 1140/1
USA	MSHA 28-90/2 MSHA 28-90/1	GI 2 plies, 3 plies, 4 plies, 5 plies PVC 630/1 - 800/1





GORO MECHANICAL FASTENERS



1/ The Company

GORO has manufactured mechanical fasteners and fastener installation machines for the jointing conveyor belts for more than 70 years.

2/ Manufacturing

The GORO products are manufactured in three plants :

- in France, Alès
- in China,
in Shanghai and
in Huaibei (Anhui Provinz)

The plants employs 150 people and cover 20 000 m2



3/ GORO specificities

Because of its experience in working with the most stringent heavy-duty mines in the world, GORO is one of the two only world suppliers of very robust mechanical fasteners for heavy duty conveyor belts that withstand very high static and dynamic fastener holding properties. (GORO 2002 and GORO 2003).

GORO also offers the same properties with staple hinged fasteners.

And finally, GORO is one of the two biggest world suppliers of plate fasteners.

4/ GORO product range

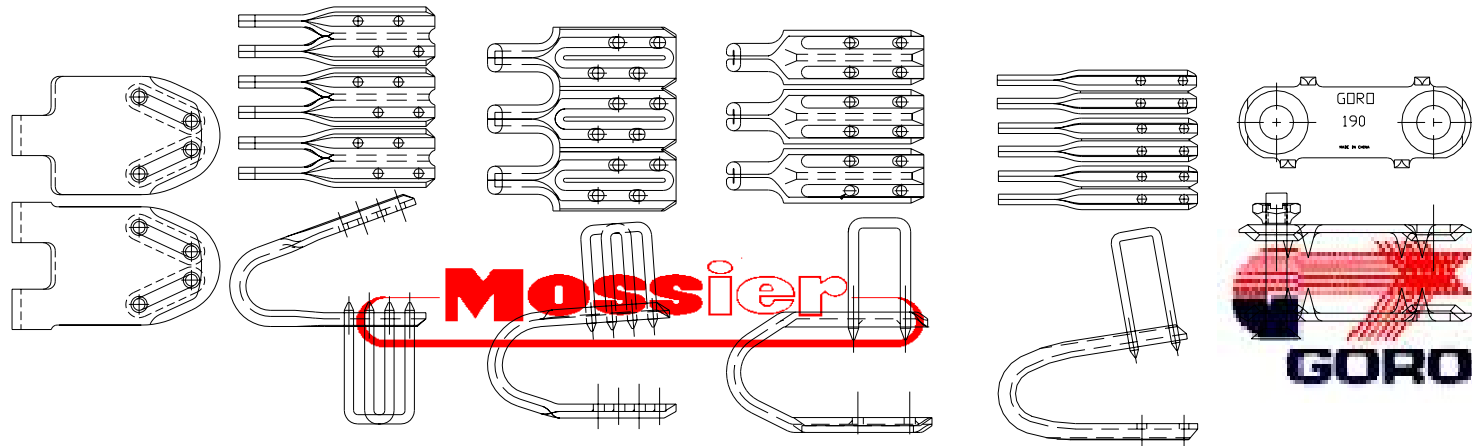
See over



GORO

MECHANICAL BELT FASTENING SYSTEM RANGE FOR INSTALLATION ON MEDIUM AND HEAVY DUTY CONVEYOR BELT

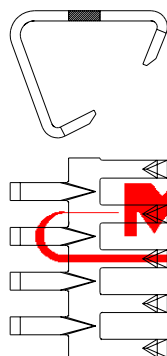
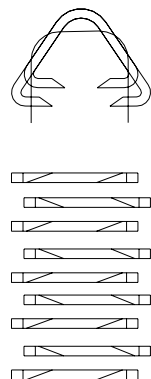
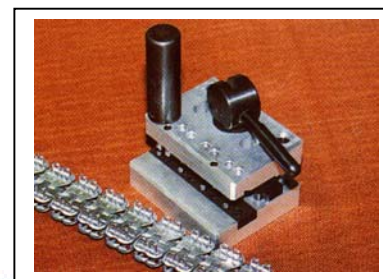
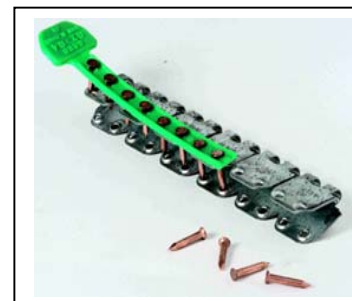
	HINGED BELT FASTENERS					SOLID PLATE
	RECORD V6	TITAN 10-14	2000 ²	2000 ³	T2H	GORFLEX
MAXIMUM WORKING TENSION RECOMMENDED According to fastener size	600PIW 105KN/m	800PIW 140KN/m	800PIW 140KN/m	2000PIW 350KN/m	2000PIW 350KN/m	225PIW 450KN/m UPTO 40KN/m 80KN/m
APPLICATIONS	Underground	Underground	Underground	Heavy duty	Heavy duty	Handling sand
	mining, coal	mining, coal	mining, coal	conveyor belt	Conveyor belt	Gravel
	Construction	Potash	Potash	Underground mining	Underground mining	Crushed stone
