# ΛΛΗΑΤΜΑ 玛哈特

# High-end international leveling equipment intelligent manufacturing service provider

## MAHATMA GROUP

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**Official Account** 



## **Preface**

# can reach the Only endless pursuit peak of the time S



Looking back at MAHATMA Group,

After more than 20 years of exploration and accumulation, we have finally become the world's leading metal leveler brand in sales; the small boat we drove back then,

Now it has become an aircraft carrier leading the industry. Unity and cooperation are the keys to us overcoming unknown difficulties; wisdom and courage are our strength to overcome the abyss of the sea. We always firmly believe that everyone's dreams should be respected and recognized. When we cross the last big wave and set foot on the land on the other side, our dreams will shine brighter on this land. Riding the boat of our desires not only gives us the opportunity to realize our dreams, but also makes us understand that every MAHATMA person is a great navigator. With the belief that actions speak louder than words and the spirit of thirst for faith, we encourage innovation and wisdom to weave sails that fly like stars and moons, day and night. . . . . . .

Past, present, Future

At every moment, keep your mission in mind and continue to explore; the valleys and ravines are as deep as the valleys, and the pole is full of steps to make further progress. Happiness, integrity, achievement, altruism, desire, belief, will, action. Start from scratch, start with details, start with standards, build a harmonious relationship with customers, recruit talents, appoint talents, use experts exclusively, form a first-class elite team, and devote ourselves to creating world-class leveling equipment intelligence. Create a national brand.

Everything starts from the customer, thinks about the customer, is responsible for the customer, and satisfies the customer; this is our eternal motivation.





### Group profile

MAHATMA mission is to assist in the domestic substitution and industrial upgrading of intelligent manufacturing. Since its establishment in 2003, it has continuously innovated its technological products and solutions in cutting-edge innovation fields such as leveling machines, automated production lines, smart systems, and supporting equipment.

We are a sheet metal parts straightening intelligent manufacturing solution service provider that integrates research and development, production, sales, and service. It is a leading international high-end leveling equipment intelligent manufacturing brand with global competitiveness, as well as a national high-tech and specialized new enterprise.

As the pioneer of intelligent super leveling technology equipment, MAHATMA has achieved full category coverage of leveling equipment from low-end to high-end. With more than 20 years of industry accumulation and technological innovation, our manufacturing process and leveling accuracy have reached the most advanced international level.

**20000**<sub>m<sup>2</sup></sub>

**R&D** Center

2003 15000. **50000**<sub>m<sup>2</sup></sub> 10 **350** Found Cases Plants Branches Employee

#### MAHATMA global Intelligent manufacturing center

Locate in Fuzhou National High tech Develop-ment Zone, Jiangxi Province, the first phase covers an area of 20000 square meters and the second phase covers an area of 30000 square meters, with over 200 employees; More than 20 R&D experts. We have advanced production facilities and equipment, focus on automation and intelligent applications, adhere to investment and improvement, to improve production efficiency and product quality.

Dedicated to technological progress and innovation, providing customers with the highest quality products and services.



#### MAHATMA global R&D center

Located in Dongguan, covering an area of approximately 15000 square meters, with over 150 employees and 30 research and development experts. We Integrating design, research and development, OEM, sales, and exhibition halls, investing huge resources and manpower, Gathering top-notch experts and scientists in the industry, dedicated to the application and development of intelligent super correction technology. And collaborate with top domestic and foreign universities such as Tsinghua University to build industry university research bases, continuing to explore At the forefront of technology, we aim to develop efficient, precise, safe, and energy-saving super straightening technologies for industrial upgrading Make contributions to manufacturing.

Innovative methods and tools. We will be committed to developing efficient, precise, safe, and energy-saving super straightening technologies, which will be applied in multiple fields such as sheet metal, industry, transportation, and energy Domain contributes to the sustainable development of human society.





## Historical Process

We will continue to move forward, continue to challenge ourselves, provide customers with more excellent products and services, and make greater contributions to the development of the industry. We believe that the journey ahead will be even more exciting and we will continue to write gorgeous chapters.

In 2003, driving the dream of vision, Dongguan Shijie Yongsheng Machinery Equipment Sales Department was established.

2003

#### 2005

In 2005, the scale was expanded and Dongguan Yongsheng Machinery Equipment Co., Ltd. was established and began to independently develop levelers and various non-standard automation equipment. In 2006, four major business divisions were established, including leveling machines, punch press peripheral equipment, non-standard automation, and manipulators/robots, and vigorously expanded overseas business.

2006

In 2015, it invested 50 million yuan to build an international intelligent manufacturing production base in Fuzhou, Jiangxi. In the same year, the MAHATMA high-end brand was born;

015

In 2008, the name was

changed to: Guangdong

Dayong Sheng Technology

Co., Ltd.; and passed the

management system, EU CE

certification. Sales are both

ISO9001 quality

internal and external.

In 2017, through diversified development, Guangdong MAHATMA Intelligent Technology Co., Ltd. was established and the R&D center was established in Dongguan. In the same year, it was awarded the title of National High-tech Enterprise, and the company has obtained hundreds of utility model patents and multiple invention patent certificates.

2017

In 2018, the company's reputation remains evergreen, and it has been rated as "Credit Cultivation Unit", "China's Industry Leading Brand", "Contract-abiding and Trustworthy Unit", "China's Famous Brand" and other titles. In the same year, it became the designated unit for the teaching practice base of Guangdong South China University of Technology and other universities.

2018

## 2019

 $202^{-1}$ 

In 2019, innovative technology won the title of "Guangdong Province Specialized New Enterprise". At the same time, it began to layout and establish Mahatma marketing service centers in Kunshan, Qingdao, Chongqing, Ningbo, Changsha and other places:

#### ΜΛΗΑΤΜΑ

In 2023, the MAHATMA Group brand will be completely upgraded, moving at full speed towards a leading brand in the intelligent manufacturing of international high-end leveling equipment.

In 2021, MAHATMA Laser will be established to fully implement the integration of automated smart production lines, forming a two-headed development of leveler + smart production line business:

#### 2022

2023

In 2022, MAHATMA's global business will continue to grow and become the leading brand of metal leveling equipment with leading sales in the industry.







Mission Super wisdom, benefiting the world



Vision



Values



symbiosis and common prosperity



Service purposes Start from the customer, consider the customer, be responsible to the customer, and satisfy the customer



**Group spirit** desire, belief, will, action



**Group slogan** 



The world's leading brand of high-end leveling equipment

Right knowledge, happiness, achievement, altruism, bright

#### **Business philosophy**

Unity of knowledge and action, sincerity and trust, excellence,

MAHATMA leveling machine- Let everything go back to a right way











Shenyan

Zhengzhou

Shijiazhuang







Haerbir

Nannir

### Group Subsidiary Companies





## Honorary Qualifications And Patents

With more than 20 years of innovative capabilities and technical strength, MAHATMA has applied for and won more than 150 national patents and related qualifications.



Wisdom OS intelligent operating system

The certificate provided by ISO standard certification is a good indicator that the enterprise is serious, responsible and professional, and is constantly looking for ways to improve the enterprise, which will make the enterprise a better investment object.



When an enterprise obtains the measurement management system certification, it is a recognition from the government that the enterprise meets the ISO10012 international standard, and a recognition of the enterprise's measurement management capabilities from international and domestic markets.



150+ Utility model patents 30+ Appearance patent

>In 2008, it passed the IS09001 quality management system, EU CE certification, etc.

50+

Patent

>In 2017, it was approved as a national high-tech enterprise.

>In 2019, won the title of "Guangdong Province Specialized and New Enterprise"





operating system

The "CE" mark is a safety certification mark that is regarded as a manufacturer's passport to open and enter the European market.



Software copyright is an important condition or the identification of "high-tech enterprises", "software enterprises" and "software products".









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#### **Expert team**

The MAHATMA technical team is composed of a group of domestic and foreign experts with professional technical knowledge and many years of practical experience. They are committed to solving practical problems for customers, providing new generation supercorrection technical support, and promoting industrial innovation.

















## Activities

Company activities are organized every year to enhance cohesion among employees and improve work efficiency. Through these activities, employees can better understand the company culture, enhance mutual understanding, and at the same time be better integrated into the company family. Let employees have a pleasant time after work.







































Let everything go back to a right way

































## Production Scale







## Domestic And Foreign Exhibitions

We regularly participate in world exhibitions every year, especially our ability to rely on our independently developed innovative technologies to become the focus of the exhibition many times, which is a great recognition of the company's strength and innovation capabilities. By displaying independently devel-

oped innovative technologies, the company's visibility is enhanced and it can also attract more partners and customers. Make greater contributions to the development of the industry.





























Let everything go back to a right way

















#### Social Responsibility And Public Welfare Activities



Rao Yongping, chairman of MAHATMA Group, is keen on charity and public welfare. In the past ten years, he and the development team have built 43 schools so that left-behind children can study.

During this period, the chairman devoted himself to various public welfare events, promoted charity culture, and advocated dedication of love. We believe that "there is no winter that is insurmountable, and there is no spring that will not come." When every ray of light comes together, it is a brilliant and powerful spring. 









捐赠证书

在我商会举行的赴江西横峰县"爱心助学"活动中,悠情系教育。 8-11条件,热心助学,奉献爱心,慷慨捐赠<u>《八</u>元人民币。

德勇年先生/女士:

寺发此证,永志纪4



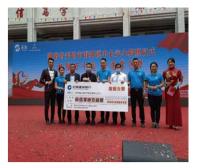
SMOLT #



Let everything go back to a right way



















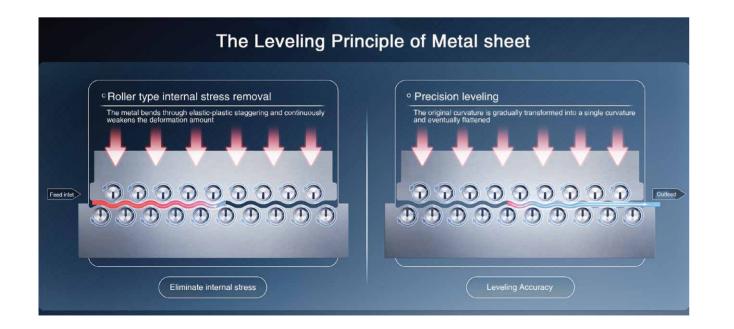
#### What is leveling

Roller leveling is a simple and fast processing method for obtaining high-precision flat parts. plates, or strips. For example, in the past, leveling could only be carried out by experienced and experienced workers. For roller leveling, anyone can quickly and conveniently master the processing method.

By using roller leveling, a plate will undergo multiple consecutive alternating bends. From the inlet to the outlet of the roller leveler, each group of leveling rollers is arranged in a staggered manner. In this way, there is always one roller in the two opposite leveling rollers that is the down pressing roller. From the first leveling roller to the outlet, the alternating bending degree gradually weakens. The bending process is similar to a gradually weakening Sine wave. Through elastic-plastic staggered bending and continuously decreasing deformation, the sheet will become flat, and more importantly, stress is eliminated and ultimately leveled!

After leveling, direct subsequent processing is carried out without the need for time-consuming and laborious rework. So roller leveling is a process of releasing the internal stress of the material itself to flatness! Abbreviated as "eliminating internal stress, leveling flatness! "

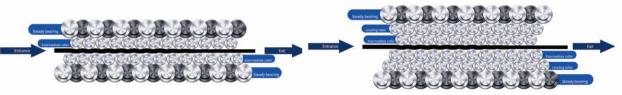
#### "Only those committed to innovation will truly discover the future of leveling technology."



#### Structure introduction

The roll leveling has a double, four and six structure. With the increase of the weight, the leveling effect is more precise. The middle roll and the lower support ensure the Incompressibility of the roll, which perfectly reduces the gap between the upper and lower leveling rolls. The plate is repeatedly bent by using the "Bauschinger effect" of the material, and the bending strength gradually decreases toward the exit. With the increase of the number of leveling rolls, The number of alternating bends also increases, gradually transforming various original curvatures into a single curvature, and ultimately leveling them to achieve the required flatness accuracy in the process.

Four-fold Type Meet the precision requirements.



Four/six-layers rollers (principle diagram)

#### Performances and features of Four layers type

- Uniform force distribution of leveling rollers
- Good structure rigidity, small deformation, high leveling accuracy
- The surface quality of leveling plate is good, the transmission is stable, and the noise is low
- Suitable for carbon steel plate and stainless Single-sided three-layer roller: support steel plate bearing, intermediate roller, leveling roller



Six-fold Type No roller imprint exists-Meet high precision leveling requirements.

#### Performances and features of Six Layers type

- Uniform force distribution of leveling rollers
- Good structure rigidity, small deformation, high leveling accuracy
- The surface quality of the leveling plate is good, the transmission is stable, the noise is low, and there is no roller indentation
- Suitable for carbon steel plate, stainless steel plate, aluminum plat

## **Product Series**

## Let everything go back to a right way

Reconstructing industrial machinery manufacturing-related industries with new smart super-correction technology



ΜΛΗΑΤΜΑ

VAGUE (Basic style)

Two/four layers leveling machine series



## **Automated** smart factory

The automated smart factory is a one-stop solution for leveling automated smart manufacturing. It is a modern production line that integrates automation technology, information technology, artificial intelligence and Internet of Things technology. We can provide a full set of services from design, integration to implementation to help Enterprises build efficient and flexible intelligent production lines to achieve seamless connections from raw materials to finished products. The solution covers everything from automatic uncoiling, leveling and feeding, automatic shearing and stamping, laser blanking, automatic collecting and loading, wool removal, precision leveling and automatic flatness detection, automatic bending, welding and assembly, spraying In all aspects, including intelligent monitoring and maintenance, the optimization of the production process and decision support can be achieved through intelligent digital factories, thereby improving production efficiency, reducing costs, and improving product quality. It is an ideal choice for modern industry for intelligent manufacturing and Industry 4.0.

