

Hartmann & König
STROMZUFÜHRUNGS AG

Energy and data transfer systems for mobile consumers

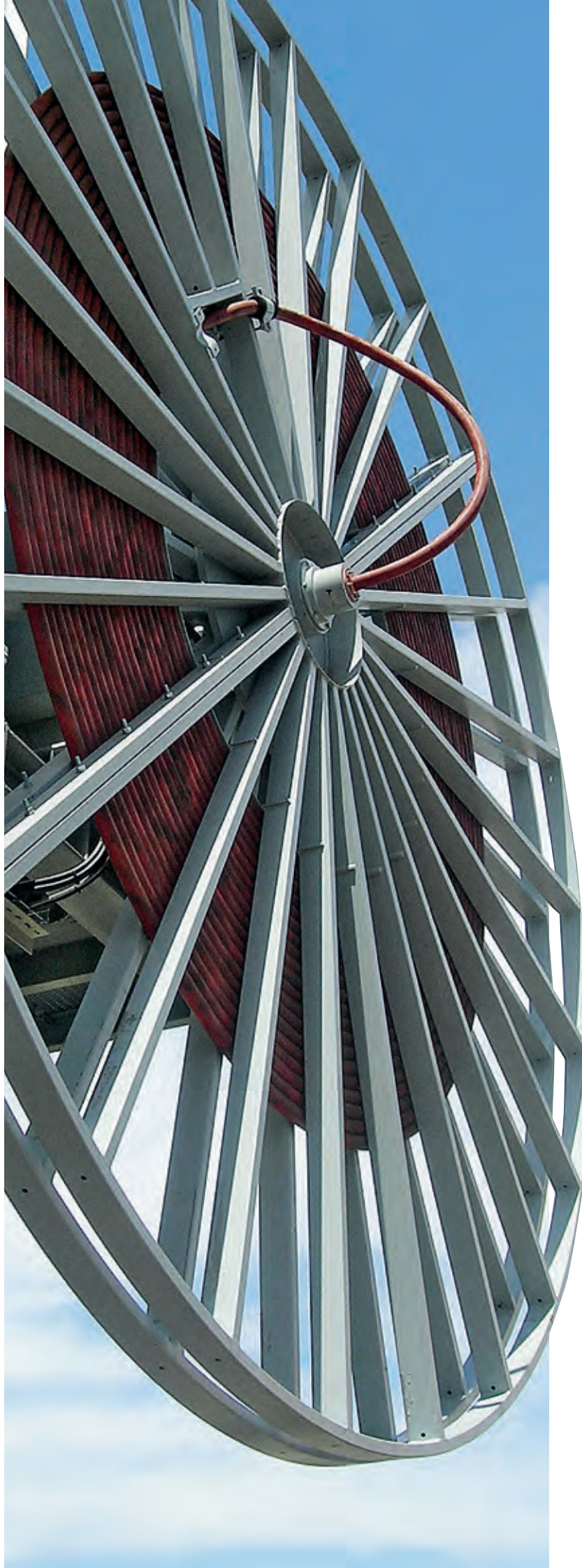
We energize mobility. Worldwide.





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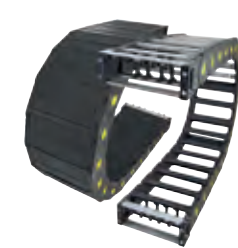
Motorized cable reels



Spring cable reels



Slip ring assemblies



Energy chains

Company profile

Expertise meets customer's needs

As one of the leading manufacturers of motorized cable reels, spring cable reels, and slip ring assemblies, Hartmann & König Stromzuführungs AG supplies its customers worldwide with technologically advanced energy and data transfer systems for mobile consumers. The high-quality „Made in Germany“ cable reels are used on container, deck and construction cranes, excavators or hoisting equipment of all types – and wherever mobile consumers require a reliable supply of power, data or other media.

Our expertise is reflected in an impressive product portfolio of state-of-the-art cable reels and slip ring assemblies. Innovative capability, reliability as well as the flexibility of a medium-sized company contributed to the success of

Hartmann & König. As a full-service provider of power supply solutions we provide in addition to our cable reel and slip ring portfolio a wide range of high-grade energy chains in plastic and steel execution.

Our expertise in the area of energy delivery to mobile consumers is based on more than 70 years experience in the development as well as production of cable reels and slip ring systems. We support our customers with a dedicated team of engineers and designers, who develop solutions for the most challenging applications. In this way, we can offer virtually all types of motorized cable reels tailored to customer requirements for spiral or cylindrical winding and unwinding of cables, ropes or hoses.





