

Equipment for an Easy and Fast Wire Handling

EMPHASIS: Wire Handling

by:

Bob Flower
Witels-Albert USA Ltd.
208 East Pier Street, Unit B
Oxford, MD 21654 USA
www.witels-albert-usa.com

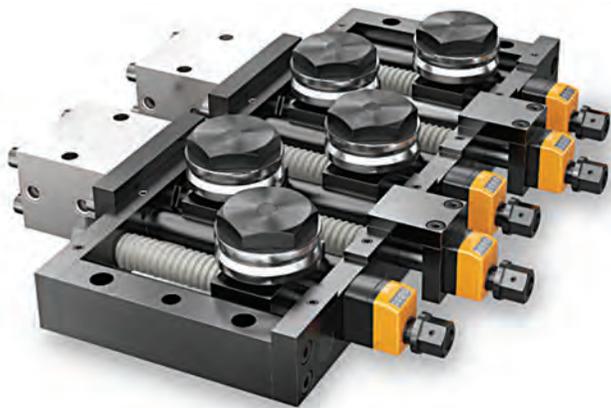
Wire feeding and straightening technology: Minimizing the time and manual work needed.

The parent company of Witels-Albert USA Ltd. is WITELS-ALBERT GmbH of Berlin, Germany. WITELS-ALBERT GmbH is the world's leading supplier of guides, feeders and straighteners for endless material such as wire and cable. The company has developed several new product series for processing larger-sized wire. The main focus of these new products is to minimize the amount of time as well as the manual work required in relation to the wire infeed and straightening processes.

The elastic-plastic deformation of larger-sized wire that is the result of straightening causes high straightening and transport forces, which can be calculated by the company's process simulation program. Straightening forces of more than 100 kN per single straightening roll as well as transport forces of more than 10 kN are more and more common and can no longer be handled on a manual basis by the operator.

Hydraulic Quick Opening & Closing

Help is at hand by using RA H PO series straighteners and NAH or NADH series feeding units, equipped with hydraulic cylinders for quick opening and closing.



RA 5-15 H PO straightener with hydraulic quick opening/closing mechanism, separately adjustable rolls and mechanical position displays PO.

With straightening rolls that are separately adjustable and supported by mechanical position displays PO, the roll adjustments on the company's RA H PO series straighteners becomes considerably easier to accomplish and can be done in a very short time.

While offering all of these features with a single design for the first time, the RA H PO series straightening units define a new industry standard. The new straightening units are recommended for a total wire size range of 9 to 40 mm and are available with five, seven or nine rolls.

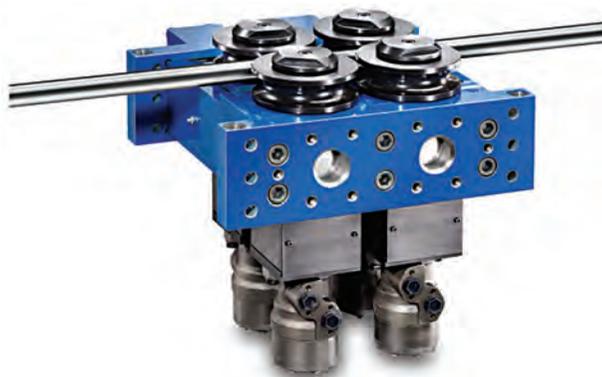
Direct Drive Technology

For managing transport forces of 10 kN and higher, the NADH 160 feeding unit is recommended. Supported by the so called direct-drive technology, using four hydraulic motors for driving the shafts, a new level of performance is reached.

The maximum opening of 60 mm allows curved wire to pass the feeding throat without any collisions. Closing the NADH 160 feeding unit and transporting the clamped wire section a bit forward and backward in the next step, will have a positive effect on the prestraightening of the related wire section. The two-roll-design NAH 160 can spend up to 6 kN transport force. Both the NADH 160 and the NAH 160 can be installed horizontally or vertically using the mounting holes provided.

Mounting Tips

As a general rule, a mounting position is recommended for RA H PO series straighteners and NADH or NAH series feeding units, which corresponds to the primary curvature plane of the wire. The new products work properly upstream to fastener machines, on horizontal support arm decoilers or upstream and/or downstream from individual bull blocks.



NADH 160 feeding unit with vertical aligned shafts, hydraulic quick opening/closing mechanism and hydraulic motors.

www.witels-albert-usa.com

FTI

Company Profile:

Witels-Albert USA Ltd. specializes in wire and tube straighteners, wire and tube feeders and drive units, guides and preformers for wire, tube, strip/flatwire, cable, wire rope and profile shapes. The products are engineered and produced in the German tradition of innovation, precision and quality, and include over 17 wire straightener models for material diameters up to 40 mm. Units are available with 3 to 14 rolls, in single or double plane arrangements. Wire guides come in 15 models with various roll materials, coatings and bearing options. www.witels-albert-usa.com