



EMVO Inspired by EXPERTISE

www.emvo.com.tr

INDEX

<i>About Us</i>	3
<i>Rod Breakdown Lines</i>	4
<i>Multiwire Drawing Lines</i>	5
<i>Single-Wire Drawing Lines</i>	9
<i>Tin Plating Lines</i>	10
<i>Bunching Machines</i>	11
<i>Spoolers and Pay-off Units</i>	12
<i>Coilers</i>	18
<i>Belt Type Filtration Equipments</i>	21
<i>Annealers</i>	22



ABOUT OUR COMPANY

EMVO Engineering Machinery and Automation family is established in 2016 to build machines for your dear customers.

Our company is completely focused on wire drawing machines and equipments.

Mechanical and automational processes are entirely performed within our organization.

We conduct our international commercial relations through **Pargo Trade** and as our official partner. **Pargo Trade** is fully authorized with their extensive experience in sales and contracts.

As well as, **EMVO** provides solutions and manufacturing support about automation and electric cabinet products with PLC and inverters as **Mitsubishi Electric Turkey Elektrik Ürünleri A.Ş.** local dealer in Kayseri region.

EMVO's engineer team and technical team have big experience like more than 25 years on every stage about to build wire drawing lines.

That's the point, we do our business to achieve the best.

We are titled as **FESTO San. ve Tic. A.Ş.** "Official Partner" with experience on pneumatic systems through offer products and solutions.

Our whole experience sustains with updates and improvements.





RBD85 ROD BREAKDOWN LINES

- Adjustable and flexible machine drafting between 11 and 15
- Ergonomic and user-friendly machine
- design, with easy maintenance
- Individually driven capstans
- Lower consumption of oil and drawing lubricant
- Wire path without intersection



MMW50 MULTI-WIRE DRAWING LINES

- User-friendly and compact design for saving production area
- Reliable separation of drawing emulsion and bearing oil
- Long lifetime for drawing tools and extended service interval
- Optimized wire path for high surface quality
- Lower energy consumption presents with our engineering knowledge

Technical Specifications	RBD85	Units
Material	Cu (Copper)	-
Maximum Production Speed	30	m/s
Production Capacity	20,000	ton/annual
Number of Wires	1	quantity
Maximum Inlet Diameter	8	mm
Inlet Strength	450	N/mm ²
Finished Diameter	1,0 4,5	mm
Number of Drafts	11 / 13 / 15	quantity
Haul-Off Capstan Diameter	Ø224 / Ø355 / Ø450	mm

Technical Specifications	MMW50	Units
Material	Cu (Copper)	-
Maximum Production Speed	30	m/s
Maximum No of Wires Per Level	8	quantity
Maximum No of Wires Per Machine	16	quantity
Maximum Inlet Diameter	1,2 (Raw) & 1,0 (Annealed)	mm
Maximum Inlet Strength	450 (Raw) & 250 (Annealed)	N/mm ²
Finished Diameter from Machine	0,05 0,15	mm
Number of Drafts within Possibility	29 / 31 / 35	-
Drawing Capstan Diameter	50	mm
Haul-Off Capstan Diameter	60	mm
Drive Technology	Electronic Gear w/ Individual Drives	-





MMW80

MULTI-WIRE DRAWING LINES

- User-friendly and compact design for saving production area automatic
- Reliable separation of drawing emulsion and gear oil via mechanical seal
- Long lifetime for drawing tools and extended service interval
- Optimized wire path for high surface quality
- Lower energy consumption presents with our engineering knowledge



MMW80-8

MULTI-WIRE DRAWING LINES

- User-friendly and compact design for saving production area automatic
- Reliable separation of drawing emulsion and gear oil via mechanical seal
- Long lifetime for drawing tools and extended service interval
- Optimized wire path for high surface quality
- Lower energy consumption presents with our engineering knowledge

