



**syil-frame™**  
**MILLING**  
**S E R I E S**



微信



@赛利精机



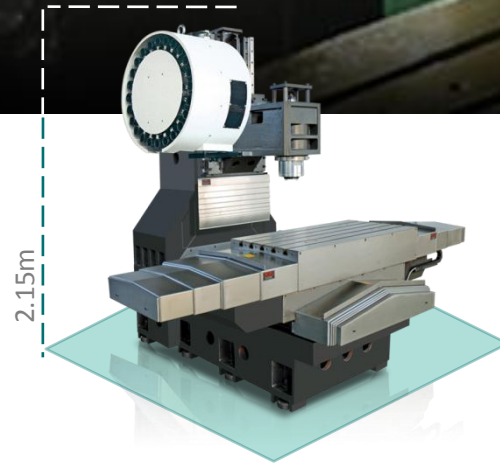
# Syl-frame™ MILLING 精密数控光机 & QUALITY PRECISION

機械合理化的構造設計、高剛性、高安定性、高い安定性。高品質な部品が選択、機械熱が小さくなり、精度が高い。高速化の運行、各種加工業界に適用。

Rational structure design of machine tool, high rigidity, high stability. High quality parts selection, machine tool thermal displacement is small, high precision. High speed operation, suitable for all kinds of processing industry.

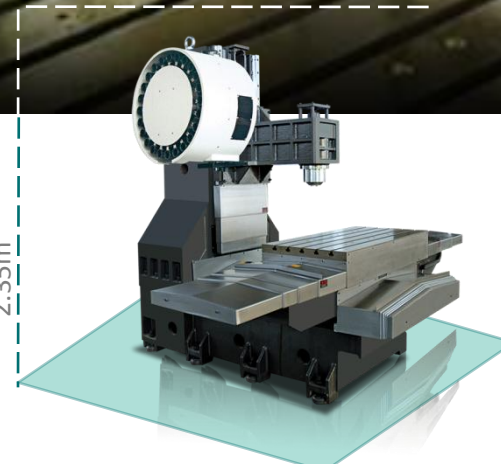
机床合理化的结构设计，高刚性，高稳定性。高品质的零件选用，机床热变位小，精度高。高速化的运行，适用于各种加工行业。

V-0850L



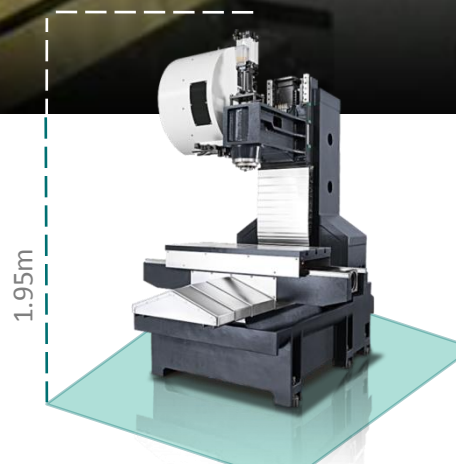
占地面积  
Space required for installation  
3.9m<sup>2</sup>

V-1060L



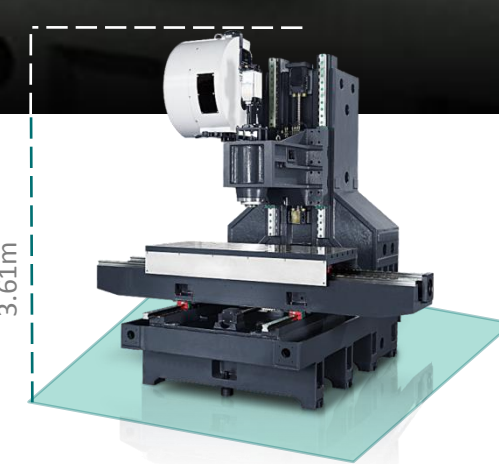
占地面积  
Space required for installation  
6.1m<sup>2</sup>

V-0640L



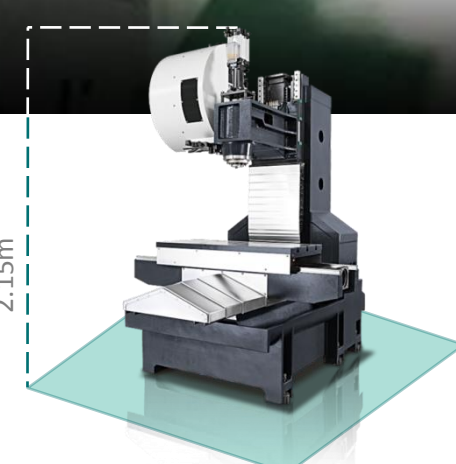
占地面积  
Space required for installation  
2.3m<sup>2</sup>

V-1380L



占地面积  
Space required for installation  
8.6m<sup>2</sup>

V-0750L



占地面积  
Space required for installation  
4.3m<sup>2</sup>

## 密闭式防护罩 Full-enclosed Guards

密闭式防护罩，在高速移动顺畅及低噪音，有效阻隔切屑液及切屑，使线轨与螺杆的保护及寿命达到最佳状态。

Fully enclosed guards ensure smooth movement at high speed and low noise. The guards isolate coolant and chips and provide a



## 静音螺杆、线性滑轨 Ball Screw、Linear Motion Guide

三轴采用静音螺杆、线性滑轨，具有高刚性、低噪音、低摩擦、高灵敏度，可提升加工速度及精度。

The machine is equipped with a collision protection device which can absorb and reduce the collision force. The machine accuracy is still maintained if any axis malfunction happens.



## 高精度主轴或电主轴 High Precision Spindle

直结主轴选用高级精密P4级轴承组装，质量轻、离心力低、刚性佳、膨胀系数低

The direct-drive spindle is mounted in high precision class P4 bearings. The spindle features include light weight, low eccentricity, high rigidity, low expansion coefficient.



## 碰撞保护装置 Collision Protection Device

本机配有碰撞保护装置，当机器发生异常或工作人员操作失误时，可吸收和减少撞击产生的振动，使撞击的损害减到最低，确保原有的精度。

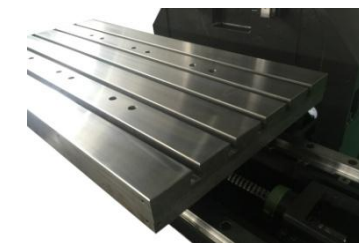
The machine is equipped with a collision protection device which can absorb and reduce the collision force. The machine accuracy is still maintained if any axis malfunction happens.



## 高速·高刚性 High speed · High rigidity

三轴48m/min高速位移，速度快，节省加工时间。

Three axis 48m/min high speed displacement, high speed, save processing time.



## 检验设备 Inspection equipment

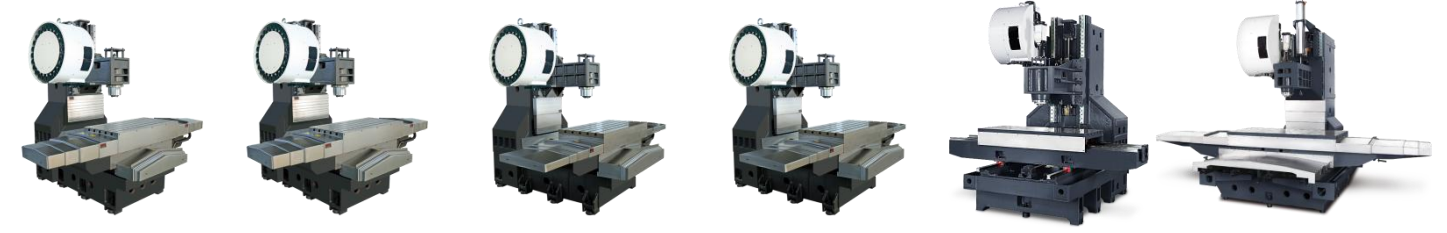


# 精密数控光机

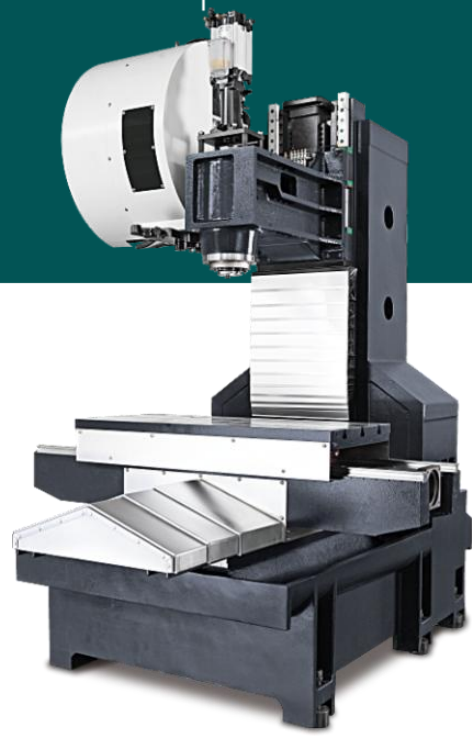
MILLING  
PRECISION & QUALITY



|                       |  |        | V-0640L               | V-650L               | V-0750L               |
|-----------------------|--|--------|-----------------------|----------------------|-----------------------|
| 行程<br>Stroke          | X轴行程 (左右) X-axis   | mm     | 600                   | 600                  | 700                   |
|                       | Y轴行程 (前后) Y-axis   | mm     | 400                   | 500                  | 500                   |
|                       | Z轴行程 (上下) Z-axis   | mm     | 450                   | 500                  | 500                   |
| 工作台<br>Table          | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm     | 150-600               | 120-620              | 120-620               |
|                       | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm     | 466                   | 550                  | 570                   |
|                       | 工作台尺寸 (X轴方向) Table size(X-axis)                                | mm     | 700                   | 800                  | 900                   |
|                       | 工作台尺寸 (Y轴方向) Table size(Y-axis)                                | mm     | 420                   | 500                  | 500                   |
|                       | 工作台T型槽 t-slot  | mm     | 14x4x84<br>(尺寸x条数x间距) |                      | 18x5x90<br>(尺寸x条数x间距) |
|                       | 工作台最大载重 Allowable load   | kg     | 350                   | 400                  | 400                   |
| 主轴<br>Spindle         | 主轴转速 (皮带式) Spindle Speed                                       | rpm    | 8000                  | 8000                 | 8000                  |
|                       | 主轴马力 Power   | kw     | 5.5                   | 5.5                  | 5.5/7.5               |
|                       | 主轴内孔锥度 Spindle taper   |        | BT40(φ120)            | BT40(φ120)           | BT40(φ120)            |
| Feed<br>进给系统          | G00快速进给 (X/Y/Z) Feed rate(X/Y/Z)                               | m/min  | 48/48/48              | 48/48/48/            | 48/48/48              |
|                       | G01切削进给 Cutting feed rate                                      | mm/min | 1-10000               | 1-10000              | 1-10000               |
|                       | 伺服电机规格 Servo motor specifications                              | kw     | 2x2x3                 | 2X2X3                | 2x2x3                 |
| 刀库系统<br>Tool magazine | 刀库容量 Tool magazine   | pcs    | 刀臂式24<br>Arm type 24  | 刀臂式16<br>Arm type 16 | 刀臂式24<br>Arm type 24  |
| 机械<br>Machine         | 机器长度 Length  | mm     | 1650                  | 2000                 | 2256                  |
|                       | 机器宽度 Width   | mm     | 1390                  | 1900                 | 1900                  |
|                       | 机器高度 Height  | mm     | 1950                  | 2100                 | 2150                  |
|                       | 机器重量 Weight  | kg     | 3200                  | 2800                 | 3200                  |



