

ALUMINIUM PROFILE BRUSHING MACHINE



S M O O T H E R 1 8

TECHNICAL DETAILS

SMOOTHER SERIES

BRUSHING

The Brushing Machine is manufactured for cleaning surfaces, eliminating some defects and optionally giving effect patterns before anodizing or static painting of aluminium profiles.

Stainless Wire brush, Tynex and Stoch Brite can be used as auxiliary elements during the process. You could choose the different brushes dimension, different thickness brushes and receive different sight effects on the extrusion profiles.

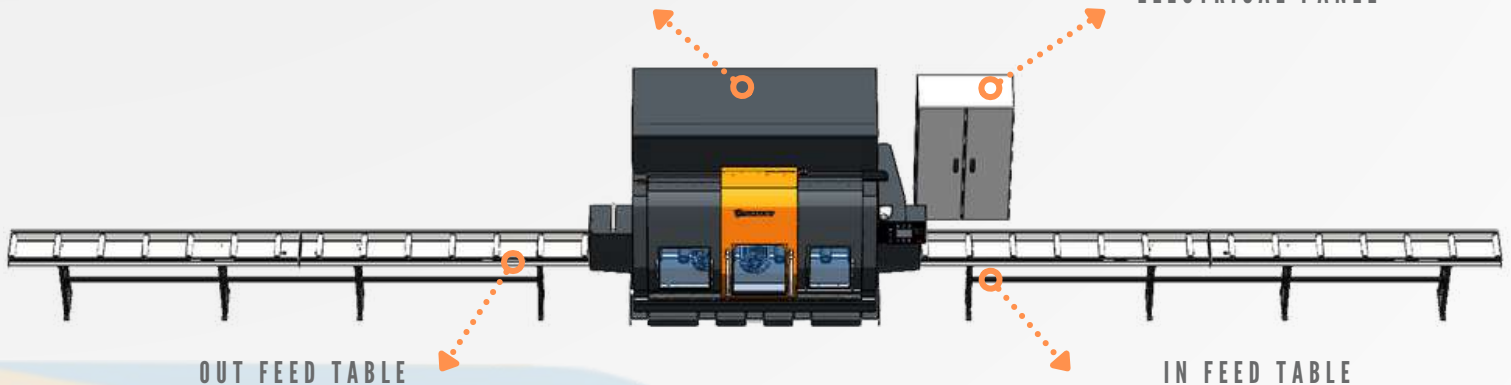
Brushes rotate under and above the profile compressed between rollers, rubbing against the profile and removing the sawdust on the profile. Water is used prevent airborne dust and ensure that the temperature on the profile surface does not increase during this process.



MACHINE COMPONENTS

MAIN MACHINE BODY

ELECTRICAL PANEL



The main machine has become 4 groups brushes, each group has included in top and bottom brushes. The machine has 8 brushes in total, each brush is provided with single and vertical movement for quality surface of extrusion profiles. All brushes speed adjustable by inverter on the PLC screen for synchronization.

There are 7 drive rollers that drive the profile linearly on the machine and 7 pressing rollers that pres on the profile between the driving rollers. There are 4 water-delivery fixtures on top brushes and an air blower in the machine outlet line to reduce the amount of water occurring on the resulting product.

