



# Vertical Type Turning Lathe

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SUZHOU GUDWAY CNC EQUIPMENT CO.,LTD

# GVT63

高速数控立式车床  
High-Speed CNC Vertical Lathe

### 结构特点

本机床主要用于加工各种盘类零件，可以车削各种回转体的内外曲面、圆弧、圆锥及螺纹，能够满足黑色金属及有色金属高速切削的速度需求。适合汽车、摩托车、电子、航天、军工等行业对回转体类零件进行高效、大批量、高精度的加工。加工精度可达到IT6级。

### Features

With the features of high-speed, high-efficient, high-volume, high-precision. This machine is mainly used for processing various of disc parts, it can finishing turning interior and exterior surface of all kinds of solid of revolution, camber surface, cone and thread. It can satisfy the high speed cutting demand with high machining accuracy of ferrous and non-ferrous metals.widely used in automobile, motorcycle, electronics, aerospace, military industry and etc.



### 技术参数 Technical Specifications

|                                  |                       | GVT63                         |
|----------------------------------|-----------------------|-------------------------------|
| 垂直轴加工进给方式Vertical axis feed type |                       | 动梁Moveable beam               |
| 最大回转直径Max.swing dia.             | mm                    | Φ800                          |
| 最大车削高度Max.turning height         | mm                    | 700                           |
| 最大车削直径Max.turning dia.           | mm                    | Φ630                          |
| 主轴端部型式及代号Spindle nose type       |                       | A2-11                         |
| 主轴前端轴径Spindle shaft neck         | mm                    | Φ180                          |
| 主轴转速范围Spindle speed              | r/min                 | 50-1000                       |
| 主轴额定扭矩Spindle torque             | N.m                   | 1148                          |
| 卡盘直径Chuck dia.                   | mm                    | Φ630                          |
| X轴快速速度X axis rapid speed         | m/min                 | 8                             |
| Z轴快速速度Z axis rapid speed         | m/min                 | 8                             |
| X轴行程X axis travel                | mm                    | 450                           |
| Z轴行程Z axis travel                | mm                    | 720                           |
| 刀架形式Turret type                  |                       | 立式五工位/卧式八工位 5/8 position turr |
| 刀具尺寸tool size                    | 外圆刀Outer turning tool | mm 32 × 32, 32 × 25, 25 × 25  |
|                                  | 镗刀杆直径boring tool      | mm Φ32, Φ40, Φ50              |
| 主电机main motor                    | 型号 model              | 22kW                          |
|                                  | 功率power               | kW 22/26                      |
|                                  | 额定转速Rate speed        | r/min 375 (基频)                |
|                                  | 最高转速Max. speed        | r/min 3000                    |
| 润滑装置Lubrication                  | 型号model               | L 4                           |
| 机床外形尺寸 (长×宽×高) Overall size      | mm                    | 2290 × 2700 × 3450            |

注：样本内文字说明、图样及设计规格、参数随技术进步如更改，不另行通知。



高速数控立车  
High-Speed CNC Vertical Lathe

结构特点

V系列数控立式车床是在吸收了国内外同类机床的先进技术的基础上，并集我厂多年生产数控立式车床的经验，顺应市场需求而设计、生产的优秀产品。该机床经济、高效、节能、环保，是汽车、航空、纺织及其它行业复杂的盘类、壳类及短轴类零件加工的首选。该系列机床可以加工各种短轴类、盘类零件，可以车削各种螺纹、圆弧、及回转体的内外曲面、端面、沟槽。适用于批量大、加工精度高、尺寸一致性要求高的零件加工。该系列机床在国内外汽车行业应用广泛，是一种高质量高精度、低成本高效率的机床。

Features

V Series of CNC vertical lathe has better performance in loading and clamping work pieces and is more suitable for disc parts with high machining precision and complicate shape compared with the CNC horizontal lathe. Through the deep study on machining technology of typical parts by users, the lathe can offer optimized technology to meet user's requirements accor



