Tangential pay-off cantilevered shaft
To be loaded from the side, therefore no additional space required to the back. Version with lifting device possible.

Pay-off pintle type
Loading in line direction, therefore no additional space required to the side. Reels can be easily changed with lifting devices and opening of the pintles.

Pay-off portal type

APPLICATIONS
- spinning and taping lines
- galvanizing lines
- rolling mills
- rewinding units
- stranders
- extrusion lines
- annealing and sintering lines
- varnishing lines

VERSIONS
- horizontal or vertical
- driven or braked
- with dancer, tension or speed control
- with traversing reel
- multiple pay-off

OPTIONS AND ACCESSORIES
- lifting device
- measuring devices and displays
- automatic height correction
- protection devices
- special models

SPECIAL CHARACTERISTICS
- optimal constancy of tension by means of application specific control
- tension independent of speed
- easy loading and unloading of the reels by lifting devices and quick release systems
- product leaves the reel by 90° if equipped with traversing reel
- optimal constancy of tension by means of application specific control

Technical data

<table>
<thead>
<tr>
<th></th>
<th>Tangential Pay-off</th>
<th>Pay-off pintle type</th>
<th>Pay-off portal type</th>
<th>Pay-off for containers</th>
</tr>
</thead>
<tbody>
<tr>
<td>wire diameter</td>
<td>0.05 – 8 mm</td>
<td>0.05 – 8 mm</td>
<td>on demand</td>
<td>0.1 – 3 mm</td>
</tr>
<tr>
<td></td>
<td>0.002 – 0.315 inch</td>
<td>0.002 – 0.315 inch</td>
<td></td>
<td>0.004 – 0.118 inch</td>
</tr>
<tr>
<td>wire bundle / stranded wire</td>
<td>0.05 – 25 mm²</td>
<td>0.05 – 120 mm²</td>
<td>on demand</td>
<td>0.04 – 4 mm²</td>
</tr>
<tr>
<td></td>
<td>0.0000078 – 0.039 inch²</td>
<td>0.0000078 – 0.186 inch²</td>
<td></td>
<td>0.0000062 – 0.0062 inch²</td>
</tr>
<tr>
<td>cable diameter</td>
<td>max. 30 mm</td>
<td>max. 30 mm</td>
<td>on demand</td>
<td>max. 3 mm</td>
</tr>
<tr>
<td></td>
<td>max. 1.181 inch</td>
<td>max. 1.181 inch</td>
<td></td>
<td>max. 0.118 in</td>
</tr>
<tr>
<td>max. speed</td>
<td>1,200 m/min</td>
<td>1,800 m/min</td>
<td>300 m/min</td>
<td>350 m/min</td>
</tr>
<tr>
<td></td>
<td>3,937 fpm</td>
<td>5,905 fpm</td>
<td>984 fpm</td>
<td>1,148 fpm</td>
</tr>
<tr>
<td>reels</td>
<td>80 – 1,000 mm</td>
<td>80 – 2,000 mm</td>
<td>1,200 – 3,200 mm</td>
<td>max. 1,200 mm</td>
</tr>
<tr>
<td></td>
<td>3.15 – 39.37 inch</td>
<td>3.15 – 78.74 inch</td>
<td>47.244 – 126 inch</td>
<td>max. 47.244 inch</td>
</tr>
<tr>
<td>reel bore</td>
<td>16 – 250 mm</td>
<td>16 – 250 mm</td>
<td>30 – 350 mm</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>0.63 – 9.84 inch</td>
<td>0.63 – 9.84 inch</td>
<td>1.181 – 13.78 inch</td>
<td>–</td>
</tr>
<tr>
<td>max. reel weight</td>
<td>1,300 kg</td>
<td>3,000 kg</td>
<td>30,000 kg</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>2,866 lb</td>
<td>6,613 lb</td>
<td>66,138 lb</td>
<td>–</td>
</tr>
<tr>
<td>tension</td>
<td>1 – 500 N</td>
<td>1 – 2,500 N</td>
<td>max. 20,000 N</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>0.225 – 112.4 lbf</td>
<td>0.225 – 562.2 lbf</td>
<td>max. 4,496.18 lbf</td>
<td>–</td>
</tr>
<tr>
<td>reel clamping</td>
<td>mechanics</td>
<td>pneumatic or hydraulics</td>
<td>pneumatic, hydraulics or electric motor</td>
<td>–</td>
</tr>
</tbody>
</table>

Values indicated delimit the range of possibilities, but never apply together for a single product. Also exceeding these limits is possible in individual cases.
Tangential Take-up with cantilevered shaft

To be loaded from the side, therefore no additional space required to the back. Version with lifting device and traversing reel possible.

Take-up pintle type

Loading in line direction, therefore no additional space required to the side. Reels can be easily changed with the lifting device and opening of the pintles.

Automatic Take-up

Automatic changing of the reels and restart.

