

Machines for wire processing



Welcome to WiTechs

In 2008, Ernst KOCH GmbH & Co. KG joined forces with WTHK GmbH, another Hemer-based company, to found a new enterprise: WiTechs GmbH.

Close collaboration between the three partners KOCH, WTHK and WiTechs has produced new prospects of successful development and a further strengthening of our position on the international markets.

WiTechs doesn't just make machines and systems for the steel wire processing and manufacturing industry. It also offers consulting and services.

The company works especially closely with KOCH and WTHK in the field of developing complete solutions to meet customer requirements.





Wire rod pay-offs





Wire descaling lines





Wire coating lines





Wire cleaning lines





Accessories









Wire rod pay-offs

Paying off wire doesn't simply mean reeling wire off a coil in a single strand. It also means preparing the wire for further processing. We present the wire in whatever way is most beneficial for the process as a whole.



HA-F / CVE Horizontal Wire Rod Pay-Off

- > Suitable for paying-off steel wires (high carbon / higher tensile strength)
- > Wire diameter: 5.5 14.0 mm
- > Pay-off speed: up to 3 m/s
- > Coil weight: approx. 3x 2.0 t
- > The pay-off consists of two units, one movable part (HA-F horizontal pay-off) and one fixed part (CVE coil pusher)



ADT Pay-Off Turntable with Dancer

- > Size range 3.0 14.0 mm
- > Coil weights up to 3 t
- > Dancer enables paying-off in either direction



UEKA-4 Wire Rod Overhead Pay-Off

- > Diameters up to 19 mm
- > Hydraulically tiltable pay-off cones
- > Guide roller movable by means of a chain hoist
- > Wire speed up to 10 m/s
- > Height up to 10 m
- > Fully enclosed design
- > Lightweight and heavyweight versions





Wire rod descaling lines

The more thoroughly the surface of a wire is cleaned of scale and rolling residue, the higher the drawing speed and longer the lifetime of the die. It also improves the quality of the end product. We offer processing methods for almost any type of wire.



WEZ-3 Bending and Breaking Descaler

- > Wire diameter 5.5 16.0 mm (LC)
- > Bend-angle infinitely adjustable using worm gear
- > Easy to operate; wire does not require prebending by hand
- > Bending rolls with long lifetime tungsten carbide inserts



BBE Bending and Breaking Descaler

- > Wire diameter 5.5 16.0 mm (LC + HC)
- > Wire processed in four bending directions
- > Easy to operate; wire does not require prebending by hand; pneumatic or hydraulic – optional
- > Bending rolls with long lifetime tungsten carbide inserts



WEZ-1/65Z Bending and Breaking Descaler

- > Wire diameter: 5.5 6.5 mm (LC)
- > Bending and breaking of scale in 2 levels (4 directions)
- > Outstanding bending angle (approx. 540° in total)
- > Very compact machine housing
- > Transport of scale by a scale waggon on wheels (screw conveyor optional)
- > Wire break control as an option
- > Bending rolls with long lifetime tungsten carbide inserts





WBE/4L Brush Descaling Machine

- > Wire diameter (low / high carbon): 5.5 10.0 mm (opt. 20 mm)
- > For brush descaling and removal of scale and medium rust
- > Suitable for any wire quality
- > 2 pair of brushes arranged in an offset of 90°
- > Special brushing process achieves outstanding surface quality
- > Automatically re-adjustment of brushes until complete wearout
- > Long lifetime of brushings due to a high efficency degree



RWCB/400-2 Brush Descaling Machine

- > Brush descaler for all wire qualities (low and high carbon)
- > Wire speed up to max. 4 m/s
- > Wire diameter 5.5 8 mm (optional up to 30 mm)
- > Brush speed adjustable (optional)
- > Special brushing process achieves outstanding surface quality



RWCB/400-3 Brush Descaling Machine

- > Brush descaler for all wire qualities (low and high carbon)
- > Wire speed up to max. 4 m/s
- > Wire diameter 5.5 16 mm (optional up to 30 mm)
- > Brush speed adjustable (optional)
- > Special brushing process achieves outstanding surface quality

Wire descaling lines

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SEZ-2-450 Single Head Sanding Machine

- > Diameter 5.5 9.0 mm (optional up to 16.0 mm)
- > Wire speed up to max. 4.0 m/s
- > Flyer speed adjustable
- > Adjustable belt speed
- > Completely dust-free
- > Noise-proof design