Technical Specifications	MMW80	Units
Material	Cu (Copper)	
Maximum Production Speed	30	m/s
Maximum No of Wires Per Level	8	quantity
Maximum No of Wires Per Machine	16	quantity
Maximum Inlet Diameter	1,8 (Raw) & 1,6 (Annealed)	mm
Maximum Inlet Strength	450 (Raw) & 250 (Annealed)	N/mm ²
Finished Diameter from Machine	0,10 0,50	mm
Number of Drafts within Possibility	17 / 21 / 25 / 31	quantity
Drawing Capstan Diameter	80	mm
Haul-Off Capstan Diameter	80	mm

Technical Specifications	MMW80-8	Units
Material	Cu (Copper)	
Maximum Production Speed	30	m/s
Number of Wires Per Level	8	quantity
Maximum No of Wires Per Machine	8	quantity
Maximum Inlet Diameter	1,8 (Raw) & 1,6 (Annealed)	mm
Maximum Inlet Strength	450 (Raw) & 250 (Annealed)	N/mm ²
Finished Diameter from Machine	0,10 0,50	mm
Number of Drafts within Possibility	17 / 21 / 25 / 31	quantity
Drawing Capstan Diameter	80	mm
Haul-Off Capstan Diameter	80	mm





FW15
FINE-WIRE DRAWING LINES

- Optimum wire cooling and lubrication with submerged drawing tank
- User-friendly design
- Smooth wire path for high surface quality
- Long lifetime and service interval
- Low consumption of oil and drawing lubricant



MW30
SINGLE-WIRE DRAWING LINES

- Optimum wire cooling and lubrication with submerged drawing tank
- User-friendly design
- Smooth wire path for high surface quality
- Long lifetime and service interval
- Low consumption of oil and drawing lubricant

Technical Specifications	FW15	Units
Material	Cu (Copper)	-
Maximum Production Speed	30	m/s
Number of Wires	1	quantity
Maximum Inlet Diameter	1,8 2,0	mm
Inlet Strength	450	N/mm ²
Finished Diameter	0,15 0,63	mm
Number of Drafts	21	quantity
Wire Elongation Per Draft	21	%
Drive Technology	AC Motors with Electronic Gear	-
Machine Dimensions (includes annealer)	2,80 x 2,30 x 2,50	m
Weight	3500	kg

Technical Specifications	MW30	Units
Material	Cu (Copper)	-
Maximum Production Speed	30	m/s
Number of Wires	1	quantity
Maximum Inlet Diameter	3,5	mm
Inlet Strength	450	N/mm ²
Finished Diameter	0,35 1,6	mm
Number of Drafts	17	quantity
Wire Elongation Per Draft	26	%
Drive Technology	AC Motors with Electronic Gear	-
Machine Dimensions	2,60 x 2,00 x 1,35	m
Weight	3500	kg





TPL6500

TPL13000

TIN PLATING

- Provides galvanic coating for non ferrous metals, especially is convenient for Sn (Tin)
- Tin plating lines presents all requirements on purpose homogeneity, concentricity and bonding the particles while metallic coating.

- Stable operation conditions ensures consistently high surface quality adjustment of current rating and production speed and automatic dosing the chemicals.

Technical Specifications	TPL6500	TPL13000	Units
Wire Material	-	Cu	Cu
Plating Material	-	Sn	Sn
Wire Diameter	250 N/mm ²	0,80 2,60	0,80 2,60
	450 N/mm ²	0,80 2,60	0,80 2,60
Maximum Production Speed	-	15	15
Maximum Plating Current	-	6500	13000
Tin coating layer thickness	-	1 20	1 20

DTB630-800

Double Twists Bunching Machine



- Machine is suitable for using right and left-hand options
- Rotating components are optimized for aerodynamical movements
- Infinitely options for lay-length to working flexibility
- Adjustable winding force, controlled via a load cell in spooler carrier
- Reduced energy consumption and low noise emissions