	Equipment	Highter tension	Highter tension	Main haulage	Main haulage	Coal
	Asphalt plants	Main haulage belt	Main haulage belt	Coal	Coal	Cement
	Aggrégate plants			Potash	Potash	Salt
						Grain elevator
BELT TICKNESS RANGE According to fastener size	7/32 15/32 UP TO 6mm 12mm	7/32 15/32 UP TO 6mm 18mm	19/64 19/32 UP TO 7,5mm 15mm	25/64 23/32 UP TO 10mm 18mm	9/16 23/32 UP TO 14mm 18mm	3/16 1 UP TO 5mm 25mm
MINIMUM PULLEY Ø RECOMMENDED According to fastener size	9"1/16 230mm	10" 20" UP TO 250mm 500mm	10" 250mm	20" 500mm	32" 800mm	10" 39" UP TO 250mm 1000mm



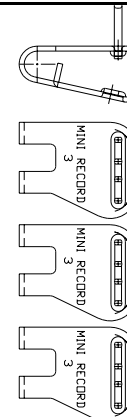
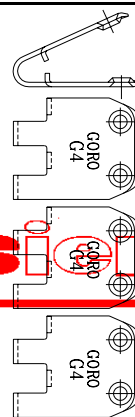
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MECHANICAL BELT FASTENING SYSTEM RANGE FOR INSTALLATION ON LIGHT AND MEDIUM DUTY CONVEYOR BELT

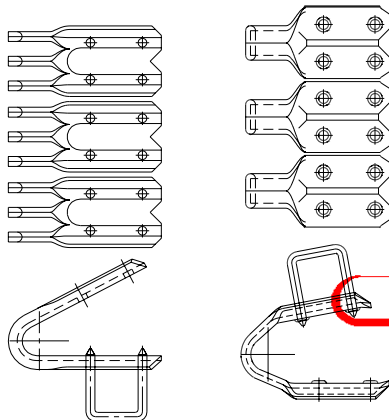
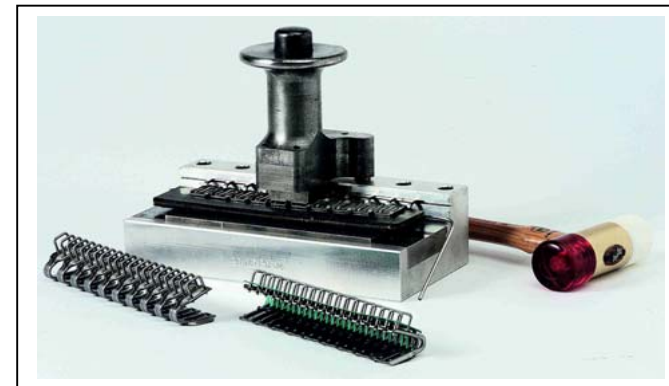
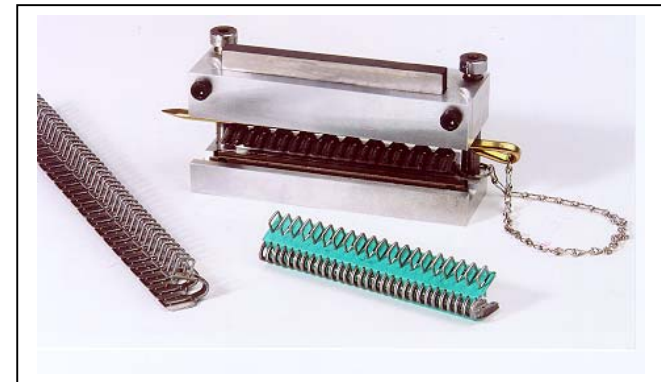
	ASGOR	TEXAS	G Line	Mini-RECORD
MAXIMUM WORKING TENSION RECOMMENDED According to fastener size		25PIW 200PIW UPTO 4,3KN/m 35KN/m	60PIW 230PIW UPTO 10KN/m 40KN/m	107PIW 215PIW UPTO 19KN/m 38KN/m
APPLICATIONS	Manufacturing	Manufacturing	Manufacturing	Package
	Assembly lines	Assembly lines	Assembly lines	Bagage handling
		Food	Food	Cased good
	Package and parts handling	Package and parts handling	Agricultural Equipment	Parts
		Airport checking count. Checkout counters		Food
		Agricultural equipment		Agricultural products
BELT TICKNESS RANGE According to fastener size	5/64 15/32 UP TO 2mm 12mm	1/16 1/2 UP TO 1,5mm 12,5mm	5/64 7/16 UP TO 2mm 11mm	1/16 15/64 UP TO 1,5mm 6mm
MINIMUM PULLEY Ø RECOMMENDED According to fastener size	2" 7" UP TO 50mm 175mm	1" 14" UP TO 25mm 360mm	3/4" 5" UP TO 20mm 125mm	2" 4" UP TO 50mm 100mm