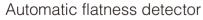




Automatic detection line



Laser coil blanking line





Leveling and deburring automated production line



high-precision uncoiling, leveling, feeding, shearing, bending and welding





High-precision automatic uncoiling, leveling and stamping line



High-precision automatic uncoiling, leveling and shearing line

## **Technological innovation** and breakthroughs

## Smart super leveling technology

#### World's first Master the next generation of leveling technology

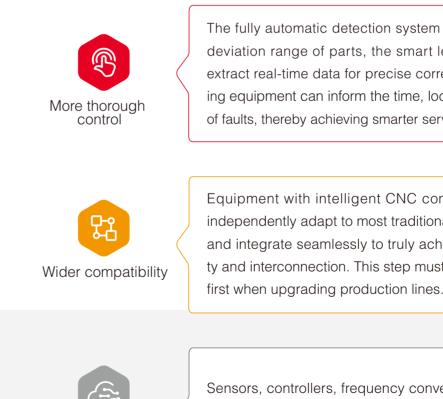
Fully intelligent automated unmanned operation

We are committed to technological innovation and breakthroughs. With years of hard work and technological accumulation by the R&D team headed by the chairman, we have successfully developed industry-leading smart super leveling technology.

## Smart super leveling technology

This technology uses advanced control systems and leveling algorithms to achieve efficient real-time control and automatic adjustment, improving the leveling effect and stability. Laser three-dimensional detection technology and image processing algorithms are used to monitor and identify surface defects in real time, accurately evaluate the leveling effect and correct the leveling parameters. We also optimize the design and wear resistance of the leveling rollers through innovative materials and processes to improve the leveling effect and manufacturing efficiency. These breakthroughs have made our smart super leveling technology widely recognized in the market. We will continue to pursue technological progress and provide customers with high-quality, intelligent leveling solutions.

### Three dimensions of wisdom and super leveling



Deeper wisdom

Sensors, controllers, frequency converters as well as smart screens, digital control and analysis tools in the equipment automatically monitor the two-way flow of leveling accuracy.



The fully automatic detection system can independently detect the deviation range of parts, the smart leveling equipment can link extract real-time data for precise correction, and the remote moni ing equipment can inform the time, location and inefficiency poir of faults, thereby achieving smarter service provision.

Equipment with intelligent CNC control systems can independently adapt to most traditional production lines and integrate seamlessly to truly achieve interoperabil ty and interconnection. This step must be corrected

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#### **R&D** Achievements **And Patents**

## Independent intellectual property rights

## Breaking foreign technology monopoly

Comprehensively master the advanced technology of high-end CNC leveling equipment

Wisdom OS intelligent operating system

Clean CS automatic roll box extraction cleaning system

Level DS automatic plane detection system



We have conducted in-depth research and innovation in the automatic control of leveling machines, intelligent super-straightening algorithms, surface defect detection, and manufacturing processes. These R&D achievements and patents not only reflect our innovation capabilities in the technical field, but also prove our technical strength and competitive advantages as a leading brand in the industry.



#### Wisdom OS intelligent operating system

Wisdom OS intelligent operating system is an intelligent operating system with independent learning and optimization functions specially designed for controlling and managing leveling machines. The system integrates MAHATMA's smart super-correction technology and has a number of key functions, including autonomous learning and optimization, intelligent control, data monitoring and reporting, remote access and control, misoperation identification and early warning, and production line efficiency optimization. By collecting and analyzing production data, Wisdom Os can automatically identify potential problems and provide improvement measures to improve production efficiency and product quality.



### 8A Level Brand Guarantee System

#### Sustainable Development And Social Responsibility

## Environmental policy and practice



More than 20 years of technology and manufacturing experience, experienced in many battles.



Introduce new service business models that adhere to green value propositions, explore new possibilities for increasing revenue and differentiation, introduce result-oriented service models to incentivize the reduction of carbon dioxide emissions, and market and promote "green service" contracts and products.

those of its competitors.



#### Improve field service delivery

Better dispatch of on-site personnel and shorten travel distance; use of remote control support technology to eliminate on-site visits; improve part identification, reduce waste parts and returns; high one-time repair rate, reduce downtime, the roller box can be extracted for cleaning, reducing equipment Length of downtime.

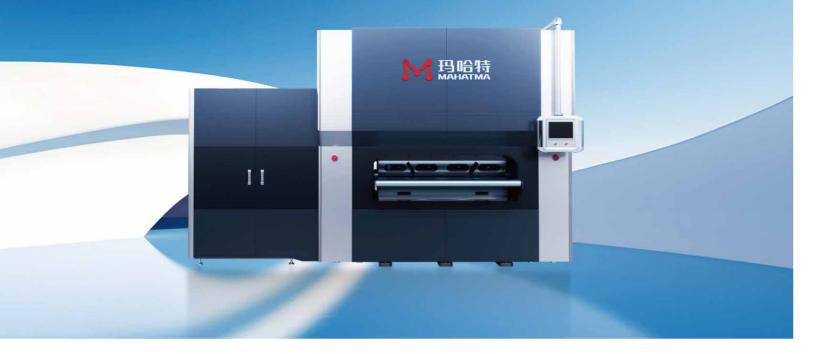
#### Intelligent spare parts management

Improve spare parts forecasting to reduce special deliveries; re-plan the spare parts supply chain and warehousing routes to minimize transportation and inventory; introduce a parts ordering service level model to encourage more sustainable ordering; re-plan last-mile delivery to eliminate unnecessary deliveries and inventory.

#### **Optimize equipment operation**

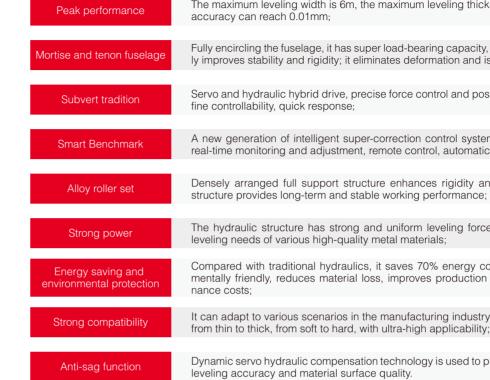
Introduce predictive maintenance plans to extend asset service life; introduce circular economy proposals and comply with disposal guidelines; make better use of remote monitoring information to optimize energy consumption.

#### Innovative service business model



The series of models adopts hydraulic and CNC technology imported from Germany, combining the accuracy of the servo control system and the powerful power of the hydraulic system. This makes it perform even better in processing large, thick and high-precision material leveling! Maintain a constant correction roller gap to reduce deformation and ensure stable correction effects. Parallel multi-rollers, hydraulic locking and dense support technology meet high-precision leveling needs. Compact design, small footprint, high processing accuracy, and silent operation. Comparable with imported equipment, low cost and quick response. Quickly and accurately monitor component flatness with micron-level accuracy.

Suitable for fine surface requirements of large thick steel plates, non-ferrous metals, mirror sheets, sheet metal, laser cutting parts and flame cutting parts. The guadruple or sixfold roller structure provides uniform roller force and high rigidity without leaving any rolling marks., can solve problems that are difficult to solve with general leveling, and has wider applicability. These advantages of hydraulic levelers make them an ideal choice for industries that require high-precision leveling, such as new energy, military industry, heavy machinery, automobiles and trucks, construction, ships, aviation, and metal processing.



#### Equipment display



#### Comparison before and after leveling

Before



Let everything go back to a right way



The maximum leveling width is 6m, the maximum leveling thickness is 100mm, and the maximum

Fully encircling the fuselage, it has super load-bearing capacity, saves space, and comprehensively improves stability and rigidity; it eliminates deformation and is stable and durable;

Servo and hydraulic hybrid drive, precise force control and positioning, high torque and pressure,

A new generation of intelligent super-correction control system; fully automatic and unmanned, real-time monitoring and adjustment, remote control, automatic counting, etc;

Densely arranged full support structure enhances rigidity and improves precision. Alloy steel

The hydraulic structure has strong and uniform leveling force, which can easily cope with the

Compared with traditional hydraulics, it saves 70% energy consumption, is green and environmentally friendly, reduces material loss, improves production efficiency, and has lower mainte-

It can adapt to various scenarios in the manufacturing industry and can handle various materials

Dynamic servo hydraulic compensation technology is used to prevent angle collapse and improve







Comparison chart before and after leveling

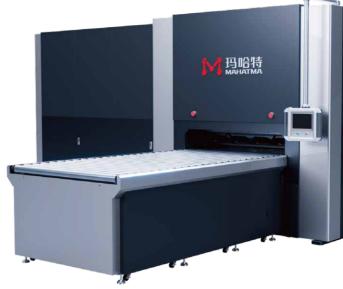


#### MHTR30 Series

#### Thickness: 0.5-3.0mm

Model	MHTR30-600-23	MHTR30-1000-23	MHTR30-1300-23	MHTR30-1600-23	MHTR30-2100-23				
Width	0-600mm	0-1000mm	0-1300mm	0-1600mm	0-2100mm				
Roll diameter	30	30	30	30	30				
Rated thickness	0.5-3.0mm	0.5-3.0mm	0.5-3.0mm	0.5-3.0mm	0.5-3.0mm				
Maximum thickness	5.0mm	5.0mm	5.0mm	5.0mm	5.0mm				
Number of rolls	23	23	23	23	23				
Shortest part	60	60	60	60	60				
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min				
• Four and six-fold rollers and number of rollers       • Loading and unloading manipulator       • Loading and unloading reanipulator         • Inlet and outflow assembly line       • The support roller is adjusted by motor independently       • Automatic detection plate									
	Larger, special size, faster speed can be customized according to demand								

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### MHTR40 Series

Thickness: 0.6-4.0mm

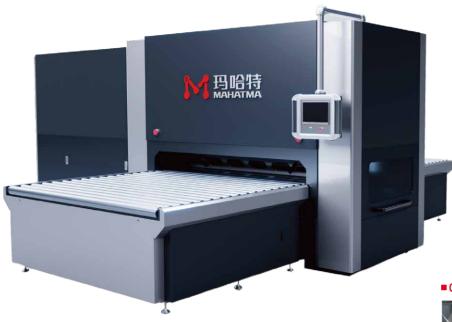
Model	MHTR40-600-23	MHTR40-1000-23	MHTR40-1300-23	MHTR40-1600-23	MHTR40-2100-23	MHTR40-2600-23	
Width	0-600mm	0-1000mm	0-1300mm	0-1600mm	0-2100mm	0-2600mm	
Roll diameter	40	40	40	40	40	40	
Rated thickness	0.6-4.0mm	0.6-4.0mm	0.6-4.0mm	0.6-4.0mm	0.6-4.0mm	0.6-4.0mm	
Maximum thickness	8.0mm	8.0mm	8.0mm	8.0mm	8.0mm	8.0mm	
Number of rolls	23	23	23	23	23	23	
Shortest part	80	80	80	80	80	80	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
• Four and six-fold rollers and number of rollers       • Loading and unloading manipulator       • Loading and unloading robot         • Inlet and outflow assembly line       • The support roller is adjusted by motor independently       • Automatic detection platform							
	Larger, spec	ial size, faster spe	ed can be customi	zed according to c	lemand		

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.









Comparison chart before and after leveling

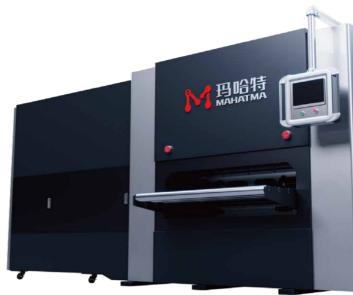


#### MHTR50 Series

#### Thickness: 0.8-5.0mm

Model	MHTR50-600	MHTR50-1000	MHTR50-1300	MHTR50-1700	MHTR50-2100	MHTR50-2600	
Width	0-600mm	0-1000mm	0-1300mm	0-1700mm	0-2100mm	0-2600mm	
Roll diameter	50	50	50	50	50	50	
Rated thickness	0.8-5.0mm	0.8-5.0mm	0.8-5.0mm	0.8-5.0mm	0.8-5.0mm	0.8-5.0mm	
Maximum thickness	10.0mm	10.0mm	10.0mm	10.0mm	10.0mm	10.0mm	
Number of rolls	23	23	23	23	23	23	
Shortest part	100	100	100	100	100	100	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
Optional	Four and six-fold rollers and number of rollers     Inlet and outflow assembly line     Loading and unloading manipulator     The support roller is adjusted by motor independently     Automatic detection platform						
	Larger, spe	cial size, faster spe	eed can be custom	ized according to	demand		

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### MHTR60 Series

Thickness: 1.0-8.0mm

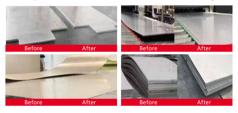
Model	MHTR60-600	MHTR60-1000	MHTR60-1400	MHTR60-1650	MHTR60-2100	MHTR60-2600	MHTR60-3200	
Width	0-600mm	0-1000mm	0-1400mm	0-1650mm	0-2100mm	0-2600mm	0-3200mm	
Roll diameter	60	60	60	60	60	60	60	
Rated thickness	1.0-8.0mm	1.0-8.0mm	1.0-8.0mm	1.0-8.0mm	1.0-8.0mm	1.0-8.0mm	1.0-8.0mm	
Maximum thickness	15mm	15mm	15mm	15mm	15mm	15mm	15mm	
Number of rolls	21	21	21	21	21	21	21	
Shortest part	130	130	130	130	130	130	130	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
Optional          • Four and six-fold rollers and number of rollers         • Loading and unloading manipulator         • Loading and unloading manipulator         • The support roller is adjusted by motor independently         • Automatic detection platform         • Automatic detection         • Aut								
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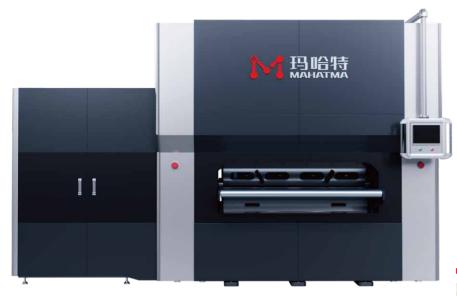
Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.









