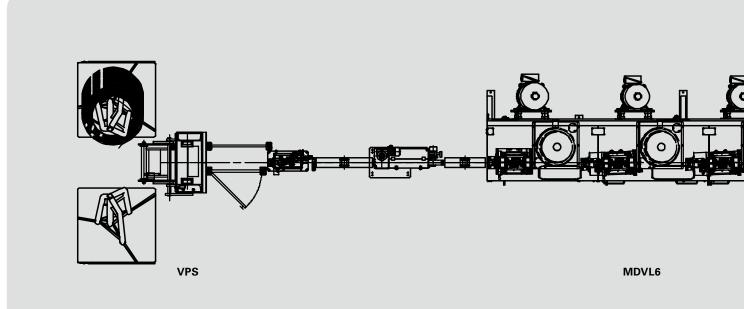


# **MDLV Multidraft Drawing Lines**



# **MDLV Multidraft Drawing Lines**

Multidraft machines with vertical capstan axis for drawing / rolling carbon steel wires with small or medium diameters, to be used for industrial purposes such as nails, galvanized wire, tying wire, etc. The wire can be coiled in spools or vertical stems.

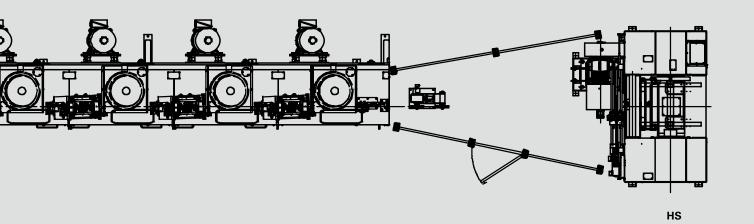




# Vertical MDV Multidraft Drawing Machine

Multidraft drawing bench with vertical capstan axis for pulling the wire through dies or micro rolling cassettes. It is composed of a series of capstans, in front of which the die/rolling cassettes and the short arm dancers are installed.

The power of the motors and the number of the drafts depends on the entry/exit wire diameter, the quality of the wire and the number of reductions.





# **VPS Vertical Pay-Off System**

The vertical VPS pay-off system is used for uncoiling wire rod coils with diameters ranging from 5.5 mm to 16 mm and ensures continuous feeding of the line.

### **VPS Module**

It is composed of two tilting fingers, where the wire rod coils are loaded in sequence, and a pay-off tower with sufficient height to guarantee highspeed wire uncoiling without tangles.









# Wire Preparation Unit - Descaling and Lubricating

The compact wire preparation unit includes a mechanical MD descaler and an LD lubricant device which simulatneously lubricate and mechanically clean the surface of the wire rod.

#### **Mechanical MD Descaling**

The mechanical descaling device consists of a series of rolls that break the heavy scale on the surface by bending the wire rod during the cold-rolling /stretching process. The descaling device is equipped with closed protective equipment and / or scale evacuation.

#### **LD Lubricating Device**

The LD wire lubricating device lubricates the wire rod with calcium-sodium stearate powder and is used in the cold-rolling process. The stearate is continuously mixed by means of vertical and horizontal transporting endless screws that are driven by motorized gearboxes.





# **MDLV Vertical Multidraft Drawing Machine**

Multidraft drawing bench with vertical capstan axis to pull the wire through dies or micro rolling cassettes.

### **Technical Data MDLV**

• Wire quality: low / medium carbon steel wire

Wire diameter range: 1.2 – 8 mm
Spool / coil weight: 0.8 – 5 ton





# **AVS Automatic Vertical Spooler**

The most advanced fully automatic AVS spooler spools steel wire on collapsible spools while at the same time automatically packing strapped compact coils in a regular format, layer to layer.

#### **AVS Module**

It does not require any operator, since all the coiling, strapping/weighing/ labelling operations and the evacuation of the compact coils are performed automatically and in less than two minutes of line downtime. The automatic AVS spooler is composed of a robust structure with a circular two-position platform.

In the first position, the collapsible spools are automatically loaded/ unloaded, strapped/labelled/weighed and opened/closed, while wire winding, tail/point clamping and automatic sample taking take place in the second position.

The automatic AVS spooler is supplied with two special automatic collapsible spools and can produce strapped

compact coils with weights between 2 and 8 tons and wire diameters between 4 and 25 mm. The special overhead crane manipulator and roll/chain conveyer can be configured according to the customer's plant layout. The automatic AVS spooler can also be used for coiling wire in fixed spools, and they are loaded/unloaded completely automatically.

Video





# **HS Horizontal Spooler**

The horizontal HS spooler performs the spooling of wire on fixed or collapsible spools.

