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Wind energy

You convert wind into energy.
We implement ideas into solutions.

HellermannTyton – Competence for renewable energies

HellermannTyton

Sun, rain, sleet and snow and other adverse factors affect wind turbine generator systems on a daily basis. Failsafe operation requires the highest product quality, which must be present in every component.

HellermannTyton always sets the highest standards in the area of cable ties and fastening systems, cable protection, identification systems and data network technology.

Our products for the wind energy sector are proof against UV weathering, resistant to heat and cold, fireproof and resistant to vibrations. **Longevity, the highest quality standards** and excellent cost-effectiveness are a matter of course.

Close **collaboration with our customers** has top priority. For special requirements such as components that are exposed to the weather, for example, our expert teams are forging ahead with new developments together with you.

You align your facilities with the wind. We align ourselves with your requirements.

Our industry expertise

Image: REpower Systems

We work with close attention to detail, and support you personally and comprehensively. HellermannTyton thus offers **unique solutions** for your individual needs.

Processing of the highest quality raw materials, seamless quality control, and reliable performance of our products are your guarantee for constantly high product quality.

Our experienced designers, ultramodern development processes and the company's own tool and mould manufacturing facilities secure the maximum flexibility and greatest productivity for you.

All of our products are constantly scrutinised and optimised by a worldwide network of developers. Coupled with our high level of **development competence** and extensive industry knowledge, this makes us a reliable partner for the construction of powerful wind turbine generator systems.

We are already creating resilient solutions for tomorrow and thus the greatest possible operating reliability and investment security. After all, people are counting on having a reliable supply of energy. Every day, again and again.

Always find just the right item! The HellermannTyton main catalogue.

Finding just the right item from more than 20,000 products is very easy with the new HellermannTyton main catalogue. The clear colour coding, self-explanatory symbols and an overview that can be folded out quickly guide you to the product you are looking for.

The entire product range of manual and pneumatic **processing tools** for burr-free bundling can be found clearly grouped in our main catalogue.

You are initiating great things. We take care of all the details.

Our product range

Intensive analyses of the market and the competition make it possible for us to recognise processing and market trends at an early stage.The result to date now: more than 20,000 products that are always **the state of the art in research and development** and which set worldwide standards.

Besides the unique diversity of products, we offer **individually-designed solutions** in wind turbine generator system construction, specifically for your needs. Our team of experts is happy to help out at any time.

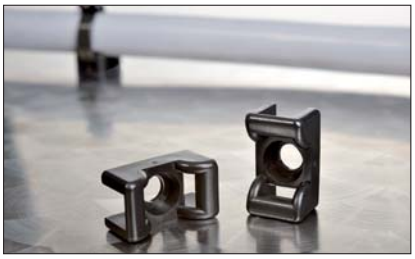
In the supply chain, you also have all the advantages on your side with HellermannTyton. You obtain **all products from a single source**, reduce the number of suppliers, and that way have **considerable savings potential in the procurement costs.**

Our tightly meshed network of branch offices and distribution partners around the world ensure that you have a constantly high level of service, high flexibility as well as fast response and delivery times.

Cable ties and fastening systems

The **T-series cable ties** make it possible to easily bundle and secure cables in many demanding applications – e.g. for fastening power and energy cables in the nacelle area.

The fastening ties from the **EdgeClip family** are suitable for reliable routing and bundling of cables and lines along the side or above an edge, for example in inverter equipment cabinets.



The compact and screw-in **KR fastening mounts** facilitate secure and reliable routing of cables and line bundles in moving system components, for example the spinner.

SOFTFIX cable ties are elastic, tear-proof and weather resistant. In addition, they can be removed and thus used multiple times. They are often used for temporary tie-offs in service or maintenance work.

PMB5 mounts are fixed in position with paste-like industrial glues and are outstandingly well suited for the secure fastening of lines to locations that cannot be drilled, for example to attach sensor cables for monitoring the operating condition.

Cable clamps for **heavy load applications**, made of impact-resistant, modified polyamide, provide the best durability even in extreme climatic conditions.