技术参数 Technical Specifications

|                                    | GVT 5060                              | GVT 6070                            | GVT 6C                              | GVT 6S                              |
|------------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 液压卡盘 Hydraulic chuck               | 15"                                   | 21"                                 | 21"                                 | 24"                                 |
| 最大回转直径Max.swing dia.               | mm 600                                | 780                                 | 860                                 | 1000                                |
| 最大车削直径Max.turning dia.             | mm 500                                | 600                                 | 800                                 | 900                                 |
| 最大车削高度Max.turning height           | mm 600                                | 700                                 | 700                                 | 800                                 |
| 最大承重（盘类件）Max. loading weight(disc) | kg 350                                | 600                                 | 600                                 | 800                                 |
| 主轴端部型式及代号Spindle nose type         | A <sub>2-8</sub>                      | A <sub>2-11</sub>                   | A <sub>2-11</sub>                   | A <sub>2-16</sub>                   |
| 主轴转速范围Spindle speed                | r/min 50-2000                         | 50-1000                             | 80-1100                             | 50-800                              |
| 主轴额定扭矩Spindle torque               | N.m 730                               | 1000                                | 1311                                | 2000                                |
| X轴快速速度X axis rapid speed           | m/min 15直线导轨Linear guideway           | 10滚动导轨rolling guideway              | 16滚动导轨rolling guideway              | 10滚动导轨rolling guideway              |
| Z轴快速速度Z axis rapid speed           | m/min 15直线导轨Linear guideway           | 15滚动导轨rolling guideway              | 16滚动导轨rolling guideway              | 12滚动导轨rolling guideway              |
| X轴行程 X axis travel                 | mm 320                                | 375                                 | 600                                 | 800                                 |
| Z轴行程 Z axis travel                 | mm 600                                | 700                                 | 720                                 | 850                                 |
| 刀架形式 Tool head type                | 卧式8工位<br>horizontal 8 position turret | 立式5工位<br>vertical 5 position turret | 立式5工位<br>vertical 5 position turret | 立式6工位<br>vertical 6 position turret |
| 刀具尺寸 tool size                     | 镗刀杆直径 boring tools                    | mm Φ40, Φ32                         | Φ50, Φ40, Φ32                       | Φ50, Φ40, Φ32                       |
|                                    | 外圆刀outer turning tools                | mm 32 × 32                          | 32 × 32                             | 32 × 32                             |
| 刀盘可否就近选刀turret choose tool nearby  | 可available                            | 可available                          | 可available                          | 可available                          |
| 净重Net.weight                       | kg 9000                               | 12000                               | 10500                               | 15000                               |
| 机床外形尺寸（长×宽×高）overall weight        | mm 3700 × 2265 × 3050                 | 3640 × 2510 × 3438                  | 3400 × 2200 × 3300                  | 3940 × 2795 × 3671                  |

注：样本内文字说明、图样及设计规格、参数随技术进步如更改，不另行通知。





### 结构特点

该系列车床是采用先进的技术和工艺，开发设计的动/定梁数控立式车床。机床技术成熟，布局合理，操作方便，自动化程度高。 广泛应用于车轮、电机壳、阀门体、泵体等大规格盘类零件的加工。可车削内外圆柱面、平面、内外圆锥面，内外螺纹，圆弧、复杂回转曲线型面等。机床采用机、电、液一体化结构，布局紧凑合理，便于维修和保养，具有高效率、高精度、高刚性的特点。整机采用半封闭式防护结构，外形符合人机工程学院里，宜人性好，便于操作。

### Features

The large-scale CNC vertical lathe adopts advanced technology and is built to have a movable or fixed beam.the lathe is extensively applied to the efficient and precise turning and compound turning and milling of large-size disc parts such as wind power bearing and wheel, motor shell, valve, flange plate, and pump of large motor base.



### 技术参数 Technical Specifications

| 技术参数 Technical Specifications     |                            |        | GVT125100                                                   | GVT160100                                                   | GVT16090                                                    | GVT250110                                                   |
|-----------------------------------|----------------------------|--------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| 主参数<br>Main specification         | 工作台直径Worktable dia.        | mm     | 1000                                                        | 1400                                                        | 1400                                                        | 2000                                                        |
|                                   | 最大回转直径Max.swing dia.       | mm     | 1400                                                        | 1600                                                        | 1600                                                        | 2500                                                        |
|                                   | 最大切削直径Max.turning dia.     | mm     | 1250                                                        | 1600                                                        | 1600                                                        | 2500                                                        |
|                                   | 最大工件重量Max.loading capacity | Kg     | 5000                                                        | 6000                                                        | 6000                                                        | 10000                                                       |
|                                   | 最大工件高度Max.workpiece height | mm     | 1000                                                        | 1000                                                        | 1200                                                        | 16000                                                       |
|                                   | 工作台最大扭矩                    | N·m    | 10500                                                       | 13300                                                       | 13700                                                       | 22683                                                       |
|                                   | 工作台最高转速                    | r/min  | 300                                                         | 280                                                         | 280                                                         | 120                                                         |
| 滑枕Ram                             | 滑枕截面尺寸Ram size             | mm     | 200*200                                                     | 200*200                                                     | 200*200                                                     | 240*240                                                     |
|                                   | X轴行程 X axis travel         | mm     | -50~+1170                                                   | -50~+1520                                                   | -50~+1450                                                   | -50~+1450                                                   |
|                                   | Z轴行程Z axis travel          | mm     | 1000                                                        | 1000                                                        | 1000                                                        | 1100                                                        |
| 进给速度<br>Feed Speed                | 切削进给速度CuttingFeed speed    | mm/min | 1~1000                                                      | 1~1000                                                      | 1000                                                        | 1000                                                        |
|                                   | X轴快速进给速度X axis rapid speed | mm/min | 16000                                                       | 12000                                                       | 8000                                                        | 8000                                                        |
|                                   | Z轴快速进给速度Z axis rapid speed | mm/min | 8000                                                        | 8000                                                        | 8000                                                        | 8000                                                        |
| 刀具Cutter                          | 车刀刀杆尺寸Turning tool size    | mm     | 40°40 { end face, outer circle端面、外圆end face, outer circle } | 40°40 { end face, outer circle端面、外圆end face, outer circle } | 40°40 { end face, outer circle端面、外圆end face, outer circle } | 40°40 { end face, outer circle端面、外圆end face, outer circle } |
|                                   | 刀具最大切削力Max. cutting force  | KN     | 18                                                          | 20                                                          | 20                                                          | 25                                                          |
| 横梁Crossbeam                       | 垂直行程                       | mm     | 固定fixed                                                     | 固定fixed                                                     | 两档三位3 steps/250mm /定位距离250                                  | 五档四位3 steps/250mm /定位距离250                                  |
|                                   | 定位方式                       |        |                                                             |                                                             | 定位销locating pin                                             | 定位销locating pin                                             |
|                                   | 升降速度                       | mm/min | 300                                                         | 300                                                         | 300                                                         | 300                                                         |
| 滑枕可入最小孔Min. hole for ram entrance |                            | mm     | 324                                                         | 324                                                         | 324                                                         | 324                                                         |
| 机床重量Machine weight                |                            | Kg     | 18000                                                       | 20000                                                       | 20000                                                       | 50000                                                       |
| 电气总容量Total electrical capacity    |                            | KVA    | 110                                                         | 95                                                          | 95                                                          | 125                                                         |
| 机床轮廓尺寸〔长X宽X高〕Overall dimension    |                            | mm     | 4800*4500*4900                                              | 6350*4350*5470                                              | 6000X5747X5500                                              | 10600X5600X7163                                             |

