

## Focus on functions

In the first step, we adopted the customer's viewpoint and divided the braking system into functional segments: "Supply", "Actuation", "Interaction", "Control", "Adhesion", "Friction", "Couplers" and "Comfort". Then we selected around 120 products that are central to their respective systems and assigned them to these segments.

"**Supply**" includes those products that supply the brake pressure, such as compressors. "**Actuation**" includes the mechanical brake force actuators, such as the calipers, while "**Interaction**" comprises the products at the human-machine interface, such as motion controller kits for the driver's cab. The "**Control**" segment covers brake control and management products. "**Adhesion**" encompasses products related to wheel/rail contact, such as sanding systems and wheel slide protection, "**Friction**" includes the brake disc and friction material, "**Coupling Systems**" stands for the couplings between trainsets and between the cars within a train, while "**Comfort**" comprises functions such as leveling control.

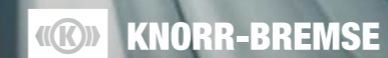
This rigid allocation process has not been introduced for its own sake. It forms the basis for a coherent naming structure that can also be applied to future products. The market name itself can comprise up to four component parts: First, there is the product family name (e.g. "Axle") plus a description of the function (e.g. "Act"). This is followed by any differentiation within the product family – e.g. "Classic". Thus, "AxleAct Classic" designates the conventional axle-mounted brake caliper, while "AxleAct Compact", for example, designates the compact axle-mounted brake caliper. Our high-value brands, such as our distributor valves KE or DB60, will retain their product names on account of their historical significance.

Knorr-Bremse Systeme für  
Schienenfahrzeuge GmbH

Moosacher Straße 80  
80809 Munich  
Germany  
Phone: +49 89 3547-0  
Fax: +49 89 3547-2767  
rail.knorr-bremse.com

# NEW NAMES FOR BRAKES

LOGICAL, INTUITIVE, CUSTOMER-ORIENTED



## Always see things from the customer's viewpoint

As the global market leader for braking systems, Knorr-Bremse has a product portfolio that is as broad as it is diversified. Today, in the Rail Vehicle Systems division, that portfolio numbers more than 5,000 main brake components. Keeping a clear overview is quite a challenge. But that's not just due to the sheer number of products. It's also because the product names mainly date back to when they were first introduced and are often made up of letters and numbers.

In the course of a comprehensive naming project, Knorr-Bremse has created Market Names for the main brake components in its Rail portfolio. The basic assumption was that the names should be logical, intuitive and customer-oriented, and they should clearly reflect and signpost the "everything-from-one-source" approach that is so crucial for Knorr-Bremse.

With this new underlying logic, we are making it far easier to navigate through our portfolio, because the new naming concept is based on the core 'systems approach' adopted by Knorr-Bremse, as well as on the intuitive perception of the functions of the individual products.

**Naming is far more than a formality. To enable the new names to leverage their full added value, they have to be lived and used. Please help us to make this happen!**

A handwritten signature in blue ink, appearing to read 'Nicolas Lange'.

**Dr. Nicolas Lange**

Chairman of the Management Board  
of Knorr-Bremse Systeme für Schienenfahrzeuge GmbH

A handwritten signature in blue ink, appearing to read 'M. Beinert'.

**Mario Beinert**

Member of the Management Board  
of Knorr-Bremse Systeme für Schienenfahrzeuge GmbH

## SUPPLY SEGMENT

DESCRIPTION		MARKET NAME
<b>Air Compressors</b>		<b>Piston / ScrewSupply</b>
Piston Compressor	LP, V, VV	PistonSupply
Piston Compressor oilfree	V...T, VV...T	PistonSupply Eco
Screw Compressor	SL	ScrewSupply
<b>Air Dryers</b>		<b>DrySupply</b>
Air Dryer	LTE, LTZ	DrySupply Classic
Air Dryer Locomotive	LTZ2.2, LTZ3.2	DrySupply Max
Adaptive Control Air Dryer	iLTZ	DrySupply Smart
Adaptive Control Air Dryer Locomotive	LD-1000	DrySupply Smart Max
<b>Air Supply Units</b>		<b>AirSupply</b>
Air Supply Unit	ASU	AirSupply Unit
Intelligent Air Supply Unit	iASU	AirSupply Smart
<b>Air Supply Control</b>		<b>SupplyControl</b>
Intelligent Air Control	iAC	SupplyControl Smart
Inverter	Inverter DC/AC	SupplyControl Direct