Technical Specifications	DTB630	DTB800	Units
Maximum Production Speed	300	300	m/min
Production range for copper	0,09 6,0	0,25 16	mm ²
Lay length	6 100	15 160	mm
Maximum number of twists	6500	5000	twists/min
Spool Dimensions			
Flange Diameter	630	800	mm
Spool width	475	600	mm
Drive for rotor bow	Standard	Standard	
Drive for winding unit	Servo motor	Servo Motor	-
Machine Dimensions		3,10 x 1,75 x 1,63	3,85 x 2,15 x 2,15 m
Weight	Apprx. 3200	Apprx. 6500	kg





SP400 SPOOLERS

- Cylindrical winding
- Facilitated loading and unloading the spools with carriage unit
- Compact design with integrated dancer
- Wire tension monitoring system
- The traverse system has automatic width adjustment



SPU630 SPOOL PAY-OFF

- Proper for one-sided (left or right) or double-sided
- Certain and stable wire tension via pneumatic dancer
- Wire break control
- Empty spool detection
- Twisting and bending free pay-off for single wire and wire bundles

Technical Specifications	SP400	Units
Single Wire Diameter	0,05 0,90	mm
Maximum Production Speed	40	m/s
Spool Dimensions	-	-
Maximum Spool Flange	400	mm
Min. Bore Diameter with Expanding Axle	90	mm
Min. Bore Diameter with Clamping Cones	80	mm
Min. Bore Diameter with Counter Support	<80	mm
Maximum Total Length	300	mm
Multiwire Bundle Process for Cu Soft	-	-
Minimum Cross-section	0.01	mm ²
Maximum Cross-section	0.65	mm ²
Input Rating (AC Motor)	7.5	kW
Machine Dimensions	1,00 x 1,60 x 1,90	m
Weight	950	kg

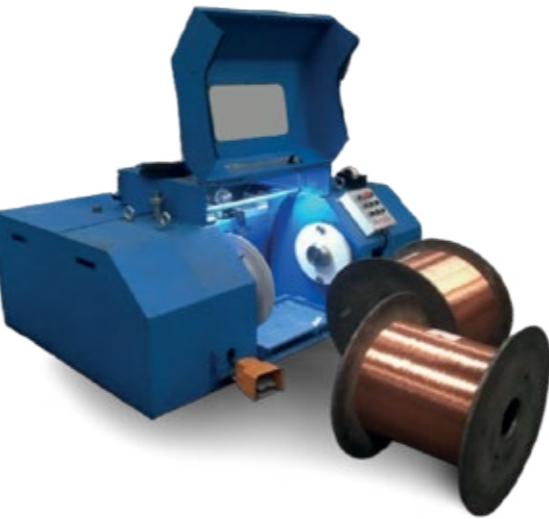
Technical Specifications	SPU630/10	Units
Maximum Pay-off Speed	300	m/min
Individual Wire Diameter (Cu soft)	0,40 1,41	mm
Wire bundle Cross-section (Cu soft)	0,14 6,00	mm ²
Spool Dimension		
Minimum Flange Diameter	630	mm
Maximum Flange Diameter	800	mm
Minimum Barrel Diameter	355	mm
Minimum Bore Diameter	125	mm
Maximum Winding Length	500	mm
Maximum Total Length	600	mm
Maximum Spool Weight	1200	kg
Maximum Input Rating	1.8	kW
Machine Dimensions	1,55 x 1,95 x 1,35	m
Weight	550	kg
Spool Number	4 10	Quantity



SPU-2 SPOOL PAY-OFF



- Proper for one-sided (left or right) or double-sided
- Certain and stable wire tension via pneumatic dancer
- Wire break control
- Empty spool detection
- Twisting and bending free pay-off for single wires and wire bundles



SPOOLERS

- Horizontal spooler with axis-pintle principle
- Different spool sizes can be used
- Designed for high wire surface quality with ceramic coated deflection pulleys
- The traverse system has automatic width adjustment