| V-0850L              | V-0855L              | V-1060L              | V-1160L              | V-1380L              | V-1580L              |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 800                  | 800                  | 1000                 | 1100                 | 1300                 | 1500                 |
| 500                  | 550                  | 600                  | 600                  | 800                  | 800                  |
| 500                  | 550                  | 600                  | 600                  | 700                  | 700                  |
| 120-620              | 120-670              | 120-720              | 120-720              | 150-850              | 120-820              |
| 570                  | 595                  | 650                  | 650                  | 855                  | 865                  |
| 900/1000             | 1000                 | 1200                 | 1200                 | 1400                 | 1600                 |
| 500                  | 550                  | 600                  | 600                  | 800                  | 800                  |
|                      |                      |                      |                      |                      |                      |
| 400                  | 500                  | 800                  | 800                  | 1000                 | 1100                 |
| 8000                 | 8000                 | 8000                 | 8000                 | 6000/8000            | 6000/8000            |
| 7.5                  | 7.5                  | 11                   | 11                   | 11/15                | 11/15                |
| BT40(φ120)           | BT40                 | BT40                 | BT40                 | BT50                 | BT50(短鼻端)            |
| 48/48/48             | 48/48/48             | 36/36/36             | 36/36/36             | 30/30/30             | 30/30/30             |
| 1-10000              | 1-10000              | 1-10000              | 1-10000              | 1-10000              | 1-10000              |
| 2x2x3                | 2x2x3                | 3x3x4.5              | 3x3x4.5              | 3x3x3.5              | 3.5x3.5x4.5          |
| 刀臂式24<br>Arm type 24 | 刀臂式24<br>Arm type 24 | 刀臂式24<br>Arm type 24 | 刀臂式24<br>Arm type 24 | 刀臂式24<br>Arm type 24 | 刀臂式24<br>Arm type 24 |
| 2050                 | 2400                 | 2855                 | 2945                 | 3300                 | 3500                 |
| 1895                 | 2050                 | 2150                 | 2150                 | 2620                 | 27200                |
| 2150                 | 2250                 | 2350                 | 2350                 | 3610                 | 3610                 |
| 3350                 | 4060                 | 5130                 | 5360                 | 12200                | 13000                |



# V-0640L

## 基本参数 Basic

|   |  |  |
|---|--|--|
| <p>行程<br/>Stroke</p> <p><b>立式</b><br/>Vertical</p> <p>X: 600</p> <p>Z: 450</p> <p>Y: 400 (mm)</p> | <p>主轴马力<br/>Power source</p> <p><b>5.5</b><br/>KW</p>            | <p>主轴锥度<br/>Spindle taper</p> <p><b>BT40</b></p>         |
|   | <p>切削进给<br/>Cutting feed rate</p> <p><b>10000</b><br/>mm/min</p> | <p>主轴转速<br/>Spindle Speed</p> <p><b>8000</b><br/>rpm</p> |

## 技术参数 Specifications

| 项目(Item)      | 单位(Unit)   | V-0640L              |
|---------------|--|----------------------|
| 行程<br>Stroke  | X轴行程(左右) X-axis  | mm 600               |
|               | Y轴行程(前后) Y-axis  | mm 400               |
|               | Z轴行程(上下) Z-axis  | mm 450               |
| 工作台<br>Table  | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm 150-600           |
|               | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm 466               |
|               | 工作台尺寸(X轴方向) Table size(X-axis)                                 | mm 700               |
|               | 工作台尺寸(Y轴方向) Table size(Y-axis)                                 | mm 420               |
|               | 工作台T型槽 t-slot  | mm 14x4x84(尺寸x条数x间距) |
| 主轴<br>Spindle | 主轴转速(皮带式) Spindle Speed  | rpm 8000             |
|               | 主轴马力 Power   | kw 5.5               |
|               | 主轴内孔锥度 Spindle taper   | BT40(φ120)           |
| Feed<br>进给系统  | G00快速进给(X/Y/Z) Feed rate(X/Y/Z)                                | m/min 48/48/48       |
|               | G01切削进给 Cutting feed rate                                      | mm/min 1-10000       |
|               | 伺服电机规格 Servo motor specifications                              | kw 2x2x3             |
| 机械<br>Machine | 机器长度 Length  | mm 1650              |
|               | 机器宽度 Width   | mm 1390              |
|               | 机器高度 Height  | mm 1950              |
|               | 机器重量 Weight  | kg 3200              |

\*产品如有信息更改, 不另行通知 We do not notice when it is changed

## 1 直结轴(选配)

### Direct-axis(Optional)

直结轴均选用高级精密P4级轴承组装, 主轴设计质量轻、离心力低、刚性佳、膨胀系数低, 可获得最佳的精度及主轴寿命。

Direct-axis adopted Precision P4 bearing .The spindle is designed to be Light weight、Low centrifugal force、outstanding rigidity、Low coefficient of expansion,make the machine improving accuracy,extending spindle life.



## 2 加工范围600 mm\* 400 mm

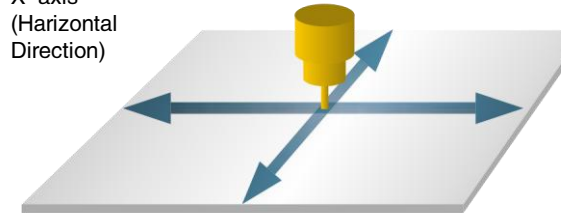
### Machining Area 600mm\*400mm

X轴600mm和Y轴400mm的行程可加工范围更广。较小的零件通过多件装夹实现加工。

Wide variety of parts can be machined with wider range of strokes at X axis 600mm and Y axis 400mm. Multiple parts fixturing for smaller parts can be done.

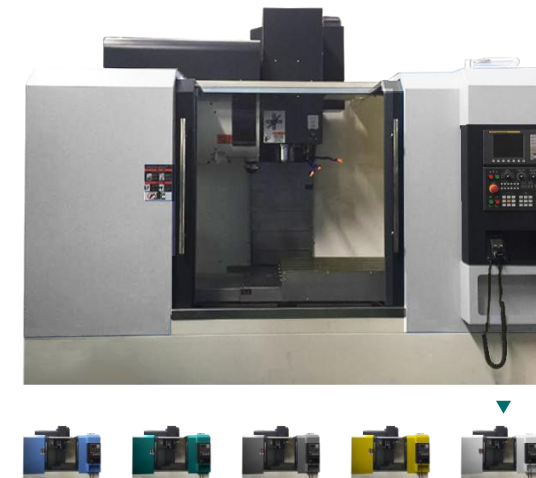
X-轴(左右方向)  
600mm

X-axis  
(Horizontal  
Direction)



Y-轴(前后方向) 400mm  
Y-axis (Vertical Direction)

## 尺寸 Dimensions(mm)

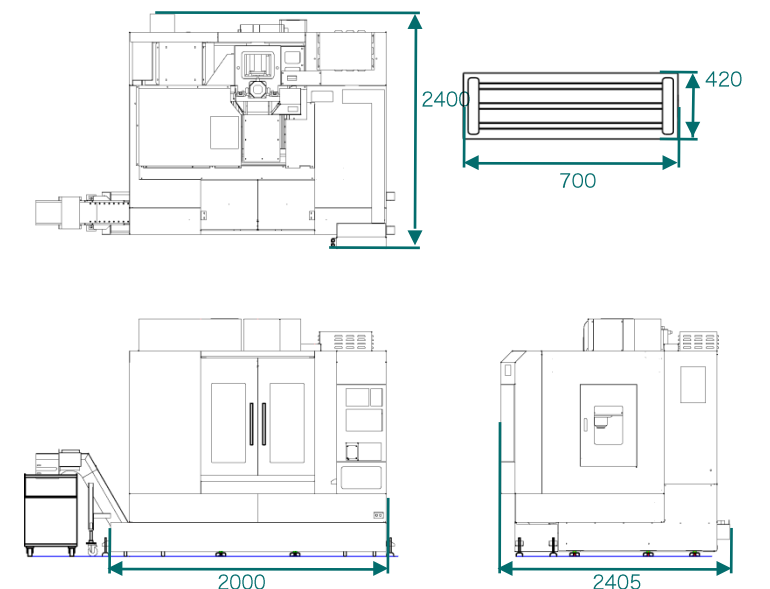
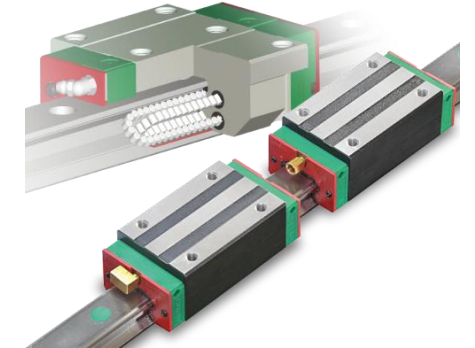


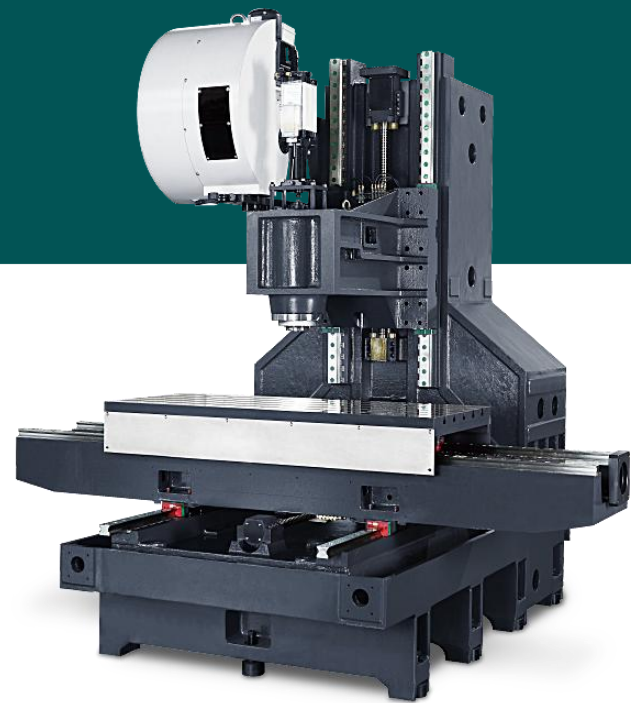
## 3 滚柱式线性滑轨(选配)

### Linear slide(Optional)

线性滑轨磨耗量非常小, 使用寿命非常长。适用于高速运转, 大幅降低机台所需驱动马力。

Linear slide rail abrasion quantity is very small,extending spindle life.Suitable for high speed operation,Greatly reduced the required of driving horse power.