Comparison chart before and after leveling



#### MHTR80Series

Thickness: 2.0-10.0mm

Model	MHTR80-400	MHTR80-800	MHTR80-1000	MHTR80-1300	MHTR80-1650	MHTR80-2100	MHTR80-2600	MHTR80-3200		
Width	0-400mm	0-800mm	0-1000mm	0-1300mm	0-1650mm	0-2100mm	0-2600mm	0-3200mm		
Roll diameter	80	80	80	80	80	80	80	80		
Rated thickness	2.0-10.0mm	2.0-10.0mm	2.0-10.0mm	2.0-10.0mm	2.0-10.0mm	2.0-10.0mm	2.0-10.0mm	2.0-10.0mm		
Maximum thickness	25.0mm	25.0mm	25.0mm	25.0mm	25.0mm	25.0mm	25.0mm	25.0mm		
Number of rolls	15/19	15/19	15/19	15/19	15/19	15/19	15/19	15/19		
Shortest part	150	150	150	150	150	150	150	150		
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min		
Optional		ix-fold rollers and n utflow assembly lin		Loading and unloading manipulator     Loading and unloading robot     The support roller is adjusted by motor independently     Automatic detection platform						
	Larger, special size, faster speed can be customized according to demand									

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



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#### MHTR100Series

Thickness: 3.0-12.0mm

Model	MHTR100-600	MHTR100-1000	MHTR100-1300	MHTR100-1600	MHTR100-2100	MHTR100-2600	MHTR100-3200	
Width	0-600mm	0-1000mm	0-1300mm	0-1600mm	0-2100mm	0-2600mm	0-3200mm	
Roll diameter	100	100	100	100	100	100	100	
Rated thickness	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm	
Maximum thickness	30.0mm	30.0mm	30.0mm	30.0mm	30.0mm	30.0mm	30.0mm	
Number of rolls	15/19	15/19	15/19	15/19	15/19	15/19	15/19	
Shortest part	160	160	160	160	160	160	160	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
Optional	<ul> <li>Four and six-fold rollers and number of rollers</li> <li>Inlet and outflow assembly line</li> <li>In support roller is adjusted by motor independently</li> <li>Automatic detection platform</li> </ul>							

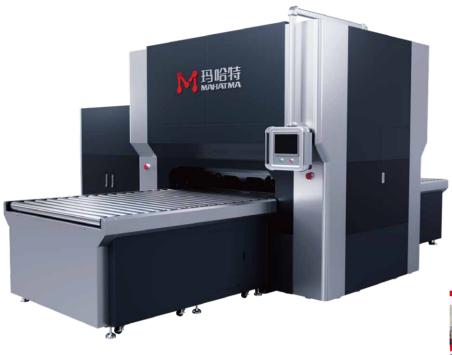
Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.









Comparison chart before and after leveling



#### MHTR120 Series

Thickness: 4.0-20.0mm

Model	MHTR120-600	MHTR120-1000	MHTR120-1300	MHTR120-1600	MHTR120-2100	MHTR120-2600	MHTR120-3200			
Width	0-600mm	0-1000mm	0-1300mm	0-1600mm	0-2100mm	0-2600mm	0-3200mm			
Roll diameter	120	120	120	120	120	120	120			
Rated thickness	4.0-20.0mm	4.0-20.0mm	4.0-20.0mm	4.0-20.0mm	4.0-20.0mm	4.0-20.0mm	4.0-20.0mm			
Maximum thickness	40.0mm	40.0mm	40.0mm	40.0mm	40.0mm	40.0mm	40.0mm			
Number of rolls	15/19	15/19	15/19	15/19	15/19	15/19	15/19			
Shortest part	190	190	190	190	190	190	190			
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min			
Optional          • Four and six-fold rollers and number of rollers         • Inlet and outflow assembly line         • Inlet and outflow assembly line         • The support roller is adjusted by motor independently         • Automatic detection platform         • Automatic detection										
	Larger, special size, faster speed can be customized according to demand									

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### MHTR150 Series

Thickness: 6.0-30.0mm

Model	MHTR150-800	MHTR150-1000	MHTR150-1300	MHTR150-1700	MHTR150-2100	MHTR150-2600	MHTR150-3200	
Width	0-800mm	0-1000mm	0-1300mm	0-1700mm	0-2100mm	0-2600mm	0-3200mm	
Roll diameter	150	150	150	150	150	150	150	
Rated thickness	6.0-30.0mm	6.0-30.0mm	6.0-30.0mm	6.0-30.0mm	6.0-30.0mm	6.0-30.0mm	6.0-30.0mm	
Maximum thickness	50.0mm	50.0mm	50.0mm	50.0mm	50.0mm	50.0mm	50.0mm	
Number of rolls	15/19	15/19	15/19	15/19	15/19	15/19	15/19	
Shortest part	250	250	250	250	250	250	250	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
Optional	<ul> <li>Four and six-fold rollers and number of rollers</li> <li>Inlet and outflow assembly line</li> <li>Loading and unloading manipulator</li> <li>The support roller is adjusted by motor independently</li> <li>Automatic detection platform</li> </ul>							

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.

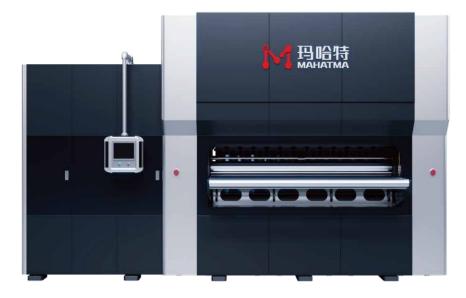


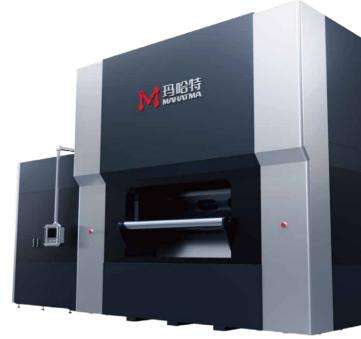


#### Comparison chart before and after leveling



Larger, special size, faster speed can be customized according to demand





#### Comparison chart before and after leveling



#### MHTR200 Series

Thickness: 8.0-40.0mm

Model	MHTR200-1000	MHTR200-1300	MHTR200-1600	MHTR200-2100	MHTR200-2600	MHTR200-3200			
Width	0-1000mm	0-1300mm	0-1600mm	0-2100mm	0-2600mm	0-3200mm			
Roll diameter	200	200	200	200	200	200			
Rated thickness	8.0-40.0mm	8.0-40.0mm	8.0-40.0mm	8.0-40.0mm	8.0-40.0mm	8.0-40.0mm			
Maximum thickness	60.0mm	60.0mm	60.0mm	60.0mm	60.0mm	60.0mm			
Number of rolls	11/15	11/15	11/15	11/15	11/15	11/15			
Shortest part	310	310	310	310	310	310			
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min			
Optional	• Four and six-fold rollers and number of rollers       • Loading and unloading manipulator       • Loading and unloading robo         • Inlet and outflow assembly line       • The support roller is adjusted by motor independently       • Automatic detection platform								
	Larger, special size, faster speed can be customized according to demand								

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.

#### MHTR260 Series

Thickness: 10.0-60.0mm

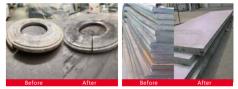
Model	MHTR260-1300	MHTR260-1600	MHTR260-2100	MHTR260-2600	MHTR260-3200	MHTR260-4000	
Width	0-1300mm	0-1600mm	0-2100mm	0-2600mm	0-3200mm	0-4000mm	
Roll diameter	260	260	260	260	260	260	
Rated thickness	10.0-60.0mm	10.0-60.0mm	10.0-60.0mm	10.0-60.0mm	10.0-60.0mm	10.0-60.0mm	
Maximum thickness	80.0mm	80.0mm	80.0mm	80.0mm	80.0mm	80.0mm	
Number of rolls	9/11	9/11	9/11	9/11	9/11	9/11	
Shortest part	400	400	400	400	400	400	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
Optional	Four and six-fold rollers and number of rollers     Automatic detection platform     The support roller is adjusted by motor independently     Automatic detection platform						
		· · · · · ·		zed according to a	la na an d		

Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.











# Comparison chart before and after leveling

#### MHTR300 Series

Thickness: 15.0-80.0mm

Model	MHTR300-1300	MHTR300-1600	MHTR300-2100	MHTR300-2600	MHTR300-3200	MHTR300-4000	
Width	0-1300mm	0-1600mm	0-2100mm	0-2600mm	0-3200mm	0-4000mm	
Roll diameter	300	300	300	300	300	300	
Rated thickness	15.0-80.0mm	15.0-80.0mm	15.0-80.0mm	15.0-80.0mm	15.0-80.0mm	15.0-80.0mm	
Maximum thickness	100.0mm	100.0mm	100.0mm	100.0mm	100.0mm	100.0mm	
Number of rolls	9	9	9	9	9	9	
Shortest part	480	480	480	480	480	480	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
Optional	<ul> <li>Four and six-fold rollers and number of rollers</li> <li>Inlet and outflow assembly line</li> <li>Loading and unloading manipulator</li> <li>The support roller is adjusted by motor independently</li> <li>Automatic detection platform</li> </ul>						
	Larger, spec	cial size, faster spe	ed can be customi	ized according to o	demand		

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.

#### MHTR400 Series

Thickness: 20.0-100.0mm

Model	MHTR400-1300	MHTR400-1600	MHTR400-2100	MHTR400-2600	MHTR400-3200	MHTR400-4000	
Width	0-1300mm	0-1600mm	0-2100mm	0-2600mm	0-3200mm	0-4000mm	
Roll diameter	400	400	400	400	400	400	
Rated thickness	20.0-100.0mm	20.0-100.0mm	20.0-100.0mm	20.0-100.0mm	20.0-100.0mm	20.0-100.0mm	
Maximum thickness	120.0mm	120.0mm	120.0mm	120.0mm	120.0mm	120.0mm	
Number of rolls	9	9	9	9	9	9	
Shortest part	610	610	610	610	610	610	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
• Four and six-fold rollers and number of rollers       • Loading and unloading manipulator       • Loading and unloading robo         • Inlet and outflow assembly line       • The support roller is adjusted by motor independently       • Automatic detection platform							
	Larger, speci	ial size, faster spee	ed can be customi	zed according to c	lemand		

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.







#### Device function

This series of machines adopts servo motors, CNC technology and a self-developed intelligent super-leveling CNC system. There are a large number of leveling process parameters in the system, which can automatically set the leveling pressure and initial work according to different coils and sheets. Parameters, and can modify, store, call process and edit equipment parameters at any time.

Equipped with intelligent functions such as automatic laser three-dimensional detection, misoperation identification and early warning, it is a high-end leveling equipment integrating cutting-edge technology. Servo motors provide the capability for high speed, high torque and precise position control, helping to achieve fast, smooth leveling operations. Reducing hydraulic oil usage and energy consumption makes servo-hydraulic levelers more environmentally friendly.

- standard configuration: Micro Innovation company's touch screen
- Can store 200 records (according to customer requirements, Storage capacity can also be expanded)
- concise, clear user interface
- professional application, fast levelling gap setting
- according to 0.01 mm
- optional configuration: remote service

#### WITS (Flagship style) Intelligent Servo-CNC Leveling machine series

Noble and luxuriousIndustrial aesthetic design, Extr painting process, symbol of strendKunpeng structurePatented structural technology, h sistant, rock-solid, fully open designMetrical roller setServo electromechanical leveling gap technology, energy-saving and environEnergy Saving PioneerDense full support structure combined enhanced load-bearing capacity, longBenchmark performanceSmart roller box pull-out cleaning support rollers! No. 1 in China;Smart technologyIntelligent human-machine inter control, automatic counting and or of the production line;Full sceneCan be seamlessly connected wi of the production line;Anti-sag functionDynamic servo compensation t improve leveling accuracy and m		
Numbering structure       sistant, rock-solid, fully open desites         Metrical roller set       Servo electromechanical leveling gap technology, energy-saving and environed enhanced load-bearing capacity, long         Energy Saving Pioneer       Dense full support structure combined enhanced load-bearing capacity, long         Benchmark performance       Smart roller box pull-out cleaning support rollers! No. 1 in China;         Smart technology       Intelligent human-machine interformatic counting and control, automatic counting and control, automaticon, automaticontrol, automatic counting and control, au	Noble and luxurious	
Wethcar foller set       technology, energy-saving and environed technology, energy-saving and environed technology         Energy Saving Pioneer       Dense full support structure combined enhanced load-bearing capacity, long         Benchmark performance       Smart roller box pull-out cleaning support rollers! No. 1 in China;         Smart technology       Intelligent human-machine interformatic counting and countrol, automatic counting and countrol, automatic counting and countrol, automatic counting and countrol, automatic counting and countrol, etc.;         Full scene       Can be seamlessly connected with of the production line;         Anti-sag function       Dynamic servo compensation to the production line;	Kunpeng structure	Patented structural technology, h sistant, rock-solid, fully open desi
Energy Saving Pioneer       enhanced load-bearing capacity, long         Benchmark performance       Smart roller box pull-out cleaning support rollers! No. 1 in China;         Smart technology       Intelligent human-machine interformatic counting and countrol, automatic counting and countrol, automatic counting and countrol, automatic counting and countrol, security guard         Security guard       Overload protection, photoelectric etc;         Full scene       Can be seamlessly connected will of the production line;         Apti-sag function       Dynamic servo compensation to the production line;	Metrical roller set	
Smart technology       Intelligent human-machine interf control, automatic counting and of Security guard         Security guard       Overload protection, photoelectric etc;         Full scene       Can be seamlessly connected wi of the production line;         Anti-sag function       Dynamic servo compensation to the seamless of the production line;	Energy Saving Pioneer	
Smart technology       control, automatic counting and	Benchmark performance	
Even     etc;       Full scene     Can be seamlessly connected will of the production line;       Anti-sag function     Dynamic servo compensation to the production line;	Smart technology	
Anti-sag function	Security guard	
	Full scene	
	Anti-sag function	

#### Equipment display



#### Comparison before and after leveling









traordinary Master BMW paint, multi-layer precision ength, highlighting noble temperament and quality;

high-strength structure, shock-proof and pressure-resign, one-click spread;

p control, precise and efficient, using the latest energy-saving ronmentally friendly, powerful power;

ed with wide support shaft, high strength and less indentation, ng-lasting stability, and elimination of deformation;

ng system for quick and easy cleaning of leveling and

erface, real-time monitoring and adjustment, remote other cutting-edge functions;

ric protection, intelligent early warning of misoperation,

vith various production lines to improve the automation

technology is used to prevent angle collapse and material surface quality.





