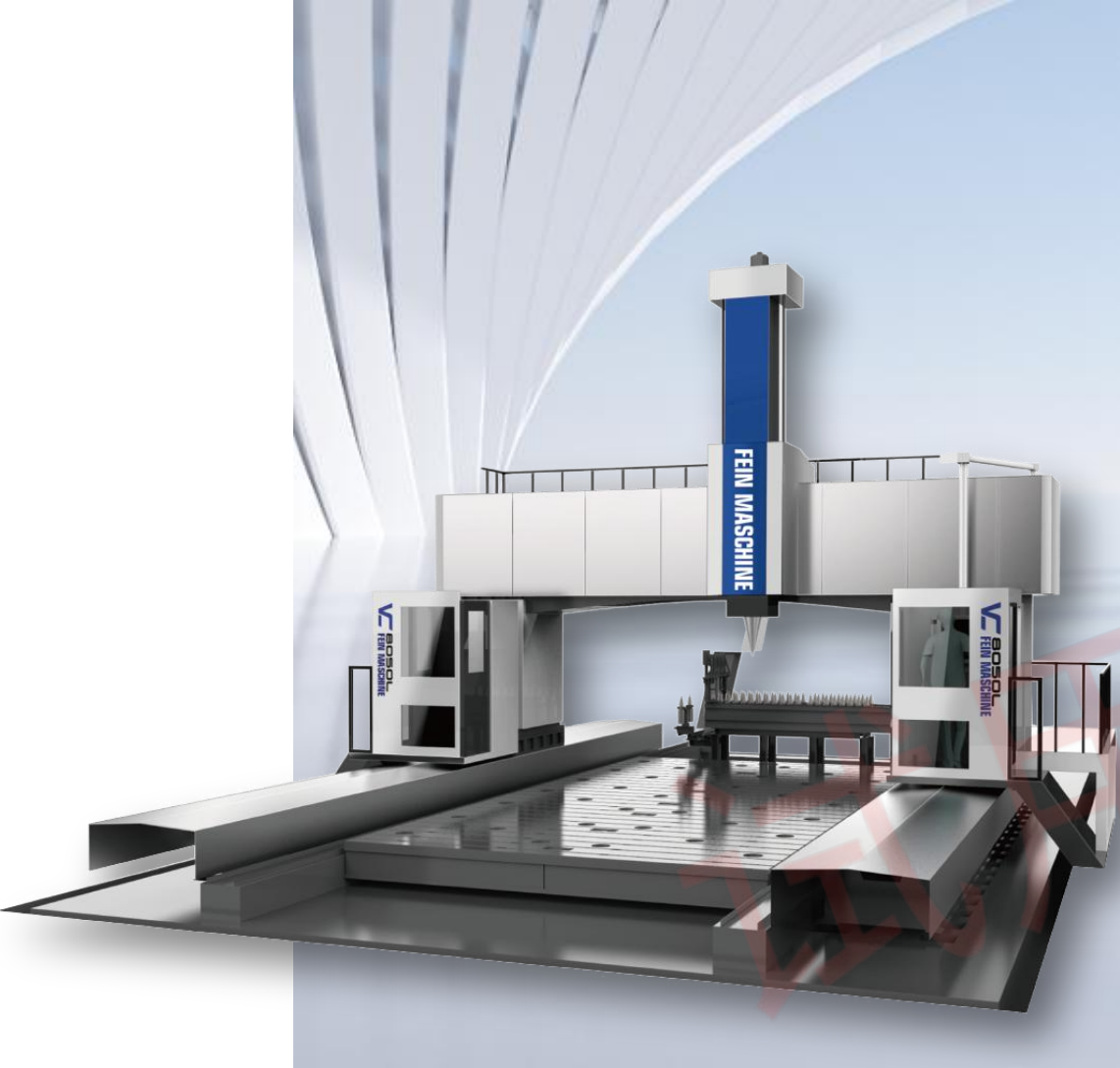




# Dragon Gate Mobile Gantry Series

High rigidity | Heavy cutting | Highly versatile

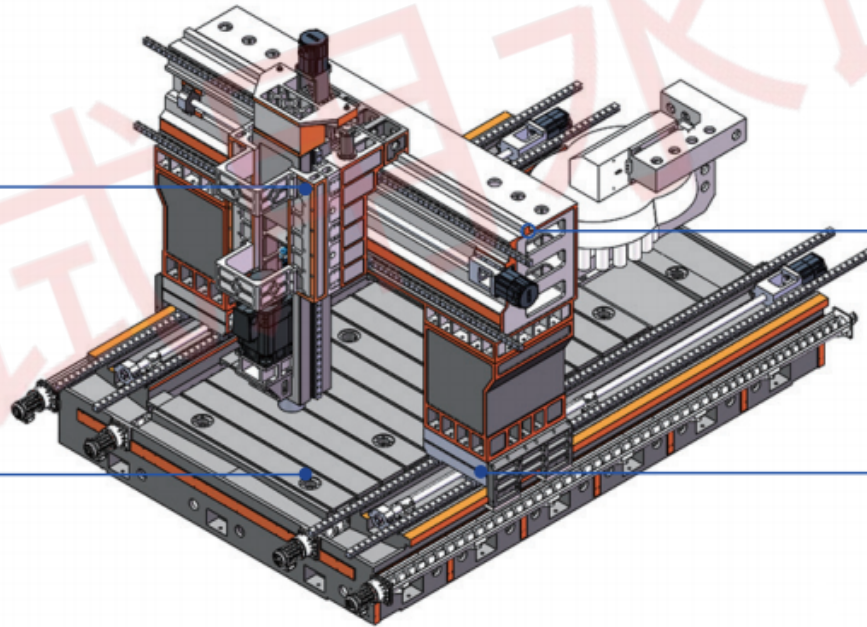
# Dragon Gate Mobile Gantry Series

一体式结构、紧凑实惠

Integrated structure, three-axis composite guide rail with hardened rails, fixed worktable, moving gantry, small footprint, strong load capacity, high torque.

The Z-axis uses a 490x320 composite guideway square slide, which replaces the traditional keyway with a linear guide to greatly improve guiding accuracy, while still keeping the rigidity of the square slide. It's especially good for machining with heavy cutting and tough-to-machine materials.

The workbench is fixed and can carry heavy loads. In theory, there's no limit to the weight it can handle. When processing heavy workpieces, it's easy to achieve high profile accuracy, and since the workpiece's weight doesn't affect it, the precision can be maintained over a long time.



The Y-axis uses our company's proprietary composite guide rail technology. Basically, we added a rectangular guide rail on top of the two existing linear guide rails on the beam, which extends the cutting resistance moment and bearing area. This greatly boosts cutting resistance and effectively overcomes the common weakness of gantry machines and large vertical machining centers, where the cutting point has an overly long cantilever.

The X-axis uses our company's proprietary composite guide rails, with two heavy-duty linear guides plus a rectangular guide in both directions, effectively preventing the gantry from tipping during fast movements and cutting.

# Dragon Gate Mobile Gantry Series



## GMI Integrated Series 20, 25

| Technical Specs                                    | unit  | GMI3020                                                                                                                                                                                                                                                                                               | GMI4025             |
|----------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Workbench area                                     | mm    | 3000×1800                                                                                                                                                                                                                                                                                             | 4000×2300           |
| Maximum load of the workbench                      | t     | 30                                                                                                                                                                                                                                                                                                    | 35                  |
| Y1/Y2 travel                                       | mm    | 2000/2500                                                                                                                                                                                                                                                                                             | 2500/3000           |
| X/Z Axis Travel                                    | mm    | 3200×1000                                                                                                                                                                                                                                                                                             | 4200×1000           |
| Guide rail type                                    |       | The X-axis is precisely driven on both sides, with each side supported by two linear guides plus a rectangular rail. The Y-axis has dual parallel linear rails supplemented by rigid guide support. The Z-axis uses a hard guide plus double linear rails on the sides for a composite sliding block. |                     |