# V-0650L

## 基本参数 Basic

|  |  |  |
|--|--|--|
| <p>行程<br/>Stroke</p> <p><b>立式</b><br/>Vertical</p> <p>X:600</p> <p>Z:500</p> <p>Y:500 (mm)</p> | <p>主轴功率<br/>Power source</p> <p><b>5.5</b><br/>KW</p>            | <p>主轴锥度<br/>Spindle taper</p> <p><b>BT40</b></p>         |
|  | <p>切削进给<br/>Cutting feed rate</p> <p><b>10000</b><br/>mm/min</p> | <p>主轴转速<br/>Spindle Speed</p> <p><b>8000</b><br/>rpm</p> |

## 技术参数 Specifications

| 项目(Item)      | 单位(Unit)   | V-0650L         |
|---------------|--|-----------------|
| 行程<br>Stroke  | X轴行程(左右) X-axis  | mm 600          |
|               | Y轴行程(前后) Y-axis  | mm 500          |
|               | Z轴行程(上下) Z-axis  | mm 500          |
| 工作台<br>Table  | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm 120-620      |
|               | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm 550          |
|               | 工作台尺寸(X轴方向) Table size   | mm 800          |
|               | 工作台尺寸(Y轴方向) Table size   | mm 500          |
|               | 工作台最大载重 Allowable load   | kg 400          |
| 主轴<br>Spindle | 主轴转速(皮带式) Spindle Speed  | rpm 8000        |
|               | 主轴功率 Power   | kw 5.5          |
|               | 主轴内孔锥度 Spindle taper   | BT40(φ120)      |
| Feed<br>进给系统  | G00快速进给(X/Y/Z) Feed rate(X/Y/Z)                                | m/min 48/48/48/ |
|               | G01切削进给 Cutting feed rate                                      | mm/min 1-10000  |
|               | 伺服电机规格 Servo motor specifications                              | kw 2X2X3        |
| 机械<br>Machine | 机器长度 Length  | mm 2000         |
|               | 机器宽度 Width   | mm 1900         |
|               | 机器高度 Height  | mm 2100         |
|               | 机器重量 Weight  | kg 2800         |

\*产品如有信息更改, 不另行通知 We do not notice when it is changed

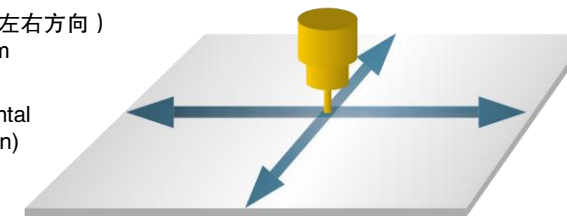
## 1 加工范围1300mm\*800mm

### Machining Area 1300mm\*800mm

X轴1300mm和Y轴800mm的行程可加工范围更广。  
较小的零件通过多件装夹实现加工。

Wide variety of parts can be machined with wider range of strokes at X axis 1300mm and Y axis 800mm. Multiple parts fixturing for smaller parts can be done.

X-轴(左右方向)  
1300mm  
X-axis  
(Horizontal  
Direction)



Y-轴(前后方向) 800mm  
Y-axis (Vertical Direction)



## 2 高速静音化滚柱螺杆(选配)

### Direct-axis(Optional)

低噪音: 回流单元的设计, 可吸收钢珠冲击所产生的噪音, 而大幅降低噪音值。

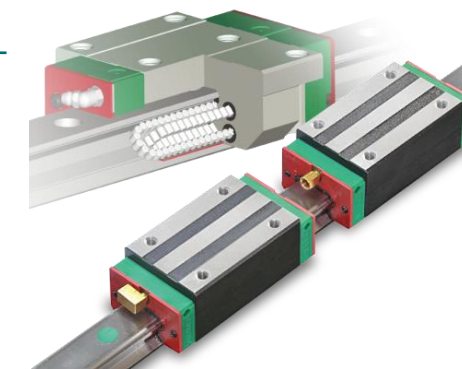
Low noise: The design of flow unit, can absorb the noise of Steel ball impact, thus reduce the noise level.

## 3 滚柱式线性滑轨(选配)

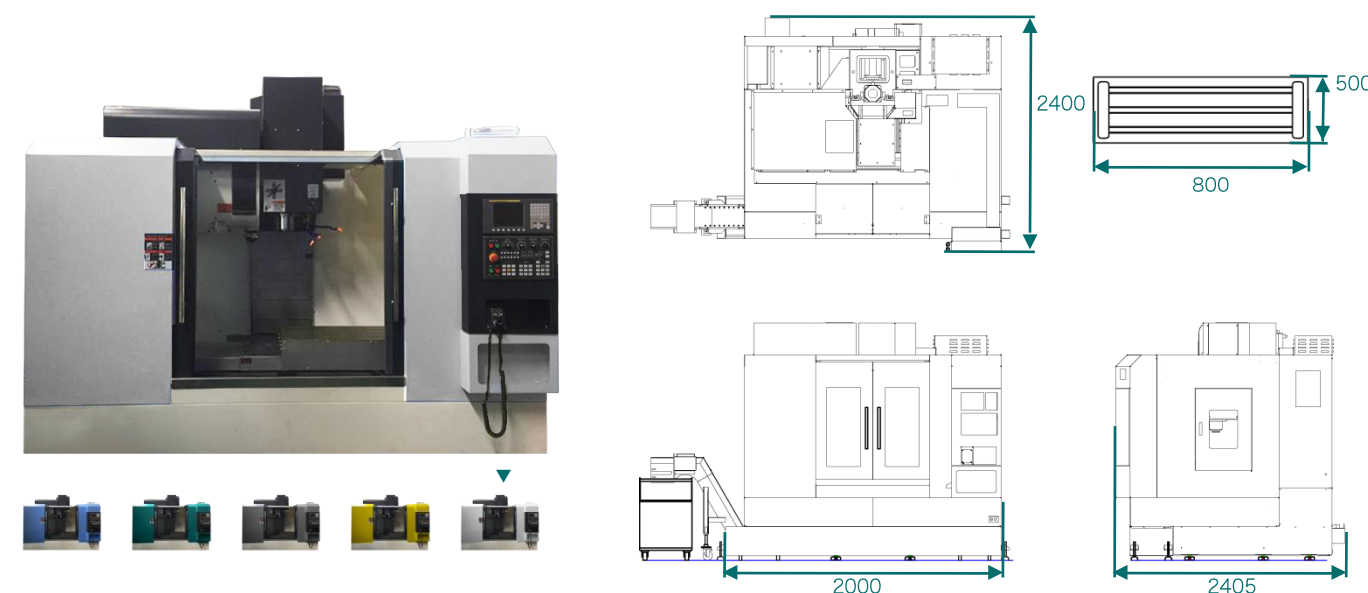
### Linear slide(Optional)

滚柱式线性滑轨在承受高负载时, 仅仅形成微小的变化, 大大提升线性滑轨的刚性, 更能维持高精度的加工。线性滑轨磨损量非常小, 使用寿命非常长。适用于高速运转, 大幅降低机台所需驱动马力。

With roller type linear ways, formed only a trace amount of change, greatly increase rigidity, can maintain high precision machining. Linear slide rail abrasion quantity is very small, extending spindle life. Suitable for high speed operation, greatly reduced the required of driving horse power.



## 尺寸 Dimensions(mm)





# V-0750L

## 基本参数 Basic

|   |  |  |
|---|--|--|
| <p>行程<br/>Stroke</p> <p><b>立式</b><br/>Vertical</p> <p>X: 700</p> <p>Z: 500</p> <p>Y: 500 (mm)</p> | <p>主轴马力<br/>Power source</p> <p><b>5.5/7.5</b><br/>KW</p>        | <p>主轴锥度<br/>Spindle taper</p> <p><b>BT40</b></p>         |
|   | <p>切削进给<br/>Cutting feed rate</p> <p><b>10000</b><br/>mm/min</p> | <p>主轴转速<br/>Spindle Speed</p> <p><b>8000</b><br/>rpm</p> |

## 技术参数 Specifications

| 项目(Item)      | 单位(Unit)   | V-0750L |                   |
|---------------|--|---------|-------------------|
| 行程<br>Stroke  | X轴行程(左右) X-axis  | mm      | 700               |
|               | Y轴行程(前后) Y-axis  | mm      | 500               |
|               | Z轴行程(上下) Z-axis  | mm      | 500               |
| 工作台<br>Table  | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm      | 120-620           |
|               | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm      | 570               |
|               | 工作台尺寸(X轴方向) Table size(X-axis)                                 | mm      | 900               |
|               | 工作台尺寸(Y轴方向) Table size(Y-axis)                                 | mm      | 500               |
|               | 工作台T型槽 t-slot  | mm      | 18x5x90(尺寸x条数x间距) |
| 主轴<br>Spindle | 主轴转速(皮带式) Spindle Speed  | rpm     | 8000              |
|               | 主轴马力 Power   | kw      | 5.5/7.5           |
|               | 主轴内孔锥度 Spindle taper   |         | BT40(φ120)        |
| Feed<br>进给系统  | G00快速进给(X/Y/Z) Feed rate(X/Y/Z)                                | m/min   | 48/48/48          |
|               | G01切削进给 Cutting feed rate                                      | mm/min  | 1-10000           |
|               | 伺服电机规格 Servo motor specifications                              | kw      | 2x2x3             |
| 机械<br>Machine | 机器长度 Length  | mm      | 2256              |
|               | 机器宽度 Width   | mm      | 1900              |
|               | 机器高度 Height  | mm      | 2150              |
|               | 机器重量 Weight  | kg      | 3200              |

