Coil Cut to Length Line

Sacform AGM line

THE PRODUCER

Our Company continues its existence, in Coil Processing Industry, with Customer Satisfaction oriented vision, under the AGMline Brand. SACFORM provides high quality products, resource, special designs, strong After Sales Services for the Customer’s Requirements.

COIL CUT TO LENGTH LINE

Scope of content

The quotation includes description of Coil Cut to Length Line with 10.000 kg Hydraulic Decoiler, 10.000 Kg Hydraulic Coil Car, Straightener, Servo Feeder and Guillotine Shear which are suitable for processing width of 1600 mm and thicknesses between 0.5 – 2 mm.

List of equipment

- 10 000 Kg Loading Car
- 10 000 Kg Hydraulic Decoiler
- Upper Pressure Arm
- Hydraulic Routing Platform with Bending Arm
- Straightener
  - Straightener Adjustment - Motorized
- Hydraulic Platform (Transfer System)
- PVC Coating
- Servo Feeder
- Guillotine Shear
- Conveyor
- Stacking Unit
- Control Panel with Touch Screen

Working principle

SACFORM’s Special Design for Cut to Length Line Enables to Have Cutting Process Faster and More Accurate, for Desired Finished Product.

- The Cutting Speed is integrated with the whole Line's working speed.
- Cutting Length and Number of Cut can be pre-programmable.
- Automatic Length adjustment is controlled by Servo Motor.
- The speed and Length of the product can be adjustable from 7”-touch screen, Control Panel.
- Electrical panels of our machines have short-circuited protection systems.
- Our CE Certificated Machines are suitable to the Safety and Low voltage directives.
- Welded and temper relieved steel body construction.

GENERAL WORKING INFORMATION

Material Specifications	
Material	Stainless Steel
Working Thickness (min)	0.5 mm
Working Thickness (max)	2 mm
Width (min)	400 mm
Width (max)	1600 mm
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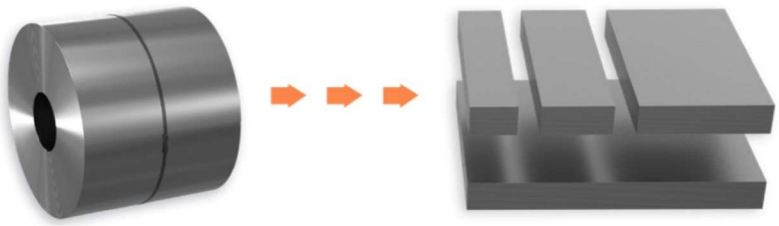
Entry Coil Dimensions	
Weight	10.000 kg
Inner Diameter (min – max)	Ø 490 / 550 mm
Outer Diameter	Ø 1500 mm

Finished Product Specifications	
Cut Thickness (min – max)	0.5 – 2 mm
Cut Width (min – max)	400 mm – 1600 mm
Cut Length (min – max)	400 mm – 3000 mm



Attention: It is not possible to straighten and process the following type of coil sheets in these machines: slatted coil with leant and/or bent, defected from various sides and chemically ruined.

Operator	
Stafff	1 person

CHARACTERISTICS OF MACHINE PARTS

1. Hydraulic loading car

Capacity	10.000 kg / 1 Coil
Max. coil width	1600 (mm)
Max. coil OD	Ø 1500 (mm)
Type	V type (Single)
Traversing speed	Hydraulic
Lifting speed (loaded)	Hydraulic
Lifting stroke	300 - hyd. Piston (mm)
Control System	Control Panel
Working System	Hydraulic - Motorized

2. Hydraulic decoiler

Decoiler Type	Single Head / Hydraulic
Decoiler Capacity	10.000 kg
Coil Width Capacity	1600 mm
Coil Inner Diameter (Min – Max)	Ø 490 / 550 mm
Working Capacity OD (Max)	Ø 1500 mm
Mandrel Tightening /Release System	Hydraulic System
Mandrel Opening Type	Conical Expansion
Power Transfer System for Drum	Motorized with Reducer
Speed Control System	Adjustable Drum Rotary Speed
Unrolling Security – Upper	Upper Pressure Arm
Unrolling Security – Lower	Via Lower Pressure Arm- Motorized
Control System	Laser Sensor
Working Direction	Upper / Bottom
Hydraulic Power	From the Main Power Unit

General features

- Mandrel expansion is by means of hydraulic cylinder
- Providing decoiling with the predetermined speed.
- Stoppage at controlled by Laser Sensor.
- Safety Upper Pressure Arm

3. Hydraulic routing platform with bending arm

Bending Arm Rolls	2 pcs.
Bending Arm Roll diameter	Ø 85 mm
Bending Arm Roll Turning	Motorized
Bending Arm Roll Piston Qty	2 pcs.
Routing Platform (Threading)	Movement with Hydraulic Pistons
Routing Platform- Piston Qty.	2 pcs.

