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Hangzhou Xiangsheng Abrasive Machine Manufacturing Co., Ltd (known as Jonsen Sander) was founded and established in the beautiful city of Hangzhou, Zhejiang, China in year 1993 by Mr. Xiangsheng (Jonsen) Chen. Jonsen Sander started out as a small abrasive belt production workshop. While fully immersing himself into the business, Mr. Xiangsheng (Jonsen) Chen soon realized the market's lack of wide abrasive belt machine supplier at the time. Back in the day, almost all of the machines were imported overseas and extremely expensive. People could rarely afford them. Therefore in year 1997, Jonsen Sander expanded its business scope and shifted the business focus into machine manufacturing.

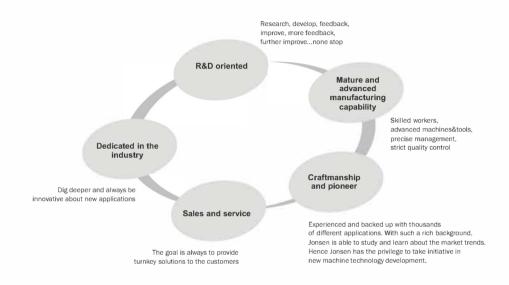
Jonsen Sander has been fully committed to the industry of metal surface treatment equipment ever since. The applications include but not limited to surface finishing, deburring, edge rounding, de-slagging, precise grinding, and stock removal. Jonsen Sander is always passionate in innovations. The end goal has never changed since day one: making the machines simple, robust, efficient, and easy hand-on. Hence Jonsen Sander is very heavily oriented in R&D. It has obtained over 30 invention patents, and in total over 100 patents.

With such rich background and accumulation of experience over the years, Jonsen Sander has gained a vast amount of professional knowledge and practical experience in dealing with all kinds of different applications. In year 2015, Jonsen Sander was nominated and eventually became an honorable founding member, and standard making unit of Chinese National Metal Surface Treatment Equipment Association. Over 20 industrial standards were drawn up and published by Jonsen Sander.

Jonsen Sander's machines are on active services across industries all over the world: metal fabrications, constructional machineries, farming machineries, national defense, aerospace, rail transit, medical instruments, automobiles, kitchenware, mining equipment, rare special metal mills, and etc. Over the years, we have provided over 10,000 industrial solutions to our customers, and there are over 300 different machine models we have designed and manufactured.

Our slogan: Professionalism We Do!

### Jonsen's CORE competitiveness





### **SGP1300**

### DEBURRING, EDGE ROUNDING, AND SURFACE FINISHING MACHINE FOR LASER CUTTING PARTS

### APPLICATIONS

Deburring, edge rounding, and surface finishing of parts coming off laser cutting/stamping/fine blanking/punching/shearing/waterjet cutting machines with sharp edges and minor-moderate burrs.

SGP1300 is equipped with two work stations. First the wide abrasive belt head is for surface sanding, vertical burr sand off, as well as surface finishing (No.4). The planetary abrasive barrel station is for further deburring and edge rounding. The overall operation is safe, light labour intensity, and minimum metal dust exposure to the operators. Full working width vacuum conveyor also grants the capability of processing small work pieces. To summarize, the machine is flexible, robust, easy hands-on, clean, safe, and great performance.







TECHNICAL DATASHEET	
Maximum working width: 1280mm	Consumables: Wide abrasive belt, abrasive barrel
Working thickness range: 0-50mm	Quantity of abrasive barrels per set: 8
Conveyor speed: 1.5-5m/min	Weight: 5000KGS

### HIGHLIGHTS

- Heavily constructed machine main frame: welded, sand blasted, and powder coated
- First work station wide abrasive belt head is used to sand dowryoff larger burrs. It is also capable of surface finishing such as No.4 finishing. Servo lifting is equipped to ensure precise height (thickness) adjustment
- Planetary abrasive barrel station: total of eight abrasive barrels to cover the whole working width. Each two adjacent barrels rotate in opposite direction to ensure consistent and even touch/pressure to all edges, corners, and holes
- Full working width vacuum conveyor allows processing of small work pieces, 60x60mm and up (solid surface area)
- Essential rollers are properly balanced, high rotational speed rated bearings are equipped
- Due to the working nature of the planetary abrasive barrel station, it targets mostly on edges, corners, and holes.
   There is minimum touch applied to the "flat surface".
   Therefore, sheet with vinyl film can be processed (using planetary abrasive barrel station only)
- Capable of processing minor profiled parts (depend on the shape, form height, and sizes. Using planetary abrasive barrel station only)
- Long life span of the consumables. Less replacement needed.
- · Easy hands-on, straightforward operation, LED light built-in
- User friendly touch screen interface

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### GOOD FIT MATERIALS

- \* Steel, stainless steel, aluminum, copper, various alloys and etc.
- \* Parts with vinyl films.
- \* Parts that require heavily rounded edges (radius) before coating process.











### MORE MACHINE MODELS AVAILABLE (MODULAR DESIGN)

- SP1300 with only planetary abrasive barrel station is a good fit for processing softer metals such as copper and aluminum, as well as parts with decent cutting quality with minor burrs
- SGGP1300 with two sets of wide abrasive belt heads and planetary abrasive barrel station is a good fit
  for processing parts with heavier burrs, or high hardness metal alloy materials
- SPG1300 with planetary abrasive barrel station on the front and wide abrasive belt head on the back is for reproducing the straight line surface finishing after deburring and edge rounding process
- $\bullet \, \mathsf{SGPG1300} \, \mathsf{with} \, \, \mathsf{wide} \, \mathsf{abrasive} \, \mathsf{belt} \, \mathsf{head} \, + \mathsf{planetary} \, \mathsf{abrasive} \, \mathsf{barrel} \, \mathsf{station} \, + \, \mathsf{wide} \, \mathsf{abrasive} \, \mathsf{belt} \, \mathsf{head} \, \\$
- SGPB1300 with wide abrasive belt head + planetary abrasive barrel station + polishing barrel station
- Up to 1600mm extra wide working width machine





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### **SG1030-NG+JS**

### COST EFFECTIVE DEBURRING, DE-SLAGGING, ANO SURFACE SANDING MACHINE FOR LASER CUTTING PARTS

### APPLICATIONS

The machine has a special work station configuration of one narrow abrasive belt head and one wide abrasive belt head. The two work station combination is to efficiently clean the parts coming off laser tables with molten slags, piercing slags, sharp edges. The narrow abrasive belt is mainly focused on the edges and contours only, with minimum touch/pressure applied to the "surface". With such unique characteristic, the narrow abrasive belt will have a long lifespan. The wide abrasive belt then sweeps on the entire surface to further clean off leftover stubborn slags if there is any. It is also capable of general surface sanding and deep scratch removal.