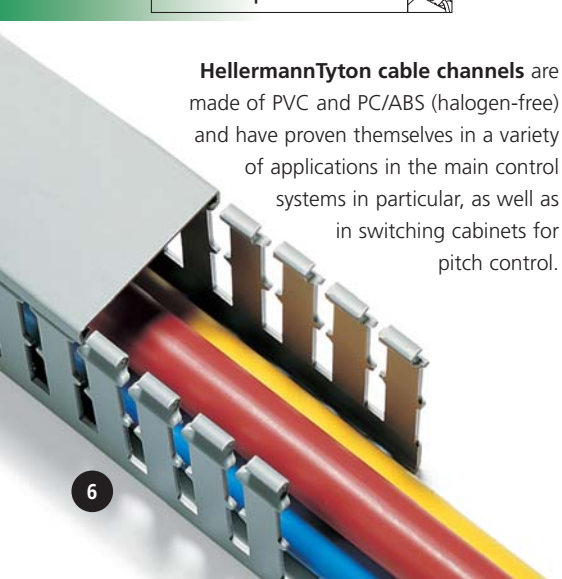
Heat-shrink products

HEK end caps are voltage-proof and equipped with a thermoplastic interior adhesive lining. Cables can thus be sealed reliably and permanently.

The printable, thin wall **TF21 heat-shrinkable tubing** is used for clear marking of cables and lines, for example to mark the phase position of power cables or PE markings.

The medium wall **MA47 heat-shrinkable tubing** (with interior adhesive) is characterised by its very good insulation properties and physical strength. Suitable for cable joints and termination in tower segment cabling.

Cable protection



HellermannTyton cable channels are made of PVC and PC/ABS (halogen-free) and have proven themselves in a variety of applications in the main control systems in particular, as well as in switching cabinets for pitch control.

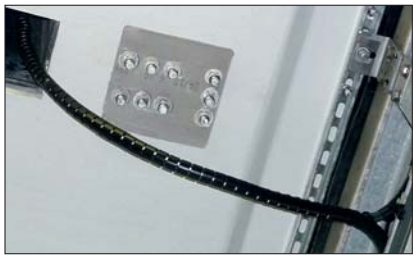
The **HelaGuard non-metallic range** includes hoses and screw connections for almost every application in a wind turbine. The product range includes screw connections in a variety of designs and IP protection classes, as well as fastening clamps.

The high-quality **HelaGuard metal protective hoses** are available in galvanised steel and stainless steel, as well as with a plastic coating. They provide excellent mechanical and EMC protection.

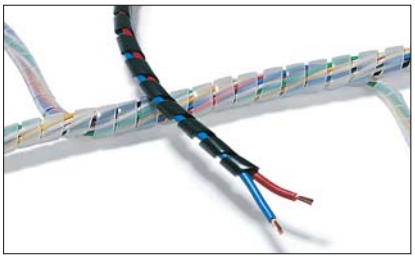
Our product range

Cable protection

Helagaine EMC, made of tin-plated copper and polyester yarn, is particularly suitable for protecting lines against stray radiation as well as for applications in radiation-critical components. The innovative braided hose returns to its original diameter after expansion.



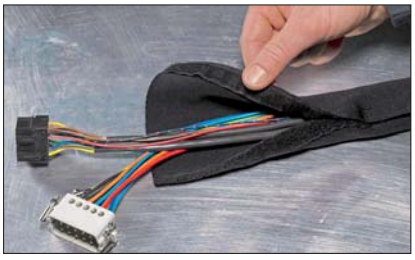
Helawrap is the solution for time-saving bundling of cables and lines to weather masts, drives and in the door area of equipment cabinets. Thanks to the flexible profile, Helawrap can be quickly and easily applied, even for preassembled segments.