### **HS Module**

It is composed of a robust structure and closed with a sliding door. The spools are held in a horizontal position by two centre pins, one moves axially by means of a hydraulic actuator and the other rotates driven by an AC motor.

The horizontal spooler includes a mobile platform and an extraction device to facilitate the movements of the empty or filled spools within the spooler.







# **Horizontal HC Coiler**

The horizontal coiler (dead block) coils the wire on fixed stems.

### **HC Module**

The stems are positioned in a vertical position while the pulling capstan is in a horizontal axis position.

An arm connected to the capstan guides the wire to the stems. The stems can be positioned on a rosette type double platform for continuous discharging of the coils.





## Thorough cleaning and coating increases the drawing speed

Prior to the wire drawing process, the WiTechs machines clean and roughen the surface of the wire. This enhances performance and reduces costs in the subsequent process.

#### Wire Cleaning and Wire Descaling

Each customer has specific requirements on the wire's level of purity and roughness. Drawing agent residues are removed from the wire rod in two ways – conventionally, using highly effective wet brushing, or with our new multistage cleaning process for high through-speeds.

Whether it be bending descaling, steel brush descaling or sanding descaling – thorough cleaning increases the drawing speed and the life span of the die. The more thoroughly this is done, the faster the process and the better the quality of the end product.

#### **Wire Coating**

Whether it be wet coating or dry coating – an even and reproducible layer guarantees reliability in the production procedures. It allows for speeds that make the drawing or rolling process even more productive. This increases the quality of the wire and the service life of the tool.



#### Wire Cleaning and Wire Descaling















#### ECOCLEAN, the unique, patented brush cleaning system from WiTechs

- For descaling and removing rust after bending descaling
- 24 brushes on 2 rotors (rotating against each other)
- Long life span of brushes up to 1500 tons (therefore long service life)
- Drawing speeds of up to 10 m/s
- Very low operating costs (<€1,- a ton)</li>

#### **Brush Descaler**

- Suitable for any wire quality up to Ø 20 mm
- For removal of scale and light rust by means of linear moving brushes
- 2 or more pairs of brushes positioned at 90° relative to each other
- Excellent and homogeneous cleaning quality due to special, linear brush pressure system
- Automatic re-adjustment of brushes until complete wear out
- Drawing speeds of up to 4,5 m/s

#### Sanding Descaler / Grinding Descaler

- Suitable for any wire quality up to Ø 20 mm
- For removal of scale, rust and surface defects by means of 1 or 2 sanding belts (with a width of 450 mm)
- 30% to 60% more sanding surface than commercially available allows for particularly long sanding belt life and optimum productivity
- Flyer and sand belt speed independent of each other and separately adjustable
- Drawing speed of up to 5 m/s

#### **Wet Cleaning Machines**

- Wet cleaning and drying system to remove drawing soap
- Various process stages: stainless steel wool, hot water, hot air and felt stripper drying
- One or optionally two large 260 litre tanks including level and temperature control
- Drawing speeds of up to 25 m/s

### **Dry Coating Machines**

- For coating wire with lubricant soap
- Perfect homogeneous coating
- Low stearate consumption
- Coating and dust collecting bay with screw conveyors
- Filter attachment for dust-reduced production with closed stearate circuit

#### Wet Cleaning and Coating Machine

- For coating of wire by means of a drawing agent carrier
- · Rinsing, coating and drying in one unit
- Suitable for mechanical descaled as well as pickled wire rod
- Almost the entire machine is manufactured using durable stainless steel
- Extensive control and monitoring features for a safe production process
- Automatic tank fluid level and temperature control combined with automatic refilling



# A reliable partner in plant construction

The Schlatter Group is a world leader in plant manufacturing for resistance welding systems for specialized solution in the field as well as weaving and finishing machines for paper machine clothing, wire and mesh. With our long-standing expertise in industrial engineering, our spirit of innovation and our reliable customer service we offer our customers highperformance and high-quality manufacturing systems.



#### Experience in plant design

The combined competence in the fields of welding, weaving and industrial engineering makes the publicly listed Swiss Schlatter Group a secure title in plant engineering.

### Welding segment

We develop and build resistance welding systems for the production of industrial and reinforcing mesh as well as rail welding.

#### Wire production

The innovative cold rolling, drawing and stretching technology sets new standards in terms of the safety, reliability and efficiency in the production of wire.

### Weaving segment

We build weaving and finishing machines for paper machine clothing, as well as wire fabric and mesh under our Jäger brand.

#### Customer service

Our goal is to increase our customers' productivity and to extend their systems' service life.

### Contact

Professional contacts for sales, technical support, customer service and administration are available worldwide in the group's companies and at select representatives/agents of the Schlatter Group. You can find the relevant contact data on our internet site www.schlattergroup.com.

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