

Newsletter

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Fabricating New Images In Aluminum Treatment





Brand-new Family Member – Horizontal CNC Centre

The traditional CNC center, mostly vertically-operated, is credited for its speedy installation, simple operation, and easy visibility during production process and calibration. Thus, it's widely used in the market. However, confined by the height of its post and tool-change devices, the system has limitation in machining parts of longer length/height. Moreover, when making parts with cavities or concaves, metal scraps/chipscannot be effectively removed, which may damage the tooling causing subsequent surface defects on parts in fabrication and delaying the whole process.

This is when our horizontally-operated CNC comes into play to deal with lengthy and cavity-filled parts which can now be comfortably secured with proper jigs and of which milling chips can now be expelled with less effort.

The new equipment features:

- 1. A one-stop automatic CNC center enabling one-stop milling, drilling, tapping, and chamfering to fulfil metal fabrication of various lengths
- 2. Devised with automatic scrap-remover
- 3. Using BT30 spindle taper drill for speedy performance
- 4. Using fixed guide-rail for elevated precision and stability
- 5. Using gang tool operated tool magazine better suited for horizontal operation
- 6. Operated in shielded-booth for the safety of the operator and the sanitation of the work environment.



Nowadays when everything is about the "look", the demand for exquisite appearance of the product is simply climbing. Thus, the introduction to chamfering for a high-gloss effect is just another essential tool to enhance the overall look of the product.

Chamfering Face Consistency always poses a challenge on production control for the entire process. Chamfering is usually the last step following treatments such as machining, buffing, sand-blasting, and anodizing where deformation may well inflict on the object due to clamping or fixation. Should the conventional chamfering be applied afterpre-fabrication, inconsistency face is easily noticeable.

To solve the problem, a new chamfering machine is now making Victor its home that handles lengthy part up to 2500mm. Operated in precision control by guiderails and drive-motor and paired with the sophisticated high-speed power shaft carrying complete-in-linedynamic vibration-damper technology, this machine is set for an uninterrupted and smooth operation regardless where the part is and how fast/slow the part is fed through the line. This safeguards the stability of the chamfering process.





Compared to its manually operated cousin, the fully automatic brushing machine is not only proud for its productivity but also quality stability without worries about surface inconsistencycaused by manual factors, which meets quality requirements from the customer.

The auto-feeder introduced to our lined-grain brushing machine is tailor-made for surface treatment on linear parts. It handle parts up to 2500mm with following features:

Integrated Fab Process (or Streamlined Fab Process): Parts are programmed to go through Coarse Grinding, Fine Grinding, and then Nylon Brushing for final touch to reach an even and smooth grain texture on the surface.

Feeding system: Comprises decelerator, conveyor belt, and rollers. The belt tension is adjustable and easy to operate; the feeding frequency converter is automatic.

Control Mode: The equipment is auto-balanced for constant tension with compact design to ensure operation stability.

Real-time Data Exchange: The SERVO switchboard communication system operated on 4 sets of servo motors for optimum performance on real-time interchange of data, as well as real-time data exchange among axles.



Automatic ImagingMeasuring System

It is a challenge to most common testing equipment to measure parts of longer length. At Victor, we have adopted the long-rang gantry-style imaging measuring system for a speedy and sharp dimension capture of lengthy items. Paired with laser infrared beamer, measurement accuracy is also improved over profiles of irregularity or radius.

The equipment features:

- 1. Equipped with HD autofocus lens that continuously magnifies, which is pre-programmed without the need for adjustment.
- 2. Devised with Japan-made Keyence laser head for precision measurement over product height, flatness, and contour.
- 3. Measuring range up to 2500 x 300 x 250mm
- 4. Devised with automatic edge-tracing to accurately discern the true edge of a part and return with graphic primitive, which obviates measuring variance by the burs.

KEYENCE CCD Laser displacement sensor



Ultra-precision, High precision, Long distance

- 5. Featured for its distinctive laser framing function for auto-capture of full primitive.
- 6. Superior measuring capability over radius: it draws the two perpendicular tangent lines over a given radius cornerand finishes with the radius curve in order to return the true R and D value.

COMPANY PROFILE

Our company was founded in year 2000. Being a company specialized in sophisticated alloyed aluminum fabrication and high-end surface treatment, JM Victor is not only refined with hands-on experiences through years of accumulation through the sector chain of precision manufacture, but also with unparalleled wealth of knowledge enriched from company operation and management process, which enables the company to offer solutions in overcoming design and production bottlenecks in high-end aluminum fabrication.

In Jiangmen High-Tech Industrial Park, we have invested in construction of our new cyber-physical powered Smart Plant embracing the core Industry 4.0 design concept. The new plant, residing on an area of 100,000 square metres, comprising a global lab of aluminum-magnesium surface treatment and a smart CNC fab centre with its own casting house and stamping workshop, will add on a new chapter of consummate expertise to the venture of JM Victor.

Our Mission Statement

We stand by our commitment to share the harvest and happiness with our staff and workers, create value for our customers and cultivate a company culture with a vision. This is the foundation for the sustainability and continuity of our company and our business.





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