### **OPTIONAL CONFIGURATIONS**

- Add a crossbelt station with de slagging blocks so it can handle parts with heavier slags that comes off plasma and flame cutting tables.
- · Add a crossbelt station with abrasive block to further round the edges of
- . Form a production line that receives parts directly off laser tables.





### HIGHLIGHTS

- · Feed through type, parts batch processing
- · Four pillar synchronized lifting conveyor table, high precision
- · Patented wide abrasive belt automatic tracking system
- Minimum metal dust exposure with proper dust extraction system installed
- Essential rollers are properly balanced, high rotational speed rated bearings are equipped
- Patented magnetic conveyor with adjustable magnetic force







#### \*Common consumables

Narrow and wide abrasive belts in various types, sizes, and grits

### \* Good fit applications

Steel parts batch processing after cutting

TECHNICAL DATASHEET	
Maximum working width: 1000mm	Working thickness range: 1-70mm
Conveyor speed: 1-5m/min	Weight: 2200KGS

# **SG1030-WJS**

### **WET OPERATION SINGLE WIDE ABRASIVE BELT HEAD SANDING MACHINE**

### APPLICATIONS

Wet sanding process is friendly to heat sensitive materials that are easily deformable under heat. It is also a MUST HAVE for some special metals/alloys for preventing potential fire hazard. The cutting fluid/coolant is recyclable by a filtration unit that is couple to the machine. It will filter out metal particles and recycle the fluid back into the machine for reuse.

For finishing applications, wet operation also produces a finer and smoother surface comparing to dry working machines.



### HIGHLIGHTS

- · Wet operation to produce a finer and smoother surface
- · Feed through type, parts batch processing
- · Four pillar synchronized lifting conveyor table, high precision
- Patented wide abrasive belt automatic tracking system
- · Automatic cutting fluid/coolant filtration and recycling unit
- Oil resistant and anti-erosion type conveyor belt
- Essential rollers are properly balanced, high rotational speed rated bearings are equipped

### **OPTIONAL CONFIGURATIONS**

- The work stations are modular. For example, for finishing applications: configure the machine with multiple wide abrasive belt heads and polishing barrel stations
- . The conveyor table can be configured to magnetic for processing small ferrous work pieces
- . Machine working width available: 630mm, 1030mm, 1300mm, 1600mm, and etc















### · Good fit materials

Aluminum alloys, magnesium alloys, titanium, zirconium, stainless steel, rubber, and other non-metal materials











### \*Common consumables

Wide abrasive belts in various types, sizes, and grits

TECHNICAL DATASHEET	
Maximum working width:	Working thickness range: 0.8-70mm
Conveyor speed: 2-9m/min	Weight: 1800KGS

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## SD300-WJS+3D

### FINE DEBURRING AND EDGE ROUNDING MACHINE FOR PUNCHING, STAMPING, FINE BLANKING, FLAT MACHINING, AND POWDER METAL PARTS

### APPLICATIONS

The machine is used for fine deburring and edge rounding process of punching, stamping, fine blanking, flat machining, and powder metal parts with minor burrs and sharp edges. It is most suitable for processing high volume punching, stamping, or fine blanking parts directly off the presses. Due to the heavy parts volume, this type of machines can be placed strategically right after the presses for minimum travel distances.



### HIGHLIGHTS

- · Work stations: combination of one wide abrasive belt head and three planetary disk brush stations. Each work station can be used individually or as combinations. Each work station has its own individual servo lifting
- · Magnetic conveyor to process small ferrous parts
- . Conveyor belt quick change design. By changing to a specific conveyor belt to accommodate parts with special humps/shapes, so the parts can sit flat
- Integrated PLC control
- · High efficiency with minimum maintenance required
- · Live load monitoring of each work station
- Automatic abrasive compensation (optional configuration)
- Oil mist separator (optional configuration)
- · Automatic cutting fluid/coolant filtration and recycling unit



### GOOD FIT MATERIALS









Maximum working width: 300mm	Disk brush diameter:
Maximum working thickness: 200mm	Conveyor table height: 940mm
Conveyor speed: 1-5m/min	Wide abrasive belt size: 1900x300mm
Disk brush rotational speed: 150-1480r/min VFD	Planetary rotational speed: 10-50r/min VFD
Conveyor type: VFD variable speed control	Total power: 23kw
Weigh: 4500KGS	Machine dimensions: 4950x1450x2150mm

TECHNICAL DATASHEET

### MORE MACHINE MODELS AVAILABLE (MODULAR DESIGN)

Various combinations of wide abrasive belt heads and planetary disk brush stations are available



### SD300-JS+D

### FINE DEBURRING AND EDGE ROUNDING MACHINE FOR PUNCHING, STAMPING, FINE BLANKING, FLAT MACHINING, AND POWDER METAL PARTS

Applications: A simpler and dry operation version of SD300-WJS+3D.



### HIGHLIGHTS

- · Feed through type, parts batch processing
- Work stations: single wide abrasive belt head + single planetary disk brush station
- . Work stations can be used together or individually
- Magnetic conveyor to process small ferrous parts
- Easy hands-on, straightforward operation, LED light built-in
- · Compact floor layout





\*Good fit materials: Ferrous materials

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### **SGP800**

### DEBURRING. EDGE ROUNDING. AND SURFACE FINISHING MACHINE FOR LASER CUTTING PARTS

#### APPLICATIONS

Deburring, edge rounding, and surface finishing of parts coming off laser cutting/stamping/fine blanking/punching/shearing/waterjet cutting machines with sharp edges and minor-moderate burrs.