\*产品如有信息更改, 不另行通知 We do not notice when it is changed



## 3 铸件

### Casting

底座、鞍座、立柱、主轴箱等主结构铸件采用高级铸铁并经二次火处理, 确保结构高刚性、高稳定性。

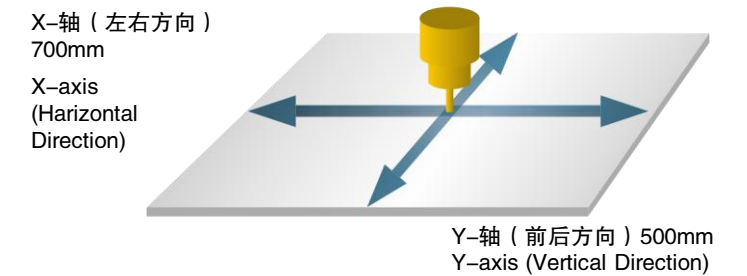
Main components of machine(such as base,Saddle, Column etc.) has treated by secondary hardening and made of cast iron to ensure machine rigidity

## 1 加工范围700 mm\* 500 mm

### Machining Area 700 mm\* 500 mm

X轴700mm和Y轴500mm的行程可加工范围更广。较小的零件通过多件装夹实现加工。

Wide variety of parts can be machined with wider range of strokes at X axis 700mm and Y axis 500mm. Multiple parts fixturing for smaller parts can be done.



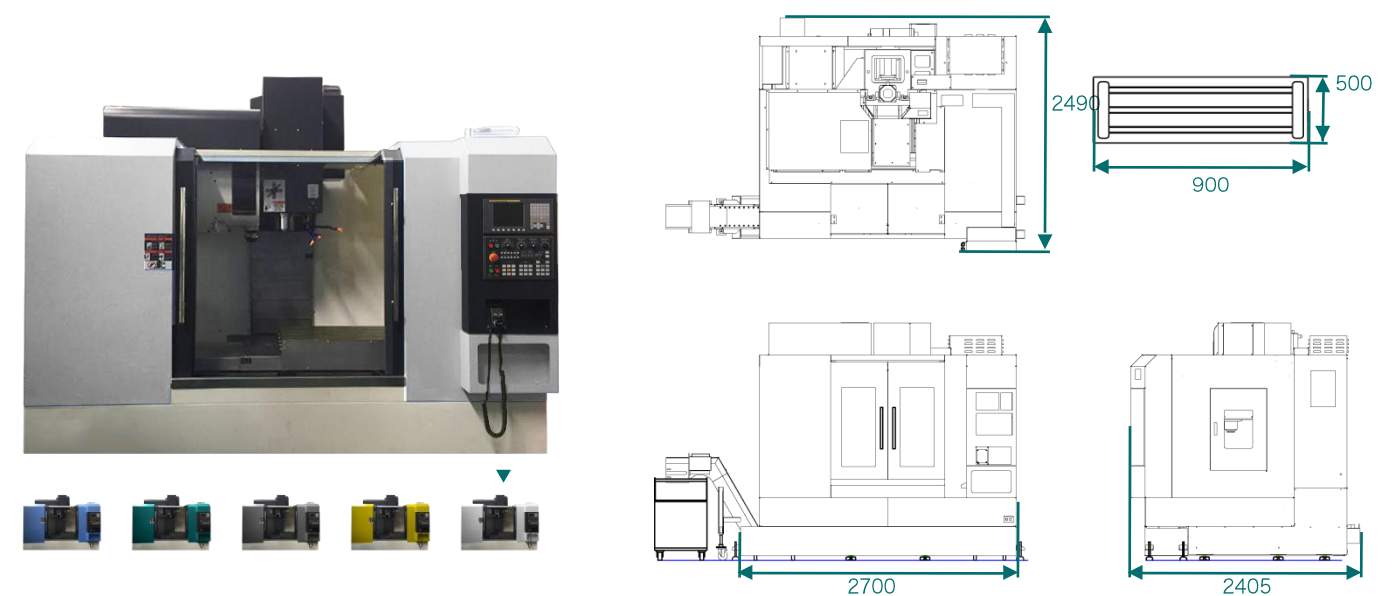
## 3 直结式主轴头(选配)

### Spindle head(Optional)

搭配直结式主轴, 获得最佳传动效率及表面光洁度, 不但刀具损耗低, 高速刚性攻牙速度快、精度高、不断牙齿。

Combined with Direct-drive spindle to achieve higher efficiency and good surface finish, It also may increase efficiency while lowering tool wear, to exhibit high speed, high accuracy and high rigidity features.

## 尺寸 Dimensions(mm)





# V-0850L

## 基本参数 Basic

|   |  |  |
|---|--|--|
| <b>行程</b><br>Stroke<br><b>立式</b><br>Vertical<br>X: 800<br>Z: 500<br>Y: 500 (mm) | <b>主轴马力</b><br>Power source<br><b>7.5</b><br>KW            | <b>主轴锥度</b><br>Spindle taper<br><b>BT40</b>        |
|   | <b>切削进给</b><br>Cutting feed rate<br><b>10000</b><br>mm/min | <b>主轴转速</b><br>Spindle Speed<br><b>8000</b><br>rpm |

## 技术参数 Specifications

| 项目(Item)      | 单位(Unit)   | V-0850L |            |
|---------------|--|---------|------------|
| 行程<br>Stroke  | X轴行程 (左右) X-axis   | mm      | 800        |
|               | Y轴行程 (前后) Y-axis   | mm      | 500        |
|               | Z轴行程 (上下) Z-axis   | mm      | 500        |
| 工作台<br>Table  | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm      | 120-620    |
|               | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm      | 570        |
|               | 工作台尺寸 (X轴方向) Table size(X-axis)                                | mm      | 900/1000   |
|               | 工作台尺寸 (Y轴方向) Table size(Y-axis)                                | mm      | 500        |
|               | 工作台最大载重 Allowable load   | kg      | 400        |
| 主轴<br>Spindle | 主轴转速 (皮带式) Spindle Speed                                       | rpm     | 8000       |
|               | 主轴马力 Power   | kw      | 7.5        |
|               | 主轴内孔锥度 Spindle taper   |         | BT40(φ120) |
| Feed<br>进给系统  | G00快速进给 (X/Y/Z) Feed rate(X/Y/Z)                               | m/min   | 48/48/48   |
|               | G01切削进给 Cutting feed rate                                      | mm/min  | 1-10000    |
|               | 伺服电机规格 Servo motor specifications                              | kw      | 2x2x3      |
| 机械<br>Machine | 机器长度 Length  | mm      | 2050       |
|               | 机器宽度 Width   | mm      | 1895       |
|               | 机器高度 Height  | mm      | 2150       |
|               | 机器重量 Weight  | kg      | 3350       |

\*产品如有信息更改, 不另行通知 We do not notice when it is changed

## 1 直结轴(选配)

### Direct-axis(Optional)

直结轴均选用高级精密P4级轴承组装, 主轴设计质量轻、离心力低、刚性佳、膨胀系数低, 可获得最佳的精度及主轴寿命。

Direct-axis adopted Precision P4 bearing .The spindle is designed to be Light weight、Low centrifugal force、outstanding rigidity、Low coefficient of expansion,make the machine improving accuracy,extending spindle life.



## 3 直结式主轴头(选配)

### Spindle head(Optional)

搭配直结式主轴, 获得最佳传动效率及表面光洁度, 不但刀具损耗低, 高速刚性攻牙速度快、精度高、不断牙攻。

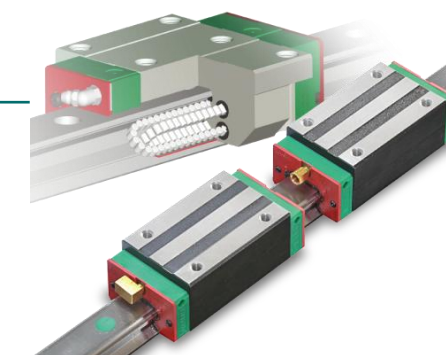
Combined with Direct-drive spindle to achieve higher efficiency and good surface finish,It also may increase efficiency while lowering tool wear,to exhibit high speed, high accuracy and high rigidity features.

