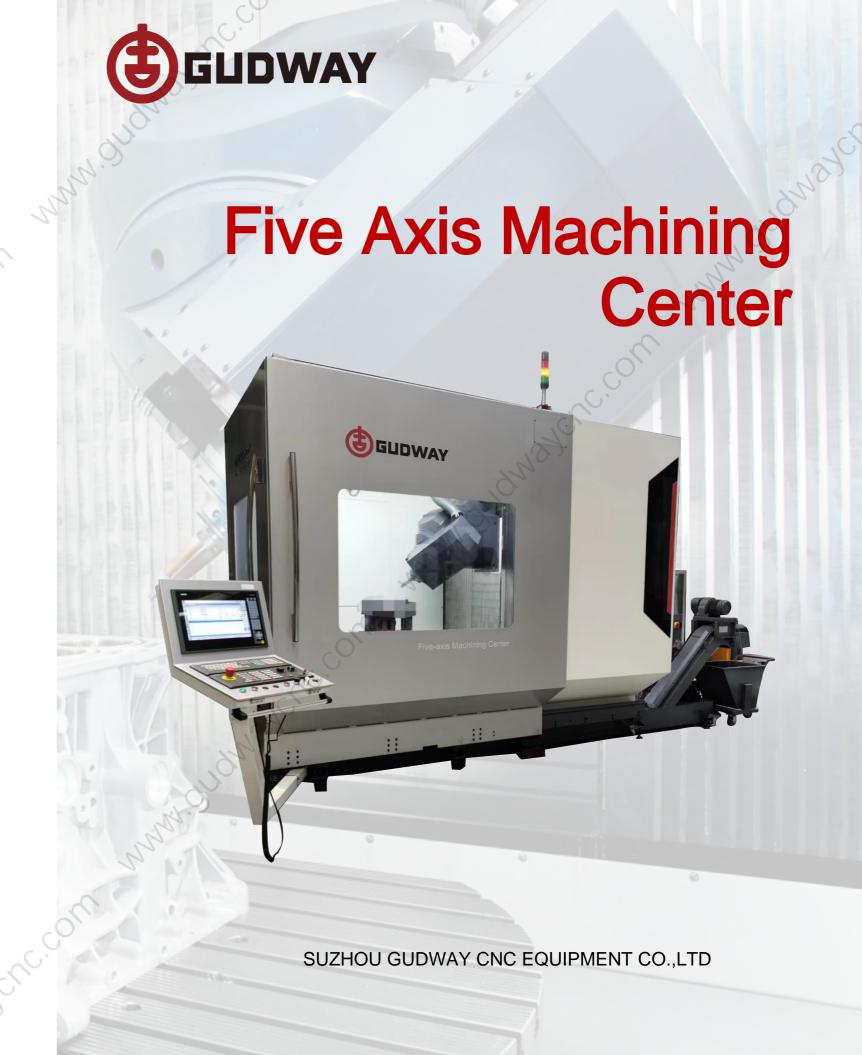




Web: http://www.gudwaycnc.com





# GFM900 SERIES

T type bed structure

GUDWAY The bed base adopts integral casting process, and the overall rigidity is greatly

High-rigidity bed base with three-point support. No special requirements for foundation. The bed is not easy to distort, with high accuracy.

German INA/ Swiss SCHNEEBERGER linear guide, widened slider, more durable accuracy

Heidenhain five-axis closed-loop measurement system. Guarantee of high precision of machine.

The highest rigidity, the highest

improved

processing superior performance.





GFM1300/1600 SERIES

**B**GLIDWAY

Wall back bed structure

Higher rigidityMore speedSmaller overturning moment

 Heidenhain five-axis closed-loop measurement system
 Guarantee of high precision of machine

High-rigidity bed base with three-point support
No fuss about the foundation
Excellent stability is demonstrated in all situations

SHUTON elongated double nut structure screw effectively improves the preload, greatly improves the positioning accuracy and cutting performance

German INA linear guide rail, widened slider, more durable accuracy

Siemens 1FT series high dynamic response motor





# GFM2100/2300 SERIES

### Gantry moving beam bed structure

Using the grating ruler full closed-loop control

 Hollow cold screw, take away the heat generated by the movement, the accuracy is guaranteed