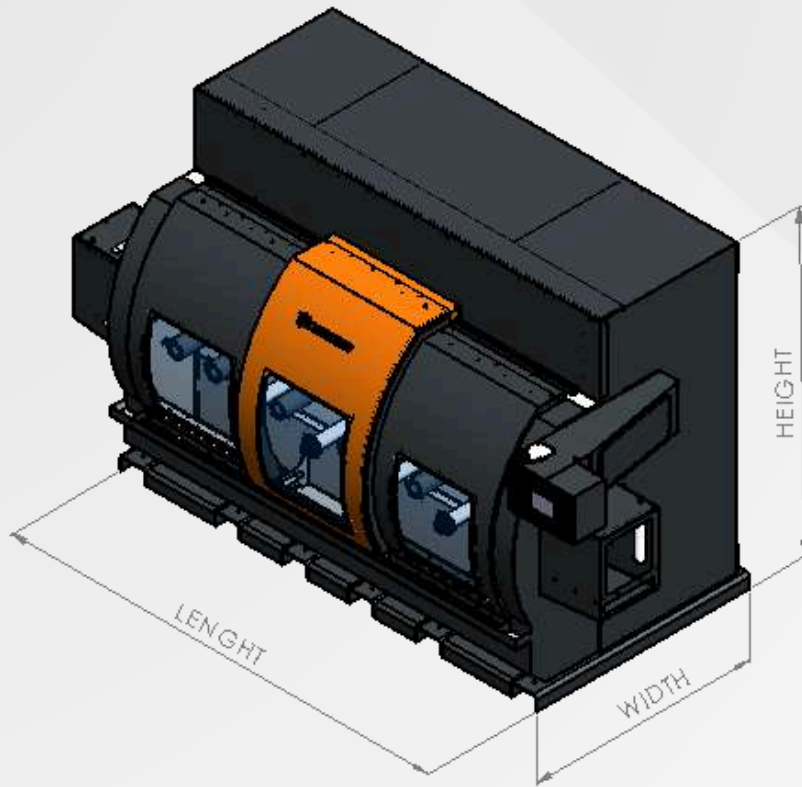
There is a movable operator panel on the machine. The electrical panel which provides the necessary automation and power in the operation of the machine is located on the right side independently of the machine. There are inverters in the panel that can change the speed of the 8 brush motors and the profile drive rollers at the desired amount.

There is a PLC that provides automation of the hydraulic unit that provides these inverters and all linear motions in th emachine. The supply must be supported with 22 kW, 45 amps powers as 3 phases. Moreover, 3-5 ohm grounding must be provided. Also SIEMENS as PLC , BEIJER as screen, DANFOSS products as speed control devices are used in our machine.

There are 2 conveyors with a length of 6 meters that allow the profile to enter and exit the machine linearly at the infeed and outfeed of the machine. The infeed and outfeed conveyors have idler rollers. Each conveyor consists of two parts for easy transportation.

WEIGHT & DIMENSIONS

SMOOTHER SERIES



Seri	Conveyor			Machine			Power			Weight
	Widht	Lenght	Height	Widht	Lenght	Height	Volt	Phase	Total	
16	436 mm	3.000 mm	895 mm	1.910 mm	3.404 mm	2.223 mm	400	3	18 KW	3.650 KG
18	436 mm	3.000 mm	895 mm	1.910 mm	3.955 mm	2.223 mm	400	3	22 KW	3.950 KG
110	436 mm	3.000 mm	895 mm	1.910 mm	4.456 mm	2.223 mm	400	3	28 KW	4.450 KG

PROFILE CAPACITY & BRUSH DIMENSIONS

SMOOTHER SERIES

Seri	Brush Motors				Brush Type		Max.Profile Dimensions	
	Brush	Drive	Hydraulic	Dry	Dimension	Type	Standart	Ops.
16	6 x 2,2 kW 1000 rpm/m.	1 x 1,1 kW 1500 rpm/m.	1 x 0,75 kW 1500 rpm/m.	1 x 2,2 kW 3000 rpm/m.	İç: Ø76,5 Diş : Ø300 340 mm	Steel Brush - Tynex	300x340	300x420
18	8 x 2,2 kW 1000 rpm/m..	1 x 1,1 kW 1500 rpm/m.	1 x 0,75 kW 1500 rpm/m.	1 x 2,2 kW 3000 rpm/m.	İç: Ø76,5 Diş : Ø300 340 mm	Steel Brush - Tynex	300x340	300x420
110	10 x 2,2 kW 1000 rpm/m.	1 x 1,1 kW 1500 rpm/m.	1 x 0,75 kW 1500 rpm/m.	1 x 2,2 kW 3000 rpm/m.	İç: Ø76,5 Diş : Ø300 340 mm	Steel Brush - Tynex	300x340	300x420



A mechanical body design optimized for high speed and rotation.



Profile irrigation channels within a stainless steel front panel.



A profile drying unit within the profile exit tunnel.



Input and output pressure sensors.



User-friendly interface with a 7" touchscreen display.