Intelligent operating system	New style of intelligent operating system, powerful dynamic performance and stability, improve software operation fluency; integrated fast intelligent leveling mode;
MHTP series high-precision leveling machine	Independent intellectual property rights, a number of patented technologies, ultra-high-efficiency leveling,intelligent control;
Self-lubricating system for all machine tools	High intelligence, high integration, maintenance-free, one-button setting for low oil pressure alarm, no oil shutdown, avoiding machine wear caused by untimely lubrication;
Remote cloud control system	It can realize remote monitoring of equipment operating status, fault query, fault judgment, etc., and real-time cloud monitoring of equipment; self-developed gearbox gear universal joint transmission, faster acceleration and speed, and better rigidity and impact resistance;
Independently developed gearbox	Gear universal joint transmission, faster acceleration and speed, better rigidity and impact resistance;
Hollow structure machine tool	The main body of the machine tool has no heating area, and there is no thermal deformation in permanent use. The main body of the machine tool is stable and reliable, so that the leveling accuracy is stable for a long time.

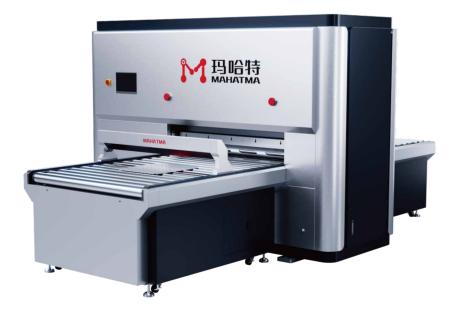
- Can be used to detect the flatness of metal products, the measurement process does not need to stop, the measurement speed is fast;
- Automatic detection, greatly improve the efficiency of measurement, mechanization and rapid measurement of flatness, simple and convenient operation, highly accurate.
- Measurement application: rapid detection of the flatness of metal sheet.







Mahatma patent technology, unique in China, the whole leveling roller box open maintenance



Schematic diagram with automatic detection

Clean Cs automatic roller box extraction cleaning system is the only patented technology for leveling roller cleaning in China. It is an innovative technology specially designed for leveling machines and aims to solve the need for roller box cleaning. Compared with thicker and heavier leveling rollers, which require the use of cranes and other auxiliary tools when disassembling, this system realizes automated roll box extraction and cleaning, requiring only one person to operate, greatly improving operational safety and production efficiency. It also improves cleaning efficiency and convenience. By fully covering the roller box, the system ensures thorough cleaning, avoids the negative impact of residues on the production line, reduces production line downtime and manual operation workload, and ensures consistent product surface quality. And during the leveling process, residues such as burrs, metal chips, and oxides contained in the material often remain on the leveling roller. If not cleaned in time, these residues may cause negative effects such as dents, bruises and scratches on the surface quality of subsequent products. This system is especially suitable for the leveling process of aluminum alloy and other products.









#### Comparison chart before and after leveling



#### MHTW15 Series

#### Thickness: 0.08-1.0mm

Model	MHTW15-300-33	MHTW15-400-33	MHTW15-600-33	
Width	0-300mm	0-400mm	0-600mm	
Roll diameter	15	15	15	
Rated thickness	0.08-1.0mm	0.08-1.0mm	0.08-1.0mm	
Maximum thickness	2.0mm	2.0mm	2.0mm	
Number of rolls	33	33	33	
Shortest part	30	30	30	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	
Optional	<ul> <li>Four and six-fold rollers and number of roll</li> <li>Inlet and outflow assembly line</li> </ul>	<ul> <li>Loading and unloading manipulator</li> <li>The support roller is adjusted by motor inde</li> </ul>	Loading and unloading robot     Automatic detection platform	
Larger, special size, faster speed can be customized according to demand				

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### • MHTW20 Series

Thickness: 0.3-1.2mm

Model	MHTW20-400-23	MHTW20-800-23	MHTW20-1300-23	
Width	0-400mm	0-800mm	0-1300mm	
Roll diameter	20	20	20	
Rated thickness	0.3-1.2mm	0.3-1.2mm	0.3-1.2mm	
Maximum thickness	3.0mm	3.0mm	3.0mm	
Number of rolls	23	23	23	
Shortest part	40	40	40	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	
Optional	<ul> <li>Four and six-fold rollers and number of re</li> <li>Inlet and outflow assembly line</li> </ul>	Loading and unloading manipulator     The support roller is adjusted by motor inc	Loading and unloading robot     Automatic detection platform	
Larger, special size, faster speed can be customized according to demand				

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.







Comparison chart before and after leveling

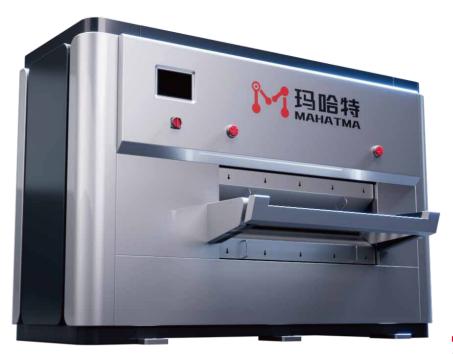


#### MHTW30 Series

Thickness: 0.5-2.0mm

Model	MHTW30-400-23	MHTW30-800-23	MHTW30-1300-23	MHTW30-1600-23
Width	0-400mm	0-800mm	0-1300mm	0-1600mm
Roll diameter	30	30	30	30
Rated thickness	0.5-2.0mm	0.5-2.0mm	0.5-2.0mm	0.5-2.0mm
Maximum thickness	4.0mm	4.0mm	4.0mm	4.0mm
Number of rolls	23	23	23	23
Shortest part	60	60	60	60
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional	<ul> <li>Four and six-fold rollers and nu</li> <li>Inlet and outflow assembly line</li> </ul>	<ul><li>Loading and unloading robot</li><li>Automatic detection platform</li></ul>		
Larger, special size, faster speed can be customized according to demand				

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### • MHTW40 Series

Thickness: 0.6-3.0mm

Model	MHTW40-400-23	MHTW40-800-23	MHTW40-1300-23	MHTW40-1600-23
Width	0-400mm	0-800mm	0-1300mm	0-1600mm
Roll diameter	40	40	40	40
Rated thickness	0.6-3.0mm	0.6-3.0mm	0.6-3.0mm	0.6-3.0mm
Maximum thickness	6.0mm	6.0mm	6.0mm	6.0mm
Number of rolls	23	23	23	23
Shortest part	70	70	70	70
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional	<ul> <li>Four and six-fold rollers and r</li> <li>Inlet and outflow assembly lin</li> </ul>	<ul><li>Loading and unloading robot</li><li>Automatic detection platform</li></ul>		
Larger, special size, faster speed can be customized according to demand				

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.







Comparison chart before and after leveling

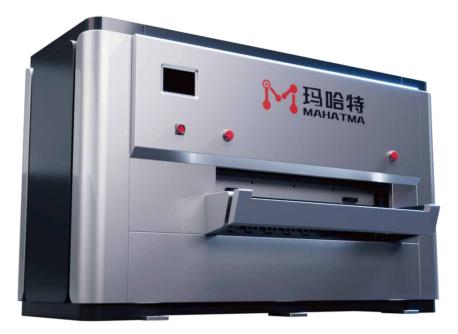


#### • MHTW50 Series

Thickness: 0.8-4.0mm

Model	MHTW50-400-23	MHTW50-800-23	MHTW50-1300-23	MHTW50-1600-23	
Width	0-400mm	0-800mm	0-1300mm	0-1600mm	
Roll diameter	50	50	50	50	
Rated thickness	0.8-4.0mm	0.8-4.0mm	0.8-4.0mm	0.8-4.0mm	
Maximum thickness	8.0mm	8.0mm	8.0mm	8.0mm	
Number of rolls	23	23	23	23	
Shortest part	90	90	90	90	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
Optional	<ul> <li>Four and six-fold rollers and number of rollers</li> <li>Inlet and outflow assembly line</li> </ul>				
Larger, special size, faster speed can be customized according to demand					

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### • MHTW60 Series

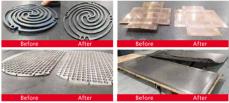
Thickness: 1.0-6.0mm

Model	MHTW60-600-21	MHTW60-1000-21	MHTW60-1300-21	MHTW60-1600-21	
Width	0-600mm	0-1000mm	0-1300mm	0-1600mm	
Roll diameter	60	60	60	60	
Rated thickness	1.0-6.0mm	1.0-6.0mm	1.0-6.0mm	1.0-6.0mm	
Maximum thickness	12mm	12mm	12mm	12mm	
Number of rolls	21	21	21	21	
Shortest part	100	100	100	100	
Leveling speed	0-10m/min	0-10m/min			
Optional	Four and six-fold rollers and number of rollers     Pour and six-fold rollers and number of rollers     Inlet and outflow assembly line     The support roller is adjusted by motor independently     Automatic detection				
Larger special size faster speed can be customized according to demand					

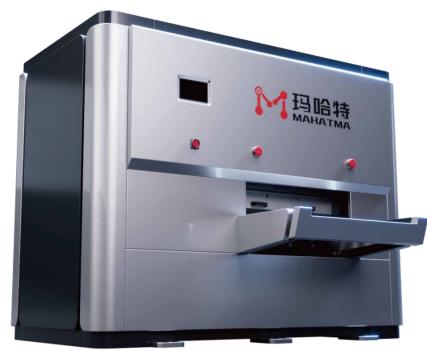
\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### Comparison chart before and after leveling



Larger, special size, faster speed can be customized according to demand



Comparison chart before and after leveling

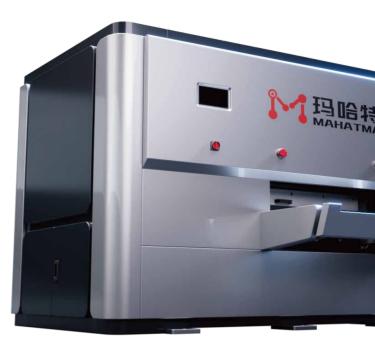


#### • MHTW80 Series

Thickness: 2.0-8.0mm

Model	MHTW80-400-19	MHTW80-800-19	MHTW80-1300-19	MHTW80-1600-19
Width	0-400mm	0-800mm	0-1300mm	0-1600mm
Roll diameter	80	80	80	80
Rated thickness	2.0-8.0mm	2.0-8.0mm	2.0-8.0mm	2.0-8.0mm
Maximum thickness	16.0mm	16.0mm	16.0mm	16.0mm
Number of rolls	19	19	19	19
Shortest part	130	130	130	130
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional	<ul> <li>Four and six-fold rollers and nu</li> <li>Inlet and outflow assembly line</li> </ul>	<ul><li>Loading and unloading robot</li><li>Automatic detection platform</li></ul>		
Larger, special size, faster speed can be customized according to demand				

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### • MHTW100 Series

Thickness: 3.0-12.0mm

Model	MHTW100-600-19	MHTW100-1000-19	MHTW100-1300-19	MHTW100-1600-19	MHTW100-2100-19
Width	0-600mm	0-1000mm	0-1300mm	0-1600mm	0-2100mm
Roll diameter	100	100	100	100	100
Rated thickness	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm
Maximum thickness	20.0mm	20.0mm	20.0mm	20.0mm	20.0mm
Number of rolls	19	19	19	19	19
Shortest part	160	160	160	160	160
Leveling speed	0-10m/min 0-10m/min 0-10m/min 0-10m/min				0-10m/min
• Four and six-fold rollers and number of rollers       • Loading and unloading manipulator       • Loading and unloading robot         • Inlet and outflow assembly line       • The support roller is adjusted by motor independently       • Automatic detection platform					
Larger special size faster speed can be customized according to demand					

#### Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.





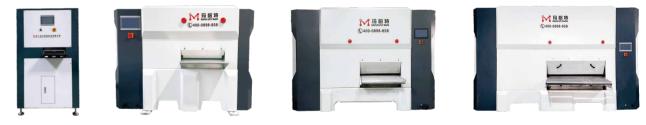


Compared with other ordinary leveling methods, the series of control systems have the functions of storing, calling, and editing process and equipment parameters, and have the function of identifying and warning of misoperations. The 10-inch high-precision touch screen displays. When in use, on the operating platform, the inlet and outlet reduction can be set according to parameters such as plate thickness, plate width, material strength, or existing parameters in the database, so as to realize the work roll entry and exit clearance, etc. Electric adjustment, and can be adjusted and corrected manually. Compared with traditional manual leveling methods, CNC leveling machines greatly improve production efficiency. Suitable for sheet metal processing that requires higher flatness and straightness.



Benchmark performance	The fastest leveling speed is 10m/mir
High cost performance	High-quality performance, super cos long-lasting stability;
Precision craftsmanship	The support structure is fine and dens lasting stability;
Intelligent operation	Intelligent CNC adjustment, automate management, improved efficiency;
Energy saving and environmental protection	Using precision motor drive, energy c cy increase, environmental protection
Safe and reliable	Comprehensive safety protection, ear
Flexible customization	We can customize production accor different industries and specifications
Efficient collaboration	Supports collaborative work with oth equipment to achieve efficient and co

#### Equipment display



#### Comparison before and after leveling





nin; the maximum thickness is 0.03-30mm;

ost-effective, maximized return on investment value provide

nsely arranged to ensure leveling quality, reduce friction and

ed operation, easy to operate, quick to get started, intelligent

consumption is reduced by 50%, cost reduction and efficienon and economy;

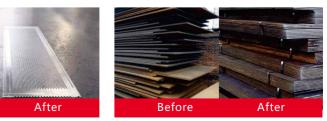
arly warning of misoperation, ensuring production safety;

ording to customer needs to meet the processing needs of ns, and provide customized solutions for customers:

her equipment and linkage with upstream and downstream coordinated operation of the production line.