Change, values and vision

Seven decades of change at Hartmann & König

- **1945:** Karl Hartmann and Max König founded Hartmann & König KG in Graben, Germany. The company initially manufactures products for other sectors, such as filter systems, water pumps etc.
- **1954:** The company specialises in the production of cable reels, slip ring assemblies and accessories. Hartmann & König Maschinenbau OHG is established in the same year.
- **1958:** The company relocates to a new production facility in Graben in order to expand its capacities and its product portfolio.
- **1980:** The second generation of the Herberger and Gross families continue the business as Hartmann & König Maschinenbau GmbH & Co. KG.
- **1993:** Ursula and Hubert Herberger act as sole managing directors and successfully steer the company's fortunes to a path of continuous growth.
- **1999:** To meet its growing requirements, Hartmann & König builds a modern administration and production facility with a total area of more than 4,200 m² in the Neudorf district.
- **2015:** Following the death of Ursula and Hubert Herberger, the long-established company remains in family ownership: their daughters Sabine Gamer and Silke Rom, representing the third generation of owners, take over responsibility for the successful future of Hartmann & König Stromzuführungs AG.
- **2016:** The globally successful specialist in energy supply systems constructs two new halls, thereby adding around 3000 m² to its production area. This enables the further expansion of series production but also caters for the production of bespoke large-diameter cable reels.
- **2019:** Hartmann & König extends its portfolio with a wide product range of energy chains.

Values and visions

Throughout the company's 70-year history, three generations of entrepreneurs have shaped a corporate philosophy based on honesty, respect and honourable dealings with customers and employees. These values are reflected in strong growth and, not least, in long-standing trusting relationships with our steadily expanding customer base.

Driven by entrepreneurial vision, technical expertise and tireless dedication, this family-owned SME based in Graben-Neudorf has successfully positioned itself on the international market. Here at Hartmann & König, we have long considered ourselves quality leaders in the area of energy supply to mobile consumers. The management remains as committed to this aspiration as it has always been. Every day, our workforce of around 150 employees goes to great lengths to convince our customers of the performance of our products, our reliability

backed by a level of flexibility that is unique on the market. We invest heavily in R&D with the goal of developing and continuously expanding the most effective product range on the market.

Our highly-qualified employees and cutting-edge technology allow us to achieve a high vertical range of manufacture and flexibility. We adhere to national and international regulations and manufacture our products in accordance with processes – keeping an eye on customer satisfaction at all times. We have been certified to DIN ISO standards since 1997, and are currently certified to 9001:2008. This guarantees the highest quality standards and enables us to fulfil the requirements of our customers – which include large corporations and SMEs – as effectively as possible.

Product groups at a glance



Motorized cable reels

Motorized cable reels by Hartmann & König are high-quality power and data supply solutions for mobile consumers. They are sturdily designed for both continuous operation in ports and container terminals and reliable power supply to construction cranes as well as overhead cranes, excavators, and hoisting devices. Motor cable reels meet requirements for high speeds, dynamic processes, large cable cross sections and high tractive forces.

- Spiral or cylindrical winding of cables and hoses
- Travel length up to 1000 m+
- Speed up to 200 m/min
- Low voltage and medium voltage applications up to 20 kV
- Integration of fibre optic cables for an interference-free transmission of data and control signals possible
- Configuration of motorized cable reels and virtually all motorized drives according to the respective customer wishes



Spring cable reels

Spring cable reels supply cranes, loading plants and forklift trucks with reliable mobile energy, and they are used in stage technology, sewage plants and many other applications. Depending on the intended purpose and installation requirements, these consist of a cylindrical or spiral-winding reel body, the spiral leaf spring drive made of premium-grade, texture-milled spring band steel, and a slip ring assembly.

- Maximum speed 60 m/min
- Supplying short distances of up to 60 m
- Cylindrical or spiral winding reel bodies
- For energy and data cables and hoses
- 48-hour express delivery programme for various sizes and model series
- For horizontal and vertical cable payout
- Payout left & right
- Protection class IP55 / IP65 for industrial applications



Slip ring assemblies

Slip ring assemblies are used wherever energy, data, control signals or other media must be transferred from a rotating to a stationary part. Main application fields for our slip ring assemblies are rotating units in mobile cranes, sewage plants, machine tools or for theatre and stage equipment.

- Secure transfer of power, signals and data from a rotating to a stationary part
- For operating voltages up to 20 kV
- Power supply in the area of mA up to 1000 A as well as low and medium voltage
- Protection class IP55 / IP65 for industrial applications
- Optimal contact quality
- Highest wear resistance and vibration strength
- Suitable for continuous operation and high dynamics
- Optimal surface protection for aggressive environmental conditions



Energy chains

Energy chains are perfectly suited for the combined guidance of power and data cables as well as pneumatic and hydraulic hoses, for short and medium distances and higher speeds. In addition to our cable reel and slip ring portfolio we distribute high-quality energy chains in plastic and steel execution. Application fields are gantry cranes, crane trolleys, CNC machines, gates, car wash systems, industrial robots, theatres and many more.

- Highest product quality with certificates of conformity according to international standards (CE marked)
- Material features: PA6 with 30 % fibre glass
- Speed: up to 9 m/s
- Operating temperature: -30 °C up to 130 °C
- Modular design – product series available in numerous executions due to different dimensions as well as bending radii
- Accessories: end brackets, separators, strain reliefs

Product groups at a glance



Rope reels

Rope reels are used for a wide range of different applications. Depending on the application requirements, we configure rope reels with a suitable motor drive. Gripper or spreader steadying reels, for example, are used in on-board cranes and port cranes to make sure that the gripper or spreader cannot twist during the operation and that the cable is not damaged. For such applications at sea or in the port area, we design rope reels according to the respective protection class and according to the regulations of the ship classification societies.