Take-up portal type

traversing reel available

Universal Take-up

for reels and containers

APPLICATIONS

- spinning and taping lines
- galvanizing lines
- rolling mills
- rewinding units
- bunchers and stranders
- extrusion lines
- annealing and sintering lines
- varnishing lines

SPECIAL CHARACTERISTICS

- optimal constancy of tension by means of application specific control
- tension independent of speed
- easy loading and unloading of the reels by the lifting device and quick release systems
- product leaves the reel by 90° if equipped with traversing reel

VERSIONS

- horizontal or vertical
- with dancer, tension or speed control
- with traversing reel
- multiple take-up
- layer winding
- with integrated capstan
- automatic take-up with reel magazine

OPTIONS AND ACCESSORIES

- lifting device
- measuring devices and displays
- automatic height correction
- protection devices
- optical reel flange scanner
- special models

Technical data

<table>
<thead>
<tr>
<th></th>
<th>Tangential Take-up</th>
<th>Take-up pintle type</th>
<th>Take-up portal type</th>
<th>Universal Take-up for reels and containers</th>
</tr>
</thead>
<tbody>
<tr>
<td>wire diameter</td>
<td>0.05 – 8 mm</td>
<td>0.05 – 8 mm</td>
<td>0.5 – 5.5 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.002 – 0.315 inch</td>
<td>0.002 – 0.315 inch</td>
<td>0.02 – 0.217 inch</td>
<td></td>
</tr>
<tr>
<td>wire bundle / stranded wire</td>
<td>0.05 – 25 mm²</td>
<td>0.05 – 120 mm²</td>
<td>1.0 – 5.5 mm²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.000078 – 0.039 inch²</td>
<td>0.000078 – 0.186 inch²</td>
<td>0.00155 – 0.0085 inch²</td>
<td></td>
</tr>
<tr>
<td>cable diameter</td>
<td>max. 30 mm</td>
<td>max. 30 mm</td>
<td>max. 5 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>max. 1.181 inch</td>
<td>max. 1.181 inch</td>
<td>max. 0.197 inch</td>
<td></td>
</tr>
<tr>
<td>rectangular wire</td>
<td>0.5 – 50 x 0.1 – 10 mm</td>
<td>0.5 – 50 x 0.1 – 10 mm</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.02 – 1.97 x 0.004 – 0.393 inch</td>
<td>0.02 – 1.97 x 0.004 – 0.393 inch</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>max. speed</td>
<td>1.200 m/min</td>
<td>1.800 m/min</td>
<td>300 m/min</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,937 fpm</td>
<td>5,905 fpm</td>
<td>984 fpm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>393.7 fpm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reels</td>
<td>80 – 1,000 mm</td>
<td>80 – 2,000 mm</td>
<td>1,200 – 3,200 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.15 – 39.37 inch</td>
<td>3.15 – 78.74 inch</td>
<td>47.244 – 126 inch</td>
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</tr>
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<td>30 – 350 mm</td>
<td></td>
</tr>
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<td></td>
</tr>
<tr>
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<td>3,000 kg</td>
<td>30,000 kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,866 lb</td>
<td>6,613 lb</td>
<td>66,136 lb</td>
<td></td>
</tr>
<tr>
<td>tension</td>
<td>1.0 – 500 N</td>
<td>1.0 – 2,500 N</td>
<td>max. 20,000 N</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.225 – 112.4 lbf</td>
<td>0.225 – 562.02 lbf</td>
<td>max. 4,496.18 lbf</td>
<td></td>
</tr>
<tr>
<td>reel clamping</td>
<td>mechanics</td>
<td>pneumatic or hydraulics</td>
<td>pneumatic, hydraulics or electric motor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mechanics</td>
<td></td>
<td>mechanics</td>
<td></td>
</tr>
</tbody>
</table>

Values indicated delimit the range of possibilities, but never apply together for a single product. Also exceeding these limits is possible in individual cases.
Caterpillar
with 2 drives for rectangular wire lines

Cable Caterpillar
with 1 drive and flexible segments for optimum guiding of large-sized cables

Double Capstan
defines master line speed

Single Capstan
Tension control for maintaining a constant product tension. Used in rectangular wire lines for example.

APPLICATIONS
• spinning and taping lines
• galvanizing lines
• rolling mills
• rewinding units
• stranders
• extrusion lines
• annealing and sintering lines
• varnishing lines

VALUES:
- Speed: 0 – 250 m/min for Caterpillar, Cable Caterpillar, Double Capstan, and Single Capstan.
- Tension: max. 1,000 N for Caterpillar and Single Capstan, max. 1,500 N for Cable Caterpillar and Double Capstan.
- Surface: rubber, silicone, carbide metal, ceramics, stainless steel.
- Pressing length / diameter: 300 – 1,000 mm for Caterpillar, 1,500 mm for Cable Caterpillar, 80 – 900 mm for Double Capstan, and 250 – 900 mm for Single Capstan.

