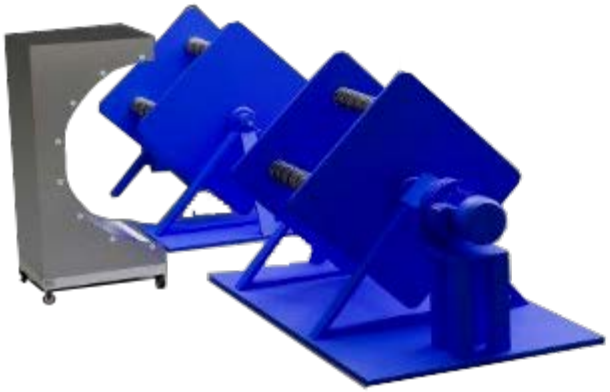
KREMEX

Faber-Reinforced Polymer Bent Element Manufacturing Line

Fibre-Reinforced Polymer Rebar Production Line KCB 1.0

The **KCB 1.0 line** is designed for serial production of composite bet elements with a rib surface (periodic profile). This machine allows you to produce fiber reinforced polymer bent elements**: L and U-shaped elements** with a maximum leg length of 500mm (expandable on demand), **trapezoidal elements (M-shaped)** with a maximum trapezoid height of 800mm (expandable on demand), and rods with a diameter of **4-16mm** (round shape spiral elements are optionally available). Manufacturing of trapezoidal parts and cutting is automatic, while L- and U-shaped elements are produced in a semi-automatic mode.



List of blocks and assemblies of KCR 2.0

No	Components, blocks and assemblies	QTY
1	Creel for 48-bobbins with internal unwinding	1
2	Bath for impregnation of fibers with a tensioning device and heating roving	1
3	Unit for M-shape elements layout	1
4	Polymerization furnace for M-shape elements	1
5	Water cooling unit for M-shape elements	1
6	Pulling unit for M-shape elements	1
7	Cutting unit for M-shape elements	1
8	Receiving table for M-shape elements	1
9	Control cabinet	1
10	Polymerization furnace for L and U-shape elements	1
11	Winding unit for L and U-shape elements	1