| Spindle end face to worktable surface              | mm    | 200-1200 (customizable)                                                                                                                                                                                                                                                                               |                     |
| Spindle speed                                      | rpm   | Standard with BT50-8000, choose 1:4 high-speed gearbox                                                                                                                                                                                                                                                |                     |
| spindle motor                                      |       | 20/25L系列: 22/26Kw 140/210Nm (560/840Nm)                                                                                                                                                                                                                                                               |                     |
| Tool magazine capacity                             |       | 24-bit disc                                                                                                                                                                                                                                                                                           |                     |
| Maximum loading width (above the hood)             | mm    | 2000                                                                                                                                                                                                                                                                                                  | 2500                |
| Rapid/Feed Speed                                   | m/min | 15 / 0-15                                                                                                                                                                                                                                                                                             |                     |
| Positioning Accuracy / Repeat Positioning Accuracy | mm    | 0.01/0.005                                                                                                                                                                                                                                                                                            |                     |
| Overall weight                                     | t     | 32                                                                                                                                                                                                                                                                                                    | 37                  |
| Dimensions (excluding electrical cabinet)          | mm    | 6700×5200×4200/5200                                                                                                                                                                                                                                                                                   | 7800×5800×4200/5000 |
| Typical CNC system configuration                   |       | Standard with Siemens 828D and Fanuc Oi MF plus, optional Siemens ONE                                                                                                                                                                                                                                 |                     |

