



DELLNER BUBENZER

**LEADING THE WORLD
IN BRAKING SYSTEM DESIGN
& MANUFACTURING**



WELCOME TO DELLNER BUBENZER



**DELLNER
BUBENZER**
BRAKING SOLUTIONS

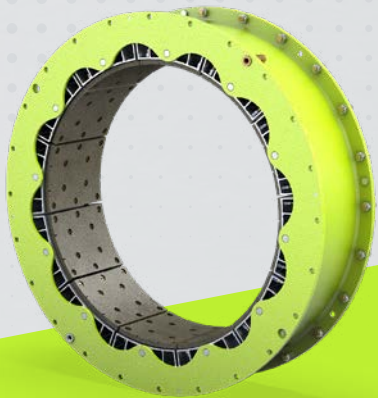
DELLNER BUBENZER is a global leader in the design and manufacture of braking systems. Our unrivaled braking equipment offers customized stop-action solutions for a wide variety of industries from sea to sky, and everything in between.

For decades DELLNER BUBENZER products have been recognized worldwide as innovative braking solutions that are precision engineered to meet the highest quality standards.

DELLNER BUBENZER



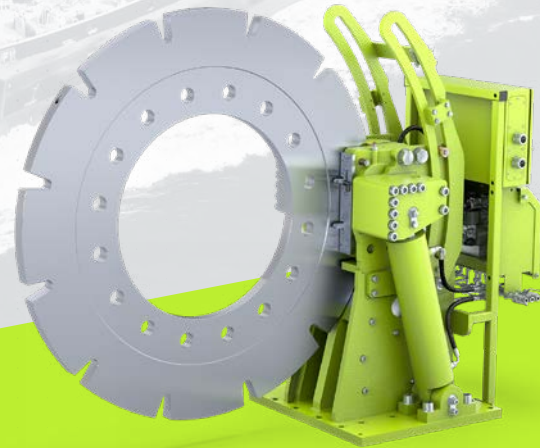
INNOVATION BY DESIGN



FKT ELEMENT
PNEUMATIC DRUM
CLUTCHES & BRAKES



SKD 100
CALIPERS/DISC BRAKES



STL
STOP TURN LOCK SYSTEMS



KFB 40
MOTOR MOUNTED BRAKES



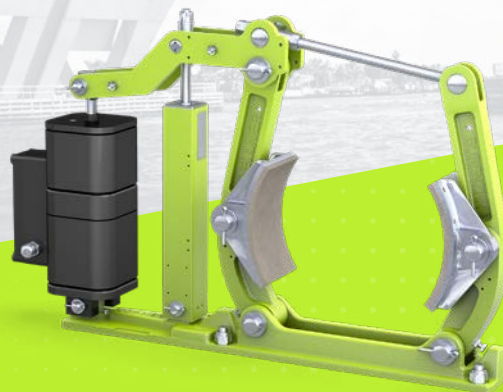
LM 40 - M
LOCKING DEVICES



SB WITH BUEL® H - CMB3
CALIPERS/DISC BRAKES



SF WITH BUEL® G - CMB3
CALIPERS/DISC BRAKES



EBN 400
DRUM & BAND BRAKES



KBSD
COUPLINGS & DISCS



SKP 50
FAIL SAFE BRAKES

DELLNER BUBENZER's leading position arises from decades of experience, subject-matter expertise, perpetual innovation, production with safety in mind, and the highest quality standards of product and service.

As no single project or customer are the same, we deliver turnkey solutions with a customized approach and support.

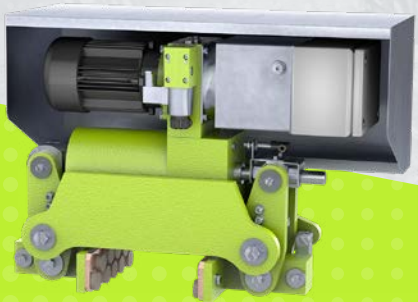
**VIEW FULL
PRODUCT
CATALOG**



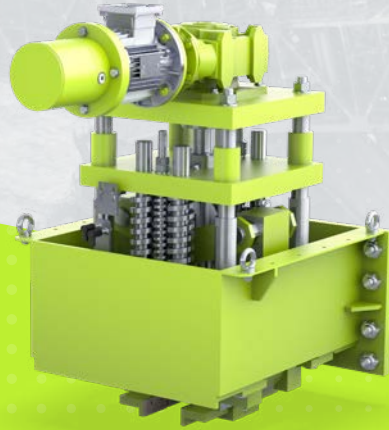
DELLNER BUBENZER



A DELLNER BUBENZER PRODUCT IS ALSO A
TRUSTED PARTNERSHIP,



DBRBe
STORM BRAKES - WHEEL BRAKES



DBSZe
STORM BRAKES - RAIL CLAMPS



DH2200 HPU
HYDRAULIC SYSTEMS



ONE THAT DELIVERS
LONG-TERM SOLUTIONS
PAIRED WITH
FIRST CLASS SERVICE.