Choose water-cooled 1FT series high-performance motor, with high dynamic response and motion control accuracy

All guide rails are used constant temperature cooling system, reduce heat deformation, further improve the accuracy

 Bed 3-point support, not affected by foundation distortion, good accuracy retention

Base cast with integral cross reinforcement, better rigidity

Adopt 45 degree oblique five-axis head structure, closed-loop system. Rigid enough, good positioning accuracy /X\Y axis stroke 2300mm, suitable for processing aviation casings and other products/The turntable can be moved into the dragon door frame, making the machine cantilever smaller. The screw is fixed and the nut is rotated, so that the machine tool is large and not bulky, and the real high-performance five-axis machine tool is realized.

Double balance cylinder, a total of 4 large capacity balance accumulators, beam movement is smooth, high control accuracy

Linear shaft screw drive, screw fixed not rotating, motor drive lock, can achieve high dynamic response

55mm high precision guide rail imported from Switzerland

YRT turntable bearing + thrust bearing, turntable bearing ability is excellent

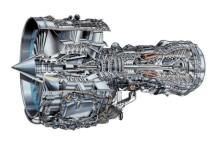






Our machines serve various machining industries such as military defense, aerospace, energy and power

#### Production assembly debugging



















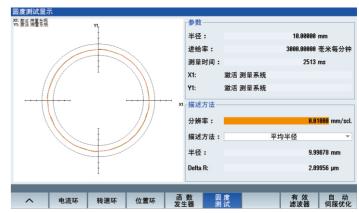














# Technical parameters

|  |  |   | 1.9   |   |   |  |  |  |
|--|--|---|---|---|---|--|--|--|
| Linear axis Machine stroke X/Y/Z axis (mm) | <b>GFM900</b><br>900/800/700                 | GFM1300<br>1300/1300/1000   | GFM1600<br>1600/1500/1250   | GFM2100<br>2100/2100/1250(1700)   | GFM2300<br>2300/2300/1250(1700)   |  |  |  |
| Fast moving speed X/Y/Z (m/mir             | n) 40/40/40                                  | 40/40/40  | 40/40/40  | 40/30/40  | 40/30/40  |  |  |  |
| Measurement system                         | Heidenhain grating ruler                     | Heidenhain grating ruler  | Heidenhain grating ruler  | Heidenhain grating ruler  | Heidenhain grating ruler  |  |  |  |
| Control system                             | Siemens SINUMERIK 840D SL                    | Siemens SINUMERIK 840D SL   | Siemens SINUMERIK 840D SL   | Siemens SINUMERIK ONE   | Siemens SINUMERIK ONE   |  |  |  |
|  | Heidenhain TNC640                            | Heidenhain TNC640   | Heidenhain TNC640   | Heidenhain TNC640   | Heidenhain TNC640   |  |  |  |
| Spindle<br>Spindle                         | HSK-A63/18000 rpm/min                        | HSK100A / 8000 rpm/min<br>HSK100A / 10000 rpm/min<br>HSK100A / 12000 rpm/min<br>HSK100A / 15000 rpm/min | HSK100A / 8000 rpm/min<br>HSK100A / 10000 rpm/min<br>HSK100A / 12000 rpm/min<br>HSK100A / 15000 rpm/min | HSK100A / 8000 rpm/min<br>HSK100A / 10000 rpm/min<br>HSK100A / 12000 rpm/min<br>HSK100A / 15000 rpm/min | HSK100A / 8000 rpm/min<br>HSK100A / 10000 rpm/min<br>HSK100A / 12000 rpm/min<br>HSK100A / 15000 rpm/min |  |  |  |
| B axis (45 degree swing                    | B axis (45 degree swing head) data           |   |   |   |   |  |  |  |
| Measuring system                           | Heidenhain magnetic gate closed loop control | Heidenhain magnetic gate closed loop control  | Heidenhain magnetic gate closed loop control  | Heidenhain magnetic gate closed loop control  | Heidenhain magnetic gate closed loop control  |  |  |  |
| Resolution                                 | 0.001 degrees                                | 0.001 degrees   | 0.001 degrees   | 0.001 degrees   | 0.001 degrees   |  |  |  |
| Control mode                               | Linkage control/arbitrary indexing           | Linkage control/arbitrary indexing  | Linkage control/arbitrary indexing  | Linkage control/arbitrary indexing  | Linkage control/arbitrary indexing  |  |  |  |
| Maximum feed                               | 15 rpm/min                                   | 12 rpm/min  | 12 rpm/min  | 12 rpm/min  | 12 rpm/min  |  |  |  |
| Itinerary.                                 | -30 to 180 degrees                           | -30 to 180 degrees  | -30 to 180 degrees  | -30 to 180 degrees  | -30 to 180 degrees  |  |  |  |