Comparison chart before and after leveling



#### • MHTM10 Series

#### Thickness: 0.03-0.6mm

Model	MHTM10-200-25	MHTM10-300-25		
Width	0-200mm	0-300mm		
Roll diameter	10	10		
Rated thickness	0.03-0.6mm	0.03-0.6mm		
Maximum thickness	1.0mm	1.0mm		
Number of rolls	25	25		
Shortest part	20	20		
Leveling speed	0-10m/min	0-10m/min		
Optional		unloading manipulator • Loading and unloading robot ler is adjusted by motor independently • Automatic detection platform		
Larger, special size, faster speed can be customized according to demand				

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### • MHTM15 Series

Thickness: 0.08-1.0mm

Model	MHTM15-200-25	MHTM15-300-25 MHTM15-400-25		MHTM15-600-25	
Width	0-200mm	0-300mm	0-400mm	0-600mm	
Roll diameter	15	15	15	15	
Rated thickness	0.08-1.0mm	0.08-1.0mm	0.08-1.0mm	0.08-1.0mm	
Maximum thickness	2.0mm	2.0mm	2.0mm	2.0mm	
Number of rolls	25	25	25	25	
Shortest part	30	30	30	30	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
Optional	<ul> <li>Four and six-fold rollers and nu</li> <li>Inlet and outflow assembly line</li> </ul>	<ul> <li>Loading and unloading robot</li> <li>Automatic detection platform</li> </ul>			

#### Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.







Comparison chart before and after leveling



#### • MHTM20 Series

Thickness: 0.3-1.2mm

Model	MHTM20-400-23	MHTM20-600-23	MHTM20-800-23	MHTM20-1300-23	
Width	0-400mm	0-600mm	0-800mm	0-1300mm	
Roll diameter	20	20	20	20	
Rated thickness	0.3-1.2mm	0.3-1.2mm	0.3-1.2mm	0.3-1.2mm	
Maximum thickness	3.0mm	3.0mm	3.0mm	3.0mm	
Number of rolls	23	23	23	23	
Shortest part	40	40	40	40	
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	
Optional	<ul> <li>Four and six-fold rollers and number of rollers</li> <li>Inlet and outflow assembly line</li> <li>Loading and unloading manipulator</li> <li>The support roller is adjusted by motor independently</li> </ul>			<ul><li>Loading and unloading robot</li><li>Automatic detection platform</li></ul>	
Larger, special size, faster speed can be customized according to demand					

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### MHTM30 Series

Thickness: 0.5-2.0mm

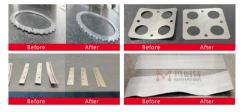
Model	MHTM30-400-21	MHTM30-600-21	MHTM30-800-21	MHTM30-1000-21	MHTM30-1300-21	MHTM30-1600-21
Width	0-400mm	0-600mm	0-800mm	0-1000mm	0-1300mm	0-1600mm
Roll diameter	30	30	30	30	30	30
Rated thickness	0.5-2.0mm	0.5-2.0mm	0.5-2.0mm	0.5-2.0mm	0.5-2.0mm	0.5-2.0mm
Maximum thickness	4.0mm	4.0mm	4.0mm	4.0mm	4.0mm	4.0mm
Number of rolls	21	21	21	21	21	21
Shortest part	60	60	60	60	60	60
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional	• Four and six-fold rollers and number of rollers       • Loading and unloading manipulator       • Loading and unloading non-pulator         • Inlet and outflow assembly line       • The support roller is adjusted by motor independently       • Automatic detection platform					
Larger special size faster speed can be sustemized according to demand						

#### Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.

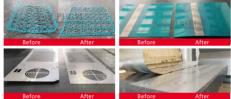








Comparison chart before and after leveling

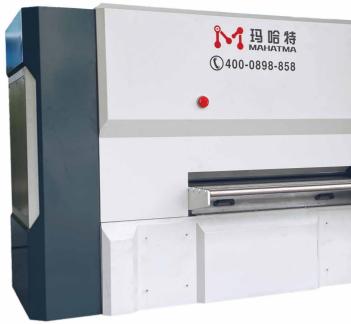


#### • MHTM40 Series

#### Thickness: 0.6-3.0mm

Model	MHTM40-400-21	MHTM40-600-21	MHTM40-1000-21	MHTM40-1300-21	MHTM40-1600-21
Width	0-400mm	0-600mm	0-1000mm	0-1300mm	0-1600mm
Roll diameter	40	40	40	40	40
Rated thickness	0.6-3.0mm	0.6-3.0mm	0.6-3.0mm	0.6-3.0mm	0.6-3.0mm
Maximum thickness	6.0mm	6.0mm	6.0mm	6.0mm	6.0mm
Number of rolls	21	21	21	21	21
Shortest part	70	70	70	70	70
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional	<ul> <li>Four and six-fold rollers and number of rollers</li> <li>Inlet and outflow assembly line</li> <li>In the support roller is adjusted by motor independently</li> <li>Automatic detection platform</li> </ul>				
Larger, special size, faster speed can be customized according to demand					

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### MHTM50 Series

Thickness: 0.8-4.0mm

Model	MHTM50-400-19	MHTM50-600-19	MHTM50-1000-19	MHTM50-1300-19	MHTM50-1700-19
Width	0-400mm	0-600mm	0-1000mm	0-1300mm	0-1700mm
Roll diameter	50	50	50	50	50
Rated thickness	0.8-4.0mm	0.8-4.0mm	0.8-4.0mm	0.8-4.0mm	0.8-4.0mm
Maximum thickness	8.0mm	8.0mm	8.0mm	8.0mm	8.0mm
Number of rolls	19	19	19	19	19
Shortest part	90	90	90	90	90
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional	<ul> <li>Four and six-fold rollers and number of rollers</li> <li>Inlet and outflow assembly line</li> <li>Loading and unloading manipulator</li> <li>The support roller is adjusted by motor independently</li> <li>Automatic detection platform</li> </ul>				
Larger special size faster speed can be sustemized assorting to domand					

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.





#### Comparison chart before and after leveling

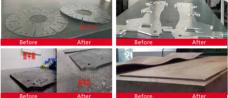


Larger, special size, faster speed can be customized according to demand

## MASTERY (Deluxe style) Intelligent CNC Leveling machine series



Comparison chart before and after leveling



#### MHTM60 Series

Thickness: 1.0-6.0mm

Model	MHTM60-400-19	MHTM60-600-19	MHTM60-1000-19	MHTM60-1300-19	MHTM60-1650-19
Width	0-400mm	0-600mm	0-1000mm	0-1300mm	0-1650mm
Roll diameter	60	60	60	60	60
Rated thickness	1.0-6.0mm	1.0-6.0mm	1.0-6.0mm	1.0-6.0mm	1.0-6.0mm
Maximum thickness	12.0mm	12.0mm	12.0mm	12.0mm	12.0mm
Number of rolls	19	19	19	19	19
Shortest part	100	100	100	100	100
Leveling speed	0-10m/min 0-10m/min 0-10m/min				0-10m/min
Optional          • Four and six-fold rollers and number of rollers         • Inlet and outflow assembly line         • The support roller is adjusted by motor independently         • Automatic detection platform         • Automatic detection         • Automatic detection					
Larger, special size, faster speed can be customized according to demand					

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



### • MHTM80 Series

Thickness: 2.0-8.0mm

Model	MHTM80-400-19	MHTM80-600-19	MHTM80-800-19	MHTM80-1400-19	MHTM80-1650-19
Width	0-400mm	0-600mm	0-800mm	0-1400mm	0-1650mm
Roll diameter	80	80	80	80	80
Rated thickness	2.0-8.0mm	2.0-8.0mm	2.0-8.0mm	2.0-8.0mm	2.0-8.0mm
Maximum thickness	16.0mm	16.0mm	16.0mm	16.0mm	16.0mm
Number of rolls	19	19	19	19	19
Shortest part	130	130	130	130	130
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional					Loading and unloading robot Automatic detection platform
Larger special size faster speed can be customized according to demand					

#### Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.

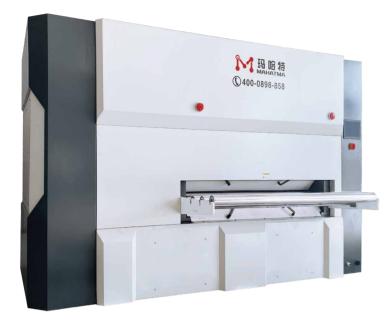




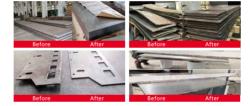
#### Comparison chart before and after leveling



### MASTERY (Deluxe style) Intelligent CNC Leveling machine series



Comparison chart before and after leveling

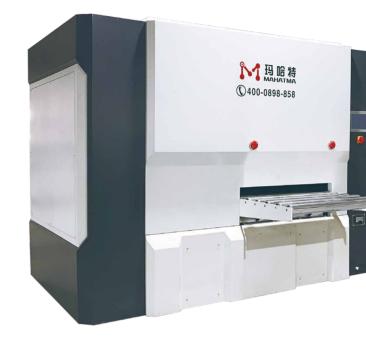


#### • MHTM100 Series

Thickness: 3.0-12.0mm

Model	MHTM100-800-19	MHTM100-1000-19	MHTM100-1400-19	MHTM100-1600-19
Width	0-800mm	0-1000mm	0-1400mm	0-1600mm
Roll diameter	100	100	100	100
Rated thickness	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm	3.0-12.0mm
Maximum thickness	20.0mm	20.0mm	20.0mm	20.0mm
Number of rolls	19	19	19	19
Shortest part	160	160	160	160
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional	<ul> <li>Four and six-fold rollers and n</li> <li>Inlet and outflow assembly lin</li> </ul>	<ul><li>Loading and unloading robot</li><li>Automatic detection platform</li></ul>		
Larger, special size, faster speed can be customized according to demand				

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



### • MHTM120 Series

Thickness: 4.0-16.0mm

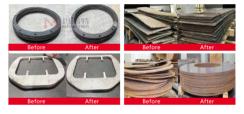
Model	MHTM120-400-19	MHTM120-800-19	MHTM120-1000-19	MHTM120-1300-19	MHTM120-1600-19
Width	0-400mm	0-800mm	0-1000mm	0-1300mm	0-1600mm
Roll diameter	120	120	120	120	120
Rated thickness	4.0-16.0mm	4.0-16.0mm	4.0-16.0mm	4.0-16.0mm	4.0-16.0mm
Maximum thickness	25.0mm	25.0mm	25.0mm	25.0mm	25.0mm
Number of rolls	19	19	19	19	19
Shortest part	190	190	190	190	190
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional					Loading and unloading robot Automatic detection platform
Larger special size faster speed can be customized according to demand					

#### Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.







### MASTERY (Deluxe style) Intelligent CNC Leveling machine series



#### Comparison chart before and after leveling



#### MHTM150 Series

Thickness: 6.0-25.0mm

Model	MHTM150-450	MHTM150-800	MHTM150-1300	MHTM150-1600	MHTM150-2100
Width	0-450mm	0-800mm	0-1300mm	0-1600mm	0-2100mm
Roll diameter	150	150	150	150	150
Rated thickness	6.0-25.0mm	6.0-25.0mm	6.0-25.0mm	6.0-25.0mm	6.0-25.0mm
Maximum thickness	30.0mm	30.0mm	30.0mm	30.0mm	30.0mm
Number of rolls	15/19	15/19	15/19	15/19	15/19
Shortest part	240	240	240	240	240
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional          • Four and six-fold rollers and number of rollers         • Loading and unloading manipulator         • Loading and unloading manipulator         • The support roller is adjusted by motor independently         • Automatic detection platform         • Automatic detection platform         • Automatic detection platform         • Coading and unloading manipulator         • Detection platform         • Coading and unloading manipulator         • Automatic detection platform         • Automatic detection platform         • Detection         • Detection					
Larger, special size, faster speed can be customized according to demand					

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### MHTM200 Series

Thickness: 8.0-30.0mm

Model	MHTM200-1000	MHTM200-1300	MHTM200-	
Width	0-1000mm	0-1300mm	0-1650n	
Roll diameter	200	200	200	
Rated thickness	8.0-30.0mm	8.0-30.0mm	8.0-30.0	
Maximum thickness	40.0mm	40.0mm	40.0m	
Number of rolls	19	19	19	
Shortest part	310	310	310	
Leveling speed	0-10m/min	0-10m/min	0-10m/ı	
Optional	<ul> <li>Four and six-fold rollers and number of rollers</li> <li>Inlet and outflow assembly line</li> </ul>			

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.





#### Comparison chart before and after leveling





Larger, special size, faster speed can be customized according to demand

This series of levelers are not as good as high-end levelers in terms of performance and automation, but their simple design, easy operation and maintenance make them an ideal choice for many small processing companies and low-cost production lines. It aims to use the "Bauschinger effect" of the material to repeatedly bend the plate to eliminate the internal stress of the material, level the flatness of the material, and achieve the flatness accuracy required by the process! Compared with highly automated straightening machines, this leveling machine may require more manual operations, such as manually adjusting the roll gap. It is more suitable for small batch production or low-frequency processing needs. The cost is relatively low, and it is suitable for those with limited budgets. Or used in small processing sites that do not require high straightening accuracy.





### Equipment display





### Comparison before and after leveling





Compact design, smaller size, maximizes space utilization, suitable for working environments with

Low energy consumption operation helps enterprises achieve green energy saving and significant-

The equipment cost is low and suitable for occasions with limited budget or low leveling accuracy

It can improve the flatness of materials, reduce waste caused by material defects, and improve

Optimize the leveling process and adopt advanced repeated bending technology to save materi-

The structure of the equipment is relatively simple, maintenance and repair are usually easier, and

Low-cost investment, rapid return on investment, and low cost to meet general production needs;

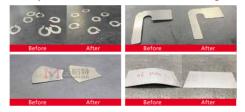
More suitable for single product leveling, precise operation, simple and efficient.







