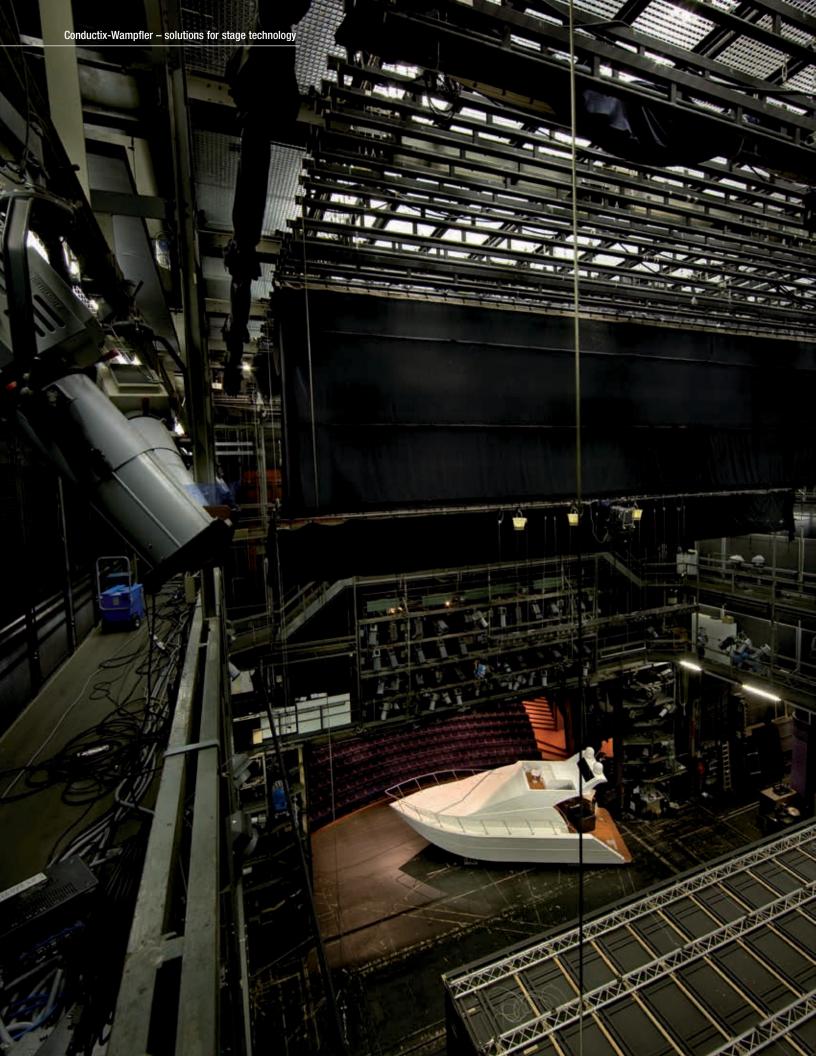


## Energy & Data Transmission Systems for Stage Technology







### Always a great entrance Solutions for stage technology

Solutions for a moving world: Anywhere goods and people are in motion, you will find custom-engineered solutions by Conductix-Wampfler for the flexible transmission of power, data, and media.



Today more than ever, a successful performance in a theater or on a stage depends on proper, reliable technology.

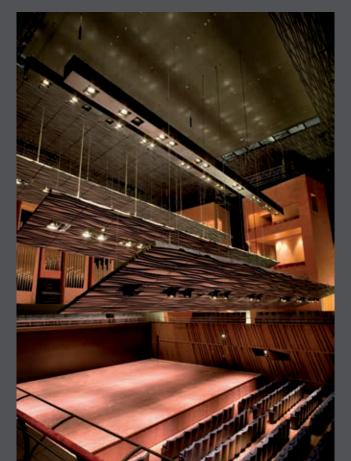
An essential aspect of this is the dynamic interplay between the individual components and parts. Spotlights on lighting bridges, speakers on media towers, or complete areas of a stage – it's all in motion, being moved, directed or lowered. At the same time these parts need to be reliably supplied with power and data. It's here that the innovative system solutions of Conductix-Wampfler have the greatest impact.

With more than 50 years of experience in the area of energy and data transmission for moving equipment, we are the specialists to call when it comes to finding the optimum solution for your stage and theater applications.