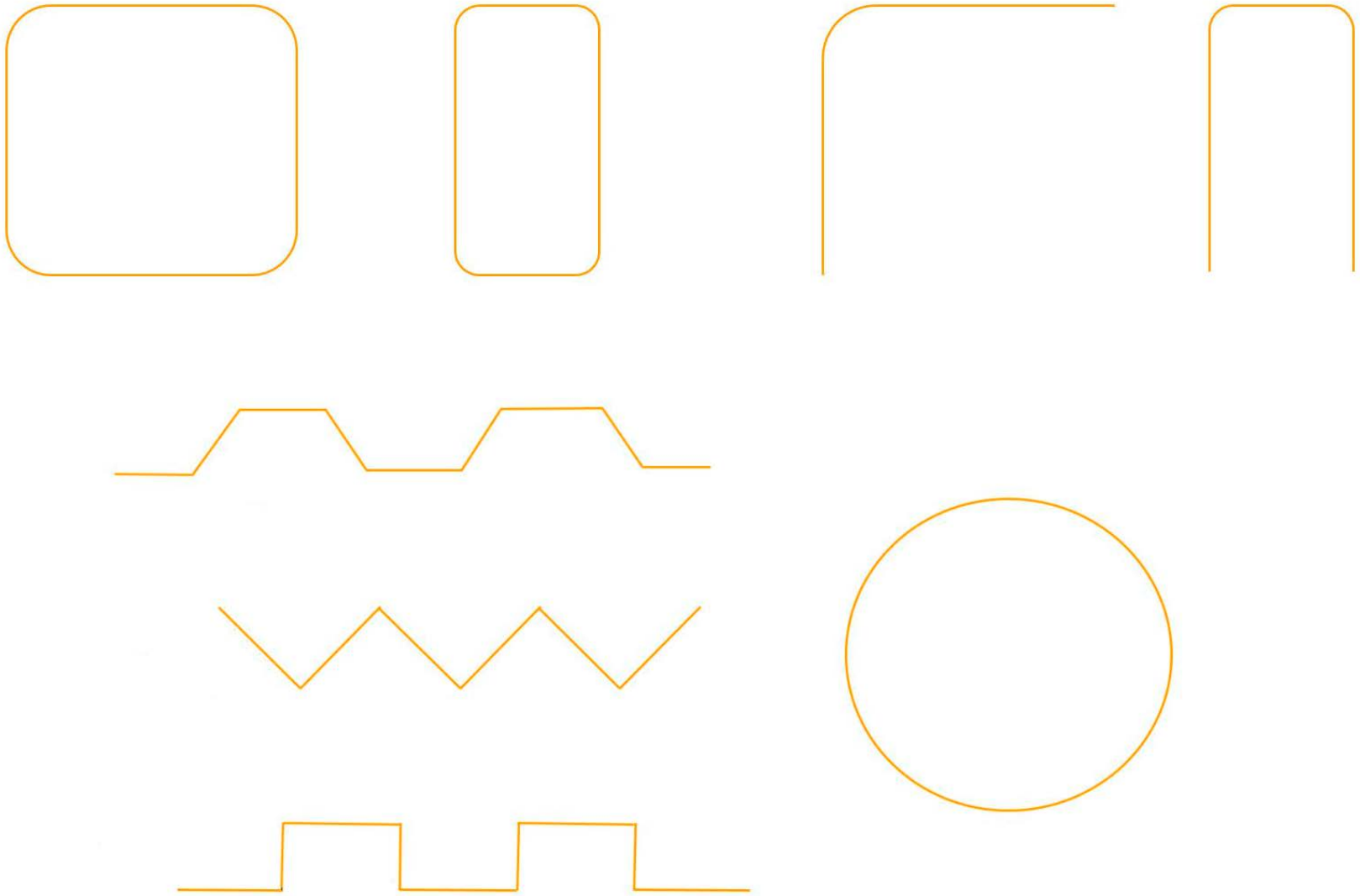
Technical characteristics of KCR 2.0

Parameter	Value
Air consumption	150 l/h
Water consumption	100 - 120 l/week (at 24 hours operation)
Electricity consumption	10 kWh (peak 35 kWh)
Type of supply current	Variable three-phase
Current frequency	50 Hz
Voltage	380 V
Capacity of the line for the production of bent element	3,5 – 6 m/min (depending on diameter)
The maximum value of the profile to be pulled	4-16 mm
The weight of one meter of bent element	0.045-0.412 kgs
The length of the finished bent element	Set by the operator
Overall dimensions of the line	18000 x 2500 x 2450 mm
Required area for line installation	250000 mm x 6000 mm

Production capacity of KCB 1.0

	Bent Element Diameter, mm		Bent Element Length, m	Capacity of the line		
				m/shift	m/hour	m/min
up to	10	up to	0.9	2700	225	3.75
up to	10	up to	1.5	3750	312.5	5.21
up to	16	up to	0.9	2340	195	3.25
up to	16	up to	1.5	3150	262.5	4.38

Bent element types produced by of KCB 1.0



Raw materials for FRP Rebar made with KCB 1.0

Description of material	Material function	Proportion in total raw material
Roving (glass fibre or basalt fibre) (Owens Corning, Jushi ,at al.)	Highly tensile strength , non-magnetic, non-conductive, transparent to electromagnetic radiation reinforcing fibers  	0.796
Epoxy resin (Kumho, Sinopec, at al.)	Thermoset polymer matrix 	0.115
Metliyltetrahydrophthalic anhydride (MTHPA)	Curing agent for epoxy resins	0.083
Polymerization accelerator (modified)	Accelerator of epoxy resin polymerization AKC 1.0 	0.006

Cost of equipment and works

Price

For actual price of KCB 1.0 please, refer to Mrs. Ekaterina Kremer (info@kremer.expert, Whatsapp: +7 9085849741)

The cost of installation and commissioning is included in the cost of equipment.

The set of accompanying documentation for the equipment includes a passport and an operating manual. We recommend having at least two production lines in your production plant. The ventilation system is not included!

Machine production time (1 set)

The production time of the equipment is 55 working days from the date of receipt of the pre-payment to the seller's current account for 1 machine.

Payment terms

- 70% - prepayment
- 30% - when the equipment is ready for shipment

Delivery EXW, FOB**,** CIF, Incoterms 2020

Warranty

Kremex LLC guarantees trouble-free operation of the equipment for 12 months from the date of commissioning, provided that the Customer complies with the rules of operation and maintenance.

Please, contact us for any questions!

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