Comparison chart before and after leveling



### VSH12 Series

#### Thickness: 0.03-0.5mm

Model	VSH12-200-19A	VSH12-300-19A	VSH12-400-19A
Width	0-200mm	0-300mm	0-400mm
Roll diameter	12	12	12
Rated thickness	0.03-0.5mm	0.03-0.5mm	0.03-0.5mm
Maximum thickness	1.0mm	1.0mm	1.0mm
Number of rolls	19	19	19
Shortest part	20	20	20
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	<ul> <li>Loading and unloading robot</li> <li>Automatic detection platform</li> </ul>
Larger, special size, faster speed can be customized according to demand			

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### VSH15 Series

Thickness: 0.08-1.0mm

Model	VSH15-200-19A	VSH15-300-19A	VSH15-400-19A
Width	0-200mm	0-300mm	0-400mm
Roll diameter	15	15	15
Rated thickness	0.08-1.0mm	0.08-1.0mm	0.08-1.0mm
Maximum thickness	1.5mm	1.5mm	1.5mm
Number of rolls	19	19	19
Shortest part	30	30	30
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	Loading and unloading robot     Automatic detection platform
	Larger special size faster spe	ed can be customized according to c	lemand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.





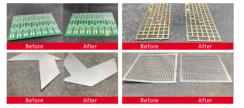
#### Comparison chart before and after leveling



be customized according to demand



Comparison chart before and after leveling



### VSH20 Series

#### Thickness: 0.2-1.5mm

Model	VSH20-400-19A	VSH20-600-19A		
Width	0-400mm	0-600mm		
Roll diameter	20	20		
Rated thickness	0.2-1.5mm	0.2-1.5mm		
Maximum thickness	2.0mm	2.0mm		
Number of rolls	19	19		
Shortest part	40	40		
Leveling speed	0-10m/min	0-10m/min		
Optional		Iloading manipulator     • Loading and unloading robot       sing lifting platform     • Automatic detection platform		
Larger, special size, faster speed can be customized according to demand				

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### VSH32 Series

Thickness: 0.5-2.0mm

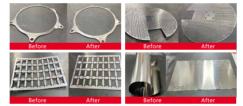
Model	VSH32-400-19A	VSH32-600-19A	VSH32-800-19A
Width	0-400mm	0-600mm	0-800mm
Roll diameter	32	32	32
Rated thickness	0.5-2.0mm	0.5-2.0mm	0.5-2.0mm
Maximum thickness	3.0mm	3.0mm	3.0mm
Number of rolls	19	19	19
Shortest part	60	60	60
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	<ul> <li>Loading and unloading robot</li> <li>Automatic detection platform</li> </ul>
	Larger, special size, faster spe	ed can be customized according to c	lemand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.





Comparison chart before and after leveling



### VSH42 Series

#### Thickness: 0.6-3.0mm

Model	VSH42-400-19A	VSH42-600-19A	VSH42-800-19A
Width	0-400mm	0-600mm	0-800mm
Roll diameter	42	42	42
Rated thickness	0.6-3.0mm	0.6-3.0mm	0.6-3.0mm
Maximum thickness	5.0mm	5.0mm	5.0mm
Number of rolls	19	19	19
Shortest part	70	70	70
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	<ul> <li>Loading and unloading robot</li> <li>Automatic detection platform</li> </ul>
Larger, special size, faster speed can be customized according to demand			

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



### VSH50 Series

Thickness: 0.8-3.5mm

Model	VSH50-400-19A	VSH50-800-19A	VSH50-1000-19A
Width	0-400mm	0-800mm	0-1000mm
Roll diameter	50	50	50
Rated thickness	0.8-3.5mm	0.8-3.5mm	0.8-3.5mm
Maximum thickness	6.0mm	6.0mm	6.0mm
Number of rolls	19	19	19
Shortest part	90	90	90
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	Loading and unloading robot     Automatic detection platform
	Larger special size faster spe	ed can be customized according to d	emand

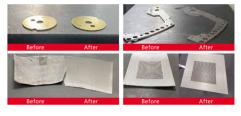
Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



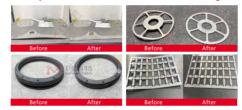


#### Comparison chart before and after leveling





Comparison chart before and after leveling



### VSH60 Series

#### Thickness: 1.0-6.0mm

Model	VSH60-400-15A	VSH60-600-15A	VSH60-800-15A
Width	0-400mm	0-600mm	0-800mm
Roll diameter	60	60	60
Rated thickness	1.0-6.0mm	1.0-6.0mm	1.0-6.0mm
Maximum thickness	10.0mm	10.0mm	10.0mm
Number of rolls	15	15	15
Shortest part	105	105	105
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	<ul> <li>Loading and unloading robot</li> <li>Automatic detection platform</li> </ul>
	Larger, special size, faster sp	eed can be customized according to	demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### VSH80 Series

Thickness: 2.0-8.0mm

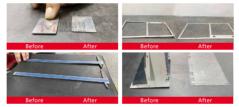
Model	VSH80-400-15A	VSH80-600-15A	VSH80-800-15A
Width	0-400mm	0-600mm	0-800mm
Roll diameter	80	80	80
Rated thickness	2.0-8.0mm	2.0-8.0mm	2.0-8.0mm
Maximum thickness	14.0mm	14.0mm	14.0mm
Number of rolls	15	15	15
Shortest part	130	130	130
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	<ul> <li>Loading and unloading robot</li> <li>Automatic detection platform</li> </ul>
	Larger, special size, faster spe	ed can be customized according to d	emand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.





Comparison chart before and after leveling



### VST42 Series

#### Thickness: 0.4-3.0mm

Model	VST42-200-19	VST42-400-19	VST42-600-19	VST42-800-19
Width	0-200mm	0-400mm	0-600mm	0-800mm
Roll diameter	42	42	42	42
Rated thickness	0.4-3.0mm	0.4-3.0mm	0.4-3.0mm	0.4-3.0mm
Maximum thickness	6.0mm	6.0mm	6.0mm	6.0mm
Number of rolls	19	19	19	19
Shortest part	70	70	70	70
Leveling speed	0-10m/min	0-10m/min	0-10m/min	0-10m/min
Optional	<ul> <li>Roller quick cleaning device</li> <li>Inlet and outflow assembly</li> </ul>			and unloading robot ic detection platform
	Larger, special size, f	aster speed can be custom	ized according to demand	

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



#### VST70 Series

Thickness: 1.0-6.0mm

Model	VST70-400-13	VST70-600-13	VST70-1300-13
Width	0-400mm	0-600mm	0-1300mm
Roll diameter	70	70	70
Rated thickness	1.0-6.0mm	1.0-6.0mm	1.0-6.0mm
Maximum thickness	10.0mm	10.0mm	10.0mm
Number of rolls	13	13	13
Shortest part	120	120	120
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	Loading and unloading robot     Automatic detection platform
	Larger special size faster spe	ed can be customized according to	demand

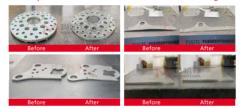
Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.





Comparison chart before and after leveling



### VST90 Series

#### Thickness: 2.0-8.0mm

Model	VST90-600-13	VST90-1000-13	VST90-1300-13
Width	0-600mm	0-1000mm	0-1300mm
Roll diameter	90	90	90
Rated thickness	2.0-8.0mm	2.0-8.0mm	2.0-8.0mm
Maximum thickness	14.0mm	14.0mm	14.0mm
Number of rolls	13	13	13
Shortest part	150	150	150
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	<ul> <li>Loading and unloading robot</li> <li>Automatic detection platform</li> </ul>
	Larger, special size, faster sp	eed can be customized according to	demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.



### VST120 Series

Thickness: 3.0-10.0mm

Model	VST120-600-13	VST120-1000-13	VST120-1400-13
Width	0-600mm	0-1000mm	0-1400mm
Roll diameter	120	120	120
Rated thickness	3.0-10.0mm	3.0-10.0mm	3.0-10.0mm
Maximum thickness	20.0mm	20.0mm	20.0mm
Number of rolls	13	13	13
Shortest part	195	195	195
Leveling speed	0-10m/min	0-10m/min	0-10m/min
Optional	<ul><li>Roller quick cleaning device</li><li>Inlet and outflow assembly line</li></ul>	<ul> <li>Loading and unloading manipulator</li> <li>Automatic stacking lifting platform</li> </ul>	<ul> <li>Loading and unloading robot</li> <li>Automatic detection platform</li> </ul>
	Larger special size faster spe	ed can be customized according to d	emand

#### Larger, special size, faster speed can be customized according to demand

\*Leveling performance is calculated based on material Q235/equipment yield strength 235 MPa.





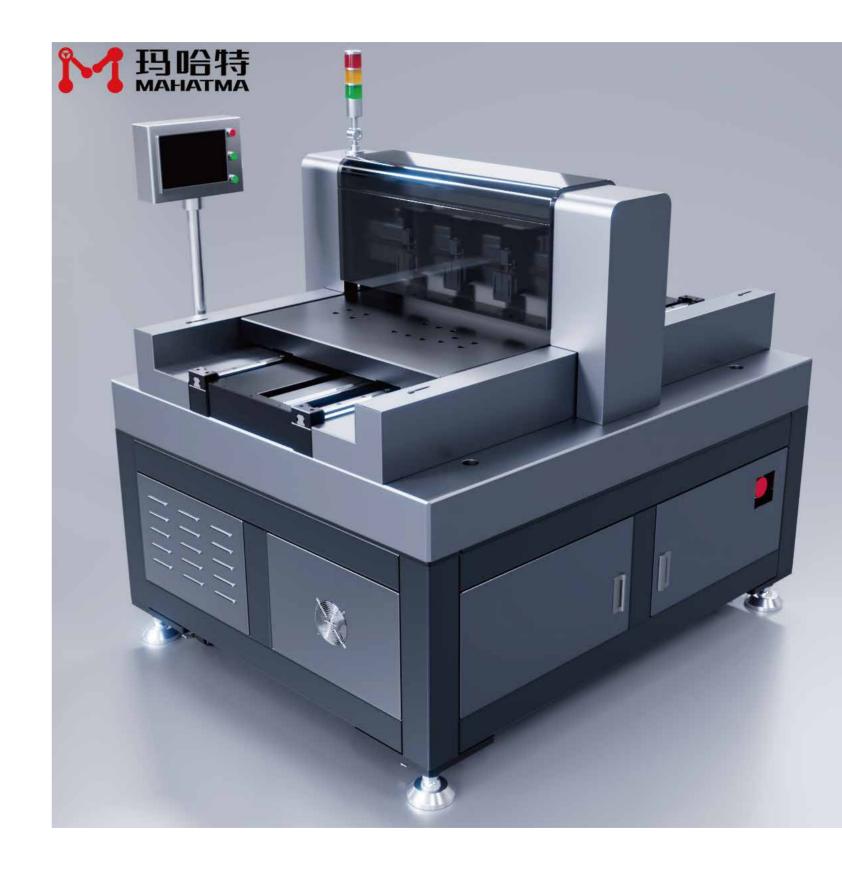
#### Comparison chart before and after leveling



### Automated Smart Factory

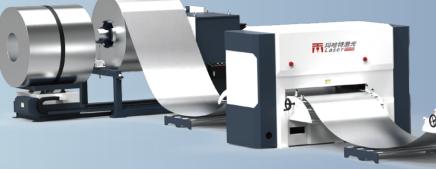
### Automatic flatness detector

- The automatic flatness testing equipment is a high-tech instrument used to test and evaluate the flatness of steel plate. Such equipment is commonly used in industries such as metalworking, steel production and quality control to ensure that steel plates meet specific manufacturing standards and customer requirements. Key features and components of automatic flatness testing equipment for steel plate.
- Sensor technology: automatic inspection equipment is usually equipped with a series of high-precision sensors, such as laser sensors, contact displacement sensors or non-contact optical sensors, used to measure small height difference of steel plate surface.
- Scanning system: to fully measure the flatness of a plate, the device may include a scanning system that covers the entire surface of the plate, sometimes by moving the plate or moving the sensor.
- Data acquisition and processing: the detection equipment usually includes a data acquisition unit, which can capture the data provided by the sensor and transmit it to the central processing unit. Here the data is analyzed and processed to calculate flatness and generate reports.
- Control Software: special software to control the detection process, provide user interface, display real-time data, and allow operators to set detection parameters, start scanning and view the results. Automation and integration capabilities: modern flatness testing equipment can be integrated into the production line and work with other machines and systems automatically to improve efficiency and reduce human error.
- Reports and documentation: the facility can generate detailed inspection reports that can be used for quality assurance, customer communication, or further data analysis.
- Standard and specification compliance: automatic testing equipment is usually designed to comply with international and industry standards to ensure that steel plate products meet stringent quality requirements.
- Maintenance and calibration: these devices require regular maintenance and calibration to ensure continuous accuracy.
- The use of automatic flatness testing equipment can significantly improve the efficiency and accuracy of product quality control, reduce reject rate, and help manufacturers optimize production processes. These devices are an integral part of modern industrial manufacturing, especially in applications requiring high flatness, such as automotive, aerospace, and precision engineering industries.





### Automated **Smart Factory**



PC Automatic feeding

5 Improve efficiency





## Laser coil blanking line

Precision

leveling

4

Efficiency

cutting

Ň

Reduce

waste

The laser coil blanking line uses automatic uncoiling machine and Leveler, which can flatten the material continuously and send it to the following process. The production line not only enables efficient, high-speed winding operations in uncoiling, but also high-precision laser cutters that can quickly and accurately cut steel plates according to digital design documents, with the use of robotic hands, or automatic conveying system to achieve the automatic material collection and feeding, reduce manual operation, improve production efficiency. The multi-function makes it suitable for different materials and various application scenarios, and has many advantages such as optimizing material utilization rate, energy saving, environmental protection, real-time monitoring and so on. It is characterized by efficient production, precision uncoiling, fine cutting, multi-function, automatic control and energy saving, to provide reliable solutions for enterprises to improve production efficiency, reduce costs, improve product quality and control safety risks.

