GOLPRETECH
CZECH REPUBLIC

PRODUCTS FOR UNWINDING
REWINDING AND SLITTING OF THE MATERIAL

ODVÍJENÍ A ŘEZÁNÍ MATERIÁLU
TECHNIKA PRO NAVIDĚNÍ

Products for unwinding, rewinding and slitting of the material
PNEUMATIC EXPANDING SHAFTS

Pneumatic expanding shafts are used for winding and unwinding rolls of materials at many applications in the converting industry. By inflating the shaft it increases its diameter and thus perfectly grips the core.

Using shafts, you can then transfer torque to a roll-to-brake when unwinding or to drive during winding. The shaft body is made of lightweight aluminum or robust steel body and hardened steel studs to suit your application needs. We offer also shafts made of carbon fiber body with low weight and huge capacity.

Pneumatic shafts with strips are designed for winding and unwinding one or more rolls on one shaft or for clamping the cutting knives. The expanding strips are available in durable rubber, aluminum, or other materials.

Pneumatic shafts with keys are often used in very demanding industrial applications, mainly in paper industry. They are suitable for winding high-weight rolls under high torque.

Shafts for differential winding are suitable for winding multiple rolls of mostly plastic material on the slitter rewinder machines. We supply shafts for machines SOMA, KAMPF, ATLAS, EUROMAC, etc.

They are the ideal solution for large hydraulic unwinding unwind stands and for applications with roll weights over 3000 kg. We offer a standard model for unwinding a single diameter, step model or model with core-kicker after finishing the unwinding.

There are also side pressure activated and pneumatic expanding chucks with adapters

SAFETY CHUCKS

Safety chucks allow easy loading and unloading of shafts with material into and out of the machine. The flange opens and the shaft with roll simply inserts into jaws. One chuck is usually supplied with output shaft for drive or brake. The standard are the square inserts, and we also offer the special inserts radically reducing the vibration and roll bouncing.

Versions with tilting and sliding flange are available. Our safety chucks are an economic and high quality alternative to the expensive competitor versions, they have replaceable jaws and their maintenance is quick and easy. All drawings and 3D models are available on request.

The sliding flange safety chucks have a square inserts turned 45 degrees with a safety flange release button. The sliding flange is a new sophisticated solution common for modern machines with simple opening, without the use of hammers. A special round-square journals minimizes vibration, jumping rolls, and so on reduces wear of components.

For the more complicated applications we offer the spreader/bowed rollers, cooling and heating rollers, calander rollers and rollers with special surface – rubber, chromium, carbon, Teflon etc..

SPECIAL ROLLERS AND PROFILES

We supply a wide range of idler rollers and aluminum profiles for all industrial applications. Due to their structural design and top technical parameters, cylinders are used in paper, plastics, rubber, textile, printing and other industries.

Profiles are available up to 6 meters in length (anodized, cut, deburred) or complete as complete rollers exactly based on your requirements (diameter, journal, material tension, wrap angle, surface finish).

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ADAPTERS

Inflatable adapters are often used for winding or unwinding rolls with several different diameters. The body of the adapter is made of lightweight aluminum or steel and an inflatable part made of highly durable rubber.

There is also a model with flange that is used as a stop for the core and air connection between two adapters. Adapters mounted on the expanding shaft using a clamping flange.

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TENSION CONTROL SYSTEM

Tension control systems of running material help to maintain the predefined tension throughout the rewinding process, reduce the number of tears of material, scrap and minimize production losses. For open-loop control systems we use an ultrasonic sensor that senses the roll diameter and, on its basis, control the unwinding brake. For closed loop tension control systems, the load cells continuously measure the tension in running material and convert it to an analog signal. This signal is processed by the control unit along with other signals and evaluated by the tension controller. The output may be a signal for the unwinding brake, the NIP roller station, or the winding motor.

Available are the different models of the load cells, sensors for measuring the diameter and other controllers.

The pneumatic brakes and clutches are controlled by the air pressure that pushes the brake pads to the rotating disc. Pneumatic brakes and clutches include a wide range of applications, mainly with a large roll weight and high unwinding speed.

Electromagnetic brakes and clutches are the ideal solution for the printing industry, flexographic printing, food, pharmaceutical industry, are used in the production of packaging and everywhere where hygienic regulations are respected. The main use is in simpler applications with lower torque, up to 100 Nm.