注：样本内文字说明、图样及设计规格、参数随技术进步如更改，不另行通知。





### 结构特点

- 采用西门子828D数控系统（可选发那科，广数等品牌），同时具有全手动操作功能
- 机械四档+变频电机无级调速/两档+大扭矩直流调速电机无级调速，恒功率范围宽，扭矩大，具有车螺纹和恒线速车削等功能
- 自产的优质铸件，人工时效处理，导轨面经超音频淬火处理（达HRC50以上），延长机床使用寿命，保证加工精度
- 横梁配有防护罩，所有滑动部位润滑采用自动润滑系统，定时定量集中供油
- 高精度变速箱齿轮（6级）及高精度螺旋伞齿轮（6级），具有噪音小，传动精度高的特性

### Features

- Equipped with SIEMENS 828D CNC control (optional, FANUC and GSK), Except CNC auto running mode, you can also use it in manual way like conventional machine.
- Two configurations available, 4 steps gearbox plus AC variable motor, or 2 steps gearbox plus big torque DC stepless motor, with tapping function and CSCS(Constant Surface Cutting Speed) function
- High grade casting from own foundry following by proper heat treatment. Hardened guideway (above HRC50). Perfect long lifetime and stable accuracy
- Auto central lubrication system with regular intervals and volume.
- Grounded gears in the gearbox to ensure high precision, low noise and long lifetime.
- and good service. Just start production immediately after setup



小型数控立式车床  
Small-Scale CNC vertical lathe



### 技术参数 Technical Specifications

|                                               |        | GVT516         | GVT518         | GVT5110        | GVT Z68       |
|-----------------------------------------------|--------|----------------|----------------|----------------|---------------|
| 最大切削直径Max. cutting dia                        | mm     | 650            | 850            | 1000           | 800           |
| 工作台直径Work table diameter                      | mm     | 600            | 800            | 900            | 500           |
| 最大工件重量Max. weight of work piece               | T      | 0.25           | 1.2            | 2.5            | 0.5           |
| 工作台转速范围worktable speed range                  | rpm    | 60/100/200     | 5-260          | 0.5-250        | 1-500         |
| 级数step range                                  | --     | 3档无级           | 3档无级           | 4档无级           | 无级            |
| 电机功率Main motor power                          | Kw     | 11             | 18.5           | 22             | 18.5          |
| 工件最大高度Max.cutting height                      | mm     | 600            | 800            | 800            | 600           |
| 立刀架行程（水平）Vertical tool head horizontal travel | mm     | 500            | 570            | 670            | 515           |
| 立刀架行程（垂直）Vertical tool head vertical travel   | mm     | 500            | 650            | 600            | 550           |
| 机床重量（约）Weight of machine                      | t      | 6.5            | 8              | 8.5            | 9.5           |
| 机床外形尺寸Overall dimension(L*W*H)                | mm     | 1821*1310*2560 | 2080*2621*3535 | 2300*2710*3605 | 2080*2621*363 |
| 刀架进给量范围（无级）Tool head feed rang(steps)         | mm/min | 0.1-1000       | 0.1-1000       | 01-1000        | 5-1000        |
| 刀架快速移动速度 Tool head rapid speed                | m/min  | 2000           | 2000           | 2000           | 2000          |
| 横梁升降速度 Cross beam speed                       | mm/min | 440            | 440            | 440            | 440           |
| 刀杆截面尺寸（宽×高）Tool bar size                      | mm     | 30*40          | 30*40          | 30*40          | 30*40         |