## 3 滚柱式线性滑轨(选配)

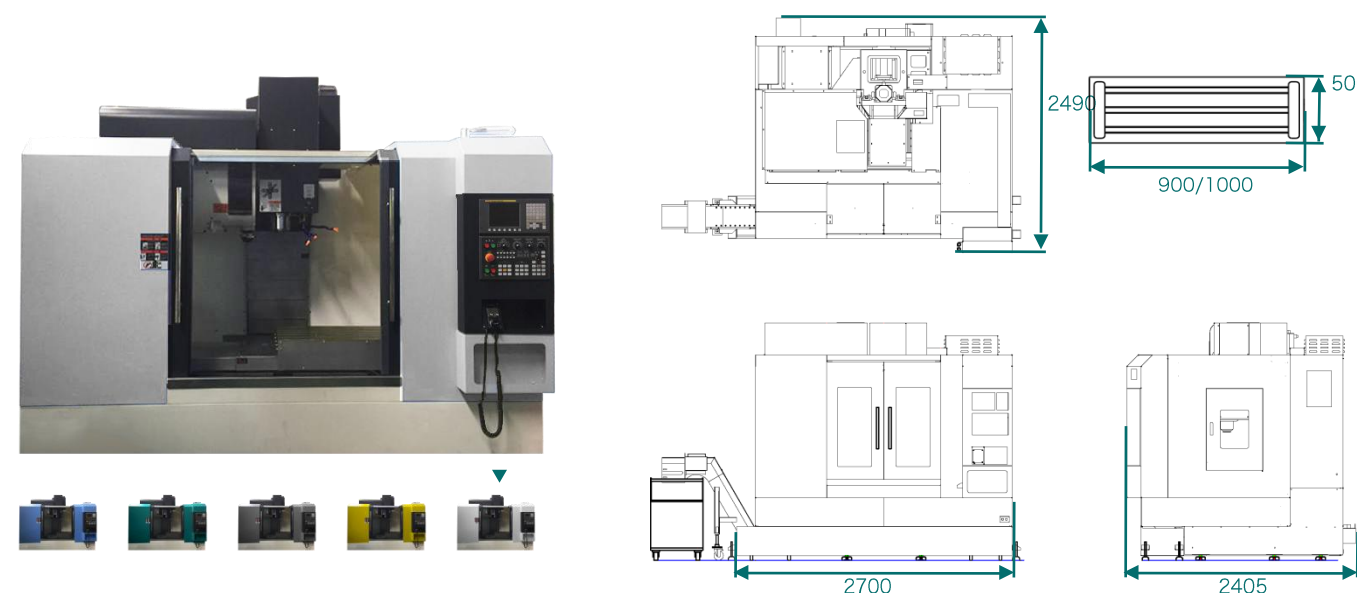
### Linear slide(Optional)

滚柱式线性滑轨在承受高负载时, 仅仅形成微小的变化, 大大提升线性滑轨的刚性, 更能维持高精度的加工

With roller type linear ways,formed only a trace amount of change,greatly increase rigidity ,can maintain high precision machining.



## 尺寸 Dimensions(mm)





# V-0855L

## 基本参数 Basic

行程  
Stroke

**立式**  
Vertical

X: 800

Z: 550

Y: 550 (mm)

主轴功率  
Power source

**7.5**  
KW

主轴锥度  
Spindle taper

**BT40**

切削进给  
Cutting feed rate

**10000**  
mm/min

主轴转速  
Spindle Speed

**8000**  
rpm

## 技术参数 Specifications

| 项目 (Item)     | 单位 (Unit)  | V-0855L        |
|---------------|--|----------------|
| 行程<br>Stroke  | X轴行程 (左右) X-axis   | mm 800         |
|               | Y轴行程 (前后) Y-axis   | mm 550         |
|               | Z轴行程 (上下) Z-axis   | mm 550         |
| 工作台<br>Table  | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm 120-670     |
|               | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm 595         |
|               | 工作台尺寸 (X轴方向) Table size(X-axis)                                | mm 1000        |
|               | 工作台尺寸 (Y轴方向) Table size(Y-axis)                                | mm 550         |
|               | 工作台最大载重 Allowable load   | kg 500         |
| 主轴<br>Spindle | 主轴转速 (皮带式) Spindle Speed                                       | rpm 8000       |
|               | 主轴功率 Power   | kw 7.5         |
|               | 主轴内孔锥度 Spindle taper   | BT40           |
| Feed<br>进给系统  | G00快速进给 (X/Y/Z) Feed rate(X/Y/Z)                               | m/min 48/48/48 |
|               | G01切削进给 Cutting feed rate                                      | mm/min 1-10000 |
|               | 伺服电机规格 Servo motor specifications                              | kw 2x2x3       |
| 机械<br>Machine | 机器长度 Length  | mm 2400        |
|               | 机器宽度 Width   | mm 2050        |
|               | 机器高度 Height  | mm 2250        |
|               | 机器重量 Weight  | kg 4060        |

\*产品如有信息更改, 不另行通知 We do not notice when it is changed

## 3 铸件

### Casting

底座、鞍座、立柱、主轴箱等主结构铸件采用高级铸铁并经二次火处理, 确保结构高刚性、高稳定性。

Main components of machine(such as base,Saddle, Column etc.) has treated by secondary hardening and made of cast iron to ensure machine rigidity



## 2 直结轴(选配)

### Direct-axis(Optional)

直结轴均选用高级精密P4级轴承组装, 主轴设计质量轻、离心力低、刚性佳、膨胀系数低, 可获得最佳的精度及主轴寿命。

Direct-axis adopted Precision P4 bearing .The spindle is designed to be Light weight、Low centrifugal force、outstanding rigidity、Low coefficient of expansion,make the machine improving accuracy,extending spindle life.

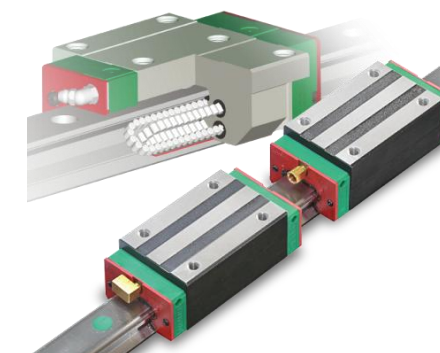


## 3 滚柱式线性滑轨 (选配)

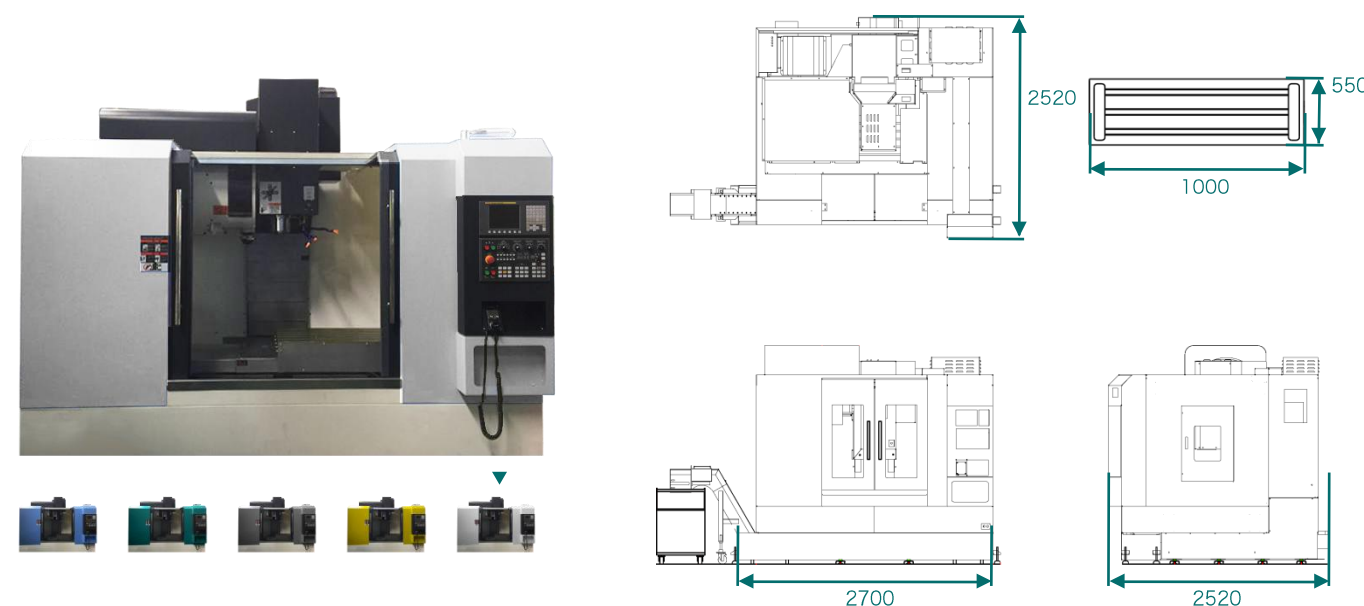
### Linear slide(Optional)

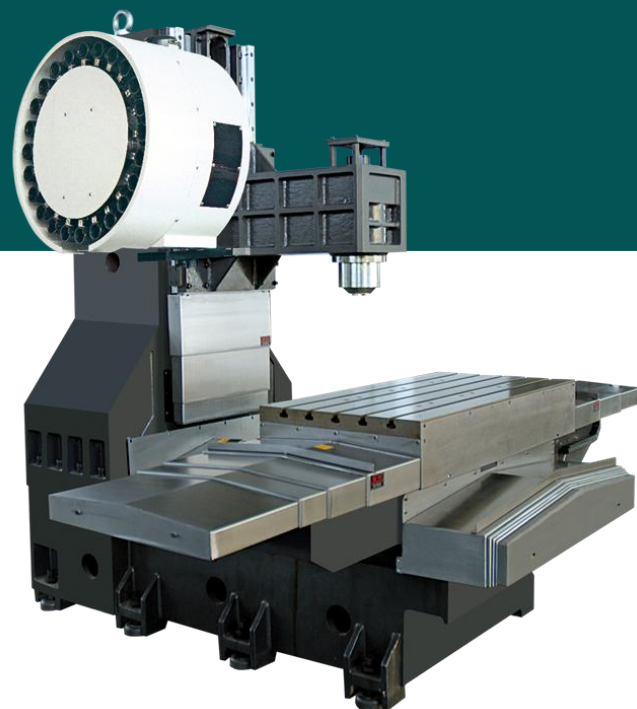
滚柱式线性滑轨在承受高负载时, 仅仅形成微小的变化, 大大提升线性滑轨的刚性, 更能维持高精度的加工

With roller type linear ways,formed only a trace amount of change,greatly increase rigidity ,can maintain high precision machining.