OPTIONS AND ACCESSORIES
• with dancer, tension or speed control
• caterpillars with synchronization available
• different surfaces and contours depending on product
• integrated water cooling for applications with thermal processes

VERSUS:
• pressing belt for capstan, solid or pneumatic tensioning
• alternatively with gearless drive
• protective devices
• special versions

Values indicated delimit the range of possibilities, but never apply together for a single product. Also exceeding these limits is possible in individual cases.
Control Dancer
with 1 thread, swiveling or static

Control Dancer
with several threads

Linear Dancer
in case of space problems

Wire Accumulator

### DANCER / ACCUMULATOR

#### APPLICATIONS
- spinning and taping machines
- galvanizing machines
- rolling mills
- rewinding units
- stranders
- extrusion lines
- annealing and sintering machines
- varnishing machines

#### VERSIONS
- **DANCER:**
  - swinging or linear dancer
  - number of threads to be adapted to the needs of the product
  - adjustment of the tension by counter weight or air pressure possible
  - use of a precision pressure regulator for setting the tension from the PLC

- **ACCUMULATOR:**
  - operating mode as accumulator only or with dancer
  - vertical standard version
  - horizontal wire accumulator by request

#### OPTIONS AND ACCESSORIES
- covers
- tension measurement with display
- automatic wire clamps
- protective devices
- special versions

#### Technical data

<table>
<thead>
<tr>
<th></th>
<th>Control Dancer</th>
<th>Linear Dancer</th>
<th>Wire Accumulator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>tension</strong></td>
<td>1 – 500 N</td>
<td>10 – 500 N</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>0.225 – 112.5 lbf</td>
<td>2.25 – 112.5 lbf</td>
<td>–</td>
</tr>
<tr>
<td><strong>pulley diameter</strong></td>
<td>80 – 700 mm</td>
<td>80 – 500 mm</td>
<td>80 – 500 mm</td>
</tr>
<tr>
<td></td>
<td>3.15 – 22.56 inch</td>
<td>3.15 – 19.685 inch</td>
<td>3.15 – 19.685 inch</td>
</tr>
<tr>
<td><strong>pulley material</strong></td>
<td>POM, aluminium, ceramically coated</td>
<td>POM, aluminium, ceramically coated</td>
<td>POM, aluminium, ceramically coated</td>
</tr>
<tr>
<td><strong>number of threads</strong></td>
<td>1 – 4</td>
<td>1 – 4</td>
<td>3 – 20</td>
</tr>
<tr>
<td><strong>max. length of accumulator</strong></td>
<td>3 m</td>
<td>5 m</td>
<td>200 m</td>
</tr>
<tr>
<td></td>
<td>9.84 ft</td>
<td>16.4 ft</td>
<td>656 ft</td>
</tr>
</tbody>
</table>

Values indicated delimit the range of possibilities, but never apply together for a single product. Also exceeding these limits is possible in individual cases.
For avoiding damage to the surface, the paper supply automatically slides a layer of paper between each (umpteenth) wire layer. Both the time of inserting and the length of the paper can be adjusted.

In addition to integrating in our take-ups, it is also possible to mount it on take-ups from other manufacturers.

**Technical data**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>max. 25 m/min, max. 82 fpm</td>
</tr>
<tr>
<td>Paper width</td>
<td>80 – 250 mm, by request up to 450 mm</td>
</tr>
<tr>
<td>Reel diameter</td>
<td>350 mm 13.78 inch</td>
</tr>
<tr>
<td>Paper feeding</td>
<td>adjustable per layer</td>
</tr>
</tbody>
</table>

**Line control**

All lines are equipped with a line control with touch screen, usually with a screen size of 10” (optionally 15”). For single components or secondary visualization 3.5” – 7” units can be used as well. Optionally our line control enables remote maintenance, i.e. access to the control program via internet, as well as the possibility of OPC connection with superior SCADA systems.

**Technical data**

The brush cleaning device is used for the mechanical cleaning of blank flat conductors, e.g. before the taping process. It can be equipped with 2 or 4 brushes. For removing dust particles it is optionally available with water cleaning and compressed air blowing system.

**Further components**

Furthermore, we are able to integrate the following components into a line:

- straightener devices
- diameter gauge
- spark tester
- precision meter counter
- speed sensor for control
- guiding pulleys (also with air cooling)
- pressing rollers (in connection with induction heating)
Factory 1: Hydro-Power
Albersrieth 27 | 92727 Waldthurn
Germany/Bavaria
Fon: +49 (0) 9657/930-0
Fax: +49 (0) 9657/930-123
info@lukas-anlagenbau.de
www.lukas-anlagenbau.de

Factory 2: Wire & Cable
Am Forst 1 | 92648 Vohenstrauß
Germany/Bavaria
Fon: +49 (0) 9651/930-0
Fax: +49 (0) 9651/930-299
info@lukas-anlagenbau.de
www.lukas-anlagenbau.de