machine-engineering for wire and cable industries
Equipment

serves for the stranding of fiber optic cables, cooper telephone cables, data cables, control cables and power cables.

WiCa's SZ Strander has a superior design which allows it to flawlessly produce multi-stranded products. The stranding process can function either in a stand-alone function or can have an extrusion process incorporated in tandem for additional flexibility in production. WiCa's design allows independent and complete control of each axis and thereby produces a perfect product.
product range

SZ - Stranding Machine

Versions

SZ - Strander Technology
• Machine contains up to 15 individual positions.
• Increased machine longevity with minimal moving mechanical parts.
• Improved operation with increased visibility of product during production.

SZ - Special features
• High production rate line speed.
• No back-twist of spools required.
• Low-friction, low-tension stranding.
• Easily achieves longer production lengths with WiCa’s design.
• Efficiently integrated into existing lines.
• Programmable to various sine and trapeze stranding models.

SZ - Single Position Advantage
• Modular system: simple addition and removal of additional positions.
• Allows for optimal adaption to the customer product.
• Achieves the optimal reverse direction parameters.
• Reduces impact loads as low as possible through optimization critical geometries.
**Steel Bow Stranding Machine**

The steel bow strander is available for a bobbin range of 200mm to 1600mm with different bobbin numbers. The Skip Strander consists of solid welded frame and is completely closed.

The stranding rotor is built up from rotating hubs carrying the rotor parts (steel bows). These bows form the sinusoidal pathway for the wires from the individual reels to the stranding point.

### Technical Data

<table>
<thead>
<tr>
<th></th>
<th>200 – 1,600 mm</th>
<th>on demand</th>
<th>5,000 rpm</th>
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<tr>
<td>reels</td>
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<td>reel numbers</td>
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<tr>
<td>max. rotation speed</td>
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</table>

### Versions

- Solid welded steel frame
- Monitoring of the bobbin closures by means of light beam
- Wire break monitoring for all sectors
- Disc brakes - pneumatically operated

The machine is controlled by a PLC-control, which is located in the main cabinet together with the drive-converters, power-supply, fuses etc.

Operation board which displays all necessary data: speed, line speed, laylength, production length etc.
Tubular Standing Machine

serves for the stranding of steel, copper and aluminium wires as well as for insulated cores.

The tubular stranding machine is designed to accept DIN bobbins (46395 and 46397) with a range of 200mm to 630mm but customer tailored versions can also be used. The strander is available in different bobbin numbers.
Versions

The Tubular Stranding Machine consists of bearing stands made of welded steel. The tube is stored in a central bearing.

The cradles are welded of steel and are held in completely closed ball bearings.

Drums carried in pintles, both sides operating with compressed air

The cradle-swing protection controlled by special sensors.

Brake System at Cradle:
- mechanical brake with diameter compensation
- mechanical- or electrical hystereše brake with diameter compensation
- tension or torque regulation with electrical drive. Load cell at cradle or stranding point. Controllable with the main terminal in real time.

Technical Data

<table>
<thead>
<tr>
<th></th>
<th>reels</th>
<th>200 – 630 mm</th>
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<tr>
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<tr>
<td>max. rotation speed</td>
<td>2.800 rpm</td>
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Bullnose
Single-twist-bunching-machine

is used for cable stranding, with 100% backtwist for twisting non-ferrous products like PVC, PE, PA, PUR, Hyrtel and LAN, cable category 6.

The machine is designed to accept DIN bobbins (46395 and 46397) from 500mm to 1600mm.
Version

Solid welding construction
one frame for the stranding rotor – one frame with a traversing bobbin drive
Rotor and bobbin drive are frequency-controlled AC-motors.
Traverser drive:
  three-phase AC-servo motor
The installed elevating platform for inserting the bobbin is controlled electrically.

Technical Data

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<tr>
<th>parameter</th>
<th>value 1</th>
<th>value 2</th>
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<tr>
<td>reels</td>
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<tr>
<td>max. rotation speed</td>
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</table>
Planetary Stranding Machine

Is used for stranding with **0-100 % backtwist**. Especially designed for stranding control cables and optical fiber cables as well as armouring steel and copper wires with backtwist.

The cradles are welded of steel and are held in completely closed ball bearings.

Spool size from 200mm up to 1000mm.
Product Range

Planetary Stranding Machine

Versions

The Planetary Strander is adapted to the customers depending and can be built with hard-paper rollers or with two bearing stands.

The cradles are welded of steel and are held in completely closed ball bearings.

Drums carried in pintles, both sides operating with an mechanical mechanism

Brake System at Cradle:
- mechanical brake with diameter compensation
- mechanical- or electrical hysteresis brake with diameter compensation
- tension or torque regulation with electrical drive. Load cell at cradle or stranding point. Controllable with the main terminal in real time.

Technical Data

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Drum Twister

serves for the stranding of steel, copper and aluminium wires as well as for insulated cores.
Drum twister are mainly used for power cables.
Drum Twister can be used as pay-off or take-up with different spool sizes up to 2200mm.
**Versions**

The Tubular Stranding Machine consists of bearing stands made of welded steel. The tube is stored in a central bearing.

The cradles are welded of steel and are held in completely closed ball bearings.

Drums carried in pintles, both sides operating with compressed air.

The cradle-swing protection controlled by special sensors.

Brake System at Cradle:
- mechanical brake with diameter compensation
- mechanical- or electrical hysteresis brake with diameter compensation
- tension or torque regulation with electrical drive. Load cell at cradle or stranding point. Controllable with the main terminal in real time.

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### Technical Data

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product range

Respooiler Unit
product range

**Respdialogs Unit**

**Respdialogs Unit**

Our various rewinding systems are designed according to customer requirements and they are used for rewinding different types of cables such as insulated wires, fibre optical cables, power cables...

The rewinding systems consist either of several single machines (take-up and pay-off) or are designed as a complete compact machine.

The respooler unit can be constructed with a dancer-control system, meter counter unit, measuring devices and so.

The machine can be designed for spools up to 3.000mm.

**Versions**

- design of rewinding line according to customer request
- solid frame construction
- most modern technic used
- on request fully reversible, automatic return after error detected from an measuring unit
- Tension control with dancer: tension with weights on dancer arm or via pneumatic cylinder on touch panel adjustable
- Tension control without dancer: Tension via torque of the drive in Newton on touch panel adjustable
The first Address for:

- Complete cable and steel rope wire lines
- Stranding Lines and Machines
- Extrusion lines and Extruder
- Cooling Troughs
- Take-up’s / Pay-off’s / Respooler
- Caterpillars and Capstans
- Dancer and Accumulators
- Binding Heads
- Line Control

We are at your disposal concerning solutions of *special orders* and *special machines*. 