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结构特点

- 采用西门子828D数控系统（可选用发那科，广数等品牌），同时具有全手动操作功能
- 机械四档+变频电机无级调速/两档+大扭矩直流调速电机无级调速，恒功率范围宽，扭矩大，具有车螺纹和恒线速车削等功能
- 自产的优质铸件，人工时效处理，导轨面经超音频淬火处理（达HRC50以上），延长机床使用寿命，保证加工精度
- 横梁配有防护罩，所有滑动部位润滑采用自动润滑系统，定时定量集中供油
- 高精度变速箱齿轮（6级）及高精度螺旋伞齿轮（6级），具有噪音小，传动精度高的特性

Features

- Equipped with SIEMENS 828D CNC control (optional, FANUC and GSK), Except CNC auto running mode, you can also use it in manual way like conventional machine.
- Two configurations available, 4 steps gearbox plus AC variable motor, or 2 steps gearbox plus big torque DC stepless motor, with tapping function and CSCS(Constant Surface Cutting Speed) function
- High grade casting from own foundry following by proper heat treatment. Hardened guideway (above HRC50). Perfect long lifetime and stable accuracy
- Auto central lubrication system with regular intervals and volume.
- Grounded gears in the gearbox to ensure high precision, low noise and long lifetime.
- and good service. Just start production immediately after setup



老款防护



数控单柱立式车床  
Single Column Vertical CNC Lathe

新款防护

技术参数 Technical Specifications

|                                              |        | GVT5112D                                           | GVT5116D       | GVT5120D       | GVT5123D       | GVT5125D       | GVT5126D       | GVT5131D       |
|----------------------------------------------|--------|----------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 最大切削直径 Max. cutting dia.                     | mm     | 1250                                               | 1600           | 2000           | 2300           | 2500           | 2600           | 3100           |
| 工件最大高度 Max. cutting height                   | mm     | 1000/1200                                          | 1000/1200/1400 | 1250           | 1350           | 1600           | 1600/2000      | 1600           |
| 工作台最大承重 Max. loading weight                  | T      | 3.2                                                | 5              | 8              | 8              | 10             | 10             | 10             |
| 工作台直径 Worktable dia.                         | mm     | 1000                                               | 1400           | 1800           | 2000           | 2250           | 2250           | 2830           |
| 工作台转速范围 Worktable speed range                | rpm    | 6.3-200                                            | 5-160          | 3.2-100        | 3.2-100        | 2-63           | 2-63           | 0.5-63         |
| 工作台转速级数 Worktable Step range                 | ----   | 2/4档无级 4 gear shift stepless//I gearshift stepless |                |                |                |                |                |                |
| 工作台最大扭矩 Worktable max. torque                | N.m    | 25000                                              | 32000          | 32000          | 32000          | 35000          | 35000          | 40000          |
| 立刀架最大切削力 Vertical tool head cutting force    | N      | 20000                                              | 25000          | 25000          | 25000          | 25000          | 25000          | 30000          |
| 立刀架垂直行程 Vertical tool head vertical travel   | mm     | 650                                                | 800            | 800            | 800/1000       | 800/1000       | 1000/800       | 1250           |
| 立刀架水平行程 Vertical tool head horizontal travel | mm     | 700                                                | 1050           | 1190           | 1320           | 1420           | 1500           | 1900           |
| 刀架快速速度 Turret rapid travel speed             | mm/min | 2000                                               |                |                |                |                |                |                |
| 刀杆截面尺寸 Tool bar size                         | mm     | 32*32/40*40                                        | 32*32/40*40    | 32*32/40*40    | 32*32/40*40    | 40*50/32*32    | 40*50/32*32    | 40*50/32*32    |
| 横梁行程 Cross beam travel                       | mm     | 650/850                                            | 650/850/1050   | 850            | 1000           | 1200           | 1200/1600      | 1250           |
| 横梁升降速度 Crossbeam lift speed                  | mm/min | 440                                                |                |                |                |                |                |                |
| 加工精度 Machining precision                     | ----   | IT7                                                |                |                |                |                |                |                |
| 定位精度 Positioning precision                   | mm     | 0.03                                               |                |                |                |                |                |                |
| 重复定位精度 Repositioning precision               | mm     | 0.015                                              |                |                |                |                |                |                |
| 主电机功率 Main motor                             | kw     | 22                                                 | 30             | 30             | 30             | 37             | 37             | 55             |
| 机床重量 Machine weight                          | t      | 8.5/9.5                                            | 12.4/14/14.8   | 17             | 18             | 24             | 24/26          | 30             |
| 机床外形尺寸 Overall dimension(L*W*H)              | mm     | 2360*2280*2800                                     | 2830*2670*3010 | 3200*2800*3250 | 3210*2850*3300 | 3300*4000*3500 | 3300*4000*3500 | 4400*4000*3800 |

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数控双柱立式车床  
Double Column Vertical CNC Lathe

结构特点

- 采用当代最先进的立车生产技术，模块化设计，有限元分析，集机、电、液先进技术于一体，提高精密切削
- 采用西门子828D数控系统（可选用发那科，广数等品牌），同时具有全手动操作功能
- 两档机械变速+大扭矩电机无级调速，具有车螺纹和恒线速车削等功能
- 自家铸造的优质铸件经热处理时效处理，保证了机床的使用寿命和稳定性
- 横梁上导轨镶铬钼锰导轨板，并配有防护罩
- 工作台导轨采用恒流马达恒流供油，精度稳定，配有独立的液压站，液压油采用恒温制冷，有效降低工作台变形量，保证工件加工精度
- 各润滑部位采用自动润滑泵定时定量集中供油
- 高精度滚珠丝杠，采用进口轴承支撑
- 变速箱采用高精度磨齿齿轮
- 大量进口功能部件（电气件，伺服电机，伺服驱动器，液压件，轴承，丝杠，行星减速机），确保机床质量
- 配件齐全，售后完善，只需准备刀具及量具即可投入生产。