- Used as gripper or spreader steadying reel arrangement for the cable reel
- Prevent damage to the cable due to wire ropes
- Cable reel and guide pulley configurations on jib cranes can be realised above, below or sideward to the crane booms
- If required, the rope is routed to the consumer via guide and deflection rollers and must be fed centrally into the rope reel body
- Lifting speeds for rope reels correlate with those of cable reels



Counterweight reels

Today, counterweight reels are used less often because of alternative robust motor drives. However, they have unsurpassed advantages, especially under extremely critical ambient conditions, for example in very high temperatures in steel works in the immediate vicinity of blast furnaces and in waste incineration plants. Instead of using a motor, the cable reel is driven by a counterweight. The cable reel can be used efficiently in all situations where there is enough space for the counterweight and its suspension. Furthermore, counterweight reels are characterised by their high operational safety because they have very few wear parts in their drive.

- Type series KTG for outer diameters of up to 6 m
- Depending on the cable cross section and the outer diameter, the cable groove body has a cylindrical or highly conical design
- Cable unwinding is possible to both sides
- Counterweights and flexible steel cables must be provided by the customer



Accessories

A cable reel on its own is often only half of the job. For a great number of applications, the interaction between the cable reel and the respective accessories is of key importance, and Hartmann & König plays special attention to tailoring the accessories to specific applications.

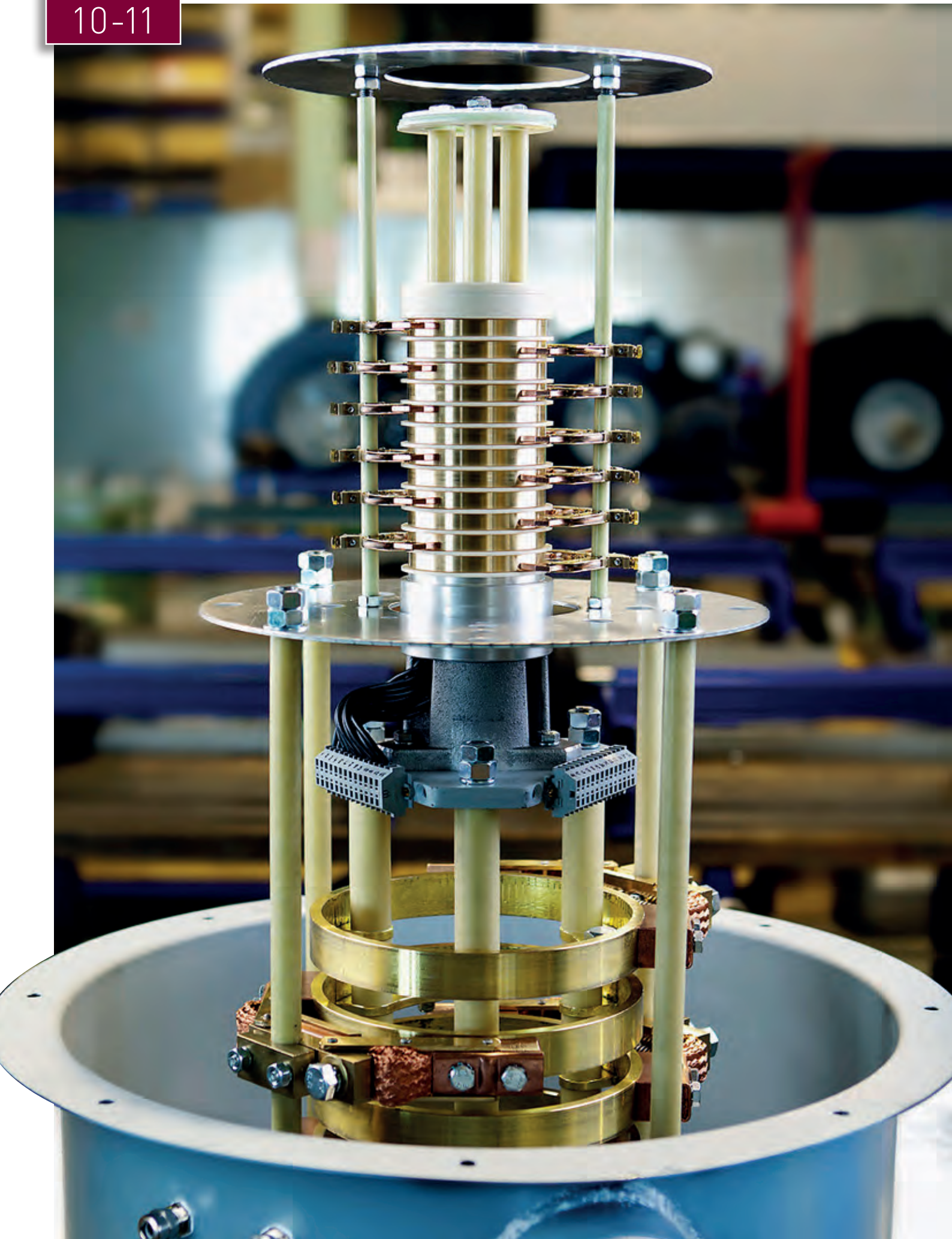
Hartmann & König offers a comprehensive range of accessories for its products such as roller payout guides with or without control function, deflector and guide pulleys, cable grip, end limit switches, spooling devices or heating units for slip ring housings. Our range of accessories is just as powerful and robust as our cable reels and slip ring assemblies.

