# **AKK SERIES**

## Flexible Mesh Welding Line

for Reinforcement and Precision Mesh Working from Coil





**INNOVATION & HISTORY** 



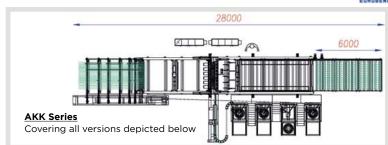
# HOW DOES THE AKK CONCEPT OPERATE AND WHAT MAKES IT NON-STOP AND SO FLEXIBLE?

Contrary to conventional welding lines, the AKK uses only four coils. Two for line wires and two for cross wires, one of each is always on stand-by mode.

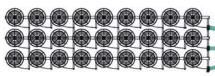
During production, once one coil is used up, the machine automatically detects the coil end and immediately, the stand-by coil is fed into the machine without any downtime. The operator can load a new coil while the machine is in operation, manifesting its true non-stop capabilies.

Since the line wires are produced and fed into the machine one by one, the quantity and distance between them can be programmed without any mechanical adjustments.

Due to its compact system layout, it requires minimum floor space compared to conventional welding machines working from coil.

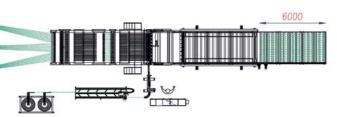


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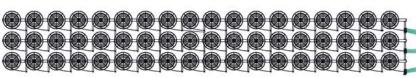


#### **Conventional Welding Line**

with one coil for each line wire
Up to 25 line wires with
100mm spacing

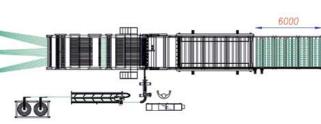


66000



#### **Conventional Welding Line**

with one coil for each line wire Up to 49 line wires with 50mm spacing

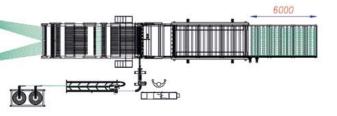


80000



#### **Conventional Non-Stop Welding Line**

with two coils for each line wire Up to 25 line wires with 100mm spacing





Line Wire Feeding Table

# AVANT-GARDE MESH WELDING LINE CHALLENGING ALL CONVENTIONAL METHODS

EUROBEND sets new standards in the welded mesh production with the AKK Series. A revolutionary concept eliminating all idle times and at least doubling productivity thanks to its non-stop capability, in comparison to any conventional welding line working from coil

The AKK is equipped with our worldwide PATENTED Automatic Wire Orientation System "AWOS", which is the core of the machine and ensures 100% flat mesh regardless of wire properties and high-speed roller straightening quality.





## ELIMINATING ALL LINE WIRE DE-COILING STATIONS

#### **AWOS**

- Our PATENTED Automatic Wire Orientation System allows the use of a high-speed roller straightening module for line wire feeding
- AWOS absorbs all wire straightening imperfections from the roller straightener
- This unique Automatic Wire Orientation System ensures perfectly flat mesh panels regardless of wire and straightening quality
- AWOS, is fully programmable and capable of processing all types of material, smooth or ribbed.
- Single coil replaces all line wire de-coiling stations.
- Double-line and cross wire de-coiling stations ensure continuous operation



Line Wire Feeding Table



Overhead De-Coiling Stations for up to 8mm 3T Coils, with Incorporated Loop



Patented Overhead De-Coiling Station for up to 12mm 6T Coils



De-Coiling Stations for up to 3T Horizontal Spools, with Loop Accumulators



De-Coiling Stations for up to 3T Vertical Spools





Line Wire Feeding Carrier

# INNOVATIVE CONCEPT IN MESH WELDING

All advantages from off-coil and pre-cut wire fed welding lines are combined in one machine, as the AKK is capable of producing large and small batches-orders consecutively without any downtime

The machine allows automatic mesh spacing and dimensions changes, thanks to programmable cross wire placement

The AKK is the only machine producing all types of mesh instantly, without any adjustments

Mesh advancing either through a servo-driven carrier, or through a compact layout servo-driven roller feeder, offering exceptional accuracy



Up and Down Cross Wire Feeding

 Collector with automatic stacking and unloading during production

- Roller or laterally discharging chain conveyors with height adjustment and in-line mesh bundling stations are available
- Cross wire welding above and below line wires, eliminating the need of a mesh turner
- Machine concept increases productivity significantly in comparison to conventional welding lines
- Just in time production
- Remote access via Internet connection for troubleshooting and routine maintenance



Up and Down Welding





- No downtime when changing:
- ✓ Wire coils
- ✓ Wire spacing
- ✓ Mesh dimensions
- Negligible downtime when changing wire diameters
- Multiple diameter changes during one day feasible
- Minimal stock of wire spools and coils required
- Flexibility eliminates the necessity for large stock of ready mesh as in conventional welding lines
- Multi diameter line and cross wire feeding available
- The AKK is equipped with independent heavy duty hydraulic or pneumatically operated welding heads



Double Wire Feeding Unit







### VERSION FOR PRECISION MESH

#### The only precision, coil-fed flexible mesh welding line

Equipped with line wire aligning unit, eliminating the need of cross wire trimming stations

Accurate in-line mesh stacking or robotic stacking available

Optional in-line bending unit to produce "V" shaped 3D fencing mesh

Sensor detecting and automatically discarding of butt-welded wire





In-Line Bending



Roller Conveyor with Height Adjustment



Robotic Stacking Unit



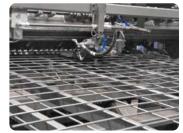
## **AKK F**

Accurate wire positioning system ensures no overhangs eliminating the need of cross wire trimming stations

Optional in-line mesh splitting cutter

Simultaneous welding of two cross wires above and below the line wires for the production of double wire fences

Production of large and small batches-orders without downtime

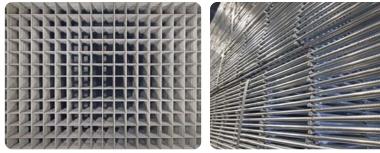


Mesh Splitting Cutter











#### **Technical Characteristics**

AKK SERIES	Working Range	AKK F			AKK R			
Welding width	mm	1.500	2.000	3.000	2.400	2.800	3.200	
Mesh feeding	ding mm		Precision Carrier			Multi-Roller feeding		
Line wire feeding	for continuous operation	Two Coils			Two Coils			
Cross wire feeding	for continuous operation	Two Coils			Two Coils			
Line wire spacing	mm	From 50 and multiple			From 50 and multiple			
Cross wire spacing	mm	Min. 50 above stepless			Min. 50 above stepless			
Number of line wires	up to	31	41	61	49	57	65	
Min. Mesh length	m	1.0		1.2				
Max. Mesh length	m	3 - 4 - 6		6 - 9 - 12				
Line wire diameters	mm	3-8		3-8, 5-10, 6-12				
Cross wire diameters	mm	3-8		3-8, 5-10, 6-12				
Non-Stop Working speed* Cross Wires/		up to 120			up to 140			
Non-Stop Working sp	eed* Cross Wires/min.		up to 120			up to	140	

<sup>\*</sup>No downtime for coil changes



### **OUR SUPREME FEATURES**

INNOVATION
FLEXIBILITY
SPEED
RELIABILITY
PRECISION
ERGONOMICAL DESIGN

EUROBEND GmbH

ADVANCED TECHNOLOGY PRODUCTS

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