Features

- Use advanced modular design, FEM analysis, integrated use of mechanical, electrical and hydraulic techniques, to guarantee high precision machining performance.
- SIEMENS 828D CNC control (optional, FANUC and GSK). Except CNC auto running mode, you can also use it in manual way like conventional machine.
- With big torque variable AC main motor plus gearbox in two steps, with taping function and CSCS(constant surface cutting speed)function
- High grade and good quality castings make by own foundry, following by proper heattreatment, giving long lifetime and stable accuracy.
- Cross rail is embedded with alloy steel guidway (W,Cr, Mn), equipping with protect cover too
- Hydrostatic working table, constant volume motorized pump, separated hydraulic station, oil cooler, all these advanced techniques assure customer a high and long stable machining accuracy.
- Auto central lbrication system with regular intervals and volume
- High precision ballscrews supported with imported bearing support
- Grounded gears are used in the gearbox to ensure high precision and long lifetime
- Widely using imported key components(electrical components, servo motor, servo drive,hydraulic components, bearing, planetary speed reducer)
- Complete accessories and good service. Just start produftion immediately after setup.

技术参数 Technical Specifications

|                                               |        | GVT5225D                | GVT5232D       | GVT5235D                                    | GVT5240D       | GVT5250D       | GVT5263D        |
|-----------------------------------------------|--------|-------------------------|----------------|---------------------------------------------|----------------|----------------|-----------------|
| 最大切削直径 Max. cutting dia.                      | mm     | 2500                    | 3200           | 3500                                        | 4000           | 5000           | 6300            |
| 最大工件高度 Max. cutting height                    | mm     | 1600/2000/2500          | 1600/2000/2500 | 1600/2000/2500                              | 1600/2000/2500 | 2000/2500/3150 | 3150/4000       |
| 工作台直径 worktable dia.                          | mm     | 2250                    | 2830           | 2830                                        | 2830/3200/3600 | 4000/4500      | 4500/5000/5700  |
| 工作台最大承重 Max. loading weight                   | T      | 10/16/20                | 10/16/20       | 10/16/20                                    | 20/32          | 32/50          | 60/80           |
| 工作台最大扭矩 worktable max. torque                 | N.m    | 63000                   | 63000          | 63000                                       | 63000          | 100000         | 100000/150000   |
| 工作台转速级数 worktable Step range                  | ----   | 2/4档无级                  |                | 4 gearshift stepless /2- gearshift stepless |                |                |                 |
| 工作台转速范围 worktable speed range                 | rpm    | 2-63                    | 2-63           | 2-63                                        | 0.5-40         | 0.5-40         | 0.5-38          |
| 右刀架最大切削力right tool head cutting force         | kn     | 35                      | 35             | 35                                          | 35             | 35/50          | 50/80           |
| 左刀架最大切削力left tool head cutting force          | kn     | 28                      | 28             | 28                                          | 28             | 28/40          | 40/70           |
| 刀架水平行程 Tool head horizontal travel            | mm     | 1400                    | 1700           | 1900                                        | 2150           | 2765           | 3450            |
| 右刀架进给量范围(级数)Right tool head feed rang (steps) | mm/min | 0-500 ( servo stepless) |                |                                             |                |                |                 |
| 刀架垂直行程 Tool head vertical travel              | mm     | 1000/1250/1400          | 1000/1250      | 1000/1250                                   | 1000/1400      | 1250/1400/1600 | 1600/2000       |
| 主电机功率 main motor                              | kw     | 55                      | 55             | 55                                          | 55             | AC55/75        | AC75/90/110     |
| 刀架快速速度 tool head rapid speed                  | mm/min | 2000                    |                |                                             |                |                |                 |
| 横梁升降速度 cross beam speed                       | mm/min | 380                     |                |                                             |                |                |                 |
| 加工精度 manufacturing precision                  | ---    | IT7                     |                |                                             |                |                |                 |
| 定位精度 position precision                       | mm     | 0.03                    |                |                                             |                |                |                 |
| 重复定位精度 reposition precision                   | mm     | 0.015                   |                |                                             |                |                |                 |
| 机床重量 machine weight                           | t      | 32/34/36                | 37/39/41       | 39/41/43                                    | 43/45/48       | 60/65/70       | 118/127/178     |
| 机床外形尺寸 Overall dimension(L*W*H)               | mm     | 5180*4700*4800          | 6310*4950*6245 | 6610*5100*6245                              | 6900*5200*6600 | 9200*5800*7700 | 11500*7500*9300 |

