FORZA

Buster Pro

Datasheet

Model BP13P30

V250828

FORZA Buster Pro

Removes burrs, rust, and paint from metal sheets, and rounds edges.

DEBURRING / SMOOTHING

The FORZA Buster Pro handles workpieces up to 1300 mm in width and is designed to remove burrs, smooth surfaces, and deburr sharp edges on metal parts.

It operates in two stages: the first stage performs double sanding, and the second stage executes edge deburring with rotary brushes.

Special Features

Triple stage

The equipment features a two-stage grinding process with an abrasive belt driven by rubber rollers to remove burrs, and an additional third stage for edge smoothing with rotating brushes.

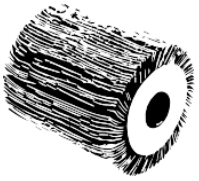
Automatic Fine Tuning

The machine automatically detects the workpiece height and self-regulates to achieve the required grinding thickness.

HMI Touch Screen

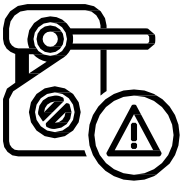
It incorporates a touchscreen as the control interface between the user and the machine. The control is intuitive and operator-friendly.

High Security Rubber Roller



The rubber roller with an eccentric shaft design ensures safety and convenient adjustment for various working conditions.

Total Security in Operation



Excellent safety features: automatic belt stop in case of an alarm or power failure, and effective limit protection in various positions.

Limitless Flexibility

There is no restriction on the workpiece length, allowing for the processing of small parts as well as pieces as long as 10 meters.

Main Features

FEATURES	DETAIL
Application	Deburring and smoothing of sheets
Nominal working area [1]	≤ 4.3ft | ≤ 1300mm
Sanding belt motor power	22kW / 30HP
Feed speed	0.027 - 0.38ft/s | 0.5 - 7m/min
Thickness adjustment	Automatic
Thickness adjustment accuracy	0.05mm
Machine dimensions	13.5 x 7.2 x 7.2ft | 4100 x 2200 x 2200mm
Conveyor belt dimensions	13.62 x 4.27ft | 4150 x 1300mm
Sanding belt dimensions	7.2 x 4.3ft | 2200 x 1310mm
Workpiece clamping on belt [2]	Vacuum pump clamping

1. *Defines the maximum size of the metal sheet that the machine can process in a single operation. To ensure a uniform finish, it is recommended that the workpiece be positioned within the defined limits, avoiding exceeding the nominal dimensions.*

2. *The machine uses a vacuum pump clamping system, which ensures that the metal sheet remains securely in place during processing. This method prevents unwanted movement and guarantees precision in removing burrs, rust, paint, and in rounding edges.*

General Specifications

SPECIFICATION	DETAIL
Model	**FORZA Buster Pro | BP13P30**
Work Type	Deburring/Smoothing
Software	PIStudio
Nominal working area	≤ 4.3ft | ≤ 1300mm
Sheet thickness	≤ 0.164ft | ≤ 50mm
Feed speed	0.027 - 0.38ft/s | 0.5 - 7m/min
Thickness adjustment	Automatic
Belt speed	60.15ft/s | 1100m/min
Workpiece clamping on belt	By vacuum pump
Dust removal [1]	Pulse jet collector (OPTIONAL)
Control screen size	10.24in | 260mm
External air tube diameter	Ø:8mm
Power supply protection level	IP54
Abrasive belt drive motor	22kW / 30HP
Motor Type	Weinuo/Dingge
Sanding cooling method [2]	Water-cooled
PLC + screen	LX3V2424MT + PI3102I /10 in, WECON
Sensor	Autonics
Transducer	Derris

1. *The system features a pulse jet collector (optional), designed to keep the work area clean by efficiently removing dust and debris generated during the sanding and grinding process. This ensures a safer environment and extends the lifespan of internal components.*

2. *The sanding process is cooled by water dissipation, which helps maintain stable temperatures during operation, reduces abrasive belt wear, and ensures a uniform finish on metal sheets.*

Working air pressure [3]	0.4 – 0.7Mpa
Abrasive belt dimensions	7.2 x 4.3ft | 2200 x 1310mm
Conveyor belt dimensions	13.62 x 4.27ft | 4150 x 1300mm
Belt roller dimensions	Width: 1360mm
	Diameter: 240mm
	Adhesive layer: 20mm
Abrasive wheel dimensions	0.92 x 0.164 x 0.13 x 0.26ft | 280 x 50 x 40 x 80mm
Abrasive belt drive motor	18.5kW
Platform lifting motor	1.1kW
Conveyor belt drive motor	4kW
Brushing roller auto-rotation motor	3kW
Total machine power	42.1kW
Average power consumption [4]	25.26kWh
Exhaust fan power	7.5kW (Optional)
Working voltage	220V/250V/380V/440V/480V 3ph 50Hz-60Hz
Minimum current per line	122.8A @ 220VAC 3ph
	108.0A @ 250VAC 3ph
	71.1A @ 380VAC 3ph
	61.4A @ 440VAC 3ph
	56.3A @ 480VAC 3ph