SGP800 is equipped with two work stations. First the wide abrasive belt head is for surface sanding, vertical burr sand off, as well as surface finishing (No.4). The planetary abrasive barrel station is for further deburring and edge rounding. The overall operation is safe, light labour intensity, and minimum metal dust exposure to the operators. Full working width vacuum conveyor also grants the capability of processing small work pieces. To summarize, the machine is flexible, robust, easy hands-on, clean, safe, and great performance.









Wide abrasive belt, abrasive barrel

#### GOOD FIT MATERIALS

- \* Steel, stainless steel, aluminum, conner various alloys and etc.



TECHNICAL DATASHEET	
Maximum working width: 800mm	Consumables

Working thickness range: 0-50mm Quantity of abrasive barrels per set: 4

Conveyor speed: 0.8-5m/min Weight: 2300KGS

#### HIGHLIGHTS

- · Heavily constructed machine main frame: welded, sand blasted, and powder coated
- · First work station wide abrasive belt head is used to sand down/off larger burrs. It is also capable of surface finishing such as No.4 finishing. Servo lifting is equipped to ensure precise height (thickness) adjustment
- Planetary abrasive barrel station: total of four abrasive barrels to cover the whole working width. Each two adjacent barrels rotate in opposite direction to ensure consistent and even touch/pressure to all edges. corners, and holes
- · Full working width vacuum conveyor allows processing of small work pieces, 60x60mm and up (solid surface area)

Essential rollers are properly balanced, high rotational speed rated

- . Due to the working nature of the planetary abrasive barrel station, it targets mostly on the edges, corners, and holes. There is minimum touch/pressure applied to the "flat surface". Therefore, sheet with vinyl film can be processed (using planetary abrasive barrel station only)
- . Capable of processing minor profiled parts (depend on the shape, form height, and sizes. Using planetary abrasive barrel station only)
- . Long life span of the consumables, Less replacement needed
- · Easy hands-on, straightforward operation, LED light built-in
- . User friendly touch screen interface
- Minimum metal dust exposure with proper dust extraction system installed

#### MORE MACHINE MODELS AVAILABLE (MODULAR DESIGN)

A compact machine model called SP800 (planetary abrasive barrel station only) even has a built-in dust collector inside the main machine body. It occupies minimum floor space, however in the meantime, capable of general deburring, and edge rounding applications







Modular design allows various of work station configurations

### SGP1000

### DEBURRING. EDGE ROUNDING. AND SURFACE FINISHING MACHINE FOR LASER CUTTING PARTS

#### APPLICATIONS

Deburring, edge rounding, and surface finishing of parts coming off laser cutting/stamping/fine blanking/punching/shearing/waterjet cutting machines with sharp edges and minor-moderate burrs.

SGP1000 is equipped with two work stations. First the wide abrasive helt head is for surface sanding, vertical burr sand off, as well as surface finishing (No.4). The planetary abrasive barrel station is for further deburring and edge rounding. The overall operation is safe, light labour intensity, and minimum metal dust exposure to the operators. Full working width vacuum conveyor also grants the capability of processing small work pieces. To summarize, the machine is flexible, robust, easy hands-on, clean, safe, and great performance.







### MORE MACHINE MODELS AVAILABLE (MODULAR DESIGN)

- . SP1000 with only planetary abrasive barrel station is a good fit for processing softer metals such as copper and aluminum, as well as parts with decent cutting quality with minor burrs
- SGGP1000 with two sets of wide abrasive belt heads and planetary abrasive barrel station is a good fit for processing parts with heavier burrs, or high hardness metal alloy materials
- . SPG1000 with planetary abrasive barrel station on the front and wide abrasive belt head on the back is for reproducing the straight line surface finishing after deburring and edge rounding process
- SGPG1000 with wide abrasive belt head + planetary abrasive barrel station + wide abrasive belt head
- SGPB1000 with wide abrasive belt head + planetary abrasive barrel station + polishing barrel station
- · Optional configuration: magnetic conveyor table for ferrous metal work pieces

### HIGHLIGHTS

- · Heavily constructed machine main frame: welded, sand blasted, and powder
- First work station wide abrasive belt head is used to sand down/off larger burrs. It is also capable of surface finishing such as No.4 finishing. Servo lifting is equipped to ensure precise height (thickness) adjustment
- Planetary abrasive barrel station: total of six abrasive barrels to cover the whole working width. Each two adjacent barrels rotate in opposite direction to ensure consistent and even touch/pressure to all edges, corners, and holes
- · Full working width vacuum conveyor allows processing of small work pieces, 60x60mm and up (solid surface area)
- Essential rollers are properly balanced, high rotational speed rated bearings are
- Due to the working nature of the planetary abrasive barrel station, it targets mostly on edges, corners, and holes. There is minimum touch/pressure applied to the "flat surface". Therefore, sheet with vinyl film can be processed (using planetary abrasive barrel station only)
- · Capable of processing minor profiled parts (depend on the shape, form height, and sizes. Using planetary abrasive barrel station only)
- Long life span of the consumables, Less replacement needed.
- · Easy hands-on, straightforward operation, LED light built-in
- . User friendly touch screen interface

### GOOD FIT MATERIALS

- \* Steel, stainless steel, aluminum, copper, various alloys and etc
- \* Parts with vinvl films
- \* Parts that require heavily rounded edges (radius) before coating process







TECHNICAL DATASHEET	
Maximum working width: 1000mm	Consumables: Wide abrasive belt, abrasive barrel
Working thickness range: 0-50mm	Quantity of abrasive barrels per set: 6
Conveyor speed: 0.8-5m/min	Weight: 4000KGS

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## SG1030-JS

### SINGLE WIDE ABRASIVE BELT HEAD SANDING MACHINE: SIMPLE AND CLASSIC

### APPLICATIONS

The wide abrasive belt head is a versatile work station that is capable of general surface sanding, surface finishing, burr removals, deep scratch removal, surface roughening, and etc.