注：样本内文字说明、图样及设计规格、参数随技术进步如更改，不另行通知。



## 单柱立式车床 Single Column Vertical Lathe

### 结构特点

- 采用当代最先进的立车生产技术，模块化设计，有限元分析，集机电业先进技术于一体，提高精密切削
- 自产的优质铸件，人工时效处理，导轨面经超音频淬火处理（达HRC50以上），延长机床使用寿命，保证加工精度
- 五角刀台采用高精度鼠盘定位，120等分刚性极强（绝非传统五等分定位板可比）
- 电气采用日本欧姆龙PLC控制，采用高品质电气件，规范的配线工艺，整机电气具有超高可靠性
- 标配两轴数显（可选配四轴数显）
- 电子转阀，16级机械变速方便，灵敏，可靠
- 高精度磨齿齿轮和伞齿轮（6级精度），噪音小，运转平稳
- 配件齐全，售后完善，只需准备刀具及量具即可投入生产
- 可选配置：滚动工作台、美卡诺按钮站，加高床身，加长滑枕，方滑枕等

### 技术参数 Technical Specifications

|                                                       |                        | GVT<br>5112DC | GVT<br>5116DC      | GVT<br>5120DC      | GVT<br>5123DC      | GVT<br>5125DC      | GVT<br>5126DC      | GVT<br>5131DC      |
|-------------------------------------------------------|------------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 立刀架最大切削直径 Vertical tool head Max. cutting dia.        | mm                     | 1250          | 1600               | 2000               | 2300               | 2500               | 2600               | 3100               |
| 侧刀架最大切削直径 Side tool head Max. cutting dia.            | mm                     | 1100          | 1400               | 1800               | 2000               | 2300               | 2400               | 2900               |
| 工件最大高度 Max. cutting height                            | mm                     | 1000          | 1000/1200/1400     | 1250               | 1350               | 1600               | 1600               | 1600/2000          |
| 工作台<br>worktable                                      | 直径 dia.                | mm            | 1000               | 1400               | 1800               | 2000               | 2250               | 2830               |
|                                                       | 最大工件重量Max. loading     | T             | 3.2                | 5                  | 8                  | 8                  | 10                 | 10                 |
|                                                       | 转数 Speed range         | rpm           | 6.3-200            | 5-160              | 3.2-100            | 3.2-100            | 2-63               | 2-63               |
|                                                       | 级数 Step range          | —             | 16                 | 16                 | 16                 | 16                 | 16                 | 16                 |
| 立刀架<br>vertical tool head                             | 最大扭矩 max. torque       | Kn. M         | 17.5               | 25                 | 25                 | 35                 | 35                 | 40                 |
|                                                       | 进给量范围feeding rang      | mm/min        | 0.8-86             | 0.8-86             | 0.8-86             | 0.8-86             | 0.8-86             | 0.2-145            |
|                                                       | 进给级数 feed steps        | ---           | 12                 | 12                 | 12                 | 12                 | 12                 | 18                 |
|                                                       | 切削力 cutting force      | kn            | 20                 | 25                 | 25                 | 25                 | 25                 | 30                 |
|                                                       | 垂直行程 Vertical travel   | mm            | 650                | 800/1000           | 800/1000           | 800/1000           | 1000               | 1250               |
| 侧刀架<br>side tool head                                 | 水平行程 Horizontal travel | mm            | 700                | 915                | 1200               | 1300               | 1400               | 2150               |
|                                                       | 回转角度 swing angle       | °             | ±30                | ±30                | ±30                | ±30                | ±30                | ±30                |
|                                                       | 进给量范围feeding rang      | mm/min        | 0.8-86             | 0.8-86             | 0.8-86             | 0.8-86             | 0.8-86             | 0.8-86             |
|                                                       | 切削力 cutting force      | kn            | 20                 | 20                 | 20                 | 20                 | 20                 | 20                 |
| 立刀架                                                   | 垂直行程 Vertical travel   | mm            | 900                | 900                | 900                | 900                | 900                | 900                |
|                                                       | 水平行程 Horizontal travel | mm            | 630                | 630                | 630                | 630                | 630                | 630                |
| 立刀架快速移动速度vertical (side) tool head rapid travel speed |                        | m/min         | 1.8                | 1.8                | 1.55               | 1.55               | 1.55               | 1.55               |
| 横梁行程 cross beam travel                                |                        | mm            | 650                | 650/850/1050       | 850                | 1050               | 1250               | 1250               |
| 横梁升降速度 speed                                          |                        | mm/min        | 350                | 350                | 350                | 350                | 320                | 320                |
| 刀杆截面尺寸 tool bar size                                  |                        | mm            | 30*40              | 30*40              | 40*40              | 40*40              | 40*40              | 40*50              |
| 进给电机功率 feeding motor power                            |                        | kw            | 1.3/1.8            | 1.3/1.8            | 1.3/1.8            | 1.3/1.8            | 1.3/1.8            | 2.2                |
| 主电机功率 main motor                                      |                        | kw            | 22                 | 30                 | 30                 | 30                 | 37                 | 45                 |
| 机床重量 machine weight                                   |                        | T             | 8.5                | 12.4/14/14.8       | 17                 | 18                 | 23                 | 30                 |
| 机床外形尺寸 Overall dimension(L*W*H)                       |                        | MM            | 2300*2280<br>*2800 | 2830*2670<br>*3010 | 3200*2800<br>*3250 | 3210*2850<br>*3300 | 3300*4000<br>*3500 | 4400*4000<br>*3800 |