3. *The machine operates within a working pressure range, ensuring stable performance in removing burrs, rust, and paint. It is important to maintain the pressure within this range to ensure proper workpiece clamping and a uniform edge finish.*

4. *The average consumption is calculated as 60% of the peak consumption. For an hourly electricity consumption calculation, use the average consumption.*

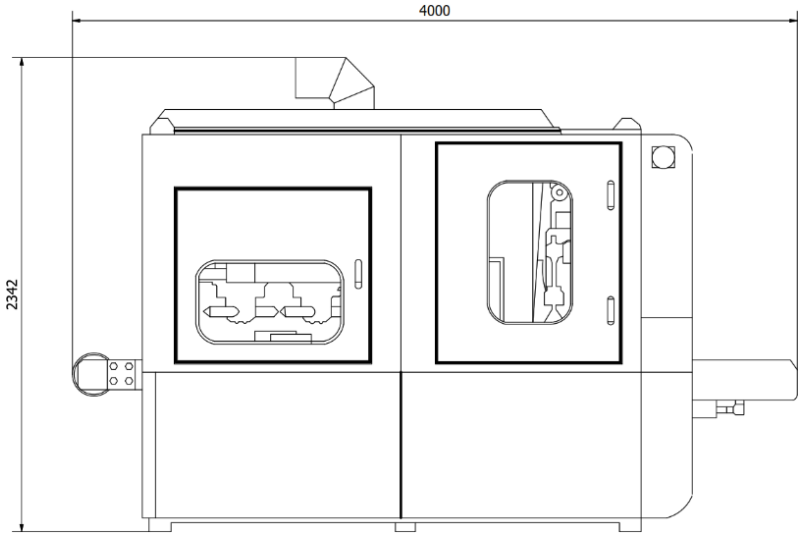
Gauge of the conductor that goes to the thermal magnetic switch (MCCB) [5]	Up to 140°F | 60°C (TW, UF)	Up to 194°F | 90°C (THHW, THHN)	Voltage
	3 x 1/0AWG	3 x 2AWG	220VAC 3ph
	3 x 1AWG	3 x 3AWG	250VAC 3ph
	3 x 4AWG	3 x 6AWG	380VAC 3ph
	3 x 4AWG	3 x 6AWG	440VAC 3ph
	3 x 6AWG	3 x 8AWG	480VAC 3ph
ITM and recommended ground conductor	MCCB	PE - PEN (Copper)	Voltage
	125A	6AWG	220VAC 3ph
	110A	6AWG	250VAC 3ph
	80A	8AWG	380VAC 3ph
	70A	8AWG	440VAC 3ph
	60A	10AWG	480VAC 3ph
HMI Control Screen	PI HD HMI PI3102i		
HMI Processing	CPU Cortex A35° 1.2 GHz		
HMI Resolution	1024*600 pixels		
Communication Type	USB, ETHERNET, WIFI (optional)		
Machine Controller (PLC)	LX3V-2416M		
Control Interface	HMI Touch Screen		
PLC Power Supply	DC 24V±10%		
Software Language	English and Spanish		

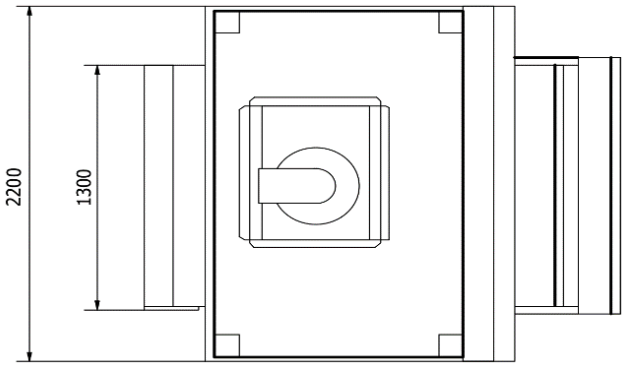
5. *The wire gauge sizing was based on Table 310-15(b) (16) of NOM-001-SEDE for maximum conductor temperatures of 60°C and 90°C, respectively, considering a conduit installation. For an open-air cable installation, a smaller gauge than shown in this document may be used, subject to prior consultation with the FORZA Laser technical department.*