Pneumatic caliper brakes are especially used in safety applications for braking large cylinders and rolls. Available are models for high torques and brakes with safety features.

ROTARY UNIONS

Rotary connections are mechanical connections between two rotating parts for transmission of heat, cold, fluid or gas in industrial applications. Our rotary unions are made of special, durable materials that guarantee long life and work without the problems. Available are one-way unions for air intake to the cantilevered shafts or two-way valves for use on flexo printing machines, cooling or heating cylinders.

WEBGUIDE SYSTEMS

Edge guide systems ensure that the web of material running through the process is always correctly aligned or the resulting wound roll has a straight edge. This significantly reduces error rates and increases product quality. Based on the material being scanned, ultrasonic or optical sensors are available. The webguide drive is DC brushless sliding drive.

A portable or fixed control panel is included in the delivery. You can integrate up to 10 systems in a series.

CAMERA INSPECTION SYSTEMS

Using the sensor to synchronize with the material speed to display the selected area on the monitor where the operator can compare print parameters.

We offer a complete system with computer, software, camera, monitor and sync sensor.

You can save photos as a reference for the future or it is possible to send by e-mail directly to the customer.

Optional features include barcode reader, image reconstruction, a double camera or an external stroboscope lamp for two-sided printing, RGB / CYM touch screen to control the quality and color intensity.
SLITTING KNIVES
We have available all standard knives and nonstandard knives which we can produce exactly according to your drawing from various materials, from standard steels 52100 up to carbide steel. We will be happy to replace the knives you use for our lower priced blades with the same quality, or make knives according to your sample or item drawing. Most knives are in stock, alternatively we produce and stock for your future needs. We offer favorable long term contracts for knife delivery = lower price + fast delivery.

SLITTING SYSTEMS AND PNEUMATIC KNIFE HOLDERS
We supply complete slitting systems or partial components for all rewind and cutting machine manufacturers. For the end users we will offer tailor-made solutions for the reconstruction of obsolete cutting knives, the design of new systems or the addition to the existing machines.

Based on the visit, we develop a technical specification, a 3D model, and we will deliver the solution itself into the construction of your machine.

Slitting systems and holders are available with independently driven lower blades or with lower blades mounted on the expanding shaft.
Core cutters are used for cutting thick paper cores with internal diameter from 40 mm to 152 mm and length up to 2000 mm in applications that require a precise, straight and clean cut.

Depending on your specific requirements, the core cutting machine can be adjusted for the special needs. Manual, semi-automatic or automatic core cutter is delivered with following standard parameters:

- Length of parent core tube 2000 mm
- Cut diameters from 25 to 152 mm
- Wall thickness of the core up to 12 mm
- Two hand controls is a standard and in delivery is included also safety certificate.

In the case of a manual cutter, the core is driven at the cutting point by two rollers and rubber belt. By the pulling of lever with sharp knife against rotating core we cut it easily without dust.

The semi-automatic cutter works on a similar principle as a manual cutter, with the difference that the arm pressure with the knife is made by the pneumatic piston. We recommend for frequent cutting of especially thick-walled tubes - cutting is safer and much more comfortable.

The Automatic Cutter Cutter is a fully automated touch-screen machine, with which you enter the length and amount of cut cores. For maximum efficiency, we deliver the automatic core loader to the machine.

Our experienced technicians are able to design equipment that is right for your machine application. All of the products from our portfolio can be adapted to the more sophisticated machines such as winding and unwinding stands, cutters, rewinders or other processing machines.

Simple roll handling devices with the load capacity up to 300 kg (more on request). Different models are specified by your requirements (stroke, roll rotation, wheels, etc.).
Thanks to our cooperation with the Italian company Air Project, we supply systems for the extraction of cuts, cuttings, waste and dust in industrial applications. We offer complete suction solutions from nozzles, flexible and rigid pipes, fans and noise absorbers to separators and compact balers. Comprehensive solutions include suction and waste handling at the same time from several machines, and their transport from the entire hall to the waste management site.

We offer dust, combustion, welding and oil vapor extraction systems at the most modern environmental level. They are available with best filtering systems, explosive atmospheres and other solutions tailored to your production hall.
ekoenergo golpretech s.r.o.
Staňkova 383/41
612 00 Brno
Česká republika
IČO: 045 64 715
DIČ: CZ04564715

+420 532 308 120
info@golpretech.cz