

機械選択情報 Machinery Sale Information



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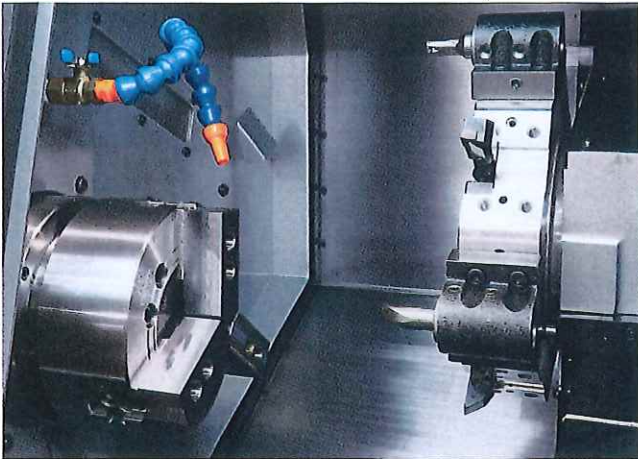
Listing No.61112

New Machine

|  |  |  |      |
|--|--|--|------|
| TAKAMAZ  | CNC 1 Spindle 1 Turret Precision Lathe Machine | GSL-15 PLUS FANUC-0i-TF                | 2021 |
| ■ MAIN SPECIFICATIONS ■  |  |  |      |
| ❖ CNC1スピンドル1タレット精密旋盤   |  | ❖ CNC1 Spindle 1Turret Precision Lathe |      |
| ❖ テール有り  |  | ❖ With Tailstock                       |      |
| ❖ 最大加工径 φ310   |  | ❖ Max.Turning Diameter φ310            |      |
| ❖ 最大加工長 300  |  | ❖ Max.Turning Length 300               |      |
| ❖ 最大棒材径 中実   |  | ❖ Max.Bar Diameter Solid               |      |
| ❖ チャックサイズ 8インチ   |  | ❖ Chuck Size 8 Inch                    |      |
| ❖ 主軸軸受内径 φ100  |  | ❖ Spindle Bearing I.D φ100             |      |
| ❖ 主軸貫通径 φ61  |  | ❖ Through Hole On Spindle φ61          |      |
| ❖ 主軸回転数 3,500 RPM  |  | ❖ Spindle Speed 3,500 RPM              |      |
| ❖ 機械重量:2,500kg   |  | ❖ Machine Weight: 2,500kg              |      |
| << Contact Us >>   |  |  |      |
|    |  |  |      |
| <h1 style="color: red;">GSL-15</h1> <h1 style="color: green;">PLUS</h1>  |  |  |      |
| <div style="display: flex; align-items: center; justify-content: center;"> <span>Chuck size</span> <div style="border: 2px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 10px;"> <span style="font-size: 24px; font-weight: bold;">8</span> </div> <span>Inch</span> </div> |  |  |      |