## INTERACTION SEGMENT

DESCRIPTION		MARKET NAME
<b>Motion Controller Kits</b>		<b>MotionLead</b>
Master Controller	FM	MotionLead Master
Traction Controller	FT	MotionLead Traction
Brake Controller	FB	MotionLead Brake
Brake Controller	FB11, ZB11, FZ	MotionLead Basic
<b>Wiper &amp; Wash Systems</b>		<b>VisionLead</b>
WiperWash Electric	EBS-1/2, EAS, EDS	VisionLead Electric
WiperWash Electro-pneumatic	EPBS, PBX, PHX	VisionLead Pneumatic
WiperWash Mechanic	WPE1, Wiper Arm, Wiper Blade, Wash Water Tank, WRS1, Filler Flap	VisionLead Accessories

## CONTROL SEGMENT

DESCRIPTION		MARKET NAME
<b>Brake Control Units</b>		<b>Cube / Flex / MaxControl</b>
Brake Control Unit	EP2002 family	CubeControl
Brake Control Unit	EPC 3.0	FlexControl
Brake Control Unit	EPC	FlexControl Modular
Brake Control Unit	EPC-L	FlexControl Lite
Brake Control Unit	EP-BGE-II	FlexControl Basic
Brake Control Unit	EP-BGE, all other BGE	FlexControl Fit
Brake Control Unit	CCB-3	MaxControl
Brake Control Unit	CCB-II (Variants), CCB-26, BPC, MBS	MaxControl Classic
Brake Control Unit	BGE, ZGE for BP Control (mainly Multiple Units, Special Vehicles)	MaxControl Basic
<b>Pantograph Control Unit</b>		<b>PantoControl</b>
Pantograph Control Unit	Type A1, A2, B1, B2	PantoControl
<b>Brake Control Electronics</b>		<b>SysControl</b>
Brake Control Electronics	ESRA Evolution	SysControl
Brake Control Electronics	ESRA	ESRA
<b>Distributor Valves</b>		<b>KE, DB60</b>
Distributor Valves	KEf	KE
Distributor Valves	KE...	KE Classic
Distributor Valves	DB60	DB60
<b>Electro Hydraulic Units</b>		<b>HydroControl</b>
Electro Hydraulic Unit	HGK	HydroControl Basic
Electro Hydraulic Unit	HGE, HGES	HydroControl Classic
Electro Hydraulic Unit	HGD, HGDS	HydroControl Compact
Electro Hydraulic Unit	HGA-70, HGF	HydroControl Level
Modular Electro Hydraulic Unit	i3HU	HydroControl Smart
Auxiliary Release Units	EDHL, HLE, HLEM	HydroControl Aux

## ADHESION SEGMENT

DESCRIPTION		MARKET NAME
<b>Wheel Slide Protection</b>		<b>WheelGrip</b>
Wheel Slide Protection	MGS2	WheelGrip Classic
Wheel Slide Protection	MGS3	WheelGrip Adapt
<b>Sanding Systems</b>		<b>SandGrip</b>
Mechanic Sanding Unit	SDM1, SDG1	SandGrip Mechanic
Pneumatic Sanding Unit	SEB, SEJ, SD, SDP2, SDN14, SEJ14, SDN31.1	SandGrip Pneumatic
Sanding Accessories	SKD, FFL, MOS, SAM, SIM, VSD5, VSD8, SK1, FLM1, SFS, SHR, Sand Boxes, Modules	SandGrip Accessories
<b>Cleaning Brake Units</b>		<b>TreadGrip</b>