## 尺寸 Dimensions(mm)





# V-1060L

## 基本参数 Basic

|  |  |  |
|--|--|--|
| <p>行程<br/>Stroke</p> <p><b>立式</b><br/>Vertical</p> <p>X:1000</p> <p>Z:600</p> <p>Y: 600 (mm)</p> | <p>主轴马力<br/>Power source</p> <p><b>11</b><br/>KW</p>             | <p>主轴锥度<br/>Spindle taper</p> <p><b>BT40</b></p>         |
|  | <p>切削进给<br/>Cutting feed rate</p> <p><b>10000</b><br/>mm/min</p> | <p>主轴转速<br/>Spindle Speed</p> <p><b>8000</b><br/>rpm</p> |

## 技术参数 Specifications

| 项目(Item)      | 单位(Unit)   | V-1060L |          |
|---------------|--|---------|----------|
| 行程<br>Stroke  | X轴行程(左右) X-axis  | mm      | 1000     |
|               | Y轴行程(前后) Y-axis  | mm      | 600      |
|               | Z轴行程(上下) Z-axis  | mm      | 600      |
| 工作台<br>Table  | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm      | 120-720  |
|               | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm      | 650      |
|               | 工作台尺寸(X轴方向) Table size(X-axis)                                 | mm      | 1200     |
|               | 工作台尺寸(Y轴方向) Table size(Y-axis)                                 | mm      | 600      |
|               | 工作台最大载重 Allowable load   | kg      | 800      |
| 主轴<br>Spindle | 主轴转速(皮带式) Spindle Speed  | rpm     | 8000     |
|               | 主轴马力 Power   | kw      | 11       |
|               | 主轴内孔锥度 Spindle taper   |         | BT40     |
| Feed<br>进给系统  | G00快速进给(X/Y/Z) Feed rate(X/Y/Z)                                | m/min   | 36/36/36 |
|               | G01切削进给 Cutting feed rate                                      | mm/min  | 1-10000  |
|               | 伺服电机规格 Servo motor specifications                              | kw      | 3x3x4.5  |
| 机械<br>Machine | 机器长度 Length  | mm      | 2855     |
|               | 机器宽度 Width   | mm      | 2150     |
|               | 机器高度 Height  | mm      | 2350     |
|               | 机器重量 Weight  | kg      | 5130     |

\*产品如有信息更改, 不另行通知 We do not notice when it is changed

## 1 加工范围1000mm\*600mm

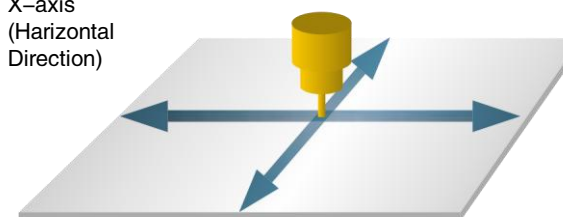
### Machining Area 1000mm\*600mm

X轴1000mm和Y轴600mm的行程可加工范围更广。较小的零件通过多件装夹实现加工。

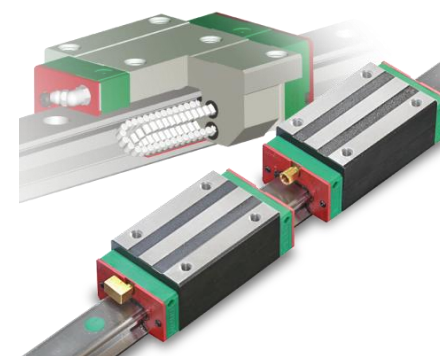
Wide variety of parts can be machined with wider range of strokes at X axis 1000mm and Y axis 600mm. Multiple parts fixturing for smaller parts can be done.

X-轴(左右方向)  
1000mm

X-axis  
(Horizontal  
Direction)



Y-轴(前后方向) 600mm  
Y-axis (Vertical  
Direction)



## 尺寸 Dimensions(mm)



## 2 直结式主轴头(选配)

### Spindle head(Optional)

搭配直结式主轴, 获得最佳传动效率及表面光洁度, 不但刀具损耗低, 高速刚性攻牙速度快、精度高、不断牙攻。



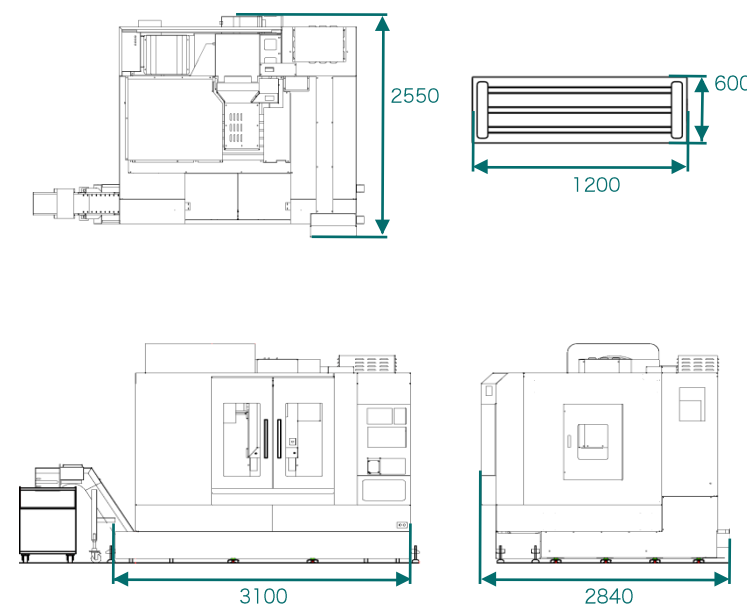
Combined with Direct-drive spindle to achieve higher efficiency and good surface finish, It also may increase efficiency while lowering tool wear, to exhibit high speed, high accuracy and high rigidity features.

## 3 滚柱式线性滑轨(选配)

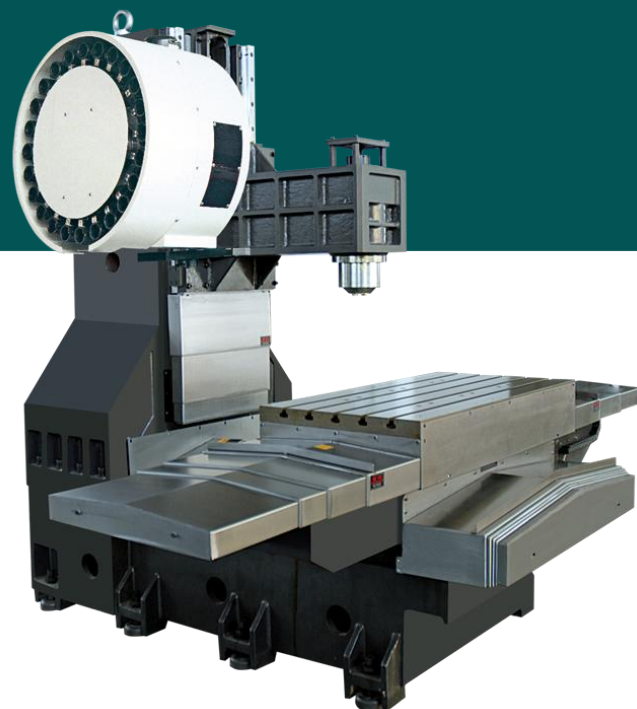
### Linear slide(Optional)

滚柱式线性滑轨在承受高负载时, 仅仅形成微小的变化, 大大提升线性滑轨的刚性, 更能维持高精度的加工

With roller type linear ways, formed only a trace amount of change, greatly increase rigidity, can maintain high precision machining.



# V-1160L



## 基本参数 Basic

|  |  |  |
|--|--|--|
| <p>行程<br/>Stroke</p> <p><b>立式</b><br/>Vertical</p> <p>X:1100</p> <p>Z:600</p> <p>Y: 600 (mm)</p> | <p>主轴马力<br/>Power source</p> <p><b>11</b><br/>KW</p>             | <p>主轴锥度<br/>Spindle taper</p> <p><b>BT40</b></p>         |
|  | <p>切削进给<br/>Cutting feed rate</p> <p><b>10000</b><br/>mm/min</p> | <p>主轴转速<br/>Spindle Speed</p> <p><b>8000</b><br/>rpm</p> |

## 技术参数 Specifications

| 项目(Item)      | 单位(Unit)   | V-1160L |          |
|---------------|--|---------|----------|
| 行程<br>Stroke  | X轴行程 (左右) X-axis   | mm      | 1100     |
|               | Y轴行程 (前后) Y-axis   | mm      | 600      |
|               | Z轴行程 (上下) Z-axis   | mm      | 600      |
| 工作台<br>Table  | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm      | 120-720  |
|               | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm      | 650      |
|               | 工作台尺寸 (X轴方向) Table size(X-axis)                                | mm      | 1200     |
|               | 工作台尺寸 (Y轴方向) Table size(Y-axis)                                | mm      | 600      |
|               | 工作台最大载重 Allowable load   | kg      | 800      |
| 主轴<br>Spindle | 主轴转速 (皮带式) Spindle Speed                                       | rpm     | 8000     |
|               | 主轴马力 Power   | kw      | 11       |
|               | 主轴内孔锥度 Spindle taper   |         | BT40     |
| Feed<br>进给系统  | G00快速进给 (X/Y/Z) Feed rate(X/Y/Z)                               | m/min   | 36/36/36 |
|               | G01切削进给 Cutting feed rate                                      | mm/min  | 1-10000  |
|               | 伺服电机规格 Servo motor specifications                              | kw      | 3x3x4.5  |
| 机械<br>Machine | 机器长度 Length  | mm      | 2945     |
|               | 机器宽度 Width   | mm      | 2150     |
|               | 机器高度 Height  | mm      | 2350     |
|               | 机器重量 Weight  | kg      | 5360     |

\*产品如有信息更改, 不另行通知 We do not notice when it is changed

## 1 加工范围1100mm\*600mm

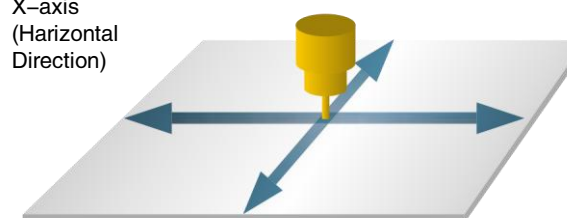
### Machining Area 1100mm\*600mm

X轴1100mm和Y轴600mm的行程可加工范围更广。较小的零件通过多件装夹实现加工。

Wide variety of parts can be machined with wider range of strokes at X axis 1100mm and Y axis 600mm. Multiple parts fixturing for smaller parts can be done.

