iNTEL MAKiNA
INDUSTRY AND TRADING CORP.

CW 400

PVC Four-Corner Welding Machine

 Last updated: July 20, 2026



Description

Welds the four corners of PVC profiles at 90° angle simultaneously with high precision. It operates in automatic production mode based on data received from window drawing software. It has a computer-controlled (PID) heat control system to achieve weld strength in accordance with standards.
It has separately definable temperature, melting and bonding time for each profile type. With its unique design, it distributes heat homogeneously to the long-lasting heating plate system. It is affected by the working environment. Pre-heated welding blades ensure good welding even in cold weather conditions. Welding dies can be changed quickly and easily. Axes are servo motor controlled.

Highlights

- ✓ In automatic production mode, it operates in accordance with data received from window drawing software.
- ✓ It has a computer-controlled (PID) heat control system to achieve weld strength in accordance with standards.
- ✓ It has separately definable temperature, melting and bonding time for each profile type.
- ✓ With its unique design, it distributes heat homogeneously to the long-lasting heating plate system without being affected by the working environment.

- ✓ Pre-heated welding blades ensure good welding even in cold weather conditions.
- ✓ Welding dies can be changed quickly and easily.
- ✓ All axes of our machine move with servo motor system (3 servo motors).
- ✓ Internally designed construction that enables automatic weld spacing selection of 0.2 and 2 mm.
- ✓ Robust Frame
- ✓ High-performance industrial PC equipped with Windows XP Embedded operating system, 21" touch screen.
- ✓ Ability to transfer data via wireless network connection, wired network connection or USB.
- ✓ Ability to create a database of separate welding parameters for all profiles in the operation.
- ✓ Separately definable temperature, melting and bonding time for each profile.
- ✓ Melting long dimensions up to 2 mm depending on servo motor torque values to achieve the desired dimension.
- ✓ Fast and easy Teflon replacement with spiral Teflon replacement system.
- ✓ Pressure control system to work effectively under appropriate pressure.
- ✓ Can weld colored profiles with the same precision as white profiles.
- ✓ Maintenance time is minimal with the lubrication system.
- ✓ Fully safe machine design with safety equipment complying with CE standards.
- ✓ Connection with CNC Corner Cleaning Machine via industrial Ethernet connection method for high-stability and accurate data transfer.
- ✓ Ability to provide remote service and connect to all automation systems to detect and resolve problems.

Optional Features

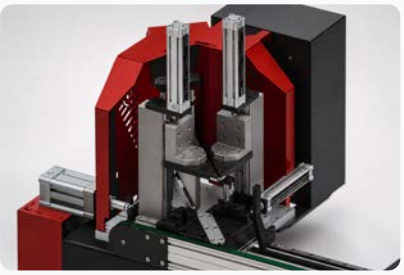
- \+ Gasket pressing system
- \+ Welded frame set
- \+ Welding dies according to requirement

Machine Components



Computer Control

Welding operations are managed through a 21" touch screen industrial PC with Intel processor.
User-friendly interface with multi-language support provides easy operation.
By entering the processing parameters of the profiles, welding operation lists can be prepared, and thus all operations can be performed fully automatically without operator intervention.
Additionally, parameter settings and process management can also be performed via remote connection; this feature also allows for fast and efficient technical support.



Welding Unit

White and colored profiles can be easily welded at 90° angle.
With 2.5 Bar melting force and 5 Bar welding force, stronger welds are achieved. The easy changeover of welding dies contributes to production speed. Thanks to the special surface blades used during welding, the surface slag generated after welding is easier to clean. Pneumatic and electrical panels are separated from each other, thereby increasing safety and service life.



Safety

Protective fences and safety barriers keep work safety at the highest level.



Output Table

Profiles exiting the welding process are transferred to the output table through automatic push conveyors; thanks to PE1000 material on the table surface, profile surfaces are easily moved on the table without wear, facilitating the operator's work.

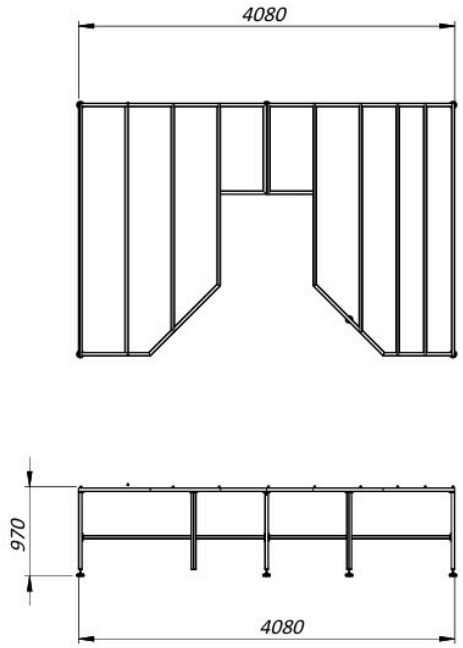


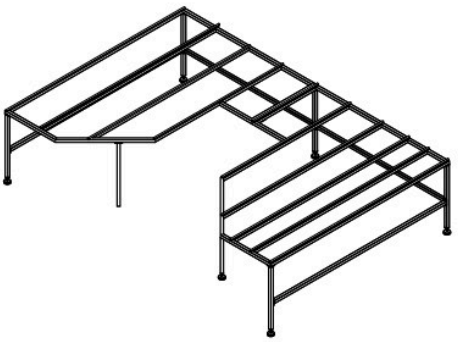
Safety

Profiles that need to be welded are positioned without needing to enter the machine. In case an adverse situation occurs in the machine, a photoelectric sensor is present; thus the machine does not operate even if someone is between the machine parts. Integrated air pressure sensor stops operations and alerts the user when insufficient pressure is applied.