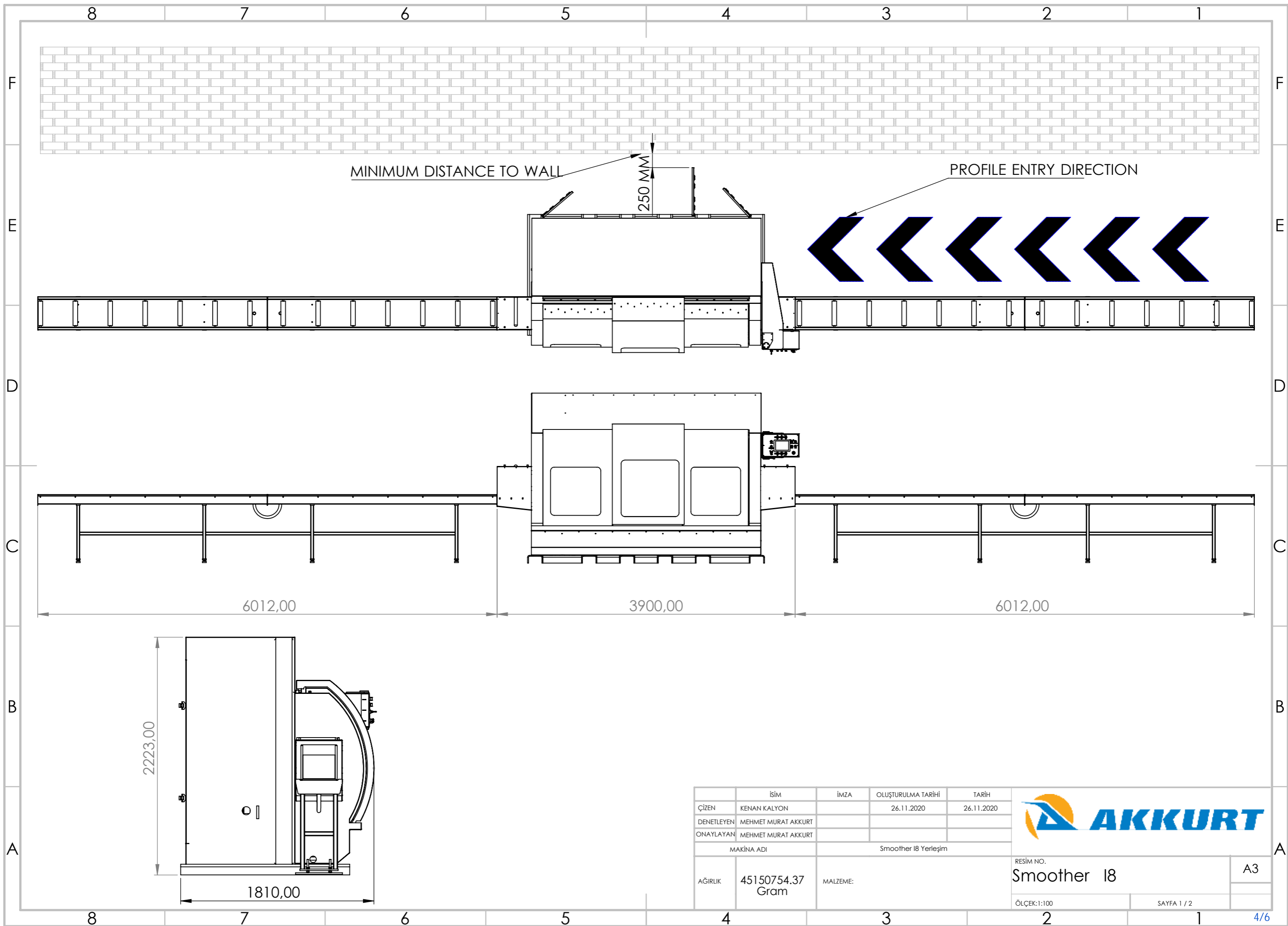
Movable control panel.



Front doors with safety switches.