Furthermore, Hartmann & König offers their customers a fully reviewed range of accessories for their spring cable reels. Accessories such as ratchets, roller yokes and cable pulling grips can be pre-assembled and delivered together with the urgently needed reels within 48 hours.



Our main accessories for cable reels and slip ring assemblies

- Roller payout guides
- Spooling devices
- Cable deflector sheaves and pulleys
- Centre feed funnels
- Cam limit switches
- Heating units
- Light wave conductors
- Cable grips
- Cable deposit roller
- Payout chains
- Ratchets
- Roller yokes
- Cable stopper
- Rotary encoder



Tailor-made electrification solutions

Motor cable reels for eco-friendly material handling machines

Besides its constantly growing product range of high-quality cable reels and slip ring assemblies, Hartmann & König has years of expertise in providing customized electrification solutions for machines that were previously running on diesel. This also includes the eco-friendly power supply of material handling equipment, shovels and heavy machines by means of motorized cable reels, which is currently the best alternative to fuel-intensive construction machines running on diesel.

In the course of the close cooperation with several leading German manufacturers of cranes and material handling machines, Hartmann & König developed a wide range of

spiral as well as cylindrical winding motorized cable reels in various sizes and configurations according to our customer's requirements.

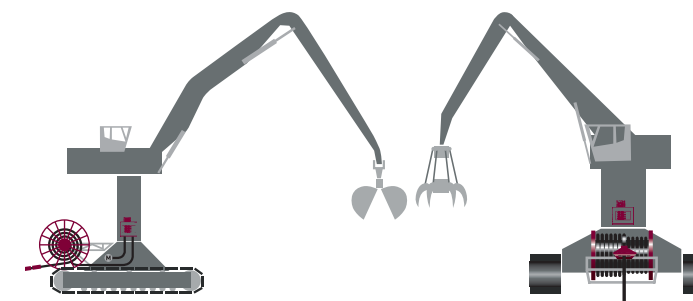
Since the installation area for cable reels on mobile vehicles is usually quite limited and the functionality of the excavator should not be impaired, specifications of cable reels have to be individually optimized and adapted to the prevailing installation conditions. Tracked vehicles usually have a restricted turning radius, which poses a constant risk to the cable on the reel body. For this reason, we offer special designed deflection link chains to be able to guide the cables safely when driving along curves and in swivel operation.

Advantages at a glance

- lower operating costs by up to 50 % in comparison to diesel engines
- better efficiency than diesel-driven machines
- significantly longer maintenance intervals and reduced maintenance costs (no need for fuel and oil filters/oil changes)
- no time loss due to refueling
- independency from volatile oil prices
- environment friendly due to significant reduction in CO₂ emissions and extremely low operating noise

Cable reel specifications

Performance	Power supply for horizontal mobility
Travel speed	up to 60 m/min
Acceleration	0,2 m/s ²
Coiling length	up to 150 m
Drive unit	frequency inverter drive, magnetic coupling
Feed-in	centre feed / end feed; plug version
Cable reel dimensions	according to customers' needs and the respective installation situation
Slip ring assembly	power supply, data, control signals
Voltage range	400 V / 690 V / 6 kV / 10 kV
Ambient temperature	from -20 °C up to +40 °C
Accessories	<ul style="list-style-type: none"> • winding device • deflection link chain • roller payout guide • cable centre feed funnel • console



Spiral cable reel mounted on a crawler undercarriage.

Cylindrical cable reel with console and spooling device mounted on a crawler undercarriage.



Mobile Cranes

Mobile Cranes

Maximum flexibility

Thanks to their mobile undercarriage supported on wheel or chain travel gear, Mobile Cranes are indispensable today for the construction industry, heavy-duty transportation, or as emergency and rescue vehicles. Wherever heavy loads, great heights or physically confined working environments must be mastered, products from Hartmann & König are the pivotal points for the supply of energy to bracket arms, grabs or machinery superstructures. In particular, spring cable reels, hose reels and slip ring assemblies ensure the high functional availability of Mobile Cranes. They transfer power and data flows as well as other media continuously and reliably.

Alternative solutions to today's fuel-intensive use of diesel-powered machines, such as excavators and loading machines,

are considered a key technology in the context of the efficient use of renewable energy. For many years, Hartmann & König has supplied systems tailored to customer requirements for the electrification of mobile excavators with the help of spiral or cylindrical winding motorized cable reels.

This electrification is particularly profitable on machines that have a predictably limited scope of movement. Motorized cable reels by Hartmann & König are an eco-friendly solution for travel ranges of up to 1,000 m and they help reduce costs in the long run. Thanks to significant savings in terms of fuel consumption, maintenance and downtimes, the investment costs for a high-quality power supply with motorized cable reels usually pay back very quickly for the customer.