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	Titan 05		2000 ¹	
MAXIMUM WORKING TENSION RECOMMENDED According to fastener size	360PIW		360PIW	
	65KN/mm		65KN/mm	
APPLICATIONS	Agricultural		Agricultural	
	machinery		machinery	
	Round balers		Round balers	
BELT THICKNESS RANGE According to fastener size	3/16	9/32	3/16	9/32
	UP TO		UP TO	
	5mm	7mm	5mm	7mm
MINIMUM PULLEY Ø RECOMMENDED According to fastener size	3"3/16		3"3/16	
	80mm		80mm	



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5/ Tools for joining of the belts

In complement of its range of fasteners, GORO offers

- machines of specific installation (with hammer, with lever LEVERMATIC, pneumatic P-MATIC or hydraulic H-MATIC),
- as well as tools to facilitate the work of the splicing teams :
 - o belt cutters
 - o belt skivers



a slicer to remove coating (cutter)

6/ Specific accessories to optimize the operation of the conveyor

We seek the satisfaction of the end-user who seeks to maximize the lifespan of his conveyor while minimizing the costs of maintenance and of investment.

Various accessories were developed to achieve this goal and in particular

- impact bars with support for a soft transfer on the conveyor belt
- systems of scrapers of cleaning the belts, which provide the function without "destroying" the belt
- removable systems of pulley-lagging (slide-lag)
- idlers





VULCANIZING PRESS DIVISION





40th Anno
Year

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CASA FONDATA
NELL'ANNO 1913

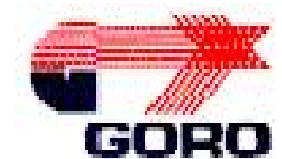
	<p>RUBBER</p>	<p><u>Mod. " UNIH "</u> <u>AUTOMATIC VULCANIZING HIDRAULIC PRESS</u> VERYLIGHT,FULLY DETACHABLE, TRANSPORTABLE PRESS BUILT WITH <u>ALUMINIUM</u> PLATENS FOR THEVULCANIZATION OF JOINTS AND ANY REPAIRS OF CONVEYOR BELTS TEXTILE AND STEEL CORD OF ALL THICKNESS. <u>MAX WIDTH mm. 2400</u></p>
	<p>RUBBER</p>	<p><u>- QUALITY: ALL COMPONENTS ARE INDIVIDUALLY INSPECTED.</u> - WIDE RANGE OF USES AND HIGH MODULARITY. - TOP PRESSURE UNIFORMITY AND ABSOLUTE SAFETY - UNIFORM TEMPERATURE. - TEMPERATURE CONTROL: DIGITAL AUTOMATIC INDIPENDENT IN THE PLATENS, BY ELECTRONIC THERMOREGULATORS – REGULATION FIELD 0 – 200° - COOLING SYSTEM BY CIRCULATING WATER IN THE PLATENS (OPTIONAL)</p>
	<p>SPOT REPAIR</p>	<p><u>Mod. " PINZA "</u> - <u>STEEL " C " FRAME</u> mm. 500 – 700 – 1000 – 1200 - - <u>BELT WIDTH</u> mm. 1200 – 1600 – 2200 – 2400 - - <u>PLATENS</u> mm. 350 X 420 – <u>PRESSURE</u> MANUAL Kg.8 cm2 - <u>EDGE RESHAPING (PLATENS)</u> mm. 1000 X 150 - - DIGITAL ELECTRONIC THERMOREGULATION SYSTEM -</p>