SEZ-6-302 Double Head Sanding Machine

- > Diameter 5.5 9.0 mm (optional up to 20.0 mm)
- > Wire speed up to max. 3.5 m/s
- > Flyer speed adjustable
- > Adjustable belt speed
- > Completely dust-free
- > Noise-proof design





SEZ-8-150 Longitudinal Sanding Machine

- > Wire Rod Diameter 5.5 12.0 mm
- > Wire inlet speed 8.0 m/s
- > Sand belt cutting speed adjustable
- > Contact pressure adjustable
- > Grinding of defect free surfaces possible



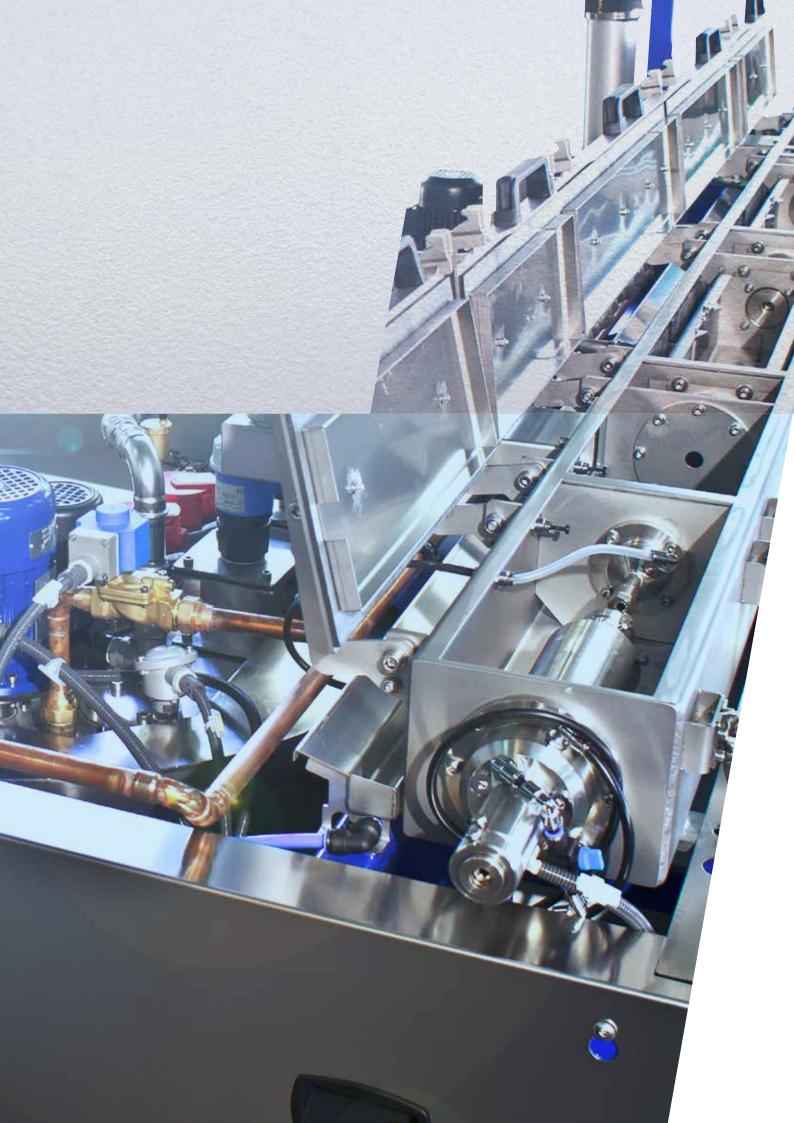
PES-1200 Steel Wool Descaling Machine

- > Cleans wires by stripping wire surface using steel wool or other polishing media
- > Wire diameter 5.5 6.5 mm (optional up to 8.0 mm)
- > Four steel wool pads arranged offset at 90° to each other
- > Application pressure adjustable using pneumatic cylinder
- > Each steel wool pad individually adjustable
- > Optionally extendable with integrated bending and breaking descaler



LB-1100 Blasting Unit

- > Wire diameter (LC) 0.8 5.0 mm
- > Wire diameter (HC) 0.8 5.0 mm
- > Wire passing speed up to 3.5 m/s
- > Blasting unit for removal of scale or resp. oxide layer
- > Processing of pre-drawn wire e.g. after heat treatment
- > Closed circuit including integrated extraction system
- > Wide range of blasting abrasives allows multi-purpose applications
- > Adjustment of all relevant parameter by touch panel
- > Most compact design









Wire coating lines

Coating wire is a very important process. The coating itself acts either as a lubricant or as an adhesive layer (lubricant carrier), and facilitates drawing and rolling processes at the speeds used in modern, productive wire manufacture. Achieving an even and reproducible layer guarantees dependable quality and reliable production procedures.