### HIGHLIGHTS

- · Simple and robust, dry operation, minimum maintenance required
- · Feed through type, parts batch processing
- high precision
- · Patented wide abrasive belt automatic tracking system
- · Minimum metal dust exposure with proper dust extraction system installed
- Essential rollers are properly balanced, high rotational speed rated bearings are equipped



 Common consumables Wide abrasive belts in various types, sizes, and grits

\* Good fit materials: Steel, stainless steel, and etc.



TECHNICAL DATASHEET	
Maximum working width: 1000mm	Working thickness range: 0.8-70mm
Conveyor speed: 2-9m/min	Weight: 1800KGS

### **OPTIONAL CONFIGURATIONS**

The workstations are modular, for example ,for finishing applications: configure the machine with multiple wide abrasive belt heads and polishing barrel stations The conveyor table can be configured to vacuum or magnetic for processing small work pieces Machine working width available: 630mm, 1030mm, 1300mm, 1600mm, and etc









### **SG630-3WB**

### **WET OPERATION SURFACE FINISHING AND FINE POLISHING MACHINE**

### APPLICATIONS

This is a dedicated machine for wet operation surface finishing and fine polishing applications with three polishing barrel stations. It is most suitable for heat sensitive materials that is easily deformable under heat. It is also a MUST HAVE for some special metals/alloys for preventing potential fire hazard.



### HIGHLIGHTS

- · Wet operation, smooth and consistent surface finishing and polishing
- Feed through type, parts batch processing
- · Four pillar synchronized lifting conveyor table, high precision
- Three polishing barrel stations. Each can work individually or as combinations
- · Automatic cutting fluid/coolant filtration and recycling unit
- · Oil resistant and anti-erosion type conveyor belt
- · Essential rollers are properly balanced, high rotational speed rated bearings are equipped

### COMMON ABRASIVE MEDIAS FOR POLISHING BARREL

Dupont fiber type (SiC coated), Scotch Brite type, nonwoven fabric type, and etc.

TECHNICAL DATASHEET	
Maximum working width: 600mm	Working thickness range: 0.8-50mm
Conveyor speed: 2-9m/min	Polishing barrel width: 630mm

### GOOD FIT MATERIALS

Aluminum alloys, magnesium alloys, titanium, zirconium, stainless steel, rubber, and other non-metal materials





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## **SG1030-3TB**

### DE-SLAGGING AND EDGE ROUNDING MACHINE

### APPLICATIONS

De-slagging and edge rounding of parts coming off plasma, high power laser, flame cutting machines with slags and dross.

Equipped with Jonsen patented carousel type crossbelt station which features "one belt two passes" processing. This particular machine has 1000mm working width, and is equipped with three crossbelt stations. The first two of the three crossbelts are mounted with numerous of high hardness anti-wear metal alloy pin blocks. The rotating crossbelts basically mimic the motion of "hammering and chiseling" off the slags. The third crossbelt is mounted with abrasive blocks that is made of dense sand paper and Scotch Brite flaps. It further cleans and rounds the edges and holes so it is not sharp.



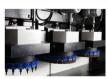


### HIGHLIGHTS

- · Feed through type, parts batch processing
- Magnetic conveyor with adjustable magnetic force to accommodate work pieces with difference sizes and weights
- · Minimum metal dust exposure with proper dust extraction system installed
- · Essential rollers are properly balanced, high rotational speed rated bearings are
- Common consumables Pin blocks, abrasive blocks

### WORKSTATION CONFIGURATION IS FLEXIBLE. VARIOUS OF TYPES CONSUMABLES ARE AVAILABLE









\* Good fit materials: Steel parts batch processing after cutting







TECHNICAL	TECHNICAL DATASHEET	
Maximum working width: 1000mm	Working thickness range: 3-80mm	
Conveyor speed: 1-5m/min	Weight: 5000KGS	

### SG1300-3TB+B

### **DOUBLE SIDE DE-SLAGGING AND EDGE ROUNDING MACHINE**

### APPLICATIONS

Double side de-slagging and edge rounding of parts coming off plasma, high power laser, flame cutting machines with slags and dross.

Equipped with Jonsen patented carousel type crossbelt station which features "one belt two passes" processing. This particular machine has 1300mm working width, and is equipped with three "top and bottom" crossbelt stations. Hence parts' both top and bottoms sides can be processed simultaneously. The first two of the three crossbelt stations are mounted with numerous high hardness anti-wear metal alloy pin blocks. The rotating crossbelts basically mimic the motion of "hammering and chiseling" off the slags. The third crossbelt is mounted with abrasive blocks that is made of dense sand paper and Scotch Brite flaps. It further cleans and rounds the edges and holes so it is not sharp.





AUTOMATED MACHINE LINE EXAMPLE

Main machine, automated material handling including loading, off-loading,

and extension conveyors

HIGHLIGHTS

- · Double side processing, hence heavy parts after cutting (slags facing down) does not need to be flipped
- Feed through type, parts batch processing
- · Heavy duty pinch rollers to ensure parts firmly clamped while feeding
- Minimum metal dust exposure with proper dust extraction system installed
- · Essential rollers are properly balanced, high rotational speed rated bearings are equipped



# types consumables are available

### Common consumables Pin blocks, abrasive blocks

Steel parts batch processing after cutting



GOOD FIT MATERIALS



### TECHNICAL DATASHEET

Maximum working width: 1300mm	Working thickness range: 3-80mm
Conveyor speed: 1-5m/min	Weight: 7800KGS

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## SG1030-2D+JS+D

### SIMPLE AND ROBUST DE-SLAGGING, EDGE ROUNDING, AND SURFACE SANDING MULTI-WORK STATION MACHINE

### APPLICATIONS

De-slagging and edge rounding of parts coming off plasma, high power laser, flame cutting machines with slags and dross. Also capable of general surface sanding and finishing by the wide abrasive belt head.