PC Control Interface [6]	Via screen and manual control
PLC Power	< 30W
PLC Inputs/Outputs	24/16
Total equipment weight without extractor	4.8ton | 4800 kg
Total equipment weight with extractor	5.1ton | 5120 kg
Equipment dimensions	13.5 x 7.2 x 7.2ft | 4100 x 2200 x 2200mm
Transport dimensions	13.8 x 7.6 x 7.6ft | 4200 x 2300 x 2300mm
Working floor resistance [7]	6.5kgf/cm^2
Relative humidity [8]	< 85%
Operating ambient temperature	2 - 35 °C
Storage temperature	8 - 30 °C
Certifications	CE, RoHS

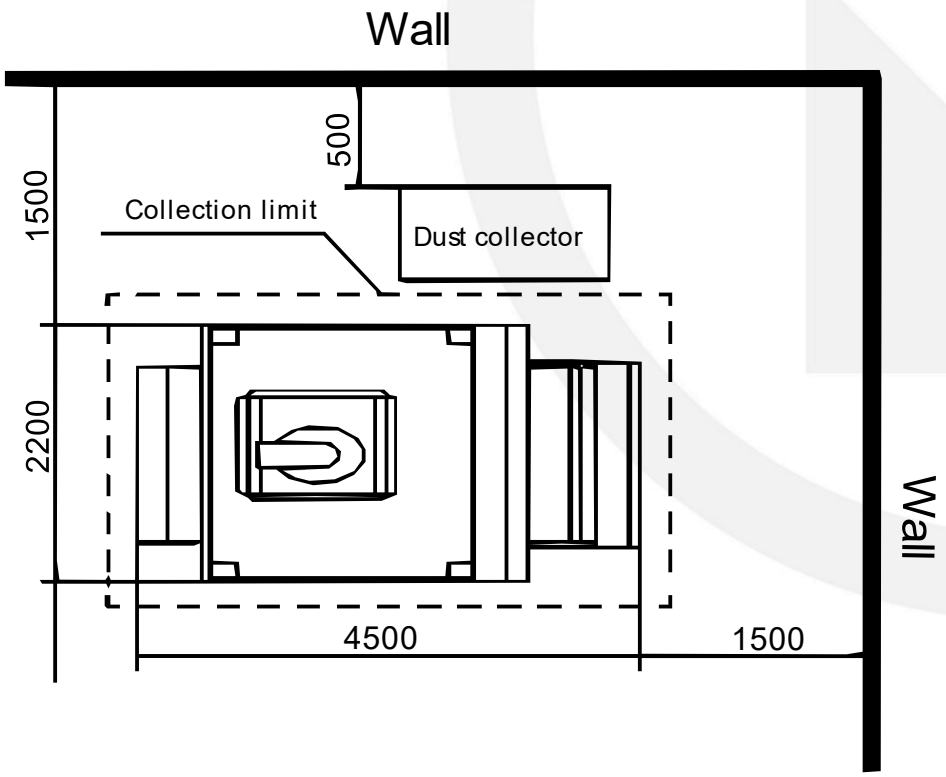
6. *The equipment can be operated flexibly via a screen control interface, complemented by a manual control that facilitates direct adjustments during the work process.*
7. *The support surface is designed to withstand loads with a resistance of up to 6.5kgf/cm², ensuring stability and safety even in operations with heavy metal sheets.*
8. *For optimal performance and to extend the lifespan of electronic and mechanical components, the equipment must operate in environments with a relative humidity of less than 85%.*

Machine dimensions

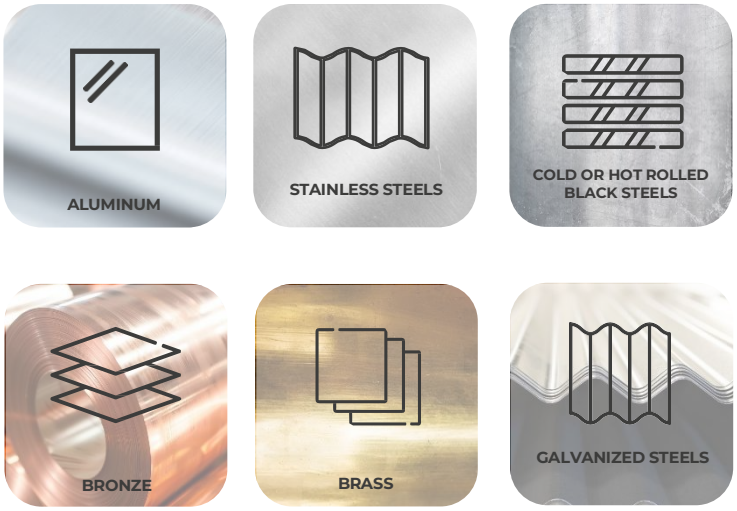




Required Space



Applicable Materials



The equipment is designed to deburr sheets with a 99.9% deburring rate; this machine is capable of deburring, beveling, and removing the oxide layer efficiently and precisely.