BOSS®

BRAKE ONLY SNAG SYSTEM

The **BOSS®** system has been developed based on the experience with the SOS system that has been already installed in more than 200 container cranes world wide. Conventional hydraulic anti snag systems have only one fixed tripping point (pressure relief valve).

The **BOSS®** system is working with variable tripping points (each corner individually) depending on the actual corner load measurement and hoisting speed. The **BOSS®** PLC is pre-calculating the perfect tripping point for each load condition. Working with the best tripping points leads to faster snag detection and less stress in the wire ropes as well as in the crane structure.

► **2-IN-1 OVERLOAD & SNAG LOAD**

► **PROFISAFE INTERFACE TO CRANE CUTS OFF POWER FOR BRAKES & HOIST MOTORS**

► **FIVE TIMES FASTER COMPARED TO OTHER SYSTEMS WITH A REACTION TIME OF 100 - 267 ms**

► **SIMPLE SET-UP & INTEGRATION**

ADVANTAGES

- Profisafe Interface
- Fastest reaction time
- Precise control
- TÜV certified
- Cross-check of both channels
- Simple calibration and set-up
- Fully integrated
- Closed wired system
- Dynamic snag trip point setting depending on corner load and speed
- No maintenance time required
- No nuisance tripping after e-Stops
- Easy retrofitable



SAFE



SIMPLE SET-UP
& INTEGRATION



CERTIFIED



FAST



OVERLOAD +
SNAG LOAD



BOSS® BRAKING PROCEDURE

1



LOAD PINS 0 ms

2



BOSS® PLC 20 ms

3



SERVICE BRAKE 56 ms

4



EMERGENCY BRAKE 90 ms

5



HOIST MOTION 100-267 ms

DELLNER BUBENZER



MONITORING & CONTROL SYSTEMS



VSR-3
FOR SB BRAKES

In response to requirements to simplify the maintenance of industrial brakes and at the same time to increase their operational safety, DELLNER BUBENZER offers a retrofitable, compact electronic status indication system to be integrated into the brake as an additional device.

OPTIONS

- ▶ Stainless steel electronic box IP65 for outdoor use
- ▶ Sunshine protection cover for outdoor use



BCC3000
BRAKE CONTROL UNIT

The **BCC3000 system** is the ideal solution for the controlled braking of machines and applications. It is especially useful for belt conveyors, where “smooth” braking is vital to prevent undue belt tensions leading to reduced component life. In addition to protecting the machine from excessive stresses during braking the **BCC3000** also offers system monitoring and diagnostics functions.



CMB-3
FOR SF BRAKES

Compact Monitoring System for Brake Systems

The CMB-3 is a robust and compact status monitoring system for industrial brakes, offering reliable performance in demanding environments.

KEY FEATURES

- ▶ **Supports More Sensors** Handles twice the number of sensors for enhanced monitoring.
- ▶ **Flexible Bus System** Compatible with Profibus or Profinet for easy system integration.
- ▶ **Wide Voltage Range** Automatic power supply switch (110-240 V AC).
- ▶ **Brake Compatibility** Monitors up to:
 - 2 brakes (SB28/SB23/SB16) or
 - 2 brakes (SF10...SF40) or
 - 1 dual caliper brake (SF50)
- ▶ **Easy Troubleshooting** M12 plug connectors for quick sensor diagnostics.
- ▶ **Durable Design** Stainless steel housing (IP65) with high temperature resistance (-20°C to +70°C).

ADDITIONAL FEATURES

- ▶ **Clear Display** 4-row industrial display for data and error messages.
- ▶ **Brake Cycle Counter** Tracks up to 100 million cycles.
- ▶ **Error Relay** Common relay contact for error reporting.
- ▶ **Bus System Advantages** All measurement signals and errors are transmitted to the PLC via Profibus/Profinet, reducing the need for expensive analog inputs.



CMB-3
FOR SB BRAKES



BCMS

BRAKE CONTROL UNIT

The **BCMS** is a micro-controller-based monitoring and switching device for spring applied brakes of the SFB and KFB series. Through measurement and analysis of current and voltage of the outgoing 2-wire, the switching status and the wear status of up to 4 electromagnetic spring-applied brakes can be evaluated simultaneously. The brakes are switched by using two internal electronic semiconductor switches. Basically, the brakes are switched by fast excitation, so the DC coil of the connected brakes will be energized at double nominal DC voltage. After that, the **BCMS** switches to holding current operation, thereby saving electrical energy.