Total four work stations: two oscillating disk brush stations that are mounted with high hardness anti-wear metal alloy pin type deslagging disks, one wide abrasive belt head, and one oscillating disk brush station with general abrasive disks.





# HIGHLIGHTS

- . Dry operation, simple and robust, minimum maintenance required
- · Feed through type, parts batch processing
- Each work station can be used individually or as a few different combinations to achieve specific results/applications
- \* Easy hands-on, straightforward operation, LED light
- Minimum metal dust exposure with proper dust extraction system installed



### TECHNICAL DATASHEET

Maximum working width: 1000mm	Working thickness range: 3-80mm
Conveyor speed: 1-5m/min	Weight: 5000KGS

### GOOD FIT MATERIALS





### **OPTIONAL CONFIGURATIONS**

Magnetic conveyor with adjustable magnetic force to accommodate work pieces with difference sizes and weights





### SG1600-3TB+B

### **DOUBLE SIDE DE-SLAGGING AND EDGE ROUNDING MACHINE**

### APPLICATIONS

Double side de-slagging and edge rounding of parts coming off plasma, high power laser, flame cutting machines with slags and dross.

Equipped with Jonsen patented carousel type crossbelt station which features "one belt two passes" processing. This particular machine has 1600mm working width, and is equipped with three "top and bottom" crossbelt stations. Hence parts' both top and bottoms sides can be processed simultaneously. The first two of the three crossbelt stations are mounted with numerous high hardness anti-wear metal alloy pin blocks. The rotating crossbelts basically mimic the motion of "hammering and chiseling" off the slags. The third crossbelt is mounted with abrasive blocks that is made of dense sand paper and Scotch Brite flaps. It further cleans and rounds the edges and holes so it is not sharp.





### HIGHLIGHTS

- · Double side processing, hence heavy parts after cutting (slags facing down) does not need to be flipped
- · Feed through type, parts batch processing
- · Heavy duty pinch rollers to ensure parts firmly clamped while feeding
- · Essential rollers are properly balanced, high rotational speed rated bearings are equipped
- . Workstation configuration is flexible. Various of types consumables are available.
- · User friendly control interface. Automated material handling system can be customized
- · Minimum metal dust exposure with proper dust extraction system installed

### GOOD FIT MATERIALS

Steel parts batch processing after cutting





### \* Common consumables

Pin blocks, abrasive blocks

TECHNICAL DATASHEET	
Maximum working width: 1600mm	Working thickness range: 3-80mm
Conveyor speed: 1-5m/min	Weight: 10000KGS

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### SG1030-3TB+B / SG2400-3TB+B

### AUTOMATED DOUBLE SIDE DE-SLAGGING AND EDGE ROUNDING MACHINE LINE FOR INDUSTRY 4.0 MANUFACTURING PLANTS

### APPLICATIONS

After cutting, all parts will first be going through a sorting process. They will be sorted into several categories based on the sizes, and finally processed by a couple of de-slagging machines. Each machine targets on a specific part size to achieve maximum working efficiency. For example, SG1030-3TB+B is aimed for "small" parts, and SG2400-3TB+B is aimed for "large" parts.

All the parts with different sizes will be randomly loaded on (either by human or by automation) a conveyor first. Along this conveyor, there will be multiple robotic arms that are visually guided to grab and sort the parts, and distribute them into a few second stage conveyors (for example if there are two de-slagging machines, there will be two second stage conveyors) that will feed the parts to the de-slagging machines.

Equipped with Jonsen patented carousel type crossbelt station which features "one belt two passes" processing. The two machines have 1000mm and 2400 mm working widths respectively, and with the same workstation configurations. Each is equipped with three "top and bottom" crossbelt stations. Hence parts' both top and bottoms sides can be processed



simultaneously. The first two of the three crossbelt stations are mounted with numerous high hardness and anti-wear metal alloy pin blocks. The rotating crossbelts basically mimic the motion of "hammering and chiseling" off the slags. The third crossbelt is mounted with abrasive blocks that is made of dense sand paper and Scotch Brite flaps. It further cleans and rounds the edges and holes so it is not sharp.

### FOR "SMALL" PARTS PROCESSING



### \*Optional configurations

Add a triangular narrow abrasive belt head specifically for processing high power laser cutting parts with hard and molten slags.

TECHNICAL DATASHEET	
Maximum working width: 1000mm	Working thickness range: 3-80mm
Conveyor speed: 1-5m/min	Weight: 10000KGS

### HIGHLIGHTS

- Heavily constructed machine main frame: welded, sand blasted, and powder coated
- Unique sectional conveyor design for double side processing
- · Feed through type, parts batch processing
- Essential rollers are properly balanced, high rotational speed rated bearings are equipped
- Workstation configuration is flexible. Various of types consumables are available
- Minimum metal dust exposure with proper dust extraction system installed
- Common consumables: pin blocks, abrasive
   blocks
- 1300mm and 1600mm working width can be configured





### HIGHLIGHTS

- Heavily constructed machine main frame: welded, sand blasted, and powder coated
- · Feed through type, parts batch processing
- Heavy duty pinch rollers to ensure parts firmly clamped while feeding
- Essential rollers are properly balanced, high rotational speed rated bearings are equipped
- Workstation configuration is flexible. Various of types consumables are available
- Minimum metal dust exposure with proper dust extraction system installed
- Common consumables: pin blocks, abrasive blocks
   2400mm or wider working width can be configured







TECHNICAL	TECHNICAL DATASHEET	
Maximum working width: 2400mm	Working thickness range: 3-80mm	
Conveyor speed: 1-5m/min	Weight: 13000KGS	

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### SG1030-JS+D

### WIDE ABRASIVE BELT HEAD + OSCILLATING DISK BRUSH STATION MACHINE

### APPLICATIONS

General surface sanding, surface finishing, deburring, and edge rounding. A versatile and flexible machine for every fabrication shop.