X-轴 (左右方向)  
1100mm

X-axis  
(Horizontal  
Direction)



Y-轴 (前后方向) 600mm  
Y-axis (Vertical  
Direction)



## 尺寸 Dimensions(mm)



## 3 直结式主轴头(选配)

### Spindle head(Optional)

搭配直结式主轴, 获得最佳传动效率及表面光洁度, 不但刀具损耗低, 高速刚性攻牙速度快、精度高、不断牙攻。



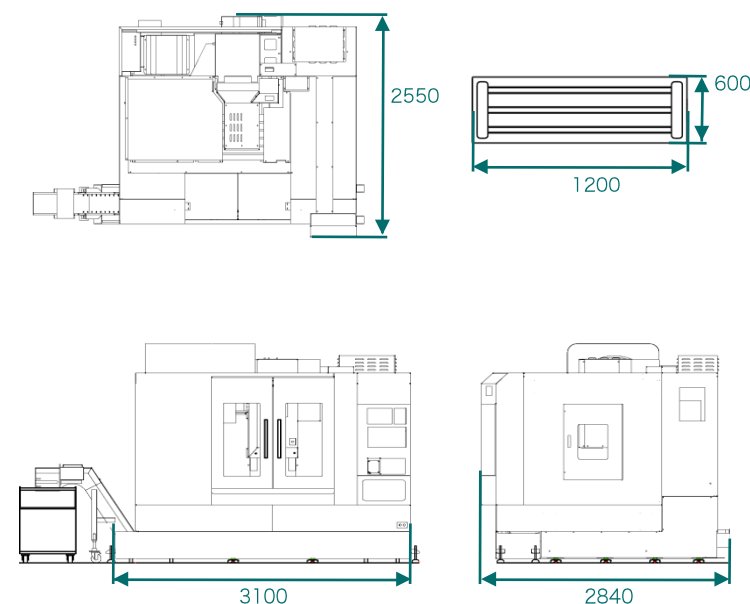
Combined with Direct-drive spindle to achieve higher efficiency and good surface finish, It also may increase efficiency while lowering tool wear, to exhibit high speed, high accuracy and high rigidity features.

## 2 直结轴(选配)

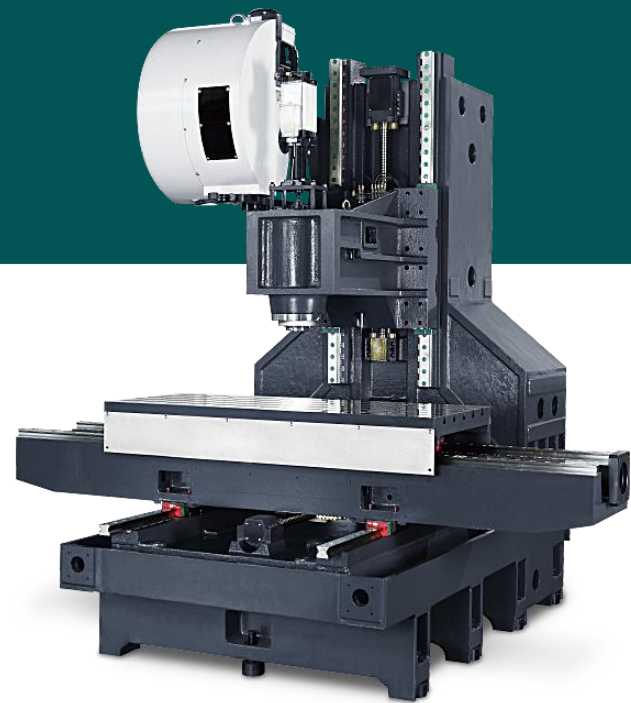
### Direct-axis(Optional)

直结轴均选用高级精密P4级轴承组装, 主轴设计质量轻、离心力低、刚性佳、膨胀系数低, 可获得最佳的精度及主轴寿命。

Direct-axis adopted Precision P4 bearing. The spindle is designed to be Light weight, Low centrifugal force, outstanding rigidity, Low coefficient of expansion, make the machine improving accuracy, extending spindle life.



# V-1380L



### 基本参数 Basic

|  |  |  |
|--|--|--|
| <p>行程<br/>Stroke</p> <p><b>立式</b><br/>Vertical</p> <p>X:1300</p> <p>Z:700</p> <p>Y: 800 (mm)</p> | <p>主轴功率<br/>Power source</p> <p><b>11/15</b><br/>KW</p>          | <p>主轴锥度<br/>Spindle taper</p> <p><b>BT50</b></p>                   |
|  | <p>切削进给<br/>Cutting feed rate</p> <p><b>10000</b><br/>mm/min</p> | <p>主轴转速<br/>Spindle Speed</p> <p><b>6000</b><br/>/8000<br/>rpm</p> |

### 技术参数 Specifications

| 项目(Item)      | 单位(Unit)   | V-1380L |           |
|---------------|--|---------|-----------|
| 行程<br>Stroke  | X轴行程(左右) X-axis  | mm      | 1300      |
|               | Y轴行程(前后) Y-axis  | mm      | 800       |
|               | Z轴行程(上下) Z-axis  | mm      | 700       |
| 工作台<br>Table  | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm      | 150-850   |
|               | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm      | 855       |
|               | 工作台尺寸(X轴方向) Table size(X-axis)                                 | mm      | 1400      |
|               | 工作台尺寸(Y轴方向) Table size(Y-axis)                                 | mm      | 800       |
|               | 工作台最大载重 Allowable load   | kg      | 1000      |
| 主轴<br>Spindle | 主轴转速(皮带式) Spindle Speed  | rpm     | 6000/8000 |
|               | 主轴功率 Power   | kw      | 11/15     |
|               | 主轴内孔锥度 Spindle taper   |         | BT50      |
| Feed<br>进给系统  | G00快速进给(X/Y/Z) Feed rate(X/Y/Z)                                | m/min   | 30/30/30  |
|               | G01切削进给 Cutting feed rate                                      | mm/min  | 1-10000   |
|               | 伺服电机规格 Servo motor specifications                              | kw      | 3x3x3.5   |
| 机械<br>Machine | 机器长度 Length  | mm      | 3300      |
|               | 机器宽度 Width   | mm      | 2620      |
|               | 机器高度 Height  | mm      | 3610      |
|               | 机器重量 Weight  | kg      | 12200     |

\*产品如有信息更改, 不另行通知 We do not notice when it is changed

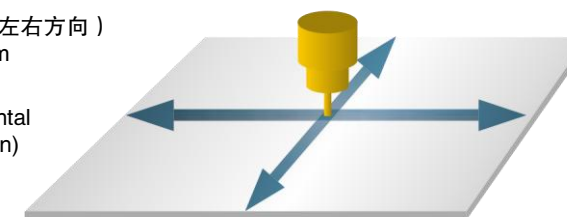
## 1 加工范围1300mm\*800mm

### Machining Area 1300mm\*800mm

X轴1300mm和Y轴800mm的行程可加工范围更广。  
较小的零件通过多件装夹实现加工。

Wide variety of parts can be machined with wider range of strokes at X axis 1300mm and Y axis 800mm. Multiple parts fixturing for smaller parts can be done.

X-轴(左右方向)  
1300mm  
X-axis  
(Horizontal  
Direction)



Y-轴(前后方向) 800mm  
Y-axis (Vertical Direction)



## 2 高速静音化滚柱螺杆(选配)

### Direct-axis(Optional)

低噪音: 回流单元的设计, 可吸收钢珠冲击所产生的噪音, 而大幅降低噪音值。

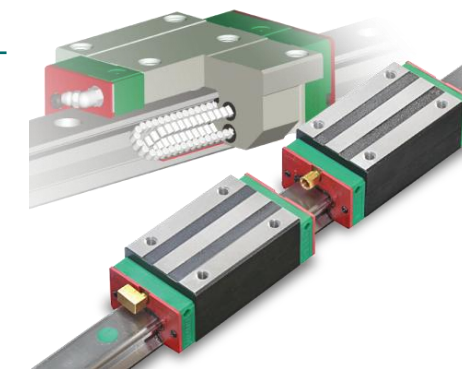
Low noise: The design of flow unit, can absorb the noise of Steel ball impact, thus reduce the noise level.

## 3 滚柱式线性滑轨(选配)

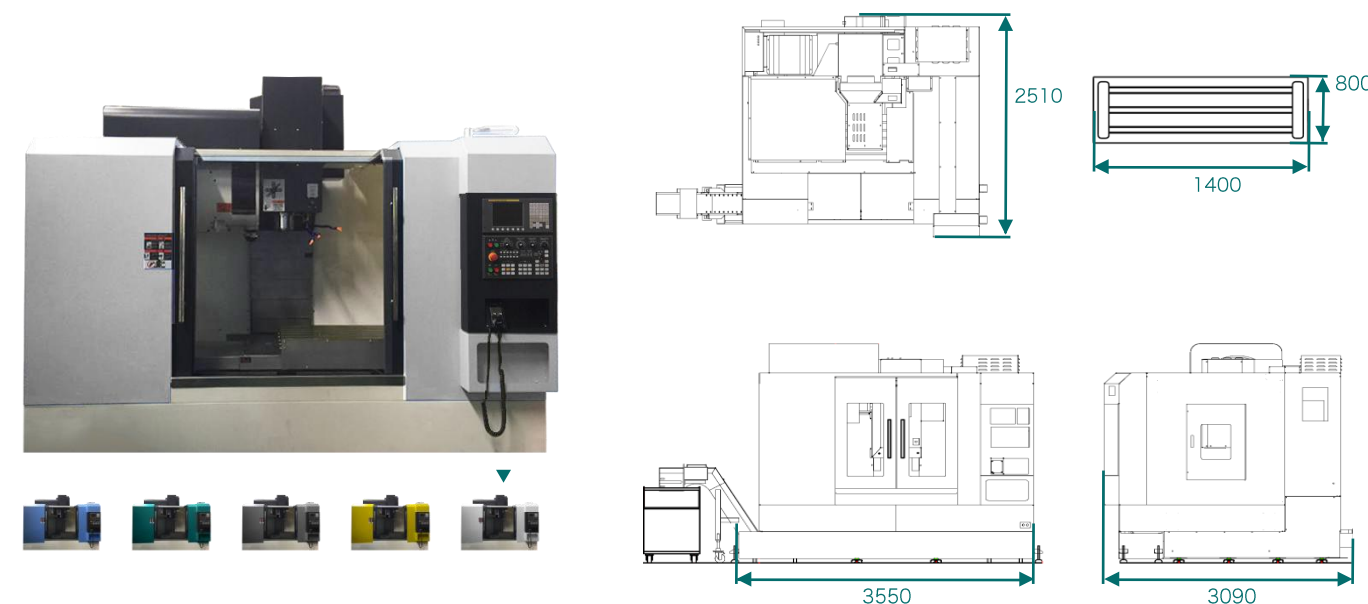
### Linear slide(Optional)

滚柱式线性滑轨在承受高负载时, 仅仅形成微小的变化, 大大提升线性滑轨的刚性, 更能维持高精度的加工。线性滑轨磨耗量非常小, 使用寿命非常长。适用于高速运转, 大幅降低机台所需驱动马力。

With roller type linear ways, formed only a trace amount of change, greatly increase rigidity, can maintain high precision machining. Linear slide rail abrasion quantity is very small, extending spindle life. Suitable for high speed operation, Greatly reduced the required of driving horse power.



