

Alpha 488 S – Twisting in a new dimension

The most cost-effective twisting concept with cutting-edge technology



The rapidly increasing driver assistance systems in today's vehicles significantly challenge the performance requirements of the modern electrical system in automobiles. Twisted pairs offer an inexpensive solution against electromagnetic interferences which may lead to malfunctions in several electronic devices. In addition, with twisted pairs a larger amount of data can be transferred.

Alpha 488 S is the answer to the annual increase in demand for such wires. The machine sets new standards in user-friendliness and ease of maintenance, while ensuring the most economical production of twisted pairs at the highest quality.

Eduardo Barros Product Manager

Many years of experience of Komax with high-end twisting machines are also reflected in the large acceptance of our existing solutions by our customers and original equipment manufacturers (OEM) – in the automotive as well as in the electronics branches. The Komax know-how, combined with the ever growing demand for twisted pairs, was the major drive for the newly developed fully automatic twister Alpha 488 S.

Highest flexibility

Alpha 488 S produces fully automatically twisted pairs out of two single bulk wires completely cut to length and terminated, with all quality controls included. Wires with cross-sections ranging from $2 \times 0.13 \text{ mm}^2$ to $2 \times 2.5 \text{ mm}^2$ may be processed in the highest quality. The modular composition of the system provides superb flexibility. Four processing stations at the wire beginning and two at the wire end offer extensive processing possibilities, such as both-sided seals and crimping. The system can also be used for the processing of two single untwisted isometric wires and is available in the versions of four, seven and ten meters.

Strongly increased user-friendliness

During the development of Alpha 488 S high value was placed on achieving optimal ergonomics. Long and fold-up wing-doors allow the operator an excellent and quick access to the upper wire deposit tray as well as to the relevant components on the twisting area. The compact design of the wire feed-in unit provides central and fast access to important guiding parts and tools for the daily operation.

The new pivoting operator console allows an improved machine operation, since the wire deposit tray is freely accessible at all times. The touch screen, which combines visual output and data input in the same spot, also contributes to a more efficient operation of the machine. The graphical user interface is based on the well-proven TopWin and allows easy control of the Alpha 488 S without additional training.

Ease of maintenance newly defined

Thanks to a sophisticated, highly innovative, wireless electrical transmission system – ICS (Inductive Communication System) in combination with an autonomous air-pressure storage system the drag chain at the wire-puller carriage could be suppressed.

Further optimizations include the new compact deposit cells, the new linear guidance concept at the twisting area and some automated adjustments, which greatly simplify the installation and maintenance of the system.



The new user console and the compact deposit cells

Technology at the highest level

A central element of the Alpha 488 S is the newly designed transfer bridge with motorized axes, which allows wires to be handled even gentler than before. The linear wire-puller with integrated DLA (Delta Length Analyzer) ensures that wires are drawn in gently and with great length accuracy. A further important monitoring system is the TFA (Twist Force Analyzer). This system ensures a constant and highly precise twisting, since it monitors and regulates the forces during the whole twisting process. Due to the parallel processing of both wires and the division of the full process cycle into three perfectly synchronized main processes this machine delivers outstanding output rates.

Diversity of options and accessories

Like other fully automatic Komax crimping machines, Alpha 488 S offers a wide variety of options and accessories. For example, the new ims 295 Inkjet generation can be optimally integrated in the fully automatic twister as well as the generic PM 8300 barcode scanner. In addition, the optional WPCS interface allows the machine to be integrated via network into a customer's existing production planning system.

Cost-optimized global solution

The modern wire processing industry requires cost-optimized global solutions, able to meet the toughest quality standards in markedly growing markets. With the new Alpha 488 S fully automatic twisting machine Komax offers already today the most economical solution for the long-run processing of twisted pairs. Because the future begins today.



Motorized transfer bridge for gentle wire handling

YOUR BENEFITS

- > Complete processing of bulk material into twisted pairs with processed ends
- > Fully automatic twister featuring well-proven as well as innovative quality monitoring systems (DLA, TFA, SPM, CFA/CFA+ etc.) for maximum process control
- > Gentle handling of wire for the best quality of the final product
- > Highly reliable and proven TopWin graphical user interface on touch screen for efficient machine use
- > Simplified machine design for great ease of operation and maintenance
- > Excellent value for the money for the economical production of twisted pairs



Alpha 488 S – the most economical approach to twisting