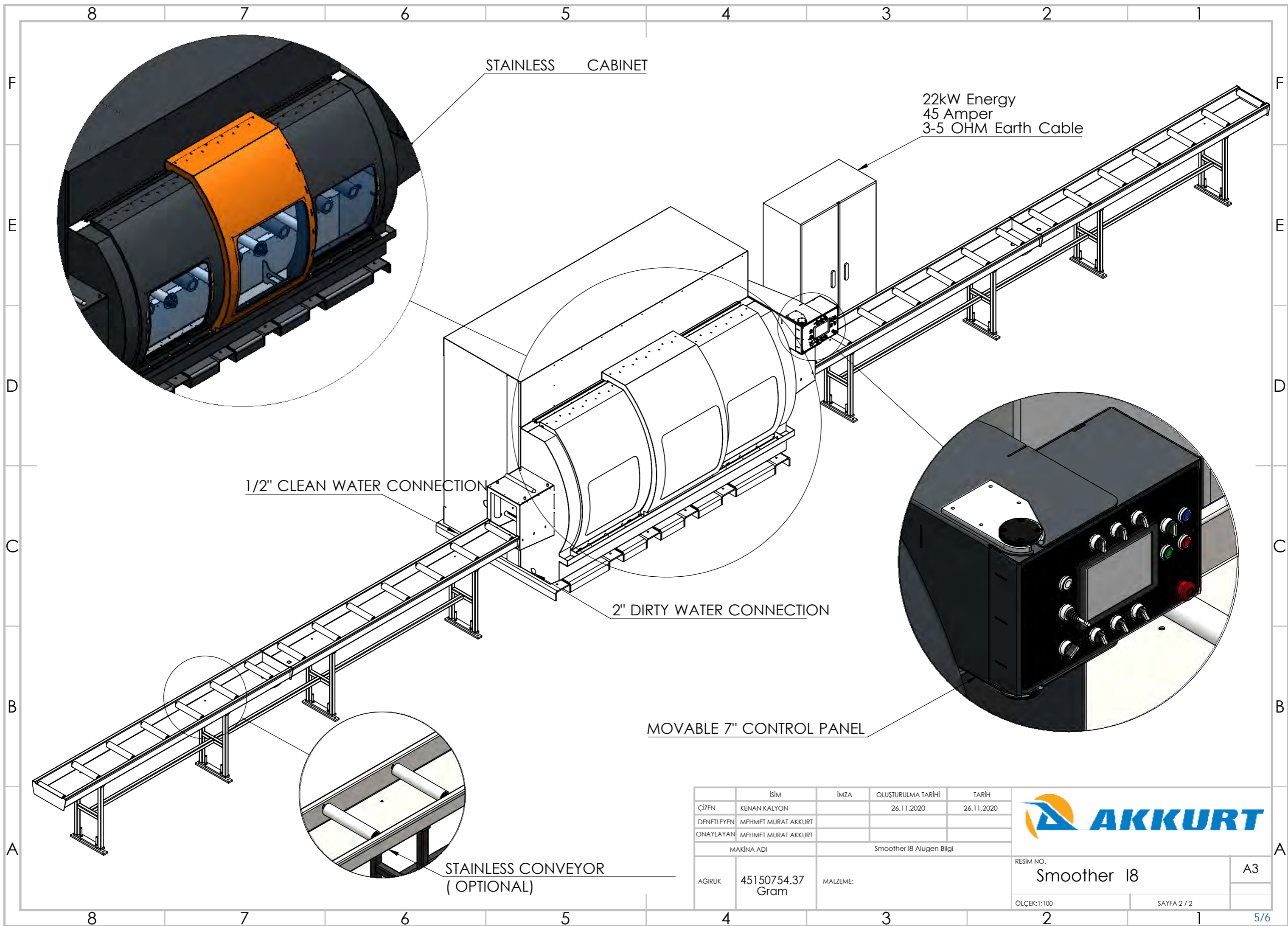
Brush motors controlled by PLC and inverter.



	İSİM	İMZA	OLUŞTURULMA TARİHİ	TARİH
ÇİZEN	KENAN KALYON		26.11.2020	26.11.2020
DENETLEYEN	MEHMET MURAT AKKURT			
ONAYLAYAN	MEHMET MURAT AKKURT			
MAKİNA ADI		Smoother I8 Yerleşim		
AĞIRLIK	45150754.37 Gram	MALZEME:		