As a system supplier, Conductix-Wampfler offers its customers comprehensive service. That doesn't just include the delivery of products like spring reels, conductor rails, or slip ring assemblies, but also competent advice and project planning, selection of the optimum cables and accessories, comprehensive logistical concepts, and on-site commissioning.

That means that important data and essential power are delivered safely, reliably, and continually wherever they're needed.

To every stage in the world!



Powerful and silent! Floating lighting, hung from the ceiling of a philharmonic.

### Solutions for stage technology

System solutions from Conductix-Wampfler are used in practically every area of stage technology. Using the example of a theater it is easy to see where these flexible, optimized solutions are used in both **over stage** and **under stage machinery**.

Depending on the application, single products or even combinations of multiple solutions can be used in order to meet a variety of requirements for energy and data transmission.

Under Stage Machinery



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### Over Stage Machinery



Curtains | Speaker towers



Lighting bridges



Moving stages





**Revolving stages** 

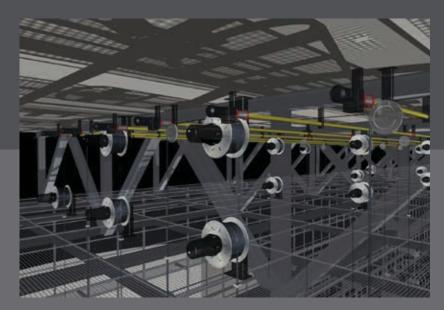
Stage lifts



Our performers are behind the scenes

- providing light and sound to move you!

## **Solutions and products** for lighting bridges



#### System advantages

Cables no longer need to be wound by hand with our spring driven and motorized reels, which are virtually silent in operation.



#### Spring cable reel

- Black painted reel, in case it is in the visible area
- Spring reel with brake for safe unplugging of the cable
- Transmission of DMX512 and Ethernet signals as standard solution, or alternatively with fiber optics for reliable data transmission at higher data rates.



#### Motorized cable reels

- Automatic, simple winding of cables with a controlled motorized cable reel
- Transmission of DMX512 and Ethernet signals as standard solution, or alternatively with fiber optics for reliable data transmission at higher data rates.

#### Tasks

- Energy supply to spotlights
- Control of spotlights
- Supply to microphones and speakers

#### Products

- Spring cable reels
- Motor cable reels



In combination with a **festoon system**, spring cable reels can be installed in a moving system – thus highly flexible.

## **Solutions and products** for mobile media towers in the wings

#### Tasks

- Energy supply and control of spotlights
- Transmission of audio signals

#### Products

- Conductor rails
- Festoon systems





#### System advantages

When moving mobile lighting and speaker towers, cables are guided accurately, and in a controlled manner.



#### **Conductor rails**

- Multiple towers can be supplied independently using one conductor rail system
- Compact conductor rails have high power bandwidth
- Optionally available with black insulation profile

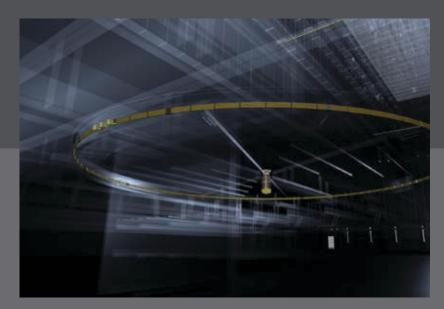


#### Festoon systems

- Reliable transmission of data signals, due to no sliding contacts
- Easy rolling with special coating for quiet motion
- Complete range of cables for energy and data transmission, with or without shielding

**Energy guiding chains** can also be used as an alternative to festoon systems.

## **Solutions and products** for revolving stages



#### System advantages The revolving stage can revolve continuously.

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#### Slip ring assemblies

- Transmission of high power levels (even when at standstill)
- Reliable transmission of all current data signals (DMX, Ethernet, Profibus, CAN bus, etc.)



