



MTX-180

MULTI-FUNCTION

LEATHER GRINDING

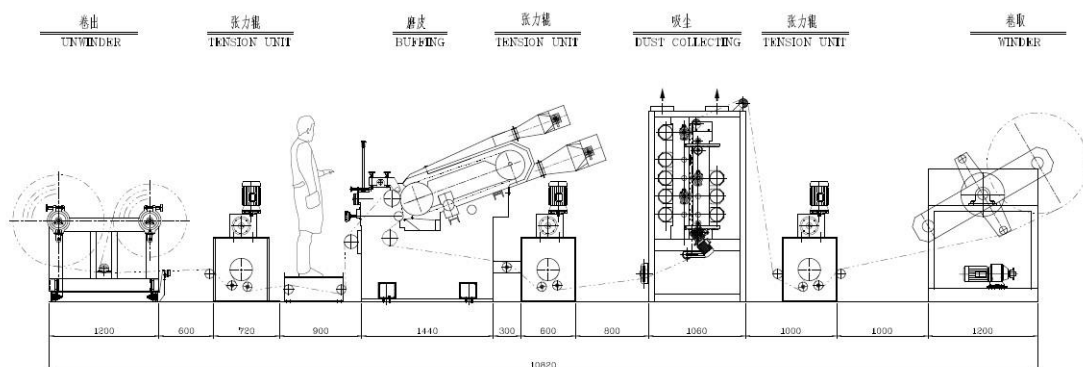
MACHINE

TECHNIQUE DETAIL

I. Introduction:

MeMeTech specializes in researching and producing multi-function leather grinding machine for more than 20 years. Few manufactures can reach us to combine grinding, flat grinding and grinding with pattern to one machine. It can be used in a wide range, such as: microfiber, leather, non-woven, natural chemical fiber, cotton, faux leather, PVC, PU and etc. This machine can help to get many kinds of patterns and soft touch, which have stable processing capacity with high quality.

II. Process Flow:



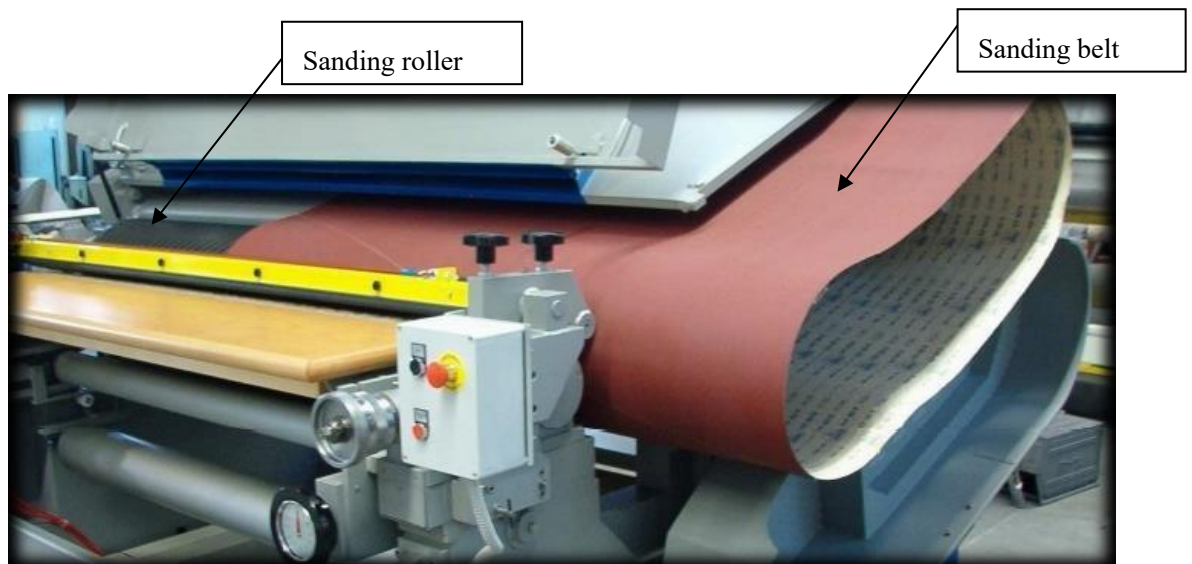
III. Main Technical Parameter:

- ① Roller width: 1800mm
- ② Mechanical speed: 5-35m/min
- ③ Roller rotation speed: max 1300 r.p.m.
- ④ Installation power: grinding machine 45KW, dust collector 52KW
- ⑤ Control type: PLC automatic
- ⑥ Grinding type: A) contact-type (quantitative)
B) coated-type (non-quantitative)
C) contact-type & coated-type
- ⑦ Application: microfiber, leather, non-woven, natural chemical fiber, etc.
- ⑧ Function: grinding, flat grinding, grinding with pattern

IV. Feature & Advantages:

A) Sanding Belt

Need to transport the PU、PVC or other base material to the sanding belt for grinding. Detail as following:



Advantage:

- 1) **In order to achieve excellent effect in grinding, we should avoid scratch in base material.**

For traditional grinding machine, sanding paper is wrapped around the roller, which is connected in large area and lead to scratch when the

roller is rotating in high speed. But our machine just has one connection area even if the sanding belt can reach to 3200mm, it will not scratch the base material.

2) The base material will be more uniform and have more stable quality.

Due to the longer contact interval between sandpaper and base material surface, the lifespan of sandpaper is longer, and the dust collection system will be more effective. The $\Phi 180\text{mm}$ sanding roller with a pipe to connect cold water, which can make sure sanding roller in low temperature with continuous production. What's more, after multiple balance testing, the roller can make the base material even and level. The roller is the most suitable design for customer needs, ensuring that the base material is uniform on both sides when using the largest diameter roller. Compared with other grinding systems, it can be found that the contact point between the base material and sandpaper is the smallest at the same speed. If the roller speed is the same, it will have a faster speed and greater production capacity per unit time.