Our solutions for Mobile Cranes and material handling

Applications	Hartmann & König Products	Requirements
Mobile Cranes, emergency vehicles	<ul style="list-style-type: none">• spring cable reels• slip ring assemblies• spring hose reels• snow protection• more accessories	<ul style="list-style-type: none">– limited installation space– low speed– energy + data + control signals– high durability– special solutions required
Excavators / material handling machines	<ul style="list-style-type: none">• cylindrical winding motorized cable reels• slip ring assemblies• hydraulic driven cable reels• hose reels• energy chains• spooling devices for short and long distances• roller payout guides• payout chains	<ul style="list-style-type: none">– eco-friendly alternative to fuel-intensive construction machines running on diesel– limited installation space– restricted turning radius– safe cable guiding for driving along curves and in swivel operation– transmit high power– for machines with a predictably limited scope of movement
Agricultural machines, crawler	<ul style="list-style-type: none">• cylindrical winding motorized cable reels• spooling devices for long distances	<ul style="list-style-type: none">– electrification of agricultural machines– low speed– long distances



Ports & container

Seaworthy and sturdily designed

Today, more than 90 % of goods transshipments worldwide are transported by sea. Energy and data transmission systems that are customised for the technical tasks to be performed play a key role in ensuring the efficiency of port and container terminals. Dependable and low-maintenance electrical power supply components are therefore critically important when it comes to ensuring smooth operation and minimizing downtimes.

Cable reels and slip ring assemblies by Hartmann & König are powerful and robust in equal measure. This makes them ideal for long-term use under the most diverse climatic conditions in ports across the globe.

As a specialist in the development of intelligent power supplies, Hartmann & König has been supplying Mobile Harbour Cranes, RMG's and RTG's as well as STS and Intermodal Cranes with environmentally friendly energy for decades. For harbour and container terminals, we design motorized cable reels with high safety classes and optimum corrosion protection to withstand even the most extreme environmental conditions. For example, we use flanges and reel bodies made of hot-galvanised steel or stainless steel as well as special paintings to maximise the service life of these components even in aggressive sea weather conditions. Hartmann & König meets the highest quality standards – for satisfied customers worldwide.

Our solutions for ports & container applications

Applications	Hartmann & König Products	Requirements
STS	<ul style="list-style-type: none">• cylindrical and spiral winding motorized cable reels with magnetic coupling and frequency inverter drive• slip ring assemblies• energy chains• roller payout guides• cable guides• centre feed funnel	<ul style="list-style-type: none">– high dynamics– high protecting class– high surface protection– for medium voltage cables with control conductor or light wave conductor
Mobile Harbour Cranes	<ul style="list-style-type: none">• motorized cable reels with magnetic coupling• hydraulic driven cable reels• slip ring assemblies• energy chains• comprehensive range of accessories	<ul style="list-style-type: none">– high protecting class– high surface protection– energy supply for horizontal flexibility of cranes
RMG / RTG / Intermodal Cranes	<ul style="list-style-type: none">• motorized cable reels with magnetic coupling and frequency inverter drives (constant)• slip ring assemblies• energy chains• roller payout guides• centre feed funnel	<ul style="list-style-type: none">– high dynamics– high protecting class– high surface protection– medium distances– for medium voltage cables– electrification of RTG's
Deck Cranes	<ul style="list-style-type: none">• cylindrical winding motorized cable reels• most required drive unit: turbo coupling• slip ring assemblies• rope reels to stabilize the rotary and slewing movements of grabs and spreaders• deflection and guide pulleys	<ul style="list-style-type: none">– aggressive salt water environment– high protecting class– high surface protection



Bulk, mining & material handling

Bulk, mining & material handling

Robust technology for the harshest environmental conditions

In the bulk and mining industry, cutting-edge technology is now more important than ever when it comes to meeting the extreme challenges that apply to all aspects of raw material extraction. Wherever vast masses of earth and rock need to be moved to expose precious raw materials, you will find our bespoke system solutions for providing flexible energy supplies to the mobile machines and equipment used to extract these valuable resources.

Around the world, motorized cable reels and hose reels by Hartmann & König ensure reliable supplies of energy, water, oil, compressed air and other media to large open-casting mining machines such as bucket-wheel excavators, conveyor belts, various types of crushing machines, hydraulic excavators or tunneling machines. Our rugged motorized cable reels with

magnetically coupled drives as well as hydraulically powered systems are suitable for use over longer distances.

Thanks to our know-how, we can provide our customers with targeted support in complying with increasingly stringent environmental regulations and high safety standards, while at the same time finding the most efficient solution to virtually every technical challenge. Our absolutely robust and reliable reel bodies and accessories have proven themselves in continuous operation even under the harshest environmental conditions. Our energy supply systems are characterised by high product quality, exceptional performance and impressive longevity, all of which enable our customers to boost the productivity of their development, mining and tunneling activities over the long term.