## A-axis (fork milling head) data

| Transmission mode | Precision gear          |
|-------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Bearings          | INA YRT series bearings | INA YRT series bearings | INA YRT series bearings | INA YRT series bearings | INA YRT series bearings |
| Maximum feed      | 1                       | 15rpm/min               | 15rpm/min               | 15rpm/min               | 15rpm/min               |
| Feed torque       | 1                       | 4100Nm                  | 4100Nm                  | 4100Nm                  | 4100Nm                  |
| Itinerary         | 1                       | -35 to 125 degrees      |

## C-axis (turntable) data

|    | C-axis (turritable) data             |  |  | Ø.                                     |  |  |
|----|--------------------------------------|--|--|--|--|--|
|    | Measuring system                     | Heidenhain grating closed loop control |
|    | Resolution                           | 0.001 degrees                          |
|    | Control mode                         | Linkage control/arbitrary indexing     |
|    | Max rotational speed                 | 12 rpm/min                             | 12 rpm/min                             | 12 rpm/min                             | 10 rpm/min                             | 10 rpm/min                             |
|    | Itinerary                            | 360 degrees                            |
| 7. | Turntable dimensions                 | 900-700mm                              | 1250-1100mm                            | 1500mm                                 | 1700mm                                 | 1700mm                                 |
|    | Load bearing                         | 1000kg                                 | 2500kg                                 | 5000kg                                 | 8000kg                                 | 8000kg                                 |
|    | Max speed (with turning function)    |  | 500rpm                                 | 400rpm                                 | 250rpm                                 | 250rpm                                 |
|    | Rated torque (with turning function) |  | 5400Nm                                 | 7900Nm                                 | 7900Nm                                 | 7900Nm                                 |
|    |                                      |  |  |  |  |  |



## Technical parameters

| TOOL MAGAZINE                 | GFM900      | GFM1300     | GFM1600     | GFM2100     | GFM2300     |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|
| Tool number                   | 40          | 40/60/120   | 40/60/120   | 40/60/120   | 40/60/120   |
| Chain rotation                | Servo motor |
| Tool changing time(tool-tool) | 6s          | 8s          | 8s          | 8s          | 8s          |

#### Other data

| Weight                  | 13.5t     |     | 28t      | 381 |        | 53t      | ,C    | 55t      |
|-------------------------|-----------|-----|----------|-----|--------|----------|-------|----------|
| Floor area              | 4.72*5.6m |     | 6.5*4.5m | 8.5 | *7.5m  | 12*9m    |       | 12*9m    |
| Height                  | 2.8m      | ,5  | 4m       | 4.1 | m      | 6m       | 72/10 | 6.5m     |
| Voltage                 | 400V      | D)  | 400V     | 400 | V      | 400V     |       | 400V     |
| Capacity                | 70KVA     |     | 100KVA   | 120 | OKVA   | 150KVA   | , 0   | 150KVA   |
| Compressed air pressure | 0.6MP     |     | 0.6MP    | 0.6 | MP     | 0.6MP    | 'M.   | 0.6MP    |
| Compressed air max flow | 650L/min  | 60, | 650L/min | 650 | DL/min | 650L/min |       | 650L/min |

#### Optional

High power spindle

Work probe

Knife setting instrument in machine

Spindle center water

Remote diagnostic services

A turnkey project

Adaptive cutting function

Vibration monitoring

FMS system.