3) Replacing sanding belt easy and fast.

Only takes 2 minutes to complete the sanding belt replacement, which

Open the cover and replace the belt.



can greatly reduce the downtime.

4) Sanding belt is more durable and long-lasting.

Due to the excellent heat dissipation function of sanding belt, with dust collect equipment, it can make belt durable and long-lasting. Reduce sanding paper cost, save time for replacing, enhance productivity.

B) Multiple function (grinding, flat grinding and grinding with pattern)

For grinding, we use roller with high hardness and dynamic balance tested;

For flat grinding, we use roller with medium hardness;

For grinding with pattern, we use roller with low hardness and carved.



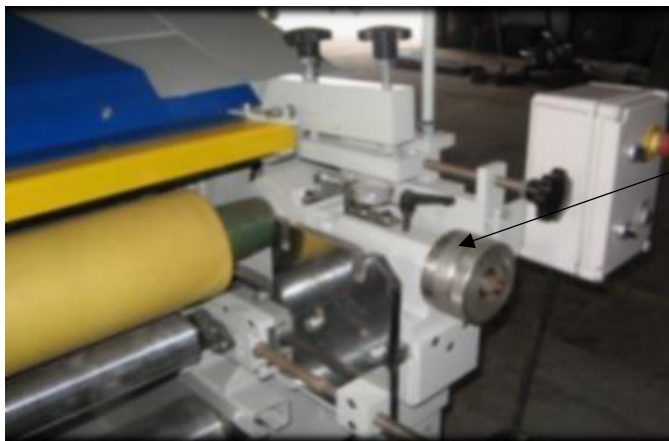
Carving roller

Grinding effect

C) Excellent and most stable grinding effect

With adjusting various settings, customer can get ideal and most stable grinding effect for kinds of base material, such as: microfiber, PU, PVC, etc.

- 1) Adjust pressure between function roller and sanding roller, to control grinding thickness;
- 2) Adjust winding angle in base material and sanding roller;
- 3) Adjust sanding belt rotate speed;
- 4) Replacing sanding belt with different grit.
- 5) Functional roller hardness.



Control system for adjusting grinding pressure and winding angel.

With adjusting above setting, we could achieve following effects:

For grinding, make the base material surface level and equal.

For flat grinding, make the base material get fluff and soft feeling.

For griding with pattern, get complicate and fine pattern.

By replacing the functional rollers that have been carved with different patterns, we can get many complex patterns:

Functional roller:



Effect:

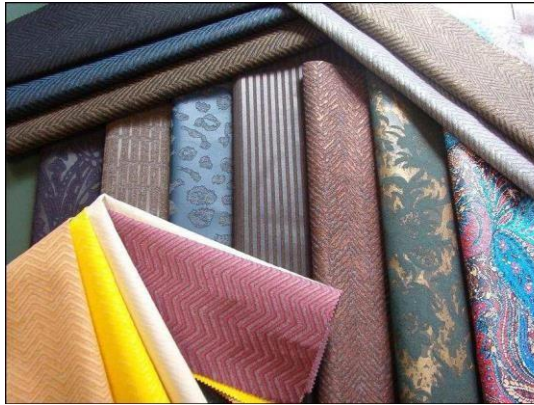


Fabric with different patterns:



PU

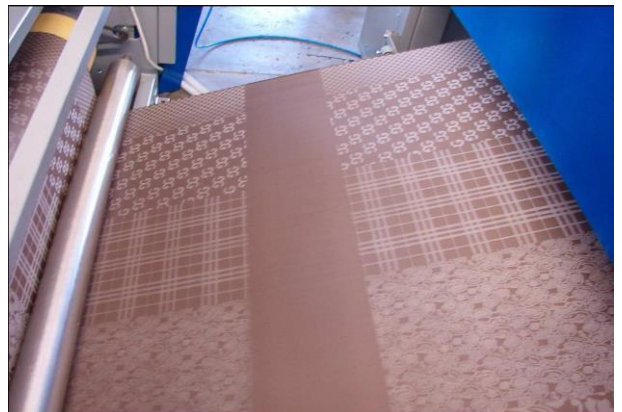
Fabric with different patterns



Light and soft fabric



Microfiber



Denim



Velvet



D) Fabric width remain consistent.

It comes with a tension controller that can maintain the tension and input speed of feeding fabric, ensuring the consistent width before and after grinding. All imported PLC human-machine controls have a high degree of automation.



E) Reverse function.

As grinding PU or microfiber, we can grind for a few meters and then reverse to check the effect. If not satisfied, we can adjust the settings until satisfied. The multi-functional grinding machine requires only one person to operate, and most of the functions can be completed through the control system, just one button realize backing up, easy to operate.

F) High-efficient dust removal system.

When sanding PU or PVC, we don't need to use the dust removal system, only when dealing with non-woven and microfibers use the system. Our dust removal system is composed of 5 air jets, 3 brushes and a set of high efficiency dust collection system: 3 air jets and 2 brushes clean dust from the front surface of the leather fabric, the other 2 air jets and a brush are responsible for cleaning the dust on the back. All the dust are taken away by the dust collector, and the surface is free of dust.



V. Customer should prepare the following parts:

- Water, electrical power, air, pipe, collection bag, two-time wiring and foundation construction, etc.

VI. Others:

- **Documents:** flow chart drawing, foundation drawing, Specification for mechanical and electrical, each two pieces. A piece of specification for special parts

Client Cases