Our solutions for bulk, mining & material handling

Applications	Hartmann & König Products	Requirements
Mining	<ul style="list-style-type: none">cylindrical winding motorized cable reels with magnetic couplinghydraulic driven cable reelsslip ring assembliesenergy chainsspooling devices	<ul style="list-style-type: none">long travel distancesrobust technologyoptional with ex-protection
Stacker & reclaimer / bulk / material handling	<ul style="list-style-type: none">monospiral and cylindrical winding cable reelsmagnetic coupling driveshydraulic driven cable reelsslip ring assembliesenergy chainsspooling devices	<ul style="list-style-type: none">long travel distancesrobust technology
Grab construction	<ul style="list-style-type: none">cylindrical winding motorized cable reelsmost frequent drive: turbo couplingrope reels to stabilize the rotary and slewing movements of grabscable deflector sheaves and pulleys	<ul style="list-style-type: none">high dynamicsseawater environmentlow speedlong distancesvertical use possible



Crane technology

Reliable systems for efficient logistics

Every industrial manufacturing enterprise must manage material flow and logistical tasks. In addition to standard applications, these usually include challenging transportation requirements - particularly regarding the critical service environments of cranes or transport goods. Indoor cranes of all types support production processes and optimise the use of available space at ground level. Even in extreme working environments, such as in the vicinity of incineration kilns in steelworks or in warm and humid environments of waste incineration, grabs and magnets must be supplied with electricity or weight information must be transmitted. We have supplied technologically sophisticated energy delivery systems for these types of applications for many decades.

Hartmann & König cable reels can be equipped with virtually all drive types and can be perfectly matched by our specialists to the respective installation set-up. For this reason, our particularly robust reels with counterweight drives or our systems equipped with turbo couplings that have proven themselves time again in 24-hour continuous operation at high air humidity levels are ideal for use in steelworks or in waste incinerators. To ensure that cranes and lifting equipment can perform critical lifting tasks safely, reliably and efficiently, our experts are always open to feedback. With extensive know-how and honest advice, they are also on hand to help customers find the optimum technical and the most economical solution.

Our solutions for crane technology

Applications	Hartmann & König Products	Requirements
EOT Cranes	<ul style="list-style-type: none">cylindrical winding motorized cable reels with magnetic couplingspring cable reelsslip ring assembliesenergy chains	<ul style="list-style-type: none">limited installation spacestandard industrial environmentsmall + medium dynamics
Steel mills	<ul style="list-style-type: none">monospiral cable reelsmotor driven or counterweight driven cable reelsslip ring assembliesenergy chains	<ul style="list-style-type: none">harsh environmental conditionshigh temperaturesspecial cable guidancessmall + medium dynamics
Hoisting technology (magnetic)	<ul style="list-style-type: none">cylindrical winding motorized cable reelsspring cable reelsslip ring assemblies	<ul style="list-style-type: none">feed-in of electromagnetssmall + medium dynamics
Recycling / waste incineration	<ul style="list-style-type: none">motorized cable reels with turbo coupling or frequency inverter drivespecial cable strain relief deviceenergy chains	<ul style="list-style-type: none">very dirty environmentshigh temperaturescontinuous operation, high dynamics in some applications
Facade Cranes	<ul style="list-style-type: none">spring cable reels	<ul style="list-style-type: none">low velocityvertical winding (fixed spring cable reel)



Plant engineering

A passion for special solutions

Almost no other sector is as diverse in terms of applications and associated requirements as the plant engineering industry. Customised energy transfer and data transmission solutions play a key role in optimising production processes. They are also the driving force that inspires our experienced specialists to work every day with customers to find optimum energy supply configurations. The spectrum ranges from flexible battery charging reels for supplying high currents all the way to power supplies for transfer carriages or locomotives used for intra-company transportation. A long service life combined with uniformly high quality are not only our aim, but also our promise.

No matter how diverse the automation solutions for optimised manufacturing facilities may be, they all require energy and data transfer systems that are perfectly customised and integrated in the value added process. In this regard, our innovative products fulfil the often complex requirements, such as confined installation spaces, high speeds or acceleration, thereby helping to reduce cycle times, boost performance and optimise energy efficiency. We support our customers with a dedicated team of engineers and designers, who can develop the right solution for the most demanding applications.

Our solutions for plant engineering

Applications	Hartmann & König Products	Requirements
Plant engineering / transfer systems	<ul style="list-style-type: none">• spiral and cylindrical winding cable reels (motorized and spring driven)• slip ring assemblies• energy chains• spooling devices• centre feed funnel	<ul style="list-style-type: none">- low speed- often limited installation space (< 800 mm)- transfer of energy, data and control signals- reliability and high durability
Locomotives for in-house transport	<ul style="list-style-type: none">• motorized cable reels	<ul style="list-style-type: none">- high speed applications- high acceleration- long distances
Automotive	<ul style="list-style-type: none">• spring cable reels• energy chains• battery charging reels	<ul style="list-style-type: none">- automated process- high currents- robust technology
Military equipment	<ul style="list-style-type: none">• spring cable reels (aerial cable reel)• slip ring assemblies	<ul style="list-style-type: none">- customer-specific solutions- special cables- data transfer
Beverage industry	<ul style="list-style-type: none">• slip ring assemblies for energy and data transfer• energy chains	<ul style="list-style-type: none">- high durability- high rotation speed- special solutions, as e.g. stainless steel execution
Packaging machinery industry	<ul style="list-style-type: none">• slip ring assemblies for energy and data transfer• energy chains	<ul style="list-style-type: none">- central position above the stretcher- energy and data transfer



Environmental technology

Reliability in harsh environments

For some time now, there has been an increased focus on forward-looking environmental technologies in industry and society. Whereas new energy generation technologies call for high-performance energy and data transfer components on the one hand, resources that have already been used must be recycled as efficiently as possible on the other. As a specialist for high-quality energy and data transfer systems, Hartmann & König has supplied cable reels and slip ring assemblies for technical facilities in sewage works, recycling or wind power stations for many decades.