## ACTUATION SEGMENT

DESCRIPTION		MARKET NAME
<b>Brake Caliper Units</b>		<b>Wheel / AxleAct</b>
Conventional Brake Caliper Unit (wheel mounted)	RZU, RZD	WheelAct Classic
Compact Brake Caliper Unit (wheel mounted)	RZTM, RZTS, RZTXS, RZKT	WheelAct Compact
Conventional Brake Caliper Unit (axle mounted)	WZU, WZD	AxleAct Classic
Compact Brake Caliper Unit (axle mounted)	WZT, WZKT	AxleAct Compact
Conventional Brake Caliper Unit (axle mounted)	WZPF6	AxleAct Passive
Brake Cylinder	i.e. U-Cylinder, Compact Cylinder	BasicAct Cylinder
Brake Cylinder	PF6	BasicAct Cylinder Passive
<b>Tread Brake Units</b>		<b>TreadAct</b>
Tread Brake Unit	PEC7	TreadAct Compact
Tread Brake Unit	PC7, PC5, PSC7	TreadAct Classic
Brake Cylinder Freight	BG	TreadAct Cylinder
Slack Adjuster Freight	DRV	TreadAct Adjuster
Compact Brakes for Freight Cars	CFCB, TMB60, BMBS, Alpac, Slapcac, KBX	TreadAct Freight
<b>Hydraulic Calipers</b>		<b>HydroAct</b>
Hydraulic Active Caliper	HF1A, HF2A, HSE1A, HSE2A, HS1A, HS2A	HydroAct Active
Hydraulic Floating Caliper	HS1P, HSC1P, HS2P	HydroAct Floating
Hydraulic Caliper Lever Type Design	HC1P	HydroAct Lever
Elastic-mounted Hydraulic Caliper	HCE1P, HSE1P, HSE2P	HydroAct Movable
Hydraulic Caliper Unit	WZ...H, RZ...H	HydroAct Unit
<b>Magnetic Track Brakes</b>		<b>MagnetAct</b>
Main Line Articulated Magnet	GRIP	MagnetAct Flex
Light Rail Vehicle Articulated Magnet	TORO	MagnetAct Flex Compact
Light Rail Vehicle Rigid Magnet	MORE	MagnetAct Rigid
<b>Eddy Current Brakes</b>		<b>EddyAct</b>
Eddy Current Brake	iECB, EWB154R	EddyAct
Eddy Current Brake	iECB + control	EddyAct Smart
<b>Magnetic Track Brake Control</b>		<b>MagnetControl</b>
	<b>IRCB, MMBC</b>	

## FRICITION SEGMENT

DESCRIPTION		MARKET NAME
<b>Brake Discs</b>		<b>Ultra / Pro / LightDisc</b>
Wheel Mounted Brake Disc (Steel)	R...LS...	UltraDisc Wheel
Wheel Mounted Brake Disc (Steel)	R...LS...L	UltraDisc Wheel Lite
Wheel Mounted Brake Disc (Gray Cast Iron)	R...LG...	ProDisc Wheel
Wheel Mounted Brake Disc (Alu)	R...LA...	LightDisc Wheel
Axle Mounted Brake Disc (Steel)	W...PS..., W...XS..., W...MS..., W...LS..., F...PS..., F...MS...	UltraDisc Axle
Axle Mounted Brake Disc Advanced (Steel)	W...PS...R	UltraDisc Axle Plus
Axle Mounted Brake Disc (Gray Cast Iron)	W...PG..., W...PK..., W...LG..., W...XG..., W...MK..., F...PG..., F...PK..., F...MK...	ProDisc Axle
Axle Mounted Brake Disc Advanced (Gray Cast Iron)	W...PG...R	ProDisc Axle Plus
Axle Mounted Brake Disc (Alu)	W...PA...	LightDisc Axle
<b>Brake Pads/Blocks</b>		<b>UltraPad / ProPad, ProBlock</b>
Sinterpad	Flexpad, Pentaflex, Tetraflex	UltraPad Flex
Sinterpad	Isobar	UltraPad Extreme
Organic Brake Pad	Propad	ProPad
Organic Brake Block	Problock	ProBlock
<b>Pads for Magnetic Track Brakes</b>		<b>MagnetBar</b>
Pads for Magnetic Track Brake (Cast Iron)		MagnetBar
Pads for Magnetic Track Brake (Steel)		MagnetBar Classic
Pads for Magnetic Track Brake (Sinter)		MagnetBar Prime

## COUPLERS SEGMENT

DESCRIPTION		MARKET NAME
Automatic Couplers (Passenger)		<b>AutoLink</b>
Digital Automatic Coupler (Freight)		<b>FreightLink</b>
Semi-Permanent Couplers (Passenger)		<b>ShortLink</b>
Adapter / Rescue Couplers (Passenger)		<b>RescueLink</b>

## COMFORT SEGMENT

DESCRIPTION		MARKET NAME
Hydraulic Leveling Cylinder	HLC	LevelEase
Suspension Leg	FB	HydroEase
Shock Absorber		ShockEase