APPLICATIONS

- ▶ Container cranes
- ▶ Ship winches
- ▶ Conveyor belts
- ▶ Automatic racking systems
- ▶ General electrical drives



BCU 2001

BRAKE CONTROL UNIT

The Brake Control Unit **BCU 2001** records characteristic current and voltage variations, which are induced by movements of the armature disk in the magnetic field of the brake coil. In an interference free and reliable manner it evaluates the signal levels in terms of the control state (applied or released) and the maximum air gap (maximum wear). The second main function that is evaluated, is the switching status of the brake, On/Off.

APPLICATIONS

- ▶ Container cranes
- ▶ Ship winches
- ▶ Automatic racking systems
- ▶ Conveyor belts
- ▶ General electrical drives

ACCESSORIES



BGL/EGL

BRAKE RECTIFIERS

Half-wave & full-wave rectifiers for DIN rail mounting.



SGL

SWITCHING RECTIFIER

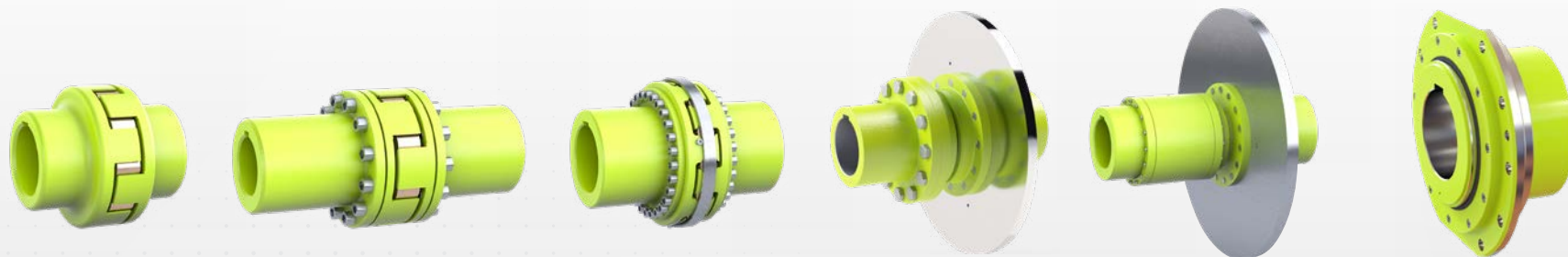
DIN rail mounted unit switches from bridge rectification to half-wave rectification.



FWR/HWR

BRAKE RECTIFIERS

Half-wave & full-wave rectifiers for DIN rail or panel mounting.



	ELASTIC COUPLINGS (also available with a disc)			GEAR COUPLINGS		DRUM COUPLING
	KST / KLST	KL	KH	KBSD	KBTD	NTRST
Nominal Torque	130 - 2 650 Nm	600 - 13 350 Nm	7 800 - 27 000 Nm	1 450 - 67 200 Nm	1 450 - 67 200 Nm	6 500 - 1 390 000 Nm
Max Speed*	7 250 - 3 000 rpm	5 250 - 1 900 rpm	3 300 - 2 200 rpm	2 600 - 9 500 rpm	1 950 - 4 800 rpm	Max Radial Load 17 650 - 670 000 N
Angular Misalignment**	2,0° - 1,0°	1,5° - 1,0°	0,5°	1,5°	1,5°	Up to 1°
Radial Misalignment	0,8 mm - 1,5 mm	1,0 mm - 1,8 mm	0,7 mm - 1,0 mm	0,7 mm - 1,6 mm	1,0 mm - 2,3 mm	Motor Shaft Diameter Up to 570mm
Temperature Range	-30°C to +80°C	-30°C to +80°C	-30°C to +80°C	-20°C to +100°C	-20°C to +100°C	-20°C to +80°C

*If applicable. Dependent on brake disk diameter **Both joints

A SUSTAINABLE FORCE

DELLNER BUBENZER leads the industry with high performance and environmentally friendly BUEL® thrusters.

BUEL®
HIGH SPEED



PERFORMANCE FEATURES

Powerfully Compact

Generates 25% more power yet requires less space

High Endurance

Increased durability with decreased maintenance cycles

Unlimited Possibilities

Voltage range between 220 and 690V with 50 or 60 Hz

Increased Safety

Optimized dead-time

SUSTAINABLE FEATURES

Energy Efficient

Intermittent operation reduces carbon footprint

Eco-Friendly

Utilizes extremely low levels of organic & optional biodegradable oil

Energy Saving

Meets requirements of DIN EN ISO 50001 Energy Management Systems

SUSTAINABILITY AT DELLNER BUBENZER



EMPLOYEE
SAFETY



HUMAN
RIGHTS



ANTI-CORRUPTION



SUPPLIER
COMPLIANCE



PRODUCT
ENGINEERING



HAZARDOUS
MATERIAL & WASTE



ENERGY
MANAGEMENT



TRANSPORTATION

DELLNER BUBENZER



GLOBAL STRENGTH, LOCAL COMMITMENT

Our global team of experts instill trust in our customers, develop and innovate with the latest technology, and provide strength in our product and personalized service.