注：样本内文字说明、图样及设计规格、参数随技术进步如更改，不另行通知。

### Features

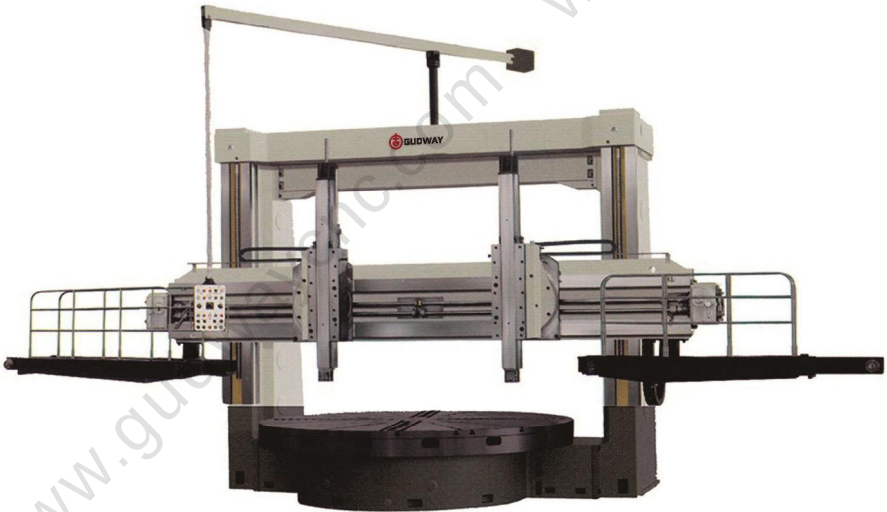
- Advance modular Design based on FEM. Integrated mechanical, electrical and hydraulic techniques. Guarantee excellent machining performance.
- High grade casting from own foundry. Good heat treatment process. Hardened guideway(above HRC50). Perfect long lifetime and stable accuracy.
- Turret indexed by curvi8c coupling with 120 divided teeth, more rigid than traditional 5 divided coupling plate.
- PLC control made by OMRON Japan. Fine layout and cabling in cabinet. special careful selected components for super reliability.
- 2 axis DRO and scales is standard.(4 axis DRO is optional)
- 16 steps speeds change by electronic valve controller, easily, sensitively and reliably.
- Fine grounded gears in the gearbox to ensure high precision, low noise and long life.
- Versatile accessories and good service. Just start production as soon as receive it.
- Many options. German MECANO panel box, roller guideway table, higher table stand, extended ram and square ram etc.



双柱立式车床  
Double Column Vertical Lathe

结构特点

- 模块化设计，通用产品，成熟，稳定，可靠
- 自产优质铸件，经热时效处理
- 导轨面经超音频淬火处理，横梁导轨采用滚滑复合形式，立刀架滑枕采用球墨铸铁采用，滑动面采用贴塑处理，确保机床经久耐用，精度稳定
- 高品质名优电气件及日本欧姆龙PLC控制， 具有高可靠性
- 独立液压站，方便调整维修及保养
- 标配光栅数显尺
- 高精度变速箱齿轮（6级）和高精度磨齿螺旋伞齿轮，噪音低，运行平稳工作台导轨分为动压和静压导轨两种。



Features

- Advanced modular design. Universal product. Mature technology. Stable accuracy and reliable quality.
- Heavy and high grade castings made by own foundry, followed properly heat treatment.
- Hardened guideway by extra-frequency induction machine (above HRC50). Sliding guideway combined with rollers on the cross rail
- PLC control made by OMRON Japan. Fine layout and cabling in cabinet. special careful selected components for super reliability
- Separate hydraulic station, easy to setup, daily machinemance and repair.
- DRO and scales is standard.
- Grounded gears in the gearbox to ensure high precision, low noise and long lifetime.
- Two kinds of table guideway is available, i.e. dynamic static pressure and pure static pressure.