TЗ

Model	Thickness	Width	Speed	Accurate positioning	Material weights	Acceleration	Leveling style	Laser power	Laser cutting surface
T2	1800	3.0mm	35m/min	±0.02mm	5T-20T	1.5g	CNC	2000w-20000w	3015/4015/ 6015/6020/12020
T2S	2800	10.0mm	35m/min	±0.02mm	5T-30T	1.5g	CNC/Hydraulic	2000w-20000w	3015/4015/ 6015/6020/8020
T3	1800	3.0mm	35m/min	±0.02mm	5T-20T	1.5g	CNC	2000w-20000w	3015/4015/ 6015/6020/12020
T3S	2800	10.0mm	35m/min	±0.02mm	5T-20T	1.5g	CNC/Hydraulic	2000w-20000w	3015/4015/ 6015/6020/12020
T5S	2800	10.0mm	35m/min	±0.02mm	5T-30T	1.5g	CNC/Hydraulic	2000w-20000w	6015/6020/8020
T6S	2800	10.0mm	35m/min	±0.02mm	5T-20T	1.5g	CNC/Hydraulic	2000w-20000w	6015/6020/ 8020/12020
Τ7	2800	12.0mm	35m/min	±0.02mm	5T-20T	1.5g	CNC/Hydraulic	2000w-20000w	6020/8020/ 10020/12020
So	ome paramet	ers are for re	ference only,	the actual pa	arameter info	ormation is s	ubject to cust	omization on o	demand

#### **Optional loading**

四哈特激光 Laser

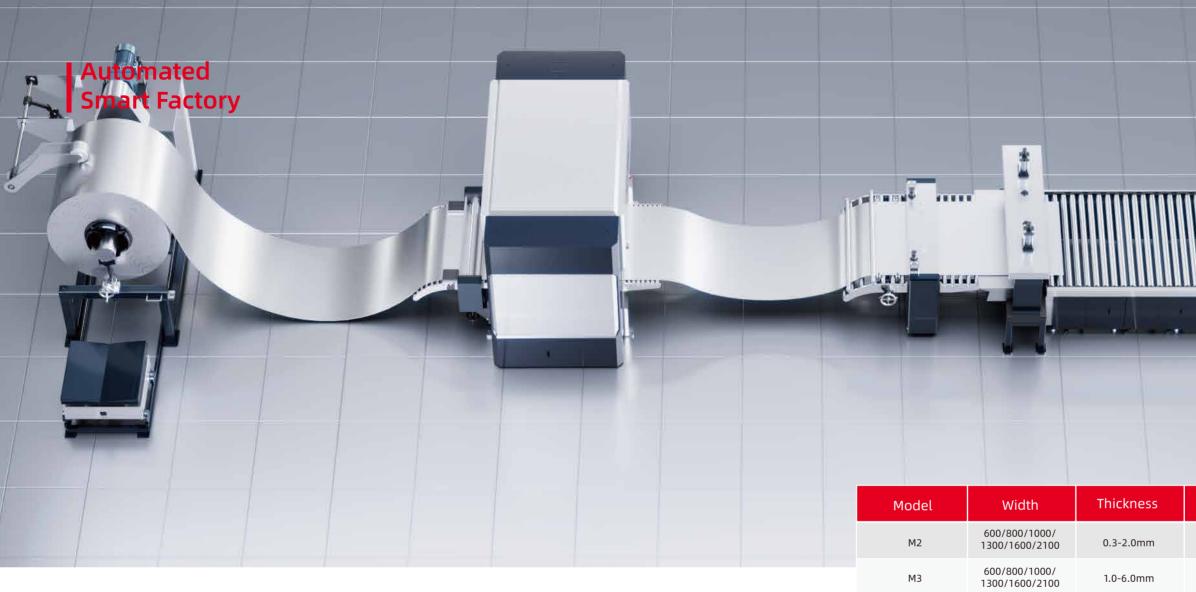


#### 



#### Palletizing machine





### **•** High-precision automatic uncoiling, leveling and shearing line

High-precision automatic uncoiling and leveling shear line is an advanced metal processing equipment, designed for efficient and accurate treatment of various metal materials. The equipment integrates automatic unwinding, leveling and shearing, which can ensure the flatness and dimensional accuracy of metal materials in the process of machining. By using high-end control system and precision mechanical structure, high-precision automatic uncoiling leveling shear line can realize continuous and automatic production, greatly improve production efficiency and processing quality. Ensure that the cut product has a higher quality standard. In addition, the device also has an intelligent operation interface, through accurate data analysis and real-time monitoring, to achieve fine management of the production process, thereby reducing production costs and improving production efficiency, bring greater market competitiveness for enterprises. In addition, the equipment is widely used, not only for different types and specifications of metal materials, but also to meet the automotive, home appliances, construction and other industries of high standards.

Some parameters are for reference only, the actual parameter information is subject to customization on demand

2.0-8.0mm

#### **Optional loading**

M4



600/800/1000/

1300/1600/2100

	HATMA	
eeding blank	e Cutting	
Flatness	Speed	
0.1-0.3mm	0-10m (Can Be Accelerated)	
0.1-0.3mm	0-10m (Can Be Accelerated)	
0.1-0.3mm	0-10m (Can Be Accelerated)	
	Autom bading Precision leveling Cost Flatness 0.1-0.3mm 0.1-0.3mm	Decision     Decision     Example     Cutting       Drecision     Save costs     Reduce waste       Flatness     Speed       0.1-0.3mm     (Can Be Accelerated)       0.1-0.3mm     0-10m (Can Be Accelerated)       0.1-0.3mm     0-10m (Can Be Accelerated)

#### Palletizing machine





#### Automatic detection line

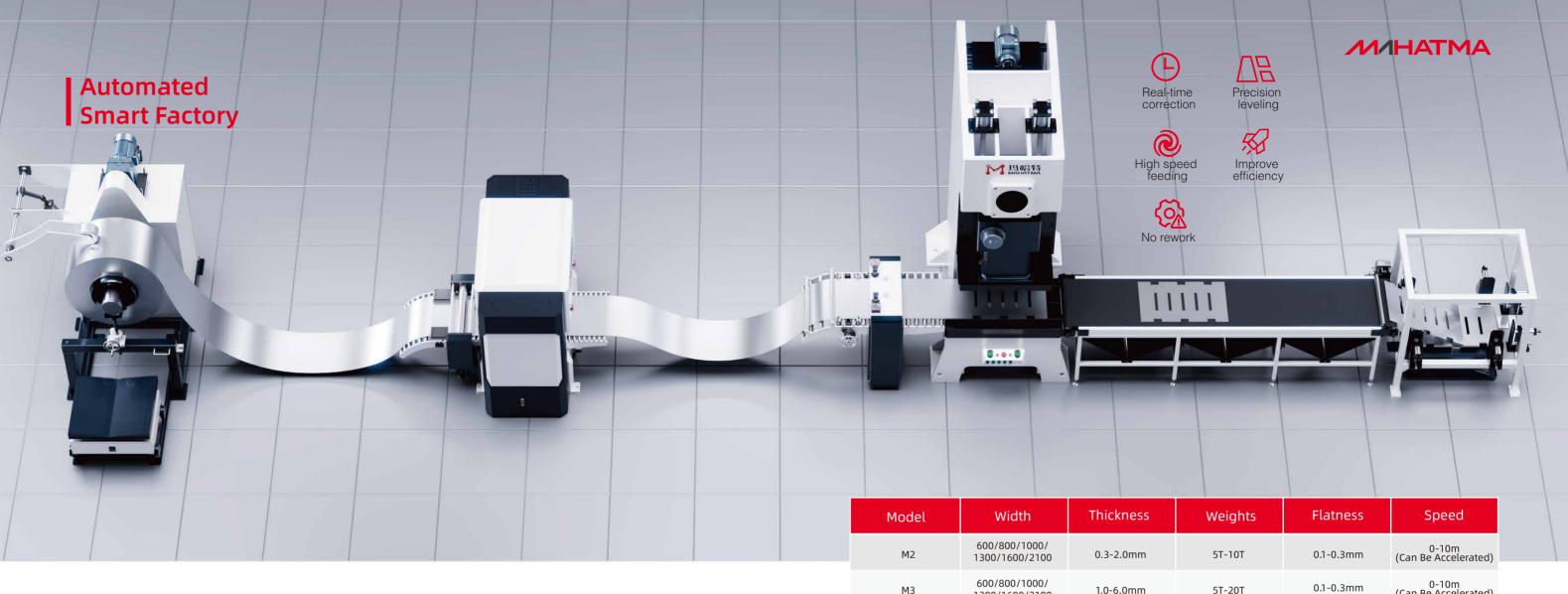
The core of the automatic production line is to realize the on-line detection of high precision levelling and flatness of steel plate, and to judge the qualified and unqualified products (NG/OK) automatically according to the set tolerance standard of plate warping, and to carry out automatic classification. The whole production line includes joint robot automatic loading and unloading, automatic closing product size detection, automatic leveling, automatic plane accuracy detection, automatic determination Ng/OK, automatic classification, automatic blanking, automatic palletizing and so on, the automatic production from raw materials to finished products is realized.

First of all, the automatic feeding link of the joint robot, through the highly flexible manipulator to achieve the accurate grasping and positioning of the steel plate. Subsequently, the automatic size detection link of the steel plate length, width, thickness and other basic dimensions of accurate measurement for the follow-up leveling and flatness detection to provide basic data. In the auto-leveling process, the pressure and speed of the leveler are adjusted by the high-precision

control system according to the data of the previous dimension test. Then, in the plane precision automatic detection link, the use of high-precision laser scanner and other detection equipment, real-time on-line monitoring of the flatness and warpage of steel plate to ensure that each plate meets the requirements of high standards of flatness. Once detected, the system will automatically determine as NG (nonconforming product), and through the automatic classification system will be sorted out, to avoid the next production link. For OK (qualified product) steel plate, then continue to carry out automatic blanking, automatic palletizing and other follow-up processing, the final realization of automatic smart factory of finished products.

#### **Optional loading**





### High-precision automatic uncoiling, leveling and stamping line

The high-precision automatic uncoiling, leveling and stamping line is a high-end equipment which integrates modern control technology and precision machining. Through automatic control system, the process of uncoiling, straightening and feeding can be adjusted accurately to ensure the smoothness and accuracy of the material in the stamping process, and greatly improve the production efficiency and product quality. The high-precision auto-uncoiling and levelling stamping line adopts advanced sensors and control algorithms, which can monitor and adjust the production process in real time, adapt to different thickness and material of metal sheet, and meet the changing market demand. In addition, the equipment also has easy to operate, low maintenance costs, low energy consumption and other features for the manufacturing industry has brought a revolutionary increase in productivity. Can significantly reduce human costs, enhance market competitiveness. At the same time, high-precision leveling control system can ensure the precision of each step, thus ensuring the stability and consistency of the final product quality.

Some parameters are for reference only, the actual parameter information is subject to customization on demand

2.0-8.0mm

#### **Optional loading**

M4



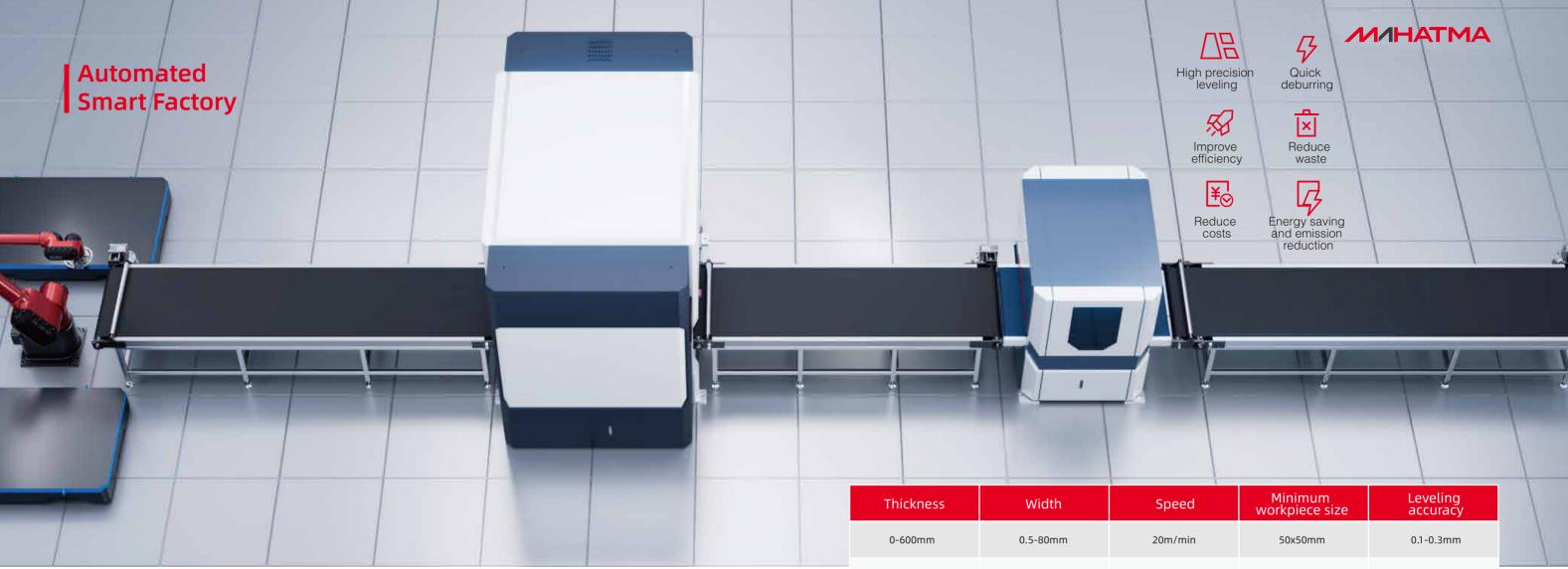
1300/1600/2100 600/800/1000/

1300/1600/2100

weights	T tatiless	Speed
5T-10T	0.1-0.3mm	0-10m (Can Be Accelerated)
5T-20T	0.1-0.3mm	0-10m (Can Be Accelerated)
10T-30T	0.1-0.3mm	0-10m (Can Be Accelerated)

#### Palletizing machine





#### Leveling and deburring automated production line

The production line is a set of deburring, leveling and production automation in one of the automatic production line. By integrating deburring machines, levelers and automatic control systems to remove burrs after cutting or stamping of metal materials or parts, it can remove all kinds of burrs and straighten the material surface quickly and efficiently, and greatly improve the downstream process. It is an essential production line equipment in modern sheet metal processing.