Anchored by integrity and committed to sustaining our industry-leading product offering, our diverse community of extremely talented people around the world are committed to serving local customers.



AFTER-SALES SERVICE

DELLNER BUBENZER takes great pride in a history of long-term satisfied customers who trust our commitment to excellence and recognize the value of our investment in our **Worldwide Service Network**.

- ▶ **SPARE PARTS SERVICE**
- ▶ **TRAINING**
- ▶ **INSPECTION PACKAGES**
- ▶ **MAINTENANCE & REVISION SERVICE**



PREVENTATIVE SERVICE

INSPECTION &
MAINTENANCE

REPAIRS

TRAINING



REACTIVE SERVICE

TECHNICIANS
ON CALL

24/7 TECHNICAL
SUPPORT



LIFE CYCLE MANAGEMENT

CUSTOMIZED
SERVICE CONTRACTS

RETROFITTING

ORIGINAL
SPARE PARTS

CONTACT

Please feel free to contact our Service Department
for more information: service@dellnerbubenzner.com



THE HIGHEST STANDARDS FOR MAXIMUM PERFORMANCE

DELLNER BUBENZER's innovative braking solutions and products are meticulously tested at our state-of-the-art research and development center. Our rigorous testing process proves and validates our research while ensuring maximum effectiveness, efficiency, and our shared client commitment to safety.

DELLNER BUBENZER's product standards are beyond meeting the Association for Iron & Steel Technology (AIST) criteria and the rigid requirements of Deutsches Institut für Normung e.V. (DIN). With a wide range of high capacity and high performance disc and drum brakes designed to operate in severe duty applications, our research, development, and testing center continuously validates our product performance and integrity.

Our commitment to research, development, and testing is the trustworthy foundation of DELLNER BUBENZER.



ENGINEERING

- ▶ DELLNER BUBENZER's trusted team of expert engineers rely on decades of experience to deliver superior products and braking systems for a multitude of industry-specific applications.
- ▶ From full braking system design to the assessment and optimization of existing solutions, DELLNER BUBENZER's engineers offer a full suite of services including 3D conceptualization, technical documentation, customized testing, and development of prototypes.



BRAKING SYSTEM DESIGN

- ▶ DELLNER BUBENZER's provides turn-key solutions for complete braking system design for static and dynamic applications.
- ▶ Upon review of input data, our engineers and product specialists evaluate system requirements, determine quantity, size and distribution of system components, perform 3D modeling for system design and/or adjustments, and deliver a complete global FEM model to ensure proper load management and system performance.



CLIMATE TESTING

- ▶ All products designed and manufactured by DELLNER BUBENZER endures in-depth climate and pressure performance testing to satisfy a stringent set of requirements for optimal performance, durability and safety.
- ▶ DELLNER BUBENZER conducts performance testing on one of the industry's largest test benches to ensure each product is prepared to meet the most rigorous demands within the world's harshest climates.



PRECISION ENGINEERED FOR DIVERSE APPLICATIONS

As no single project or customer are the same, DELLNER BUBENZER is recognized globally for delivering turnkey braking solutions and unparalleled support for a variety of industry applications worldwide.

- Durability, minimum failure probabilities and maximum performance
- Superior braking system design for static and dynamic applications for use in the toughest conditions

INDUSTRIES SERVED



BRIDGES & MOVABLE
STRUCTURES



CONTAINER
HANDLING



CRANES
& HOISTS



GENERAL
INDUSTRY



IRON &
STEEL



MARINE
PROPULSION



MATERIAL
HANDLING



MINING & BULK
HANDLING



OFFSHORE



OIL &
GAS



PULP &
PAPER

PRODUCT TYPES

Caliper / Disc Brakes

Couplings

Drum & Band Brakes

Hydraulic Systems

Locking Devices

Monitoring & Control
Systems

Motor Mounted Brakes

Pneumatic Drum
Clutches & Brakes

Stop Turn Lock Systems

Storm Brakes

Thruster / BUEL®

Rail & Wheel Brakes



WORLDWIDE SERVICE NETWORK

With your investment in a DELLNER BUBENZER product you also enter into a strong partnership, one that delivers first-class service, fast reaction times, highly qualified personnel, and minimal downtime through the readily available resources of our **Worldwide Service Network**.





CONTACT
A LOCATION
NEAREST YOU

DELLNER BUBENZER



DELLNER BUBENZER



www.dellnerbubenzner.com