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#### **Conductor rails**

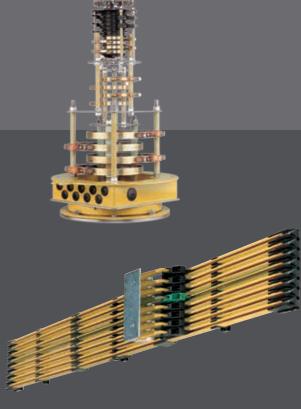
- Solution for energy supply if no room in pivot bearing
- Ideal solution for low installation heights (using a horizontal arrangement of conductor rails)
- Solution for energy supply of independently rotating single rings

#### Tasks

- Energy supply of lighting and junction boxes
- Transmission of audio, video, and standard bus signals

#### Products

- Slip ring assemblies
- Curved conductor rail systems





# **Solutions and products** for stage wagons

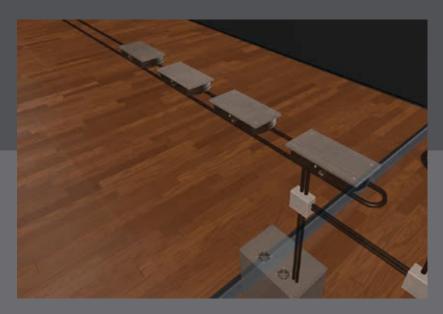
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#### Tasks

- Energy supply to stage wagon electrical systems
- Energy supply to junction boxes

#### Products

- Inductive Power Transfer IPT®
- Conductor rails



#### System advantages

The system is completely hidden from the audience.



#### Inductive Power Transfer IPT®

- Contactless power and data
- transmission for curved applications - Noise-free
- Wear-free
- Can be walked on, since the cables are under the floor



#### Conductor rails

- Standard solution
- Suitable for currents of up to 400 A

For simple linear movements, **spring** or **motorized cable reels** can also be used.



# **Solutions and products** for stage lifts



#### System advantages

Ability to combine of a variety of cable types and cross-sections into one protective, guiding chain.

#### Tasks

- Transmission of control signals and bus signals
- Energy supply to junction boxes and interlocks

#### Products

• Energy guiding chains







#### Energy guiding chains

- Transmission of high power levels (even when at standstill)
- Reliable transmission of all current data signals (Ethernet, Profibus, CAN bus, etc.)

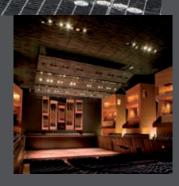




#### Philharmonic Luxembourg (L)

- Six EXEL 4L.3P.13TP050 spring cable reels for six circuits without guide rollers

for five circuits with two spotlights 0,7 kW + one circuit with three spotlights 0,7 kW



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#### State theater Karlsruhe (D)

- One conductor rail system, program 0812, 9 poles, 400 V / 400 A I Ø 16 m
- One conductor rail system, program 0811, 32 poles, 230 V / 80 A I Ø 15 m
- One slip ring assembly, 142 poles with terminal boxes

### State theater Braunschweig (D)

The main stage consists of seven lift platforms. The inductive power supply for an additional revolving stage wagon runs from backstage across the seven lift platforms of the main stage.

IPT<sup>®</sup> for the revolving stage wagon: - Ten 2.2 kW flat pick-ups with integrated regulator

- One 35 kW track supply



### **Your Applications - Our Solutions**

Solutions for stage technology by Conductix-Wampfler are only one part of the wide range of the Conductix-Wampfler energy, data and air/fluid supply systems. The right solution for your application is always dependant on the specific situation.

Many times, it is the precise combination of several Conductix-Wampfler systems that will yield the best results. You will find consulting and engineering competence in our companies and subsidiaries worldwide - a perfect complement to our wide array of products and systems.













#### Festoon systems

It's hard to imagine Conductix-Wampfler cable trolleys not being used in virtually every industrial application. They're reliable and robust and available in an enormous variety of dimensions and designs.

#### Cable reels

Motorized reels and spring reels by Conductix-Wampfler hold their own wherever energy, data and media have to cover the most diverse distances within a short amount of time - in all directions, fast and safe.

#### Slip ring assemblies

Whenever things are really "moving in circles", the proven slip ring assemblies by Conductix-Wampfler ensure the flawless transfer of energy and data. Here, everything revolves around flexibility and reliability!

#### Conductor rails

Whether they're enclosed conductor rails or expandable single-pole systems, the proven conductor rails by Conductix-Wampfler reliably move people and material.

#### Energy guiding chains

The "Jack of all trades" when it comes to transferring energy, data, air and fluid hoses. With their wide range, these energy guiding chains are the ideal solution for many industrial applications.

#### Inductive Power Transfer IPT®

The no-contact system for transferring energy and data. For all tasks that depend on high speeds and absolute resistance to wear.

## www.conductix.us

**Conductix-Wampfler** has just one critical mission: To provide you with energy and data transmission systems that will keep your operations up and running 24/7/365.

stage@conductix.com www.conductix.com