General features;

- With unique design of Routing Platform Unit with Bending Arm, the coil is being transferred to the Straightener, without needing anyone's interference.
- Bending Arm moves Up and Down, while Routing Platform moves both Up & Down and Back & Forth
- Routing platform transfers the sheet properly from the coil to the pinch rollers, without an operator need.

Routing platform

Bending arm

4. Straightener

Speed (in the free working condition)	32 m/min
Setting Width	400 – 1600 (mm)
Total Roller Quantity	13 Piece (7 bottom / 6 upper)
Feeder Roller qty	2 Piece Ø 85 (mm)
Straightener Roller qty	9 Piece Ø 85 (mm)
Pinch Roller qty	2 Piece Ø 85 (mm)
Straightener Adjustment	
Gear Group with Low Backlash	Cementation Steel (8620)
Straightener Reducer	
Moving Mechanism	Gear System
Rollers Pressure Adjustment	Pneumatic Pistons
Upper and Lower Rollers Transmission	Gear System
Control System	Sensor
Guiding	Vertical Bearing
Width Adjustment	Via Gearing System
Guiding	2 Piece

5. Servo feeder

Servo Speed (in the free working condition)	32 m/min	
Working Width	400 – 1600 (mm)	
Working Thickness	0.5 – 2.0 (mm)	
Servo Roller Quantity	2 Pieces (1+1)	
Rollers' Diameter	Ø 110 (mm)	
Lateral Guides		
Guiding	Horizontal Rollers	
Width Adjustment	Via Gearing System	
Guiding System	2 Pieces	

- Double-sided Lateral guides are designed to position and route the metal sheet.
- To adjust the sheet 90 ° (degree) parallel between the mold and the feeder with right & left scrolling feature.

Gear Group with Low Backlash	 Cementation Steel (8620)
Servo Feeder Reducer	 1/20
Plotting System	Pneumatic
Rollers Pressure Adjustment	Pneumatic Pistons
Upper and Lower Rollers' Transmission	Gear System (2+2)
Servo Movement Transmission	Gear System
Roller Quality	4140

6. Coil cutting unit (Guillotine Shear)

Cutting Thickness Capacity	0.5 – 2 mm
Cutting Width	1600 mm
Cut Blade Quality	Blade_2379
Working Thickness Adjustment	Manually Adjustable

**** The shear has 2.5 seconds time lose for each Cut Movement ****

- High carbon/high chrome, two-edged top, four-edged bottom cutting blades.
- Cutting beam working in perfectly sliding, durable teflon/non-stick slideways
- Easy blade gap adjustment
- Mechanical sheet clamping system

7. Conveyor

Working System	Motorized and Speed Controlled
Width	1600 mm
Length	3.000 mm

- Stress reduced steel body construction
- Guiding system is used to eliminate the sliding possibility of the Material.
- Transfer Conveyor system is equipped with the PVC.

8. Stacking unit

Working System	Adjustable for Width and Length
Length (min- max)	400 - 3000 mm
Width	400 - 1600 mm
Height Capacity – max	400 mm
Cut Sheets' Positioning	Pneumatic and Hydraulic
Stacking Capacity Dimensions – Max	1600 x 3000 x 400 mm
Stacking Capacity Dimensions – MİN	400 x 400 x 400 mm
Weight Capacity	4 Tons

- This unit is for receiving and stacking the Finished/Cut materials onto the Pallets.
- Lengths and Widths can be adjusted to a desired Stacking Dimensions.
- The Stacking Unit has 4 sided-Pneumatic Positionings for the Cut Sheets.
- Stacked materials can be carried with Forklift or Crane.

ENERGY CONSUMPTION DETAILS FOR THE LINE

Hydraulic and pneumatic equipment	
Compressed Air Pressure	6 Bar (Supplied by Buyer)
Service Pressure	120 Bar
Main Service Pressure	220 Bar

- The pneumatic power is needed to operate pneumatic devices placed on machines.
- All of the machines equipped with pneumatic devices will be provided with filtering units, lubrication and pressure regulator.
- All main hydraulic control valves will be solenoid operated and mounted on the main housing of each unit.

Electrical automation and equipment	
Hydraulic Unit & Capacity	2 Unites (40 lt/ each unit)
Motor Brands	YILMAZ & GAMAK
Brand of Hydraulic Valves	REXROTH / BUCHER
Pneumatic Equipment Brand	FESTO / PEMAKS
Electronic Components	Siemens
Servo Motor	Siemens
Control Panel	Siemens – Touch Screen (7”)

Energy	
Total Energy	46 Kw
Voltage	
Three-phase Supplying Voltage	380 V - 50 Hz
Auxiliary Voltage	220 V - 50 Hz
Solenoid-Operated Valve Voltage	24 V DC