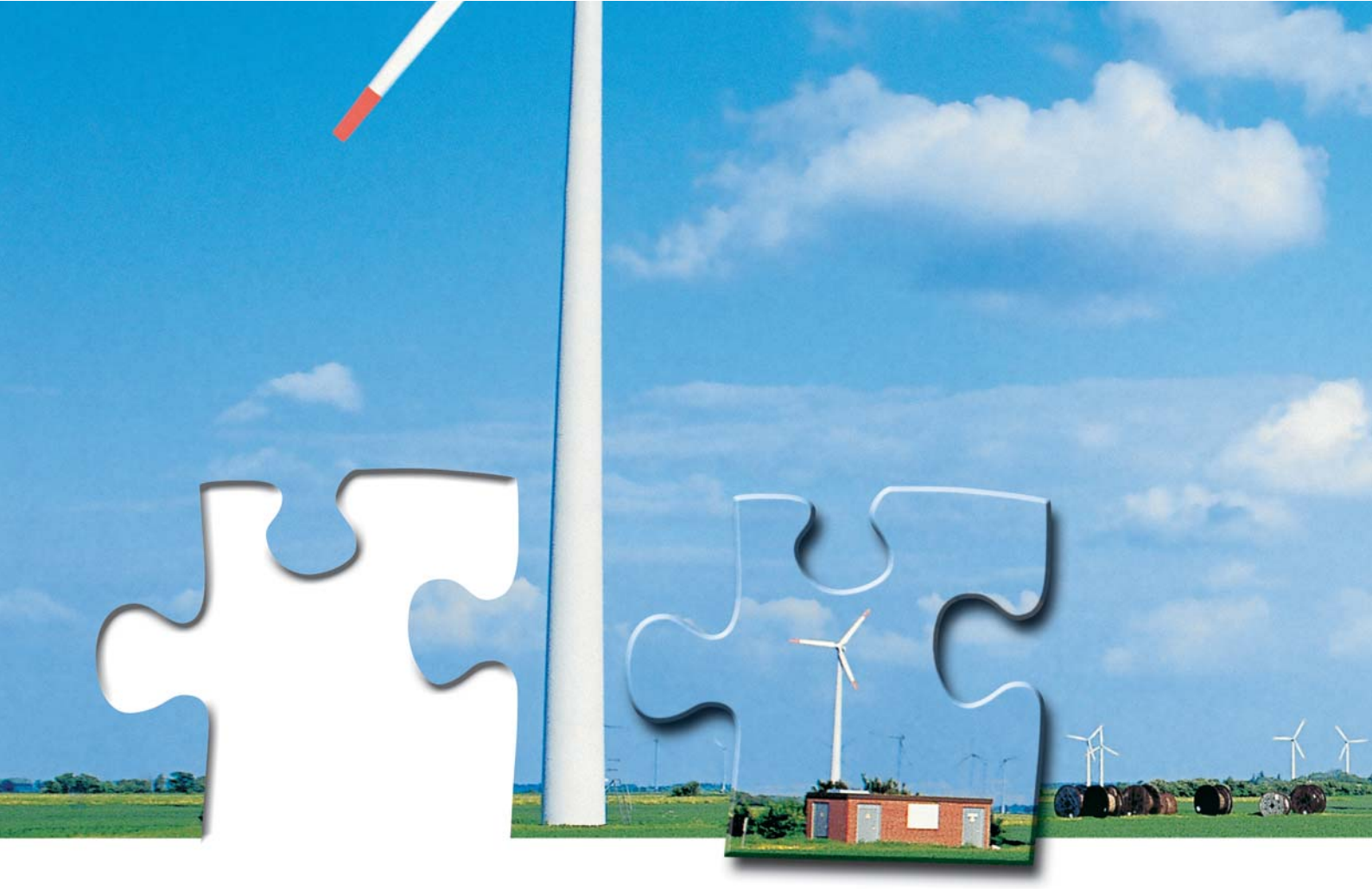
HellermannTyton spiral hoses are used for bundling and routing cables and lines in equipment cabinet doors and system components with a low mechanical load. Individual lines can be flexibly implemented.

SPS and **SPF spiral hoses** are very robust and can even withstand strong mechanical influences. Especially in the hollow shaft between the hub and gearbox, they ensure reliable line protection.

With the closely-fitting shaped track of the **Flexiform edge protector**, you ensure optically clean and mechanically safe protection of cables and lines at plate edges.



Helahook cable protection provides reliable protection against abrasion and other environmental effects. A practical Velcro seal simplifies fitting on cables that are already installed.