HIGHLIGHTS

- · Simple and robust, dry operation, minimum maintenance required
- · Feed through type, parts batch processing
- . Wide abrasive belt head for surface finishing and sanding off large burrs; oscillating disk brush station for further deburring and edge
- . The two work stations can be used individually or together
- Easy hands-on, straightforward operation, LED light built-in
- · Minimum metal dust exposure with proper dust extraction system





#### \* Good fit materials

Steel, stainless steel, and etc.

### OPTIONAL CONFIGURATIONS

- The conveyor table can be configured to vacuum or magnetic for processing small work pieces
- · Additional wide abrasive belt head can be configured for heavy duty sanding/grinding applications
- . Combinations of wide abrasive belt heads and polishing barrel station for fine surface finishing applications
- . Combinations of wide abrasive belt heads, oscillating disk brush stations, and polishing barrel stations for versatile applications
- . Standard size up to 1280mm working width. Wider model can be customized

#### **TECHNICAL DATASHEET**

Maximum working width: 1000mm

Working thickness range: 1-80mm

Conveyor speed: 2-9m/min

Disk brush quantity per station: \$165mm/7pieces

Abrasive medias: DuPont fiber (SiC coated) type brush, Scotch Brite + sand paper type brush, wide abrasive belt

Oscillating disk brush station main motor: 7.5kw

Wide abrasive belt head main motor: 11kw

Machine dimension: 1800x2300x2000mm

Weight: 2800KGS

### SG1030-WJS+DB

### WET OPERATION SURFACE FINISHING. POLISHING. DEBURRING. AND EDGE ROUNDING MACHINE

### APPLICATIONS

It is a multi-work station machine for wet operation surface finishing, polishing, deburring, and edge rounding applications. Wet operation is friendly to heat sensitive materials. It is also a MUST HAVE for some special metals/alloys for preventing potential fire hazard.

Work stations are modular design, can be configured in various combinations for different applications such as finishing, polishing, deburring, and edge rounding. This machine has a wide abrasive belt head, an oscillating disk brush station, and a polishing barrel station



### **OPTIONAL CONFIGURATIONS**

- · Multiple sets of oscillating disk brush stations for more efficient deburring process and improve surface roughness
- · Additional wide abrasive belt heads can be configured for heavy duty sanding/grinding applications
- · Combinations of wide abrasive belt heads and polishing barrel stations for surface finishing applications such as No.4 and Hairline (HL) finishings
- . Standard size up to 1280mm working width. Wider model can be
- . Standard configuration up to 4 work stations. More work stations can be customized
- . Wet type vacuum conveyor table for processing small work pieces
- Magnetic conveyor table for processing small ferrous work pieces





### HIGHLIGHTS

- · Feed through type, parts batch processing
- . Three work stations. Wide abrasive belt head for surface finishing and sanding off vertical burrs; oscillating disk brush station for further deburring and edge rounding; polishing barrel station for fine polishing
- · Each work station can be used individually or as a few different combinations to achieve specific results /
- . Easy hands-on, straightforward operation, LED light built-in
- · Automatic cutting fluid/coolant filtration and recycling unit





#### Good fit materials

Aluminum alloys, magnesium alloys, titanium, zirconium, stainless steel, rubber, and other non-metal materials

### TECHNICAL DATASHEET

Maximum working width: 1000mm

Working thickness range: 1-80mm

Conveyor speed: 2-9m/min

Disk brush quantity per station; \$165mm/7pieces

Abrasive medias: DuPont fiber (SiC coated) type disk brush, Scotch Brite + sand paper type disk brush, wide abrasive belt

Oscillating disk brush station main motor: 7.5kw

Wide abrasive belt head main motor: 11kw

Polishing barrel station main motor: 7.5kw

Weight: 3500KGS

▶ 17 ◄ ▶ 18 ◄

### WET OPERATION SURFACE FINISHING. SURFACE POLISHING. PRECISE STOCK REMOVAL MACHINE FOR EXTRA WIDE WORK PIECES

### APPLICATIONS

The machine is specifically for heavy duty precise grinding, polishing, and stock removal applications of titanium, stainless steel, thick steel plate, and other special metals such as molybdenum alloy.

WET OPERATION HEAVY DUTY RECIPROCATING TYPE PRECISE GRINDING. POLISHING. AND STOCK REMOVAL MACHINE

A single wide abrasive belt head is rigidly constructed on the machine gantry frame with heavy power delivered to the contact roller, hence driving the wide abrasive belt.

The conveyor rollers run in a reciprocating manner, in both directions. Therefore the parts can be fed through the machine multiple passes (the number of passes is programmable). The cutting rate/pressure is adjustable based on the type of material and operator's experience.







### HIGHLIGHTS

- · Wet operation, minimum deformation, finer surface
- Heavy duty pinch rollers to secure and "clamp" the parts firmly while processing
- · A special bottom roller, Billy roller, is utilized underneath the main contact roller for optimum performance.
- . Minimum working thickness: 0.5mm
- · Main contact roller is equipped with Jonsen patented servo lifting system. It utilizes Mitsubishi servo systems to reach a excellent precision of ±0.01mm
- Multiple stage filtration and recycling system (can be customized)
- Wide abrasive belt change-over assisting tool/hanger

- · Self cleaning/spraying function inside the machine chamber
- Programmable Mitsubishi control interface with live load monitoring
- · Fixed conveyor table design to allow easier automation such as extension conveyors, material handling systems, and etc.

TECHNICAL DATASHEET		
Maximum working with: 1280mm	Working thickness range: 0.5-70mm	
Conveyor speed: 2-14m/min	Wide abrasive belt size: 1300x2620mm	
Machine dimensions: 2050x2000x2500mm	Weight: 10000KGS	

### APPLICATIONS

There are two types of applications for this machine. The first one is surface finishing and polishing application for decorative purposes. The second one is functional application such precise stock removal, specific surface roughness requirement, and etc. The machine is used for processing extra wide work pieces and complete sheets such as large scale elevator panels, kitchenware panels, and etc. Wet operation is friendly to heat sensitive materials that are easily deformable under heat. It is also a MUST HAVE for some special metals/alloys for preventing potential fire hazard.