The Burr on the surface of the metal coil can be removed quickly and accurately, and the speed and efficiency of burr removal can be improved. It can realize continuous and efficient production, reduce labor cost, reduce the risk of human error, avoid waste caused by inaccurate operation, and improve the utilization of raw materials.

#### **Optional loading**

0-800mm

0-1000mm

0-1300mm



0.5-80mm

0.5-80mm

0.5-80mm

E .	1	1
Speed	Minimum workpiece size	Leveling accuracy
20m/min	50x50mm	0.1-0.3mm

Some parameters are for reference only, the actual parameter information is subject to customization on demand

#### Palletizing machine





### High-precision uncoiling, leveling, feeding, shearing, bending and welding

The fully automatic high-precision uncoiling, leveling, feeding, shearing, bending and welding line adopts the most advanced automation technology, which can realize the rapid uncoiling, precise leveling, automatic feeding, efficient shearing and precision bending of materials, and finally complete the production of high-quality products through robot welding technology. The design of the whole production line fully considers the convenience of user operation, ensures the production process with high efficiency and high stability, and greatly reduces the labor cost and time cost. We offer the perfect solution for all kinds of manufacturing needs, whether it is automotive manufacturing, electronics, household appliances or precision machinery manufacturing. Another significant advantage of this one-stop solution is its flexibility and scalability. Due to the modular design, companies can flexibly select and combine different functional modules according to their production needs and scale, such as adding specific functions such as deburring, inspection, welding or bending. This flexibility makes the fully automatic high-precision uncoiling, leveling, feeding, shearing and bending robot welding line

not only suitable for large-scale production, but also for small batches and diversified customized production needs. Contributes to the safety of the production process. Traditional production lines often involve a lot of manual operation, and there are certain safety risks. The fully automated production line minimizes direct human involvement, avoids workplace accidents through precise machine operation, and provides a safer working environment for employees. This highly automated production line not only reduces the need for manual operation and labor costs, but also greatly improves production efficiency and processing accuracy, and ensures the consistency and reliability of product quality. It provides strong support for the development of the manufacturing industry! Not only can you optimize your production process, but also can bring you greater market competitiveness, your production efficiency will be a qualitative leap, product quality will also be greatly improved. With the continuous progress of technology and the continuous expansion of applications, its role in the future manufacturing industry will become more and more important, and it deserves extensive attention and active investment inside and outside the industry.

#### **Optional loading**





#### High quality welding improvement solutions

This solution is suitable for customers in metal processing, automobile and machinery manufacturing and other industries that have high requirements for welding quality and efficiency.

#### Improve welding quality and standards and consolidate product competitiveness

Using leveled materials and parts for welding can improve product quality, stability and appearance accuracy. Therefore, our welding quality improvement program is particularly Suitable for customers in the



automotive manufacturing and machinery manufacturing industries to help them improve welding efficiency, reduce preliminary preparation work, reduce temperature changes and material deformation to obtain better Good welding results. Whether it's a large manufacturing company or a small workshop, we can Provide customized solutions based on customer needs to meet their specific industry Require.

#### High performance product assembly solutions

This solution is suitable for customers in industries such as mechanical parts and electronic parts who want to improve the stability of their products and precise assembly operations.

### • High-end CNC leveling capability, 0.1mm accuracy guarantee

By using advanced CNC leveling equipment and technology and automated control systems, combined with MAHATMA's patented manufacturing process, we can help customers achieve high-precision leveling requirements for plates or parts of specific products. By monitoring material flatness in real time and applying automated control systems, high-precision leveling can be achieved. This ensures that materials and parts are straight and flat to the required accuracy standards.

### Improve assembly speed and accuracy

Because the flattened parts are dimensionally stable, parts can be assembled more quickly and accurately during assembly. This increases assembly speed, reduces adjustment and calibration time, and increases production efficiency. At the same time, the precision of assembly will be improved, ensuring a higher optical and technical quality of the product.



### **Customer demand solutions** and cases

#### High-precision laser cutting solutions

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sheet metal processing, laser OEM, building panels and other related industries that cause thermal deformation of materials after the laser cutting/CNC processing process.

### Eliminate the impact of material deformation and reduce material rework





#### Efficient and rapid delivery solutions

This solution is suitable for customers in various industries who want to shorten product delivery cycles, respond quickly to market demands, and meet urgent project requirements.

### Shorten delivery cycle and meet urgent needs

We provide fast delivery solutions designed to help customers shorten product delivery cycles and meet pressing market needs. By adopting the equipment configuration and efficient process related to smart super-correction technology, and relying on the automated production line of MAHAT-MA Intelligent Manufacturing Center, we can quickly respond to customer needs, speed up equipment production, and enable products to be delivered to customers as early as possible.

### Optimize processes and resource allocation

We have automated production processes and industrial chain resource allocation capabilities. In order to achieve rapid delivery to customers, by analyzing bottlenecks in the production process and optimizing production plans, we can rationally allocate resources, improve production efficiency, advance projects in an orderly manner, and deliver products Deliver to customers as quickly as possible.

### Solutions And Cases For **Customer Needs**



#### Foxconn

#### Customer Needs

1.For the production needs of ipone15, the traditional stainless steel fixture is changed to titanium alloy. Due to the high strength and strong memory of titanium alloy, the product deforms greatly during the production process.

2.If the production requirements are not met, the customer's design reserves a flatness deviation of 0.05mm.

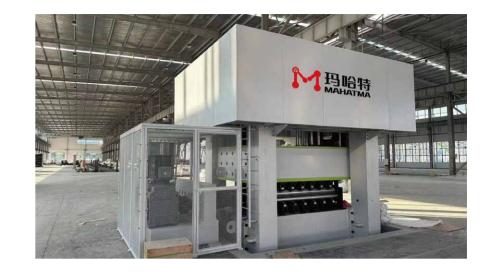
#### project outcome

1. Solved the problem of out-of-tolerance flatness and increased the pass rate to 99.9%;

2. Provide Chinese wisdom for the mass production of iPhone 15;

3. It solves the problem of titanium alloy leveling and subverts the problems of traditional annealing and pressure leveling, such as low leveling efficiency, long time and high cost.





## Customer Needs

Zoomlion

1. High-precision leveling process for wide and thick plates is required; 2. Cooperate with other equipment in the workshop to complete automated production tasks.

#### project outcome

1. Achieve one-stop processing method: solve the difficulty of flattening and processing of wide-thickness plates, and cooperate with automated production to realize one-stop processing method;

2. Improved product quality: Ahead of its peers, Mahat and Zoomlion are committed to building a national brand.





### Solutions and cases for customer needs

#### Yangli Group

#### Customer Needs

1. The blank sheet is leveled, and the flatness does not meet the requirements, which makes subsequent production and processing time-consuming and laborious, and the quality does not meet the standard;

#### project outcome

1. Leveling from blank sheet to high-precision flatness. Improve the efficiency and quality of subsequent production and processing.

2. Break through industry problems. Be a benchmark in the industry.

#### Avic (Aviation Industry of China)

#### Customer Needs

1. Solve the problem of localized flatness of C919 domestic large aircraft workpieces; 2. The heat-treated skin of a very large model in the military industry is integrally formed, and its accuracy surpasses that of Europe and the United States.

#### project outcome

- 1. Solved the problem of localized flatness;
- 2. Improved product quality: laid a foundation for the localization of China's aviation-related production equipment.







### Solutions And Cases For Customer Needs

#### Jinchuan Group

#### Customer Needs

1. The main production tools of electrolytic copper: stainless steel electrolytic plates are reused;

2. Ensure the thickness consistency of electrolytic copper foil.

#### ZTE

#### Customer Needs

It mainly produces data cabinets and has been pursuing high-end sheet metal manufacturing. The cabinets and sheet metal stamping and laser heat deformation produced by it have poor flatness and cabinet bodies that are prone to deformation and cannot meet market demand!

#### project outcome

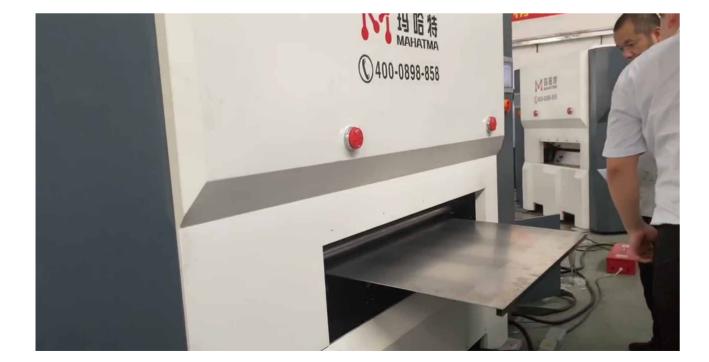
1. Stainless steel electrolytic plates can be reused more than ten times;

2. In recent years, my country's electrolytic copper foil industry has made significant progress in reducing costs and increasing efficiency, injecting new impetus into the development of the industry.

#### project outcome

1. Comprehensively solve sheet metal quality problems and improve product quality and aesthetics!

2. After leveling, the stress of the punched plate is removed, and there is no rebound after bending, and the rebound rate does not exceed 2mm!







### Solutions and cases for customer needs

#### Zhucheng Group

#### Customer Needs

1. Unmanned production: fully automated production line, directly formed from coiled raw materials through several processes; 2. High-precision flatness requirements: solve the problem of unevenness in traditional processing methods.

#### project outcome

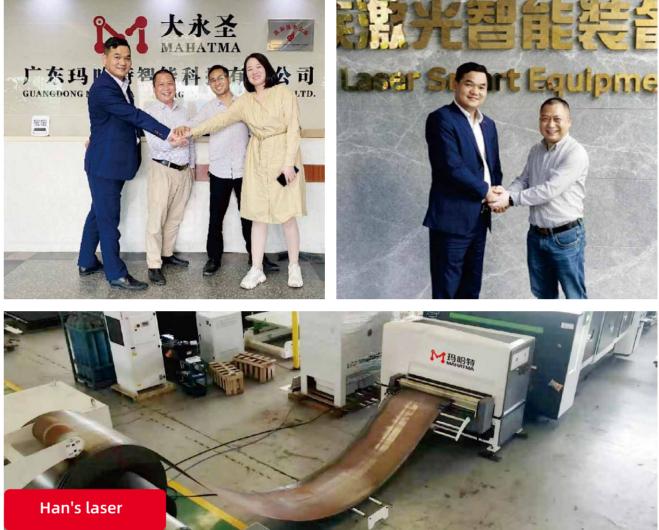
1. Production efficiency has been greatly improved: the original single-machine equipment has been upgraded to a complete set of automated equipment(high-precision leveling and feeding line equipped with Baidi laser cutting machine), which has improved production efficiency;

2.Quality industry benchmark level:Products processed through automated production lines have high precision and high degree of standardization;

3.Strong product diversity: It can produce customers' various material sizes at will, and has been recognized by many end customers.







#### Customer Needs

1. Product high precision feeding and leveling; 2. Together with its laser cutting machine, it forms a complete production line.

#### project outcome

1.Improve product promotion:Exported to India, product quality has been recognized by end customers and promoted the promotion of new products in the foreign trade market. 2.Realize automated production of products:We jointly developed the connection with Han's Songgu throughout the entire process, and finally realized the automated production process of the product.



## Industry Applications



aerospace



Transportation



Construction industry



5G communication



Medical technology industry



Electric power



Chassis cabinet



Ceiling curtain wall





Stored energy



Photovoltaic industry



Heavy manufacturing



Super flat aluminum plate industry



Environmental protection industry



Metal new material industry



High strength steel plate industry



Laser cutting



Textile machinery



motorcycle parts



Metal working







Lithium battery industry



Saw blade industry





Machining automation industry



Precision fixture

### Global Partner

 宁德时代

TESLA

FOXCONN

富士康

HOFO

昊 方

We have also signed strategic partnerships with domestic leading enterprises such as Han's laser and HGTECH. And with BYD, DJI, Zoomlion, Huawei, State Grid Co., LTD., Foxconn, China First Automobile Group Co., LTD., China North Industries Group Co., LTD., Aluminum Corporation of China, Jiangxi Copper Group Co., LTD., China Electronics Technology Group Co., LTD., Midea Group Co., LTD., Jinchuan Group Co., LTD., Ningde Times New Energy Technology Co., LTD., Jiangsu Shagang Group Co., LTD., Zijin Mining Group Co., LTD., China National Nuclear Corporation Co., LTD., Shanghai Electric Holding Group Co., LTD., ZTE Corp., Sany Heavy Industry Co., LTD., Liuzhou Iron and Steel Co., LTD., Anhui Construction Engineering Group Co., LTD., Aviation Industry Corporation of China The top 00 large group has formed a long-term and stable cooperative relationship, providing customers with high-quality domestic cutting-edge products, and promoting the long-term and stable development of domestic intelligent manufacturing industry upgrading.

CASC

山国航天

●中国科学院

KDL科达利

◎ 强瑞

Panasonic

松下电器

HUAWEI

() 清華大学

SHIMANO

Sugon

ZOOMLION 中联重科



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JINCHUAN金川

























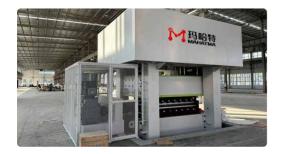
### Customer Application Scenario













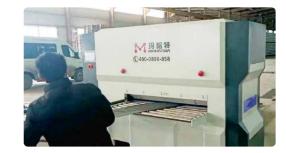






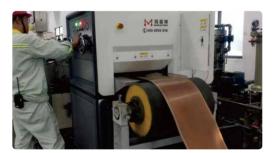


































### Looking Forward To The Future

Start the international journey and lead the intelligent super leveling Carrying the mission of the times and creating a national brand