# Dragon Gate Mobile Gantry Series

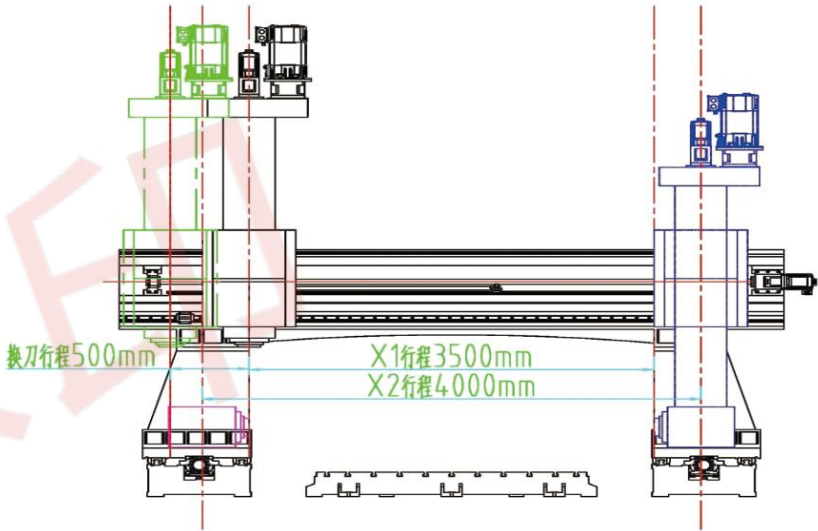
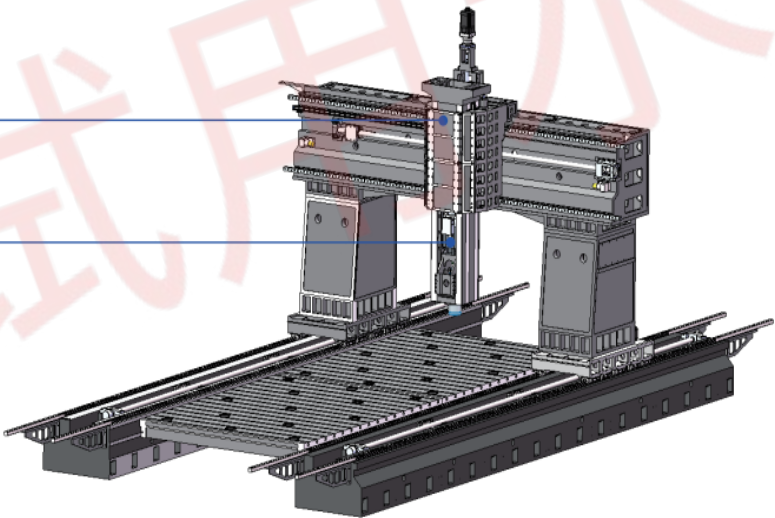
五面体高效率！高精度！重切削！

针对特大特重宽幅零件重切削加工解决方案

Square Sliding Pillow: 500×580mm

The Z-axis sliding saddle uses a 500X580 ductile iron square sliding saddle, precision-ground, and combined with advanced German injection molding technology, giving it really strong rigidity.

Optional: Uses an imported 2500rpm BT50 (or 2000rpm BT60) spindle, combined with imported roller bearings for extremely high rigidity, capable of handling heavy cutting. With an imported high-power high-speed gearbox, the machine also achieves a cutting torque of 3000Nm.