### HIGHLIGHTS

- · Essential rollers are properly balanced. high rotational speed rated bearings are equipped
- · Heavy duty construction machine frame
- · Roller type conveyor for robust and precision feeding
- · Synchronized conveyor lifting (if equipped with extension conveyors)
- · Automatic cutting fluid/coolant filtration and recycling unit
- · Conveyor can be configured to reciprocating type
- · Machine working width available: 1300mm, 1650mm, 1900 and etc.





Various of combinations of wide abrasive belt heads and polishing barrel stations



### TECHNICAL DATASHEET

Maximum working width: 1580mm

Minimum working length: 700mm

Working thickness range: 0.5-40mm

Conveyor speed: 2-18m/min

Total power: 97.5kw

Wide abrasive belt dimension: 1650x2620mm

Machine dimensions: 3500x3300x2260mm

Weight: 8000KGS

▶ 19 ◀ ▶ 20 ◄

### **SG1950-4WJS**

### WET OPERATION RECIPROCATING TYPE PRECISE GRINDING. POLISHING. AND STOCK REMOVAL MACHINE

### APPLICATIONS

The machine is equipped with four heavy duty gantry frame type wide abrasive belt heads for precise grinding, polishing, and stock removal processes in a reciprocating manner, in both directions.

The work pieces will be placed, and fixed on the working table by means of either locating pins, clamping tools, vacuum, or magnetic tables. The working table is sitting on linear guides and driven by high precision ball screw mechanism for stable and consistent moving rate. The working table moves in a reciprocating manner, therefore the work pieces can be processed multiple passes back and forth until the desired result is achieved.







### Gantry type: each wide abrasive belt head has its own "sub frame". Each head has its individual servo lifting for maximum precision control

- A combination of wide abrasive belt heads can be used for different applications. Each head can be used individually or in various of combinations
- Wet operation, minimum deformation, finer surface quality
- Multiple sets of spray nozzles and air knifes at machine's infeed and outfeed ends
- Programmable stock removal rate
- Precision accuracy: +/- 0.02 mm
- Multiple stage filtration and recycling system (can be customized)
- · Wide abrasive belt change-over assisting tool/hanger
- · Self cleaning/spraying function inside the machine chamber
- Multiple sets of coolant nozzles are equipped for each wide abrasive belt head

### TECHNICAL DATASHEET

Maximum working width:

630/1000mm/1300mm/1600mm/1900mm(Optional)

Maximum working length: 3000mm

Maximum working thickness: 100mm

Precision accuracy: ±0.02mm





Smaller scale machine with single wide abrasive belt head available: SG630-WJS-L

## SG1300-JS/SG1300-2JS

### STAINLESS STEEL SHEET/COIL TO COIL SURFACE FINISHING LINE

### APPLICATIONS

Fine surface finishing process for stainless steel sheet/coil to coil applications. For such production line, a special additive oil is typically added as assistant fluid for finer surface finishing result. Benefits of oil sanding: sheet surface is better smoothened, and it becomes more anti-rust. A complete production line will consist of extension conveyors, main machines for No.4 finishing and Hairline (HL) finishing, degreasing machine, rinsing and drying machine, laminating machine, and etc. Double side processing can also be achieved.



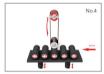
For coil to coil production lines, decoiler, rewinder, and levelling machines can be integrated.





### HIGHLIGHTS

- . No.4 finishing machine and Hairline (HL) finishing machine
- · Large diameter contact rollers for finer surface finishing result
- Essential rollers are properly balanced, high rotational speed rated bearings are equipped
- · Patented wide abrasive belt automatic tracking system
- · All drive and pinch rollers are rubber coated
- Efficient degreasing, hot water rinsing, tap water rinsing, and drying process, so all the work pieces come out dry and clean
- Multiple coolant spray nozzles for each wide abrasive belt head Production live monitoring









#### 规杉

Maximum working width: 1300/1600/2100mm

Conveyor speed: 2-18m/min

Working thickness range: 0.5-40mm

Wide abrasive belt circumference: 2620mm

Applications: No.4 short parallel straight line / Hair line (HL) long straight line

### SD-H

### DOUBLE BELT STROKE SANDER FOR BOX. ENCLOSURE. AND PANEL SURFACE FINISHING AND POLISHING

### APPLICATIONS

SG2500-2 is a dedicated machine for box, enclosure, and panel surface finishing (No.4, Hairline, and etc.) applications. It is also capable of sanding down weld bead, deep scratch removal, fine polishing and etc.



### HIGHLIGHTS

- Double belt stations, various abrasive medias and grit sizes available
- Double interchangeable loading decks: 1. rotational vacuum cup 2. flat deck
- Unique design of contact rollers/pressure pads for different applications
- · Abrasive belt main motor is equipped with VFD, rotational speed is adjustable





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DATACHEET	

TECHNICAL DATASHEET	
Maximum working width: 1500mm	Dust extraction requirement: 3000m^3/h
Maximum working length: 2500mm	Total power: 12kw
Maximum working height/thickness: 600mm	Abrasive belt size: 9000x100mm
Compressed air: 0.6mpa	Weight: 3500KGS
Machine dimensions: 4350x4200x2350mm	



\* More machine models SG3800-2: extra wide model with automation



Good fit applications Electrical cabinets, electrical enclosures, wide door frames, stainless steel panels, and etc.

### FLEXIBLE MANUAL SWING ARM DEBURRING. EDGE ROUNDING. SANDING MACHINE WITH VACUUM TABLE

### APPLICATIONS

Small batch parts processing. The SD-H is a better substitute of DA sanders, orbital sanders, and other hand held grinders, and etc. It is safer for operators, substantially less stressful on operator's hands, and in the meantime higher efficiency. With numerous types of abrasive medias available, it is a flexible fit for parts coming off laser cutting/stamping/fine blanking/punching/shearing/wateriet cutting machines with sharp edges and minor-moderate burrs.