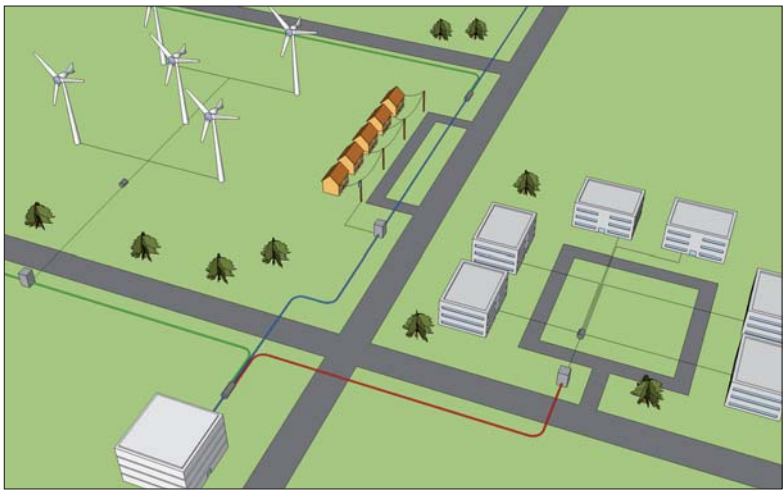
A reliable network infrastructure is indispensable for the effective condition monitoring and control of a wind farm. Each individual wind turbine generator system has a variety of sensors and monitoring media that analyse important parameters and thus ensure optimum operation.

The detailed data recorded includes, for example, the condition parameters of the drive train, the gearbox, mechanical loads on the structure, as well as the condition and performance of the rotor blades. Even external factors such as the surrounding temperature, wind speed and wind direction can be measured and analysed.

The multitude of recorded data is transferred to a central wind farm control centre via a line. A fibre optics line provides the transmission bandwidth that is necessary here for the data reliably and over large distances. For many years, HellermannTyton has offered the appropriate products for fibre optics based networking of systems, including **glass fibre sleeves** or individual connection modules.

The network infrastructure of a wind farm with a transformer station places high demands on the materials and workmanship of the components. Both the coordinated feeding of electricity into the network and the remote monitoring and control of switching stations make use of a refined cable installation.

The **fibre optic cables** are enclosed **in the modules** in a space-saving way. This simplifies the cable installation enormously. In addition, the system makes further expansion of capacity possible. Fibre optic cables can be retrofitted at any time for a quick and easy capacity increase.



Our product range

Data network technology

Glass fibre splicing sockets from **HellermannTyton** are predestined for secure routing and connection of sensitive glass fibre cable networks in a wind farm. Numerous sizes and different configurations facilitate special solutions that are customised to your requirements.

RapidNet is the innovative solution for reducing installation times for wind park control centres to a minimum. The modular and pluggable system consists of preassembled point-to-point connections made of glass fibre and the latest copper technologies.

The patented and time-saving **Cablelok System** is used for sealing the cable entries in HellermannTyton glass fibre sleeves.
Compared to conventional heat-shrinking methods, the installation time can be reduced by up to 90 % with Cablelok.

Identification systems

TIPTAG identification plates were developed especially for permanent loading under rough conditions. Even large diameters such as hydraulic hoses, lines for drives or power cables can be marked later.

Individual type plate labels can be generated quickly and easily with the professional HellermannTyton labelling system. There is a multitude of label sizes and types available for almost every equipment housing, such as equipment cabinets.

With the **TT4000⁺ thermal transfer printer**, it is possible to quickly print heat-shrinkable tubing and labels. Even high printing volumes are no problem for the robust and reliable printer

Self-laminating labels are predestined for use under extreme conditions. The protective laminate protects the printing from external influences. It is easy to print the labels with all popular printer systems.

ShrinkTrak is a flexible and identifiable heat-shrinkable tubing system with a shrink ratio of 3:1. The practical backing enables clean printing and removal for individual markers.

Tagprint Pro is one of the most comprehensive and powerful software products for the creation of professional labels, identification plates and cable lamination. It is even no problem to mark heat-shrinkable tubes with it.