Cutting Thicknesses by Material

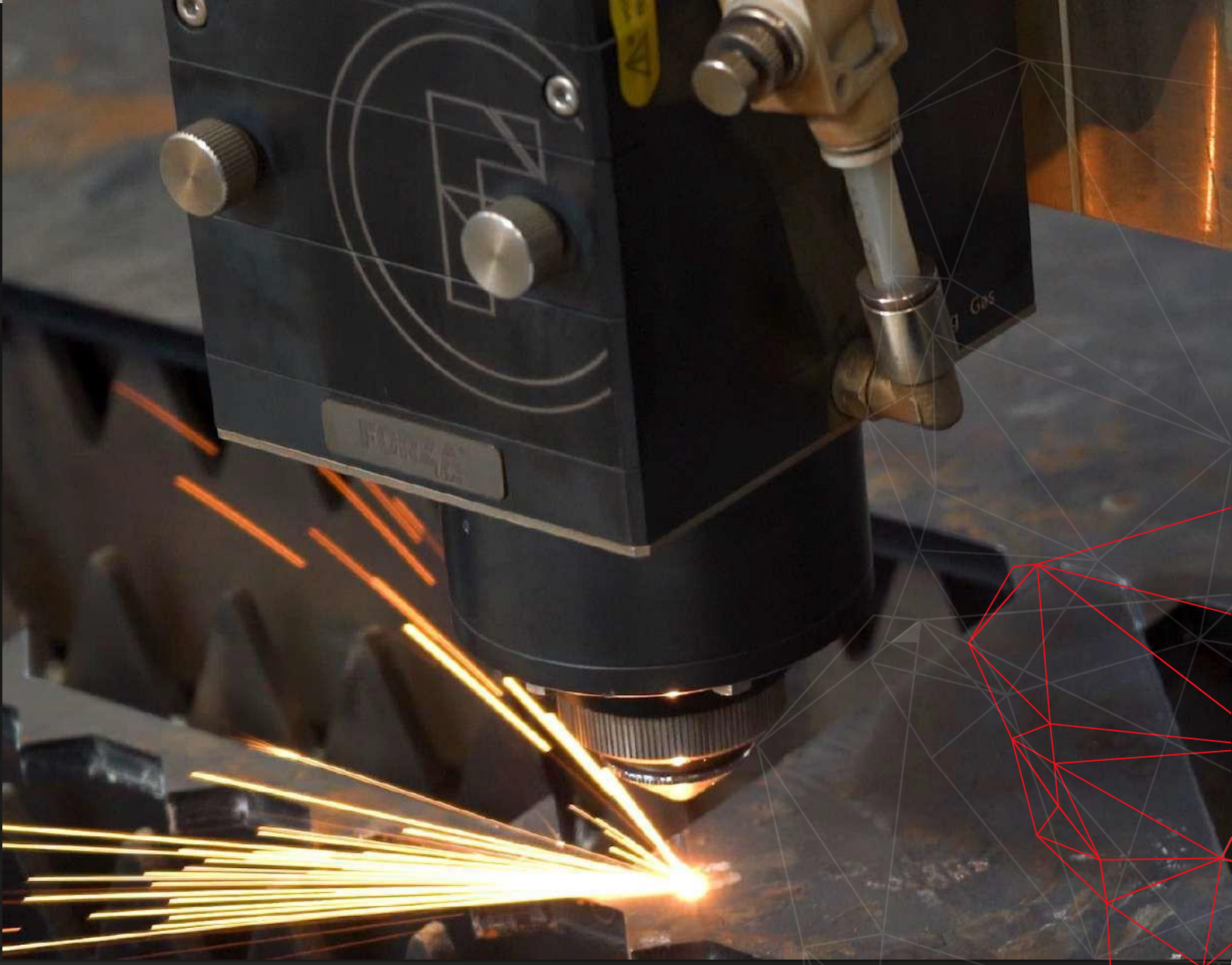
The equipment is designed to work with thicknesses from 2mm to 50mm.

Speeds

The FORZA Buster Pro deburring machine offers an adjustment range from 0.5m/min to 7m/min depending on the material being processed.

The speed is precisely adjusted using hertz, ensuring the ideal polishing for each task.

NOTE: Do not start polishing at high speeds. Adjust the speed gradually to avoid damaging the workpiece or affecting the final result.



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