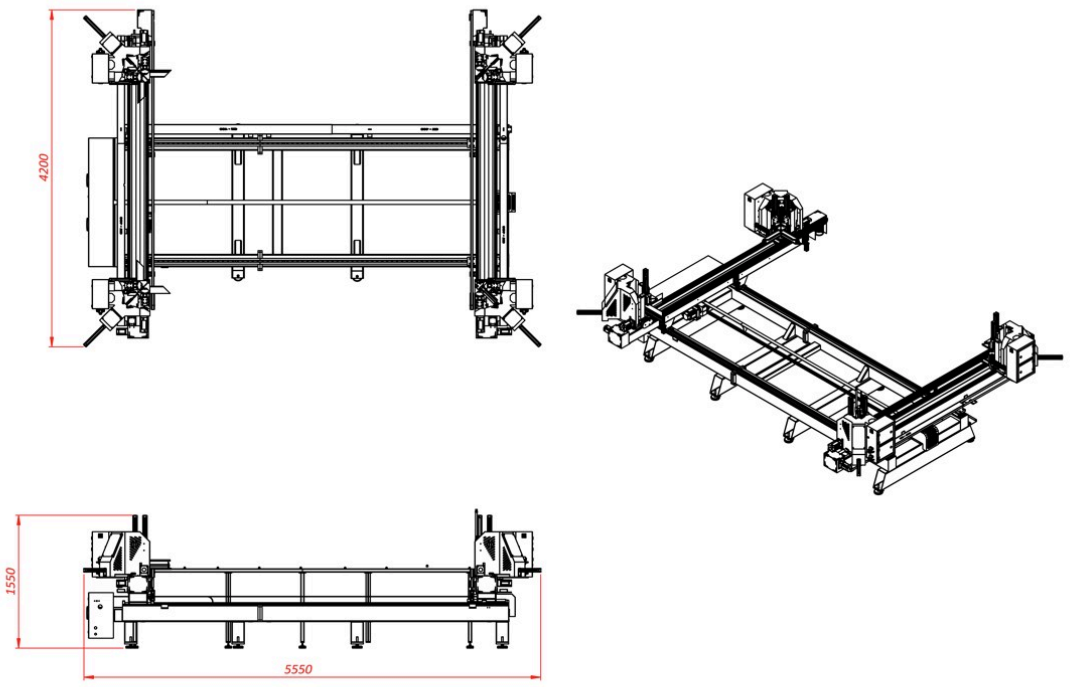
Technical Drawings

Layout Plan 1





Output Table



Technical Specifications

Welding Dimensions

Profile Height	**190 mm**
Profile Width	**130 mm**
Width / Length Maximum	**2600 / 3650 mm**
Width / Length Minimum	**350 / 400 mm**
Welding Angle	**90 Degree**

Machine Axes

X Axis Motor Power	**1.5 kW**
Y Axis Motor Power	**2 x 0.75 kW**
Conveyor Motor Power	**2 x 0.37 kW**

Technical Specifications

Air Pressure	**6-8 Bar**
Total Air Consumption	**58 l/d**

Voltage	**400 V**
Total Power	**10.5 kW**

MACHINE DIMENSIONS

Length	**5500 mm**
Width	**4200 mm**
Height	**1550 mm**
Weight	**2170 kg**

Servo Motors X Axis

Power	**0.75 kW**
Rotation Speed	**3000 rpm**
Voltage	**VAC 110**
Torque	**2.4 Nm**
Quantity	**2**

Servo Motors Y Axis

Power	**1.5 kW**
Rotation Speed	**3000 rpm**
Voltage	**VAC 110**
Torque	**7.16 Nm**
Quantity	**1**

Control

Industrial PC	✓
Operating System	**Windows**
Touch Screen	**21.5""**
Remote Connection	✓
USB File Transfer	✓
'mdb' and 'csv' format support	✓

Safety

Photoelectric Sensor	✓
Integrated Air Pressure Sensor	✓
Phase Protection (When Motor Direction Changes)	✓
Current Protection (Leakage Current)	✓
Motor Protection (High Current)	✓

Emergency Stop	✓
Servo Motor Torque Protection	✓

Control

Industrial PC	✓
Operating System	**Windows**
Touch Screen	**21.5""**
Remote Connection	✓
USB File Transfer	✓
'mdb' and 'csv' format support	✓
Processing List Creation	✓

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