

**WAFIOS pay-off units – perfectly coordinated complete package for wire processing**

WAFIOS, a leading provider of wire pay-off units, offers a broad range of coil designs for a whole host of wire processing applications.

The know-how that these Reutlingen-based specialists have built up over decades ensures that customers receive a complete package of production equipment and pay-off units that is perfectly coordinated in terms of quality, output, availability, and service life.

Traditional factors which influence the ideal configuration of the pay-off unit are the wire diameter and wire strength, in particular with respect to the type and size of the coiled material. In addition, the wire processing machine which defines both the pay-off size and the type of design, such as the deflection version, has a key role to play.

The pay-off series from WAFIOS offer exceptional variety with a whole host of equipment options, allowing them to meet the most varied of customer requirements. Depending on the pay-off direction of the coiled material, the control unit can be converted to right-handed or left-handed operation.

When it comes to the deflection versions, customers can choose between the light and heavy version, as well as double-pass wire deflection, see also Fig. 1. The light arm version, which comprises spring steel, metal or plastic rollers, is used for wire diameters from approx. 1.5 to 7 mm with strengths up to 1,200 N/mm<sup>2</sup>, especially on straightening and wire bending machines. The heavy version with a large, stable deflection roller is suited to wire diameters between 3 and 16 mm and strengths up to 1,200 N/mm<sup>2</sup>. This version is used on straightening and chain machines as well as for cold-forging applications. Last but not least, the double-pass version features a deflection system with springs and steel rollers which is permanently attached to the pay-off unit and also has an easy-to-move arm on the control unit. Suited to wire diameters up to 5 mm and strengths up to 2,000 N/mm<sup>2</sup>, double-pass wire deflection is primarily used on spring coil and wire nail machines.

The carrier plate diameters can be chosen based on the outer diameter of the coiled material and can be between 850 mm (for special materials such as alloys, for example) and 2,300 mm (for spring steel wire, for example). When it comes to the carrier versions, the variety of equipment options depends on whether wire spools, wire coil carriers, strengthened versions for reinforcing steel or, for example, special safety equipment for oil-hardened spring steel wire are required.

In addition to the carrier versions, WAFIOS pay-off units also feature a large number of other equipment options, subject to the type or series.

- Central centering stanchion adjustment optimizes set-up time when adjusting and securing the coils
- Wire-end clamping device provides additional protection to prevent the wire end from being whirled around
- Residual weight detection with wire-end switch prevents the production machine from running while empty. This option is only available with double-pass wire deflection and when using spring steel or reinforcing steel, and can be fully integrated into the programming system of the WAFIOS wire processing machine. Immediate shutdown, shutdown after defined number of units, or warning message only are available as options

- Motorized wire feed designed specifically for large to very large wire diameters improves set-up safety, makes it easier to introduce the wire into the machine, and increases machine availability
- Protective fence versions for forklifts or crane loading (CE conformity) to increase flexibility and industrial safety
- Custom solutions include placing two pay-off units with separate protective features in front of the straightening machine with consoles and wire clamping unit. This enables each pay-off unit to be loaded independently of the other. For example, processors can use two different diameters on the pay-off units without requiring much set-up work.

WAFIOS offers this solution for wire diameters from 3 to 10 mm.

The WAFIOS H series Performance pay-off units are new additions to the portfolio. The pay-off units are produced in China, where WAFIOS operates its own production facility in the city of Zhangjiagang. As ever, the engineering processes take place at the company's Reutlingen headquarters, harnessing the design expertise that has been established there over many years. The Performance pay-off units are currently provided in three expansion levels – the H3, H3V, and H7 Performance – see Fig. 3.

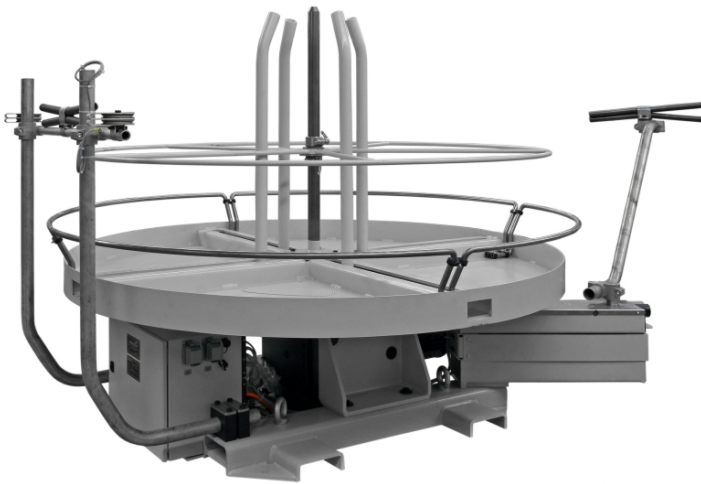


Fig. 1 Pay-off unit from the AHP series with double-pass wire deflection



Fig. 2 Pay-off unit from the AHT series

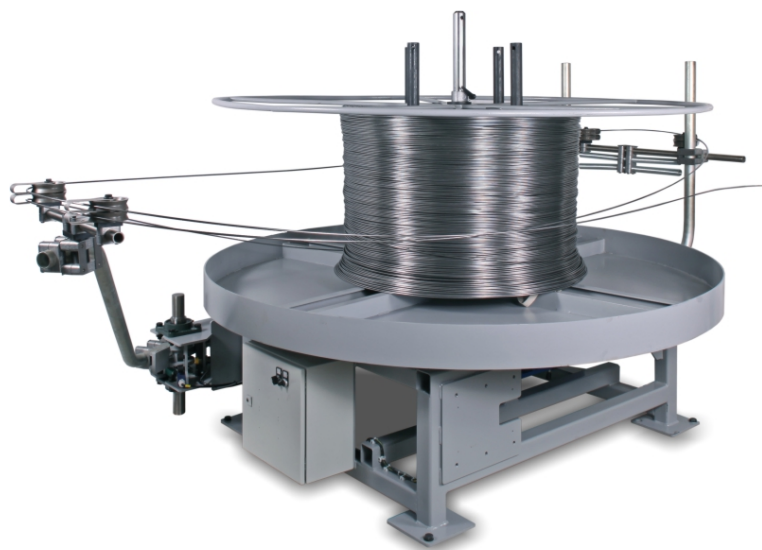


Fig. 3 WAFIOS H7 Performance pay-off unit