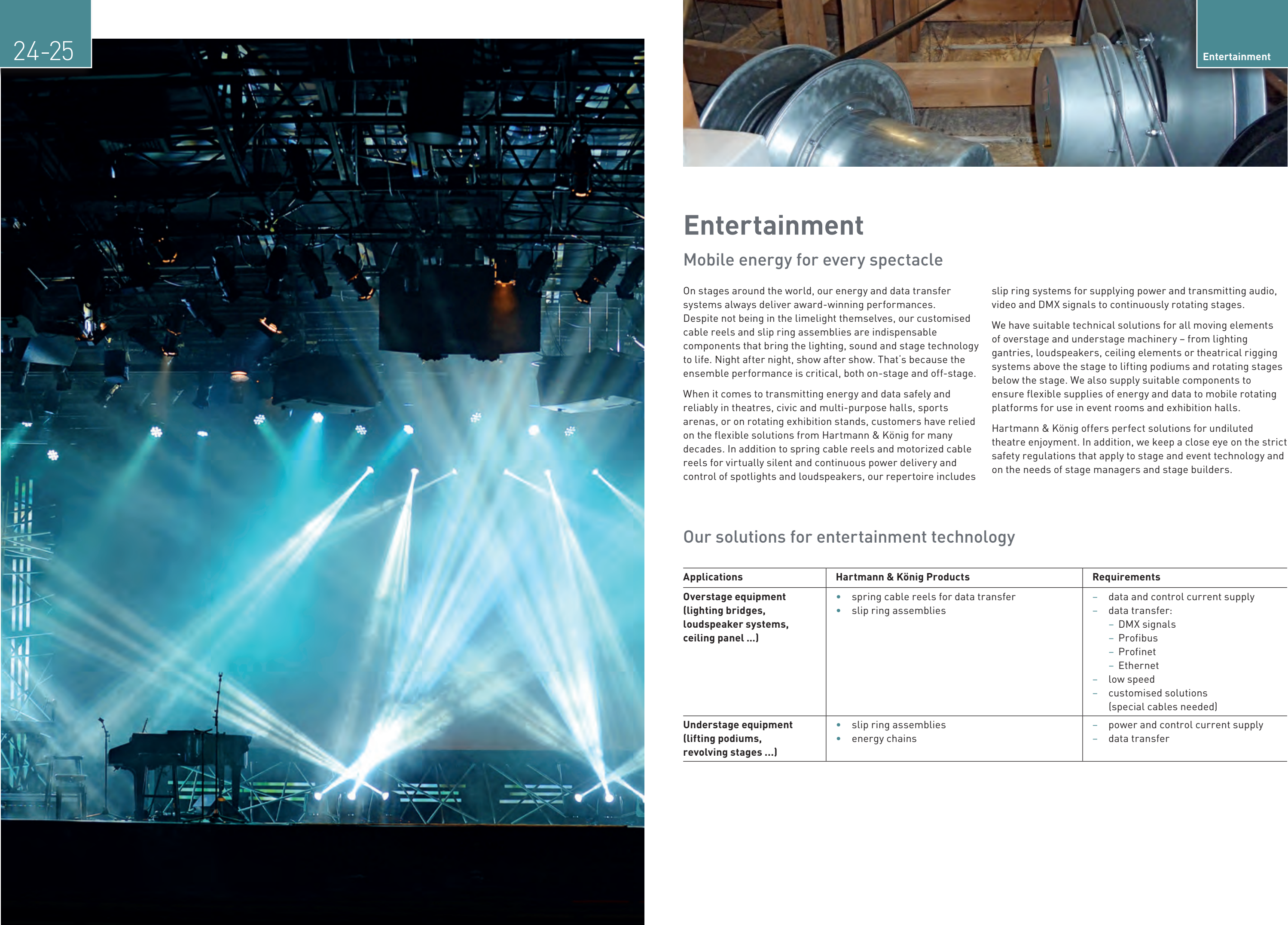
Ensuring reliable power supplies and control over sewage purification plants requires extremely robust energy and data transfer systems that can withstand aggressive environmental conditions. For this reason, circular scrapers in sewage plants are the ideal application for our rugged

slip ring assemblies, which transfer energy and data from the stationary switchgear and control systems to the drives on the rotating circular scraper bridge. In addition to optimum corrosion protection, our cable reels are also used to supply energy to longitudinal scrapers in sewage plants. The hot-dip galvanised surface finish of the reel bodies and the use of wear-free magnetic coupling drives enables our high-quality products to withstand even the most aggressive environments.