Technical Specifications	SPU-2	Units
Maximum Pay-off Speed	300	m/min
Individual Wire Diameter (Cu soft)	0,40 1,41	mm
Wire bundle Cross-section (Cu soft)	0,14 2,50	mm ²
Spool Dimension		
Minimum Flange Diameter	400	mm
Maximum Flange Diameter	630	mm
Minimum Barrel Diameter	224	mm
Minimum Bore Diameter	100	mm
Maximum Winding Length	400	mm
Maximum Total Length	475	mm
Maximum Spool Weight	650	kg
Maximum Input Rating	1.5	kW
Machine Dimensions	1,45 x 1,40 x 1,30	m
Weight	400	kg
Spool Number	2	quantity

Technical Specifications	SP630	SP800	SP1000	Units
Individual Wire Diameter	0,15 4,50	0,15 4,50	0,15 4,50	mm
Maximum Production Speed	40	40	40	m/s
Maximum Spool Flange	630	800	1000	mm
Minimum Singlewire Diameter	0.10	0.10	0.10	mm
Minimum Cross-section	0.018	0.018	0.018	mm ²
Maximum Cross-section	5.5	5.5	5.5	mm ²
Cylindrical Winding Structure	27	37	77	kW
Machine Dimensions	2,65 x 1,15 x 1,05	2,75 x 1,25 x 1,15	3,10 x 1,65 x 1,55	m
Weight	2100	2300	3800	kg





SPD250-12
SPOOL PAY-OFF WITH
DANCER

- Smooth open design for spool loading and unloading
- Compact design with integrated dancer
- Spool drive provides with AC geared motors



SPD630
SPOOL PAY-OFF WITH DANCER

- Constant wire tension through pneumatic dancer
- Wire break control
- Automatic lift system
- Double-sided pneumatic reel clamping
- Low energy consumption
- High wire surface quality

Technical Specifications	SPD250-12	Units
Wire Material	Cu	-
Spool Diameter	Ø250	mm
Wire Cross-section	0,07 0,30	mm ²
Maximum Production Speed	300	m/min
Spool quantities	2 12	quantity
Machine Dimensions	2,24 x 1,03 x 1,84	m

Technical Specifications	SPD630	Units
Maximum Pay-off Speed	600	m/min
Wire Bundle Diameter (Min / Max)	4 x 0,10 / 12 x 0,30	mm
Wire Tensile Strength	1,5 33	N
Spool Dimension		
Minimum Flange Diameter	400	mm
Maximum Flange Diameter	630	mm
Maximum Spool Weight	700	kg
Maximum Input Rating	7,5	kW
Machine Dimensions	1,45 x 1,40 x 1,30	m
Weight	400	kg





CLB650 BARREL COILER

- Proper for insulated, conductive and bare wires
- Modernized and updated controls and AC drives are standard
- Variable products and applications are suitable. Short barrels, tall barrels. Bare and coated copper, insulated and stranded cable as well.



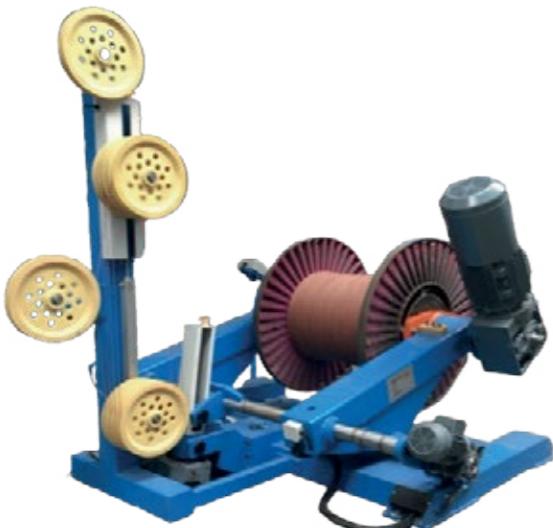
CL650 – CL800 COILERS

- Proper for insulated, conductive and bare wires
- Modernized and updated controls and AC drives are standard
- Variable products and applications are suitable. Short barrels, tall barrels. Bare and coated copper, insulated and stranded cable as well.