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LIST OF REFERENCES



For textile belts:

COAL MINING

Charbonnages de France
Deutsche Steinkohle
Park Teknik (Turkey)
B.H.P. Collieries, Thiess, Rio Tinto (Australia)
U.K Coal
James River Group, American Electric Power
Xstrata (Australia)
Sasol (South Africa)
Shenhua, Yankuang, Datong, Huaibei Mining
Coal India

Kompania Weglowa S.A. KWK « Jankowice », Poland
Katowicki Holding Weglowy S.S. KWK “Murcki”,
“Wesola”, “Myslowice”, “Halemba”, “Marcel”,
“Rydultowy-Anna”
BHP Billiton (South Africa)
Long-Airdox (USA)
Corto Cortes (Spain)
Arch coal (Usa)
Zhaozhuang Mining, Daliuta, Jincheng (China)

LIGNITE MINES

Matraljai (Hungary)

Belchatov (Pologne)

COPPER MINING

Codelco (Chili)
KGHM “Polska Miedz”, Poland

Philex Mining (Philippines)

IRON ORE

B.H.P. – Rio Tinto (Australia)

SNIM (Mauritania)

PHOSPHATES/ POTASSE

O.C.P. (Marocco)
Mines de Potasses d’Alsace (France)
Jordan Potash (Jordan)

G.C.T. (Tunisia)
Iberpotassa (Spain)

BAUXITE ALUMINIUM

Pechiney (France)
Alcan (Ghana)
Alpart (Jamaica)

Alcan (Jamaica)
Friguia (Guinea)

GOLD MINE

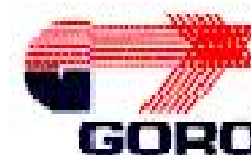
Anglogold (Mali)

GLASS

St Gobain (France)



<i>POWER PLANT</i>	Park Termik (Turkey) Belchatow (Poland)	EDF (France)	
<i>QUARRIES</i>	Lafarge / Redland (France) Kalenborn (Germany)	Point P (France) Blue Circle (UK)	Ghana Cedar Quarry
<i>SALT</i>	Salt Union (UK)	Salins du Midi (France)	
<i>STEEL COMPLEX</i>	Mittal / Arcelor (France) Mittal (Trinidad Tomago) Krakatau Steel (Indonesia) Baogang	Nova Huta (Poland) Mittal (Ex Sider) Algeria Alba Steel (Bahrein) Wuhan Steel	
<i>CEMENT</i>	Lafarge (France, China, Jordan) Helwan, Tourah (Egypte) Suez Cement (Italcement Group) Nghi Son Cement (Vietnam)Central Asia	Vicat, Calcia (France) Groupe E.R.C.O, El Chleif (Algeria) Slag Cement (Southern) SDN (Mlaysia) Cement (JSC) in Karaganda - Kazakhstan	
<i>FOUNDERIES</i>	Valeo (France)		
<i>RECYCLING INDUSTRIES</i>	Andrin (France)	Koch (Germany)	
<i>SUGAR INDUSTRIES</i>	Beghin-Say (France)	Le Havre Terminal (France)	
<i>TUNNELLING</i>	Robbins (U.S.A.)	REI/RBL (France for Europe)	
<i>Harbour terminals</i>	Ghana Bauxite Terminal Ningbo, Rizhao (China)	Le Havre, Rouen (France)	
<i>PAPER INDUSTRY</i>	International Paper	Rizhao Wodd and Paper	



Elevator belts for food industrie

Stiff (France)

Bühler (Suisse)

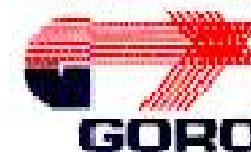


For steel cord belts:

<u>Client name</u>	<u>Belt type</u>	<u>Quality</u>	<u>Remarks</u>
Sun Village Coal Mine of Xinwen Bureau of Mine	ST2500S-1000-8+6-Φ6.8-K	1000m	nylon anti-tear fire resistance belt
Ningbo Harbor Bureau	ST1000-1600-6+6-Φ3.9- DIN X	1200m	steel cord belt
Larfage , Chengdu, Sichuan	ST1600-800-6+6-Φ4.9- DIN X ST1000-800-6+6-Φ3.9- DIN X ST2000-800-6+6-Φ5.7- DIN X	3370m 1300m 8600m	nylon anti-tear fire resistance belt steel cord belt steel cord belt
Changfeng, Shanghai	ST630-1000-5+5-Φ2.8-DIN Y	2500m	steel cord belt
Da Liu Ta Coal Mine of Shengdong Company	ST2000-1200-8+6-Φ5.7-K	11000m	MT147 steel breaker fire resistance steel cord belt
Nanjiang Dock of Tianjin Port	ST800-1800-7+4+5-DIN X ST1000-2000-7+4+5-DIN X	800m 3200m	steel cord belt steel cord belt
Nantun Coal Mine	ST1600-1200-7+8-Φ5.7-K	2400m	MT 668 nylon wire fire resistance steel cord belt



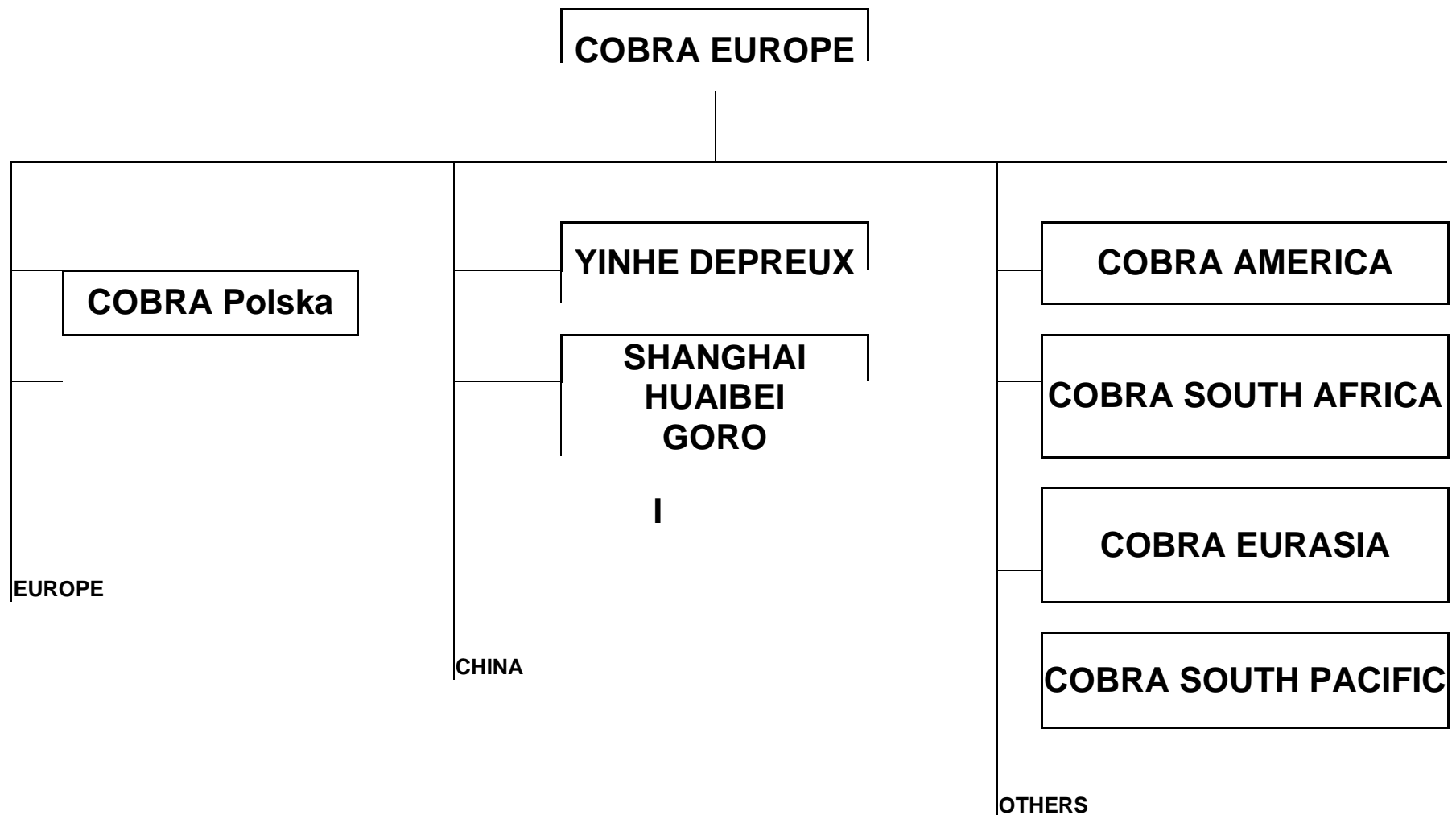
Tunisia-GCT	ST1000-650-6+4+4-Φ4 DIN X	8000m	steel breaker anti-tear steel cord belt
Rizhao Port	ST1000-1800-7+5-Φ4 DIN X	1250	Anti-abrasion
Changzhi Steel and Iron Group	ST1250-1000-7+5-Φ4 DIN X	1250	Anti-abrasion
Baoshan Steel and Iron Group	ST1250-1600-8+5+6-Φ4.5- DIN X ST1600-1600-8+5+6-Φ5.0- DIN X	780m 1400m	steel cord belt steel cord belt
Jining 2° Coal Mine of Yanzhou Bureau of Mine	ST2000-1200-8+8+6-Φ5.7-K	6000m	MT668 steel breaker fire resistance steel cord belt
Yougcheng Coal Mine	ST1600-1000-6+6+5-Φ5.7-K	2900m	steel cord belt
Da Liu Ta Coal Mine of Shengdong Company	GX1600-1800-9+7+7-K ST1000-1400-8+4+6-K ST2000-1600-8+6+6-K	1200m 900m 6500m	steel breaker anti-tear steel cord belt steel breaker anti-tear steel cord belt steel breaker fire resi-stance steel cord belt
Hua Xin Cement Company	ST1250-800-6+6-Φ4.5 DIN Y	800	Anti-abrasion
Huangdao Power Plant	ST1000-1200-6+6-Φ3.9 DIN X	1370	Anti-abrasion
Jiang Zhuang Coal Mine of Zaozhuang Bureau of Mine	ST2000-1000-8+6-Φ5.7-K	1700	MT668 steel breaker fire resistance steel cord belt
Xu Chang Coal Mine of Zibao Bureau of Mine	ST1600-1200-6+6-Φ5-K	2600	MT668 fire resistance steel cord belt