For numerous other applications in the area of environmental technology, our experts have the necessary know-how and understanding to configure the best technical solutions for our customers – proven in practice and backed up by extensive references.

Our solutions for environmental technology

Applications	Hartmann & König Products	Requirements
Circular scraper in wastewater treatment plants	<ul style="list-style-type: none">slip ring assemblies for energy and data transfer	<ul style="list-style-type: none">low dynamicsaggressive environmentanti-corrosive protectionhigh protecting classes
Longitudinal scraper bridges in wastewater treatment plants	<ul style="list-style-type: none">motorized cable reels for the transfer of energy and control signalsspring cable reels for short distances up to 60 meters	<ul style="list-style-type: none">low dynamicsaggressive environmentanti-corrosive protectionhigh protecting classeshigh surface protection
Recycling/ waste incineration	<ul style="list-style-type: none">motorized cable reels with turbo coupling or frequency inverter drivespecial cable strain relief device	<ul style="list-style-type: none">very dirty environmentshigh temperaturescontinuous operationoccasionally high dynamics
Wind turbines	<ul style="list-style-type: none">slip ring assemblies for blade pitch controllight wave conductors for transmitting optical signals optional	<ul style="list-style-type: none">high dynamicshigh vibration resistanceenergy and data transfer between fixed installations and rotor bladeshigh durabilitylow maintenance for cost-efficient operation



Entertainment

Mobile energy for every spectacle

On stages around the world, our energy and data transfer systems always deliver award-winning performances. Despite not being in the limelight themselves, our customised cable reels and slip ring assemblies are indispensable components that bring the lighting, sound and stage technology to life. Night after night, show after show. That's because the ensemble performance is critical, both on-stage and off-stage.

When it comes to transmitting energy and data safely and reliably in theatres, civic and multi-purpose halls, sports arenas, or on rotating exhibition stands, customers have relied on the flexible solutions from Hartmann & König for many decades. In addition to spring cable reels and motorized cable reels for virtually silent and continuous power delivery and control of spotlights and loudspeakers, our repertoire includes

slip ring systems for supplying power and transmitting audio, video and DMX signals to continuously rotating stages.

We have suitable technical solutions for all moving elements of overstage and understage machinery – from lighting gantries, loudspeakers, ceiling elements or theatrical rigging systems above the stage to lifting podiums and rotating stages below the stage. We also supply suitable components to ensure flexible supplies of energy and data to mobile rotating platforms for use in event rooms and exhibition halls.

Hartmann & König offers perfect solutions for undiluted theatre enjoyment. In addition, we keep a close eye on the strict safety regulations that apply to stage and event technology and on the needs of stage managers and stage builders.

Our solutions for entertainment technology

Applications	Hartmann & König Products	Requirements
Overstage equipment (lighting bridges, loudspeaker systems, ceiling panel ...)	<ul style="list-style-type: none">• spring cable reels for data transfer• slip ring assemblies	<ul style="list-style-type: none">– data and control current supply– data transfer:<ul style="list-style-type: none">– DMX signals– Profibus– Profinet– Ethernet– low speed– customised solutions (special cables needed)
Understage equipment (lifting podiums, revolving stages ...)	<ul style="list-style-type: none">• slip ring assemblies• energy chains	<ul style="list-style-type: none">– power and control current supply– data transfer



Installation, commissioning & after-sales service

Individual support guaranteed

Here at Hartmann & König, we see ourselves as partners to our customers. Therefore, our customer service begins long before the cable reel or slip ring system has been supplied. As a specialist for energy and data transfer systems, we provide our customers with comprehensive advice based on the appropriate cable reel specifications, cables and hoses as well as installation conditions and requirements.

Our after-sales service does not only supply spare and wear parts, but is also the point of contact for customers who need

regular service or support to solve technical issues. Despite the fact that our products are reliable, extremely rugged and required minimal maintenance, we do offer an extensive spare parts service for several decades.

Hartmann & König trained staff provides customer care around the clock. No distance is too far for our experienced service experts to implement your complex installation projects, maintenance tasks or on-site commissioning.

Customer service worldwide

High-performance sales network

Hartmann & König is an international company. Our commitment to quality "Made in Germany" begins with a professional initial consultation, includes development and production with a high degree of in-house production, and continues long after the final delivery. Our technical sales engineers advise and support customers throughout the project. Consequently, we can offer customised solutions that draw on our 70 years of experience and expertise.

By expanding our international network of sales representatives Hartmann & König is entering new regional markets for its technologically advanced, high-qualitative cable reels and slip ring assemblies.

Our distribution network is closely integrated in long-term relationships, which allows us to ensure reliable service and the best possible technical support to our customers across the globe.

Extensive know-how, direct availability of our key experts to customers, and a spirit of partnership have fostered the successful implementation of projects all over the world. Renowned international customers in the fields of crane and port technology as well as plant and machine construction among others, profit from our wide range of products with standard and custom solutions.





Motorized cable reels



Spring cable reels



Slip ring assemblies



Energy chains

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Hartmann & König
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