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## *Press Release for EMO Milano '03*

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### **COMPANY PROFILE**

Founded in 1954, *Victor Taichung Machinery Works Co., Ltd.* started with making conventional lathes in Taiwan and now steadily supplies CNC lathes and machining centers by devoting her management to non-stop R&D and innovations. With more than 65% in-house manufacturing and her own foundry to offer highly reliable Meehanite® castings to further assure machine quality, all products are marked globally under the brand names VICTOR or FORTUNE (in North America) which highlight her strong position as the leading machine tool manufacturer in Taiwan.

Insisting on “Technology Innovations and Quality Superiority”, Victor Taichung is continuously devoted to developing new generation of machine tools. Besides the existing Vturn range of Horizontal CNC slanted bed Lathes (from 6” to 24” chucks) and Vcenter range of Vertical Machining Centers (from 0.5 to 1.5 meter for X-axis travel), Victor Taichung has been focusing to develop high speed, high precision and more comprehensive machine tools. New lathe models Vturn-II series horizontal lathes and vertical lathes were launched since 2000 so as to offer high spindle speed and multi-function machines for competitive markets. Also more vertical and horizontal machine centers were introduced. The moving column machining center Vc-205 and horizontal machining centers Vcenter-500/630/800 were all launched within the past three years to offer high spindle speed, upgrading performance, multi-function and turnkey solution for competitive markets.

To ensure a market for our products, Victor has invested considerably in setting up a global distribution network. As well as numerous agents around the world the Victor group has 8 technical support and distribution centers located in *USA, England, France, Germany, South Africa, Malaysia, Thailand and China*. These centers act not only to market our machines but also to provide our customers with an efficient after-sales service and technical support. In 2003, Victor Taichung celebrates her 50 anniversary and is greatly confident to meet the fierce challenge of machine tool market. To strive for perpetual development and technological innovations, Victor Taichung will keep on manufacturing modern machine tools with greater value added and creating prosperous future for the industry.

### **EMO EXHIBITS**

This year we will exhibit a number of new machines including vertical and horizontal CNC lathes and machining centers.

#### *Vcenter-205 ~ Traveling column VMC with long fixed table for pendulum machining*

- C-framed traveling column with rapid feed 30 m/min reduces spindle idle time and feature easy access to load/unload the components.
- Long fixed worktable assures the evenly distributed loading and features for uniform accuracy at full stroke of X-axis travel even when oversized parts of off-center parts are loaded.
- Central partition guarding enables the pendulum machining: the spindle can effectively machine on one side while loading or unloading parts on the other side.
- Spindle motor is directly coupled to the spindle (DCS) to avoid the vibration resulted from belts and enhance surface finish on components
- Easy installation for the 4<sup>th</sup> axis rotary tables and/or hydraulic fixtures which cannot be activated

for conventional VMC with 2 pallet APC (Auto Pallet Changer).

### *Vcenter-70APC ~ Cost effective VMC with Auto Pallet Changer*

- Front mounted APC with ergonomic design and hydraulic clamping allows easy operator access to pallet and machining area.
- Servo-driven rotary APC offers mere 3 second pallet changeover time.
- High pressure coolant flushes away the swarf accumulation on the bottom guarding and two scroll type chip removers dispose maximum chips to the rear of machines.
- Spindle oil cooler prolongs service long for this grease-lubricated DDS spindle bearings.
- Fanuc 21i-MB controller with preview control 40 look-ahead blocks allows higher cutting feed and user-friendly interface for machine operation.

### *Vcenter-500HS ~ High performance HMC with DDS spindle and BT-40/50 tooling*

- Victor's innovative design offers BT-50 tooling (Vcenter-H500) for heavy cutting or BT-40 tooling (Vcenter-H500HS) for high speed machining.
- High efficiency by rotary style APC and oversized linear guide ways.
- Integral spindle construction by built-in DDS spindle (motor-spindle) with dual winding technology enhances the torque output 48.5 kg-m for BT-50 tooling at low spindle speed.
- High spindle speed options from 12000rpm to 20000rpm for either BT-40 or HSK-A63 tooling.
- Optional CNC table for 0.001 degree continuous indexing.
- Optional coolant through spindle (CTS) offers high-pressure coolant up to 70 bars for optimal machining accuracy.

### *Vturn II-26YBCV - Leading edge production technology*

- Faster rapid feeds of 20/24 m/min for X/Z-axis on the box slideways with high rigidity maintained.
- Servo-driven milling turret (C/Y axes with travel  $\pm 55 \text{ mm}$ ) and 12 live tool pockets offers mere 0.2 second tool changeover time.
- DDS built-in spindle with dual winding motor (like gearbox) generates high torque capability and offers improved finishing and precision with no transmission vibrations.
- B-axis sub-spindle (also DDS) collects part synchronously from main spindle assures collinear accuracy requirement.
- Chips can be expelled from the right hand side or the rear side of the machine.

### *Vturn-iV200 - Pick & place vertical chucker with built-in automation*

- "Pick and place" DDS spindle by the traveling headstock couples turning and part-loading by one machine.
- Inverted vertical chuck clamping reduces the possibility for the chip scratching on the surface of the components to cover the drawback of conventional vertical lathe.
- More cost effective than a horizontal lathe with the gantry robot because no special holding devices, gantry robot and cell controllers are required and less space floor requirement,
- Servo driven turret with hydraulic clamping shortens tool changeover time and assures the cutting rigidity
- Versatile work feeding packages A/B/C offers a flexible turning cell.

### *Vturn-V300 – Flange turning lathe for high roundness parts*

- Faster rapid feeds of 15/24 m/min for X/Z-axis on the box slideways with high rigidity maintained by Meehanite® cast iron.

- Rear chip disposal without coolant leakage.
- No gravity affects on turning process so as to assure high roundness and fine surface finish.
- Compact space floor requirements for easier cell layout in the factory.
- Well balanced turret carriage design with upgraded servo motor and ball screws minimizes moving wear on the box sideways.