Technical Specifications	CLB650 (Barrel Coiler)	Units
Nominal Diameter	Ø650	mm
Wire Diameter	0,80 3,60	mm
Package weight	1500 - 2000	kg
Maximum Production Speed	15	m/s
Drive	15	kW
Working conditions	Proper for tin-coated or bare wire	-

Technical Specifications	CL650	CL800	Units
Insulated Stranded Conductor	0,80 3,20	0,80 4,10	mm
Wire cross-section range	0,50 8,40	0,50 13,30	mm ²
Soft solid bare / Tin coated copper	1,00 3,00	1,30 4,10	mm
Hard solid bare / Tin coated copper	1,00 2,50	1,30 3,20	mm
Package weight	1000 - 1800	1000 - 2200	kg
Maximum Production Speed	31	38	m/s
Nominal Capstan Diameter	760	915	mm
Drive	30	30	kW





CNL1000 – CNL 1280 - CNL1600
CANTILEVER TYPE CABLE PAY-OFF

- Single bobbin, cantilever arm type cable pay-off and winding unit
- Hydraulic lift bobbin and double-sided top cone by motor driven
- Convenient for the processing with extruder and twisting machines
- Separately and individually PLC control from main machine



EMF452-1000
BELT TYPE FILTRATION
MACHINE

- Fully automatic filtration procedure working through filter paper
- The main conveyor system is driven by geared motor
- The filter selection is well important to achieve high efficiency
- The particles settle in the non-turbulent area of the filter
- The filter can be changeable without any interruption to the filtration process

Technical Specifications	CNL-1000	CNL-1600	Units
Weight Capacity	0,6 2,5	0,6 3,5	ton
Wire Diameter	3 25	4 30	mm
Spool Flange Diameter	Ø630 Ø1000	Ø1250 Ø1600	mm
Spool Outer Width	475 - 750	950 - 1180	mm
Maximum Production Speed	400	400	m/min
Spool number	1	1	quantity

Technical Specifications	EMF452/ 710	EMF630/ 710	EMF800/ 710	EMF800/ 1040	EMF1000 /1040	Units
Drum Diameter	452	630	800	800	1000	mm
Filter Diameter	710	710	710	1040	1040	mm
Nominal Diameter	DN65	DN80	DN100	DN100	DN200	mm
Paper Length	710	710	710	1040	1040	mm
Input Rating (Geared Motor)	0.09	0.12	0.12	0.12	0.12	kW
Maximum Filtration Flowrate	250	400	500	750	1000	liter/min





AU15 - AU30 ANNEALERS

- single-wire path for bare or coated copper wires
- High quality finished product
- Drawing machine and annealer work like monoblock
- Speed control provides the annealing at every speed
- Contact tubes are designed easy to change

Technical Specifications	AU15	AU30	Units
Diameter Range	0,15 0,63	0,30 1,40	mm
Maximum Production Speed	30	30	m/s
Contact Pulley Diameter	Ø120	Ø250	mm
Maximum Annealing Power	20	132	kW
Maximum Annealing Current	400	2200	A
Maximum Annealing Voltage	50	60	V
Machine Dimensions	3,60 x 2,00 x 2,50 (includes drawing & spooler)		1,45 x 1,35 x 2,90 m