RESİM NO.	Smoother I8	A3
ÖLÇEK: 1:100	SAYFA 1 / 2	4/6



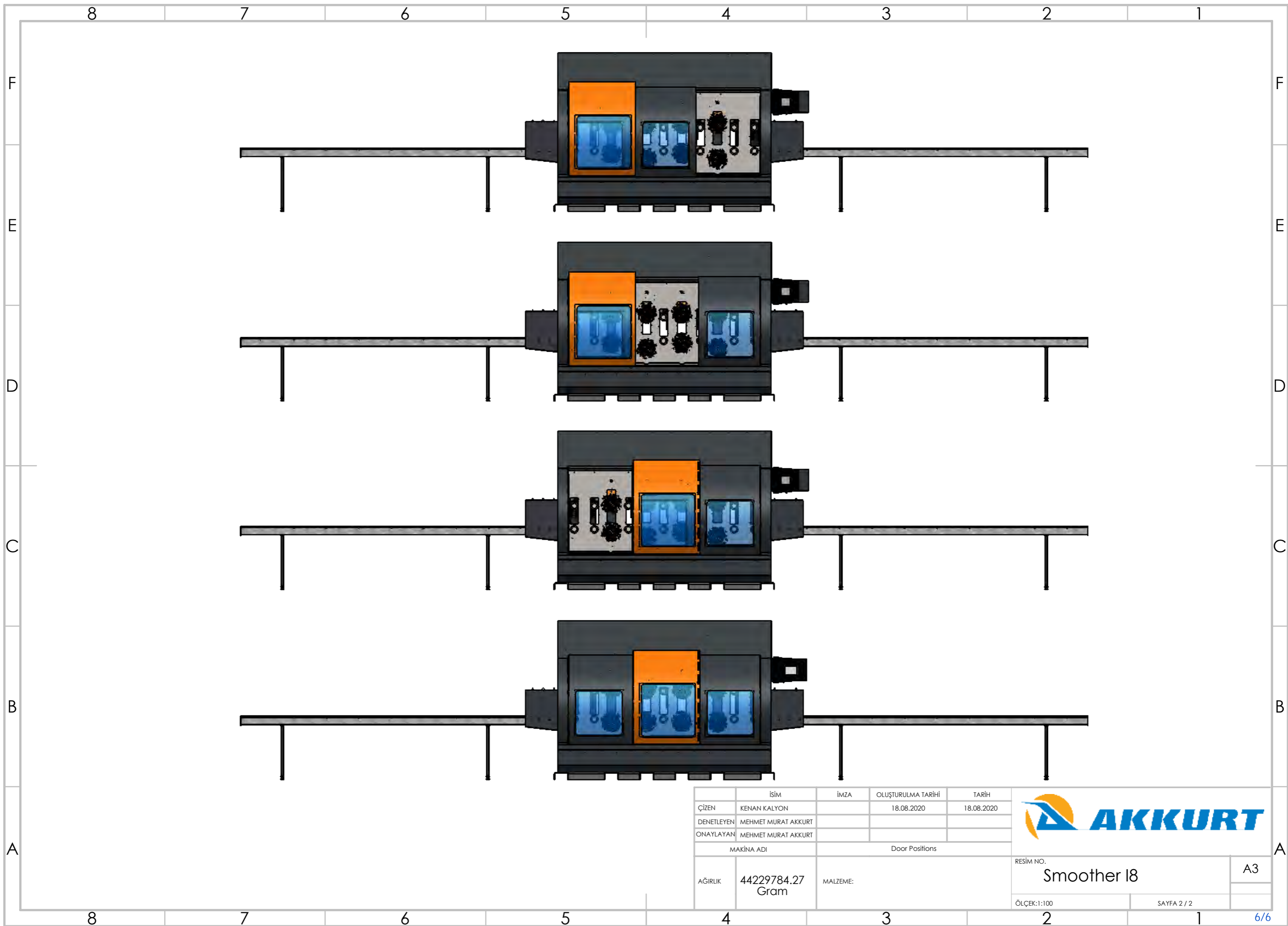
	İSİM	İMZA	OLUŞTURULMA TARİHİ	TARİH
ÇİZEN	KENAN KALYON		26.11.2020	26.11.2020
DENETLEYEN	MEHMET MURAT AKKURT			
ONAYLAYAN	MEHMET MURAT AKKURT			
MAKİNA ADI		Smoother I8 Alugen Bilgi		
AĞIRLIK	45150754.37 Gram	MALZEME:		



RESİM NO.
Smoother I8

ÖLÇEK: 1:100

SAYFA 2 / 2



	İSİM	İMZA	OLUŞTURULMA TARİHİ	TARİH
ÇİZEN	KENAN KALYON		18.08.2020	18.08.2020
DENETLEYEN	MEHMET MURAT AKKURT			
ONAYLAYAN	MEHMET MURAT AKKURT			
	MAKİNA ADI	Door Positions		
AĞIRLIK	44229784.27 Gram	MALZEME:		



RESİM NO.	Smoother I8	A3
ÖLÇEK: 1:100	SAYFA 2 / 2	6/6