HSBE-3301 Wet Cleaning and Coating Machine

- > In-line cleaning, e.g. hot water or using liquid cleaning agents
- > Especially suitable for mechanically descaled wire rod, but also for acid-cleaned rod
- > Lubricant carrier-coating with an organic salt mixture instead of pure borax (drawing agent carrier)
- > Coating and drying at in-feed speeds up to 4.0 m/s
- > Stainless steel build protects against corrosion
- > Extensive control and monitoring features for a safe production process



BSG / T Dry Coating Machine

- > Drawing speed max. 10 m/s
- > Very even coating
- > Low stearate consumption
- > Wire diameter 5.5 16 mm
- > Coating chamber and separation chamber with screw conveyers



BSG / TF Dry Coating Machine

- > Drawing speed max. 10 m/s
- > Very even coating
- > Low stearate consumption
- > Wire diameter 5.5 16 mm
- > Coating chamber and separation chamber with screw conveyers
- > Filter add-on for dust-free production with a closed stearate circuit



Wire cleaning lines

Some products require a particular level of purity after drawing and before further use. Generally speaking, drawing agent residue is to be removed and the wire dried. For this purpose, we offer two different processes. Firstly, we use conventional wet brushing for effective cleaning. We also present our new multi-stage cleaning process, which is especially suitable for high through-speeds. Both processes can be coupled with a filtration system to ensure continuous operation.



HSRT-2600 Hot Rinsing Cleaning and Drying Unit

- > Removes drawing agent residues
- > Improves surface quality of wire
- > Wire diameter 1.2 5.0 mm
- > Integrated drying unit
- > Wire speed up to max. 18 m/s



TBM / 2B-N Wet Cleaning Brush Machine

- > Removes drawing agent residue
- > Improves surface quality of wire
- > Wire diameter von 1.0 8.0 mm
- > Integrated drying unit



Service after you purchase:

Need a spare part?

We can supply you with spare parts for the latest WiTechs product range, as well as spare parts from GSG GmbH.

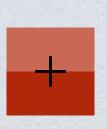
Need help at your premises?

Our trained staff will gladly assist you on location, wherever in the world you may be.

Need help quickly:

Let us know. We maintain a comprehensive range of products in stock, and we work with dependable partners to try to help you through your bottlenecks. If you have an enquiry please contact sales@witechs.de.







Accessories

Accessories are system components and auxiliary equipment that make day-to-day work with wire easier, and allow you to achieve the quality you are aiming for in your end products. Speak to us – including if you require a custom solution. Our staff are highly trained and have many years of experience with us, enabling them to deal with whatever requirements you may have.



MRE Motorised Drawing-In and Straightening Device

- > For straightening and driving wire into a drawing line
- > Wire diameters up to 16.0 mm Straightening system with five straightening rollers
- Rollers applied hydraulically or pneumatically
- > Rollers made from tool steel or carbide



DEG-5 Wire Stress Relieving Device

- > Wire diameters up to 8.0 mm
- > Stress relieving on one or two levels with five stress relieving rollers
- > Rollers applied hydraulically or pneumatically
- > Rollers made from tool steel or tungsten carbide



DEG-S7 Wire Stress Relieving Device

- > Wire diameters up to 16.0 mm
- > Stress relieving on one or two levels with seven stress relieving rollers
- > Rollers applied hydraulically or pneumatically
- > Rollers made from tool steel or tungsten carbide





MKS-1 / MKS-2 / MKS-3 Multi Soap / Die Box

- > Straightener
- > Dry and/or Wet drawing
- > Water-cooled die
- > Rotating Die Holder



DZH-1S / DZH-2S Rotating Die Holder

- > Dies up to Ø 75.0 mm
- > Water-cooled die



Collapsible Spools, Standard Spools, Special Spools

Made to custom dimensions such as:

- > Flange diameter
- > Core diameter
- > Laying width
- > Mounting hole
- > 4 8 segments



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