### 尺寸 Dimensions(mm)



# V-1580L



### 基本参数 Basic

|   |  |   |
|---|--|---|
| <b>行程</b><br>Stroke<br><b>立式</b><br>Vertical<br>X:1500<br>Z:700<br>Y:800 (mm) | <b>主轴马力</b><br>Power source<br><b>11/15</b><br>KW          | <b>主轴锥度</b><br>Spindle taper<br><b>BT50</b>             |
|   | <b>切削进给</b><br>Cutting feed rate<br><b>10000</b><br>mm/min | <b>主轴转速</b><br>Spindle Speed<br><b>6000/8000</b><br>rpm |

### 技术参数 Specifications

| 项目(Item)      | 单位(Unit)   | V-1580L |                          |
|---------------|--|---------|--------------------------|
| 行程<br>Stroke  | X轴行程 (左右) X-axis   | mm      | 1500                     |
|               | Y轴行程 (前后) Y-axis   | mm      | 800                      |
|               | Z轴行程 (上下) Z-axis   | mm      | 700                      |
| 工作台<br>Table  | 主轴鼻端至工作台面距离<br>Distance from table surface to spindle nose     | mm      | 120-820                  |
|               | 主轴中心至立柱轨道面距离<br>Distance from spindle center to column surface | mm      | 865                      |
|               | 工作台尺寸 (X轴方向) Table size  | mm      | 1600                     |
|               | 工作台尺寸 (Y轴方向) Table size  | mm      | 800                      |
|               | 工作台最大载重 Allowable load   | kg      | 1100                     |
| 主轴<br>Spindle | 主轴转速 (皮带式) Spindle Speed                                       | rpm     | 6000/8000                |
|               | 主轴马力 Power   | kw      | 11/15                    |
|               | 主轴内孔锥度 Spindle taper   |         | BT50(Short Spindle Nose) |
| Feed<br>进给系统  | G00快速进给 (X/Y/Z) Feed rate(X/Y/Z)                               | m/min   | 30/30/30                 |
|               | G01切削进给 Cutting feed rate                                      | mm/min  | 1-10000                  |
|               | 伺服电机规格 Servo motor specifications                              | kw      | 3.5x3.5x4.5              |
| 机械<br>Machine | 机器长度 Length  | mm      | 3500                     |
|               | 机器宽度 Width   | mm      | 27200                    |
|               | 机器高度 Height  | mm      | 3610                     |
|               | 机器重量 Weight  | kg      | 13000                    |

\*产品如有信息更改, 不另行通知 We do not notice when it is changed

## 1 直结轴(选配)

### Direct-axis(Optional)

直结轴均选用高级精密P4级轴承组装, 主轴设计质量轻、离心力低、刚性佳、膨胀系数低, 可获得最佳的精度及主轴寿命。

Direct-axis adopted Precision P4 bearing .The spindle is designed to be Light weight、Low centrifugal force、outstanding rigidity、Low coefficient of expansion,make the machine improving accuracy,extending spindle life.



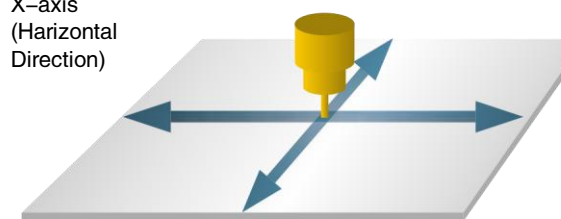
## 2 加工范围1500 mm\* 800 mm

### Machining Area 1500mm\*800mm

X轴1500mm和Y轴800mm的行程可加工范围更广。较小的零件通过多件装夹实现加工。

Wide variety of parts can be machined with wider range of strokes at X axis 1500mm and Y axis 800mm. Multiple parts fixturing for smaller parts can be done.

X-轴 (左右方向)  
1500mm  
X-axis  
(Horizontal  
Direction)



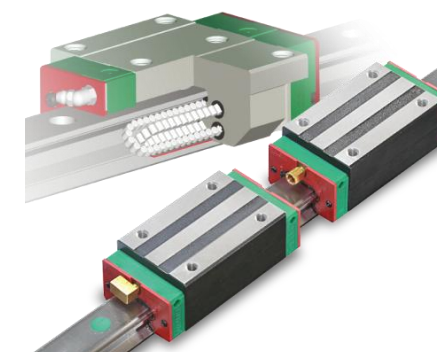
Y-轴 (前后方向) 800mm  
Y-axis (Vertical  
Direction)

## 3 滚柱式线性滑轨 (选配)

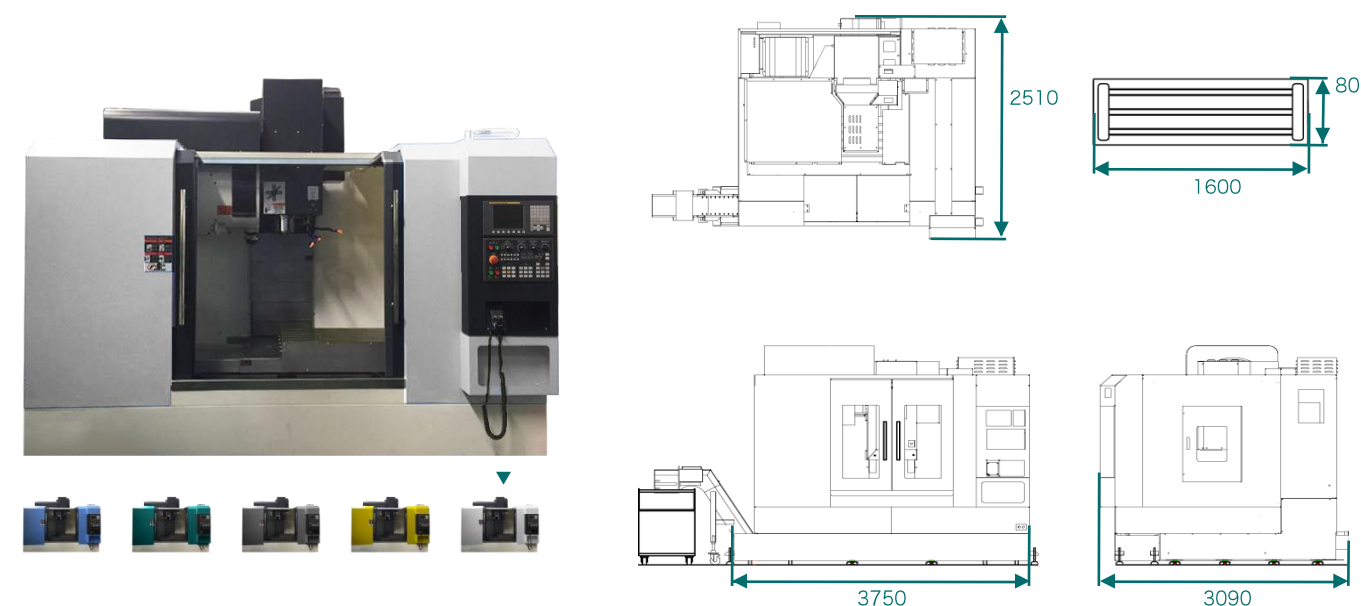
### Linear slide(Optional)

线性滑轨磨耗量非常小, 使用寿命非常长。适用于高速运转, 大幅降低机台所需驱动马力。

Linear slide rail abrasion quantity is very small,extending spindle life.Suitable for high speed operation,Greatly reduced the required of driving horse power.



### 尺寸 Dimensions(mm)



# Controller

Easy to Operate

## Advanced new standard for MITSUBISHI CNC



### MITSUBISHI CNC M70/M700 Series

**• Increasing process and reducing tack time**

- 0.1um for minimum input unit and 1nm for interpolation unit to realize highly smooth mechanical processing
- Upgrading calculation speed due to high-speed PLC engine to reduce cycle time

**• Fresh and advanced operability reducing setup time**

- Popups, operation, program and alarm guidance with no screen layer
- Implementing 'NAVI MILL' and 'NAVI LATHE' for simple programming

**• Compact size**

- Implementing 60mm of compact design integrating the screen and CNC controller

## Other Controllers



### FANUC Oi-MD

#### Ultra-Compact CNC with Simplified Cables, High-Reliability

The most recent Oi CNC is proudly presented with the most powerful integrated system by easier control to coincide various customers' needs

Oi CNC series are designed to fit literally all work processing application in aspect of milling, turning or even grinding operations. Especially the CNC for milling operation can even drive 5 individual axes (including 4 axes concurrent control) and control up to 2 spindle motors at the same time.

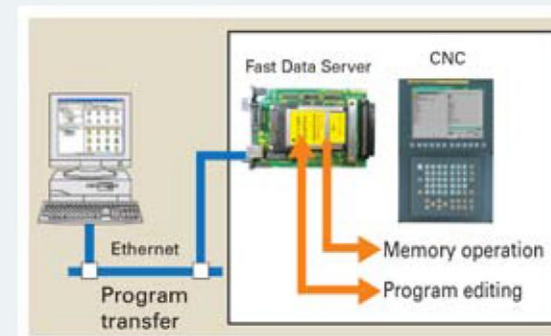
#### Enriched CNC Functions

- Spindle Control with Servo Motor
- Tool Management Function



- Unexpected Disturbance Torque Detection Function
- Composite Control

#### Fast Data Server



### SIEMENS 828D

Siemens 828D control system carries 6 numerical controls that can certainly measure circuit and it has been perfectly optimized to drive vertical/horizontal milling and machining centers. Especially the newly-developed contouring control can also run applications for tool and mold making better than any other NC manufacturer.

#### < Operating convenience based on intuitive grasp >

Intuitive operating Siemens NC includes as followings;



- \* CNC Rotary table(C-axis) that can process 2 stations
- \* Reversible CNC clamping device (A-axis) that can do milling and hole-machining on cylindrical work pieces
- \* CNC Gantry axis (for Gantry operation)
- \* Tilting free axis or rotary table that can do milling and hole-machining on surfaces of rotating work pieces
- \* CNC-Controlled tool changer

#### Enabled for Communication

- RJ 45 Ethernet
- USB 2.0
- Compact Flash Card



# Factory Review