### HIGHLIGHTS

- · Air spring supported working head provides a "zero gravity" feel to the operators. The head hovers over the working table, therefore the operator only needs to apply a slight downward pressure to lower it to the work pieces.
- · Partial vacuum area, 330x300mm. Simply place the parts over the vacuum area, strong down draft force will hold the parts in place for safe processing.
- · Different abrasive medias available for different applications.
- . A single motor drives two abrasive medias on the two ends of the motor. Typically one is disk brush and one is Velcro pad to mount the sanding pad. The head is rotational, up to 180° with locating pins 45° apart
- The swing arm has a wide working span for extra large work piece up to 1500x1500mm



### **TECHNICAL DATASHEET**

Vacuum area: 330x300mm

Main motor power: 0.75kw

Working table size: 1000x800mm

Number of working head: 2

Maximum working size (off the table): 1500x1500mm

Dust extraction requirement: 1000m3/h

Swing arm span: 1500mmx360°

Total power: 4.05kw

Working thickness range: 1-150mm

Machine dimensions: 1700x1000x1700mm

**▶ 23 ◄** ▶ 24 ◄

### **SGGB1000**

### DEBURRING AND EDGE ROUNDING MACHINE FOR LASER CUTTING PARTS

#### APPLICATIONS

Two common models below:

- 1. SGGB1000: deburring, edge sanding, surface sanding, and edge rounding of laser cutting part with sharp edges, and minor-moderate burrs.
- 2. SGB1000: deburring, edge sanding only, and edge rounding of laser cutting part with sharp edges, and minor-moderate burrs.





# HIGHLIGHTS

- · Feed through type, parts batch processing
- The combination of both narrow and wide abrasive belt heads efficiently sands off burrs along the edges, contours, and holes, as well as removes surface scratches/imperfections, and general surface sanding. The crossbelt station with abrasive blocks will further clean and round the edges.
- Each work station can be used individually or as a few combinations for different applications
- Magnetic conveyor to process small ferrous parts
- Simple and straightforward operation, easy hands-on
- Compact floor layout







\* Good fit materials: Steel parts batch processing after cutting









#### More machine models available (modular design)

SGB1000: Narrow abrasive belt head + crossbelt station with abrasive blocks. The characteristic of narrow abrasive belt is that it targets mostly on the edges and contours with very minimum touch/pressure to the entire surface. Therefore it saves extensively on the abrasive belt. It is a good trail for customer whose application does not need parts whole surface sanded

TECHNICAL DATASHEET	
Maximum working width: 1000mm	Working thickness range: 0-80mm
Conveyor speed: 1-5m/min	Weight: 3500KGS

### **JONSEN AFTER CUTTING SYSTEM**

### APPLICATIONS

Jonsen after cutting system is a great fit for customers who routinely process bulk order plasma cutting, high power laser cutting, and flaming cutting parts/medium-thick work pieces) with minimum human intervention required.

Besides the main de-slagging machines, a smart material handling system which is capable of automatic parts loading and unloading is an integral part of "Jonsen after cutting system". The gantry type robotic arm with suction/magnetic cup assembly will pick up raw parts from "raw pallets" and load them on the infeed conveyor. The parts will then be fed into the main machine for de-slagging/deburring, and edge rounding processing. Afterwards, the parts will be fed out to the outfeed conveyor. While moving, all parts will be marked and analyzed by the visual system, and finally get picked up by the robotic arm(s), and re-stacked on the "finished pallets".

The visual system is capable of multiple working logics. It handles complex working scenarios, such as multiple types of work pieces that come in random positionings.

Furthermore, multiple sets of robotic arms can be integrated along the outfeed conveyors to greatly increase the working efficiency.

For loading, the gantry type robotic arm with suction/magnetic cup assembly is capable of grabbing multiple work pieces at a time, hence higher efficiency.

The load capacity can be customized to meet each customer's requirement.

Manual de-slagging, deburring, and edge rounding are tedious and hazardous work for human operators. Jonsen after cutting system is an intelligent and turnkey solution to minimize manual labour for this type of work. We believe such automated machine line that requires minimum operator's attention is a long term trend.











# TECHNICAL DATASHEET Maximum working width: 1300mm Visual area: 1300\*1300mm Visual resolution: 0.6mm/pixel Restacking accuracy: ±3mm Working cycle: ≤10s/pc Gantry load: ≤1000kg

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**WE CHOOSE TOP OUALITY CONSUMABLES!** 

### **WIDE RANGE OF APPLICATIONS**

### A good machine needs matching quality consumables to achieve the best performance!

Jonsen Sander started off as a wide abrasive belt manufacturer. Since then, we've never stopped exploring in the consumable world. We design and apply new designs in our machines, and always try to improve them further. We design and try out prototypes non-stop, version 1, version 2, version 3... Therefore, we know about our machines and consumables!

In the meantime, we work strategically with reputable suppliers all over the world!

### STRATEGIC PARTNERS IN CONSUMABLES, IN NO PARTICULAR ORDER











3M, USA

Hermes, Germany

VSM, Germany

Klingspor, Germany Sharpness, China

NCA, Japan

### JONSEN CONSUMABLES

We supply consumables that covers Jonsen Sander's full product line, including applications such as deburring, edge rounding, de-slagging, finishing, polishing, precision grinding, stock removal and etc











available in various brands.

types, grits, and sizes

Wide and narrow abrasive belts available in various brands, types, grits, and sizes











Jonsen patented crossbelt available in various types, and grits













Disk brush types: DuPont fiber (SiC coated), sand paper and Scotch Brite, wire brush, metal alloy pin (de-slagging), Velcro pad, and etc





Abrasive barrels available in various types, and grits





Jonsen patented crossbelt available in various types, and grits

### Precise sheet metal fabrication **Automobile** Medical manufacturing instrument Aerospace Electrical JONSEN® Nuclear components power plant Construction Non-metal and farming equipment insulating board, Medium-thick friction materials plate heavy duty de-slagging **Rail transit** vehicles

### JONSEN SANDER'S MACHINES ARE ON ACTIVE SERVICES ACROSS INDUSTRIES ALL OVER THE WORLD





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⑦※CMG 徐工集図

















































The above Jonsen Sander's customers are in no particular order