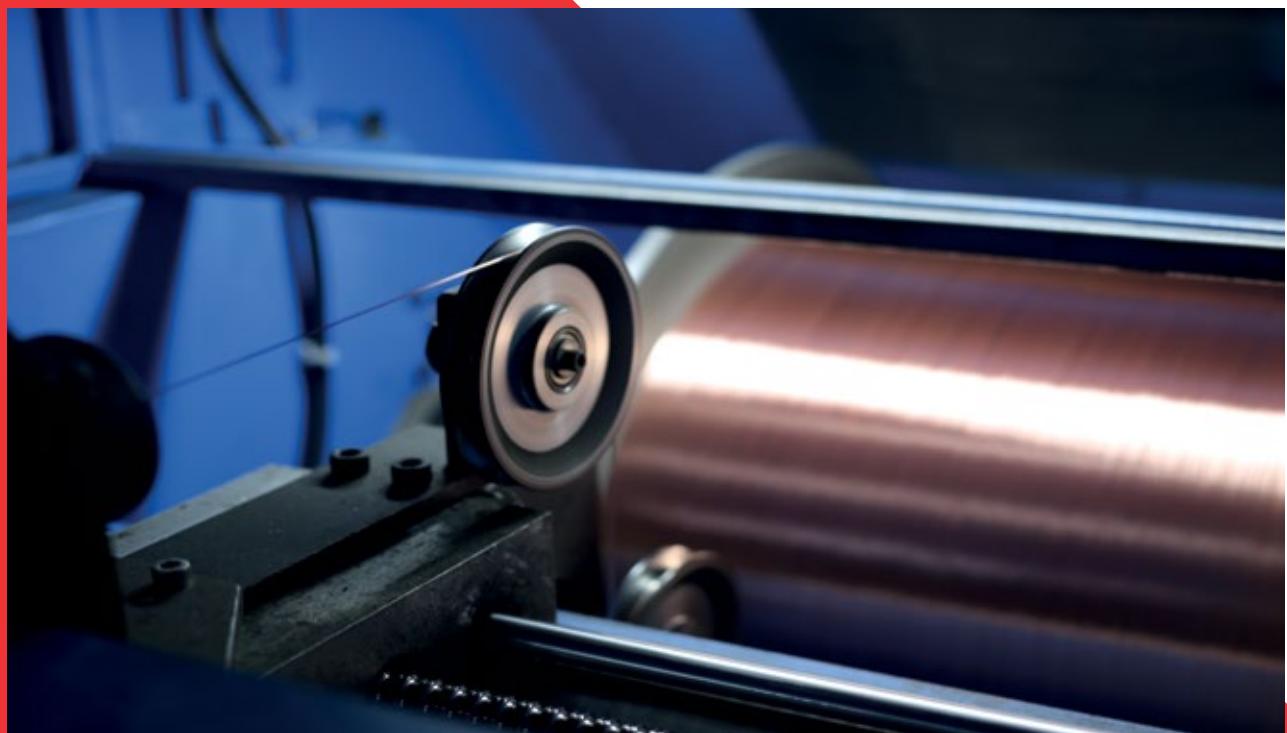


ANNEALERS MULTI-WIRE LINES

- DC Multi-wire resistance annealer with single-wire path for bare or coated copper wires
- High quality finished product
- Drawing machine and annealer work like monoblock
- Speed control provides the annealing at every speed
- Contact tubes are designed easy to change and with cleaning device for high product quality for tinned wire and long lifetime

Technical Specifications	AU120	AU140	AU160	AU200	Units
Maximum Production Speed	30	30	30	30	m/s
Possible Number of Wires	8 / 16	8 / 16	8 / 16	8 / 16	quantity
Finished Diameter of The Line	0,05 0,15	0,10 0,50	0,10 0,64	0,10 1,05	mm
Contact Pulley	140	140	160	200	mm
Maximum Annealing Power	23	60	80	180	kW
Maximum Annealing Current	500	2000	2000	5000	A
Annealing Principle	3 Zones	2 or 3 Zones	2 or 3 Zones	2 or 3 Zones	-
Separately Driven Auxiliary Pulley	Standard	Standard	Standard	Standard	-
Individual Drives	Optional	Optional	Optional	Optional	-
Water-cooled Slip Rings	Stock at 3000 (<3000A)		Stock at 3000	Stock at 3000	Stock at 3000 A





Pargo
Trade



Dış Ticaret Mühendislik Sanayi ve Ticaret Ltd. Şti.

EMVO Mühendislik Makine Elektrik Elektronik Otomasyon San. Tic. Ltd. Şti.

Sultansazı OSB Mah. 4.Cadde No:12 Melikgazi/KAYSERİ

☎ +90 352 503 00 50

✉ info@emvo.com.tr

☎ +90 352 503 00 51

✉ www.emvo.com.tr



for more information..