技术参数 Technical Specifications

|                                       |       | GVT<br>5225DC  | GVT<br>5232DC  | GVT<br>5235DC  | GVT<br>5240DC  | GVT<br>5250DC  | GVT<br>5263DC   |
|---------------------------------------|-------|----------------|----------------|----------------|----------------|----------------|-----------------|
| 最大切削直径 Max. cutting dia.              | mm    | 2500           | 3200           | 3500           | 4000           | 5000           | 6300            |
| 最大工件高度 Max. cutting height            | mm    | 1600/2000/2500 | 1600/2000/2500 | 1600/2000      | 1600/2000/2500 | 2000/2500/3150 | 3150/4000       |
| 工作台直径 worktable dia.                  | mm    | 2250           | 2830           | 2830           | 2830/3200/3600 | 4000/4500      | 4500/5000/5700  |
| 工作台最大承重 Max. loading weight           | T     | 10/16/20       | 10/16/20       | 20             | 20/32/50       | 32/50          | 50/100          |
| 工作台最大扭矩 Worktable max. torque         | kn. M | 63             | 63             | 63             | 63             | 70             | 100             |
| 工作台转数级数 worktable Step range          | ---   | 16 steps       |                |                |                |                |                 |
| 工作台转数范围 worktable speed range         | rpm   | 2-63           | 2-63           | 2-63           | 0.5-40         | 0.5-40         | 0.5-38          |
| 右刀架最大切削力right tool head cutting force | kn    | 35             | 35             | 35             | 35             | 35/50          | 50/80           |
| 左刀架最大切削力left tool head cutting force  | kn    | 28             | 28             | 28             | 28             | 28/40          | 40/70           |
| 刀架水平行程 Tool head horizontal travel    | mm    | 1400           | 1700           | 1900           | 2150           | 2765           | 3450            |
| 刀架垂直行程 Tool head vertical travel      | mm    | 1000/1250/1400 | 1000/1250      | 1000/1250      | 1000/1400      | 1250/1400/1600 | 1600/2000       |
| 横梁行程 cross beam travel                | mm    | 1250/1650/2150 | 1250/1650/2150 | 1250/1650      | 1250/1650/2150 | 1500/2000/2650 | 2650/3500       |
| 主电机功率 main motor                      | kw    | AC55           | AC55           | AC55           | AC55           | AC55/75        | AC75/90/110     |
| 机床重量 machine weight                   | t     | 32/34/36       | 39/42          | 40/43          | 43/45/48       | 60/65/70       | 118/127/178     |
| 机床外形尺寸 Overall dimension(L*W*H)       | mm    | 5180*4700*4800 | 6000*4860*5000 | 6400*5050*5200 | 6900*5200*5700 | 9200*5800*5800 | 11500*7500*9300 |

注：样本内文字说明、图样及设计规格、参数随技术进步如更改，不另行通知。



数控单柱移动立式车床  
MOVABLE COLUMN CNC VERTICAL LATHE

结构特点

- 结构典型化，模块化设计。具有高承载，高速度，高精度，高自动化等特性，可以完成普通立车车削工序及车削螺纹，锥体和各种旋转曲面体。
- 自产优质HT300铸件（方滑枕为球铁）经人工时效处理，导轨面经超音频淬火处理（HRC50以上）延长机床使用寿命，保证加工精度。
- 配备西门子系统（可选用发那科，广数等品牌）。
- 电器元件采用施耐德等名优品牌，独立电气柜配有空调制冷，确保电气件的可靠性和使用寿命。



技术参数 Technical Specifications

| GVT53100                            |       |                 |
|-------------------------------------|-------|-----------------|
| 最大加工直径 Max. machining dia.          | mm    | 10000           |
| 最大加工高度 Max. machining height        | mm    | 3000            |
| 最大加工工件重量 Max. loading capacity      | T     | 80              |
| 工作台直径 Worktable dia.                | mm    | 5000            |
| 工作台转速 Worktable speed               | r/min | 0.03-32         |
| 工作台转数级数 worktable speed steps       |       | 机械四档+无级         |
| 立滑枕水平行程 Horizontal travel of ram    | mm    | 3500            |
| 立滑枕垂直行程 Vertical travel of ram      | mm    | 2500            |
| 横梁行程 Crossbeam travel               | mm    | 3500            |
| 刀杆最大尺寸 Tool bar size                | mm    | 50*70           |
| 主传电动机功率 Main motor                  | Kw    | 110             |
| 机床总重量 Machine weight                | T     | 130             |
| 机床外形尺寸 Overall dimension of machine | mm    | 11500*7500*9500 |

注：样本内文字说明、图样及设计规格、参数随技术进步如更改，不另行通知。

Features

- Typical structure and modular design with the features of high load capacity, high speed, high accuracy, high automation etc.
- The machine is suitable for turning, threading, cutting cone and all kinds of rotating curved surface as same as normal vertical lathe
- High grade casting from own foundry following by proper heat treatment. Hardened guideway(above HRC50). Perfect long lifetime and stable accuracy
- SIEMENS 828D CNC control (optional, FANUC and GSK)
- Adopt German Schneider and famous brand electric elements, independent electrical cabinet with air conditioner guarantee the stability and service life



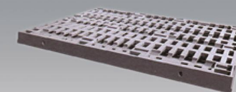


## F 铸造车间 Foundry

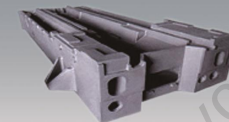


## 铸件产品 Castings

### 数控机床类 CNC machine castings



工作台 Workbench  
17800Kg, HT300



床身 Bed  
6500Kg, QT600-3

### 通用机械类 General machinery castings



泵壳 Pump body  
1500Kg, QT500-7



箱体 Housing  
2400Kg, HT250

### 风力发电类 Wind power castings



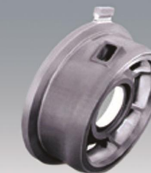
轮毂 Hub  
7000Kg, QT400-18AL



行星架 Planet carrier  
2500Kg, EN-GJS-500-7U



箱体 Housing  
2200Kg, QT700-2A



箱体 Housing  
1800Kg, QT400-18AL