加工范围示意图



五面体头最小分割单位标配5度可选配1度，定位精度1秒

# Dragon Gate Mobile Gantry Series



## GMS Split-Type 30, 35 Series

| Technical Specs                                    | unit  | GMS60/80- 30                                                                                                                                                                                                                                                              | GMS60/80- 35           | GMSXXX35 |
|----------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------|
| Workbench area                                     | mm    | 2100×6000/8000                                                                                                                                                                                                                                                            | 2600×6000/8000         | 2600×XXX |
| Maximum load of the workbench                      | t/m²  | 5                                                                                                                                                                                                                                                                         | 5                      | 5        |
| Y1/Y2 travel                                       | mm    | 3000/3500                                                                                                                                                                                                                                                                 | 3500/4000              |          |
| X/Z Axis Travel                                    | mm    | 6200/8200×1200                                                                                                                                                                                                                                                            | 6200/8200×1200         | /        |
| Guide rail type                                    |       | The X-axis is driven precisely in both directions, with both sides supported by two linear guides plus a rectangular rail. The Y-axis has dual linear rails supplemented by hard guides for strong vertical support, and the Z-axis has a square slide with a hard guide. |                        |          |
| From spindle end face to worktable surface         | mm    | Standard 350-1550, optional 350-1850                                                                                                                                                                                                                                      |                        |          |
| Spindle drive type                                 | rpm   | Standard with built-in short direct-connect BT50-6000 dual-speed gearbox (BT50-3000 roller bearing / BT60-2000 roller bearing) / Optional top-mounted long direct-connect with central water outlet                                                                       |                        |          |
| spindle motor                                      |       | 30/35L Series: Standard 37/55.5 kW (rated 1500 rpm) 236/354 Nm (twin-speed gearbox 944/1416 Nm); Optional 28/42 kW (rated 1000 rpm) 268/401 Nm (twin-speed gearbox 1070/1604 Nm)                                                                                          |                        |          |
| Tool magazine capacity                             |       | 24-position rotary/cassette tool magazine                                                                                                                                                                                                                                 |                        |          |
| Column spacing                                     | mm    | 3000                                                                                                                                                                                                                                                                      | 3500                   |          |
| Rapid/Feed Speed                                   | m/min | 15 (screw drive) 20 (rack drive) / 0-10                                                                                                                                                                                                                                   |                        |          |
| Positioning Accuracy / Repeat Positioning Accuracy | mm    | 0.01/0.005                                                                                                                                                                                                                                                                |                        |          |
| Overall weight                                     | t     | 53/62                                                                                                                                                                                                                                                                     | 58/67                  | /        |
| Dimensions (excluding electrical cabinet)          | mm    | 11650/13650×6850×5200                                                                                                                                                                                                                                                     | 11650/13650×7750 ×5200 | /        |
| Typical CNC system configuration                   |       | Standard with Siemens 828D, Fanuc Oi MF plus; optional Siemens ONE                                                                                                                                                                                                        |                        |          |

# Dragon Gate Mobile Gantry Series



## GMS extra-wide series 40, 50, 60 and above

| Technical Specs                                    | unit  | GMS60/80- 40                                                                                                                                                                                                                                                                  | GMS60/80- 50          | GMS80/100- 60         | GMSXXX50  |
|----------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------|
| Workbench area                                     | mm    | 6000/8000×3100                                                                                                                                                                                                                                                                | 6000/8000×4100        | 8000/10000×5100       | XXX×4100  |
| Maximum load of the workbench                      | t/m²  | 5                                                                                                                                                                                                                                                                             | 5                     | 5                     | 5         |
| Y-axis travel                                      | mm    | 4000/4500                                                                                                                                                                                                                                                                     | 5000/5500             | 6000/6500             | 5000/5500 |
| X/Z Axis Travel                                    | mm    | 6200/8200 ×1200                                                                                                                                                                                                                                                               | 6200/8200×1200        | 8200/10200×1200       | /         |
| Guide rail type                                    |       | The X-axis is driven precisely in both directions, with both sides supported by two linear guides plus a rectangular rail. The Y-axis has dual linear rails supplemented by hard rails for strong vertical support. The Z-axis has a square sliding carriage with hard rails. |                       |                       |           |
| Spindle end face to worktable surface              | mm    | Standard 350-1550, optional 350-1850                                                                                                                                                                                                                                          |                       |                       |           |
| Spindle drive type                                 | rpm   | Standard with built-in short direct-connect BT50-6000 dual-speed gearbox (BT50-3000 roller bearing / BT60-2000 roller bearing) / Optional to long direct-connect with central water outlet                                                                                    |                       |                       |           |
| spindle motor                                      |       | 30/35L Series: Standard 37/55.5 kW (rated 1500 rpm) 236/354 Nm (twin-speed gearbox 944/1416 Nm); Optional 28/42 kW (rated 1000 rpm) 268/401 Nm (twin-speed gearbox 1070/1604 Nm)                                                                                              |                       |                       |           |
| Tool magazine capacity                             |       | 24-position rotary disk / warehouse-style tool magazine                                                                                                                                                                                                                       |                       |                       |           |
| Column spacing                                     | mm    | 4000                                                                                                                                                                                                                                                                          | 5000                  | 6000                  | 5000      |
| Rapid/Feed Speed                                   | m/min | 15 / 0-10                                                                                                                                                                                                                                                                     |                       |                       |           |
| Positioning Accuracy / Repeat Positioning Accuracy | mm    | 0.01/0.005                                                                                                                                                                                                                                                                    |                       |                       |           |
| Overall weight                                     | t     | 62/72                                                                                                                                                                                                                                                                         | 69/79                 | 84/95                 | /         |
| Dimensions (excluding electrical cabinet)          | mm    | 11650/13650×7350×5200                                                                                                                                                                                                                                                         | 11650/13650×8350×5200 | 13650/15650×9350×5200 | /         |
| Typical CNC system configuration                   |       | Standard with Siemens 828D, Fanuc Oi MF plus; optional Siemens ONE                                                                                                                                                                                                            |                       |                       |           |

- Gantry of 6 meters and above uses gear and rack rotation
- Using a synchronous dual-drive four-motor same-direction differential backlash-eliminating motion structure



Synchronized dual-drive four-motor same-direction differential backlash elimination movement



Uses high-precision, large-modulus gear racks, strong and accurate