Lian Yun Gang Port	ST1600-1600-6+6-Φ5 DIN X	1500	Anti-abrasion
Rizhao Wood-pulp Plant	ST1000-1800-6+6-Φ4 DIN Y	1000	Anti-abrasion

Xin An Coal Mine of Yima Company	ST3150-1000-8+12-8-K	1100 m	MT668 fire resistance steel cord belt
Macari mines – Mexico	ST3500-1372-8+6 DIN X	220 m	ST3500-1372-8+6 DIN X
BHP – Australia	ST710-1800-6+5-Φ3.5 AS M	120m	steel cord belt
Rio Tinto – Australia	ST1000-1800-10+6-Φ4.3 AS M	3204 m	steel cord belt
Robbins	ST1600-914-5+5-Φ4.3 DIN Y	46000m	steel cord belt
ERCO – Algeria	ST500-800-6+3 DIN Y	650m	steel cord belt with 2 steel breakers
BORPAC – Bresil	ST1250-1219-8+8 DIN X	3000m	steel cord belt
REI/RBL – Europe Italy and France	ST1400-1000-6+4-ø4.5 DIN X ST1000-1000-5+5 DIN X ST 800-1000-5+5 DIN X	6000m 18000m 21000m	steel cord belt
Krakatau Steel - Indonesia	ST 630 1000 6+4 DIN X	1100 m	Steel cord belt
Alcan - Ghana	ST 2250 762 7+5 DIN X	1050 m	Steel cord belt
Robbins – Europe Spain	ST1600-914-5+5-Φ4.3 DIN K	21000m	steel cord belt





CONTACT

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