# GSL-15 PLUS

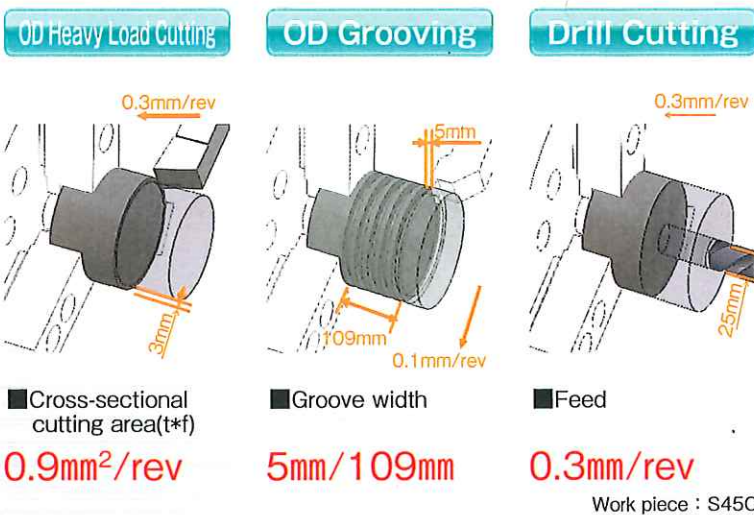
Designed for high quality and endurance



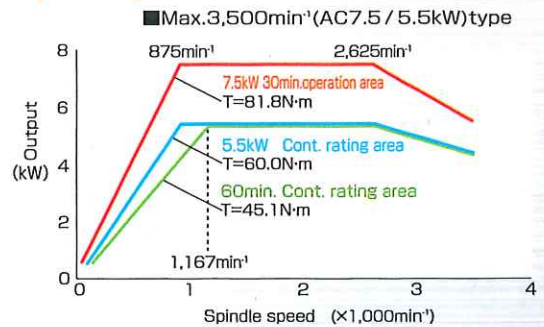
※ Holders are common-use with the GSL-15.

We have called on the technical knowhow on lathes that we have built up over many years, and adopted a spindle unit with the same bore diameter of 100 mm that has proven itself on our flagship model (XL-150). The machine will maintain endurance even in working environments outside Japan and minimize changes in finish dimensions if operating over long periods.

## Stable Turning Accuracy

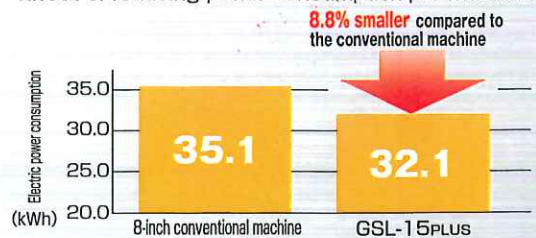


## Spindle power characteristic curve



## Pursuit of Energy Efficiency

Effect of reducing power consumption per machine



※ Operating Condition: Power Consumption per Cycle Running performed with TAKAMAZ Measuring Standard Program

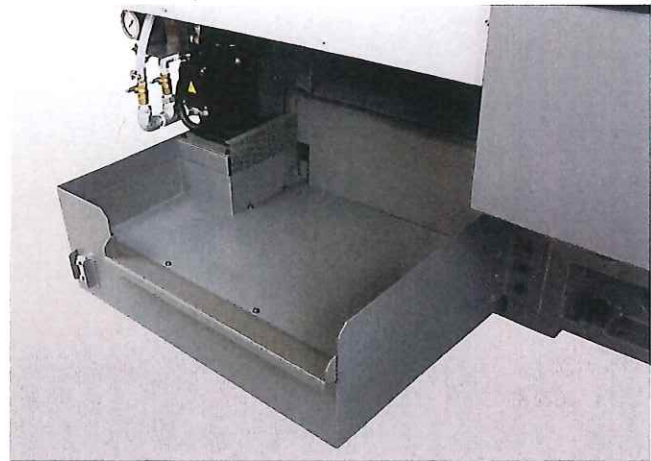
# This is the Launch of a Universal Machine of Global Standards with Refined Utility and Endurance.

## Simultaneous attainment of low costs and high reliability

Simplifying the structure realizes low costs and provides differentiation from existing machines. What is more, high reliability is maintained because, from parts to assembly, manufacture is completely done in Japan while achieving low costs.

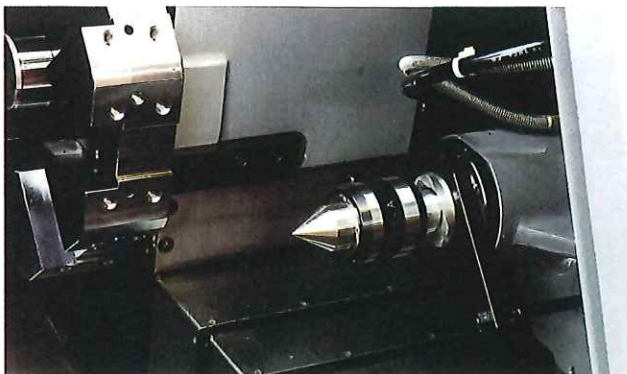
## Operator-friendly design

Excellent accessibility, with a spindle center height of 980 mm and a distance from the front of 315 mm, along with a low machine ceiling height of 1,400 mm, release operators from feeling constricted and allow even short-statured operators to work without strain. Maintainability is also improved by adopting a fixed-type coolant tank that can be cleaned inside simply by removing the lid.



## Equipped with a tailstock unit

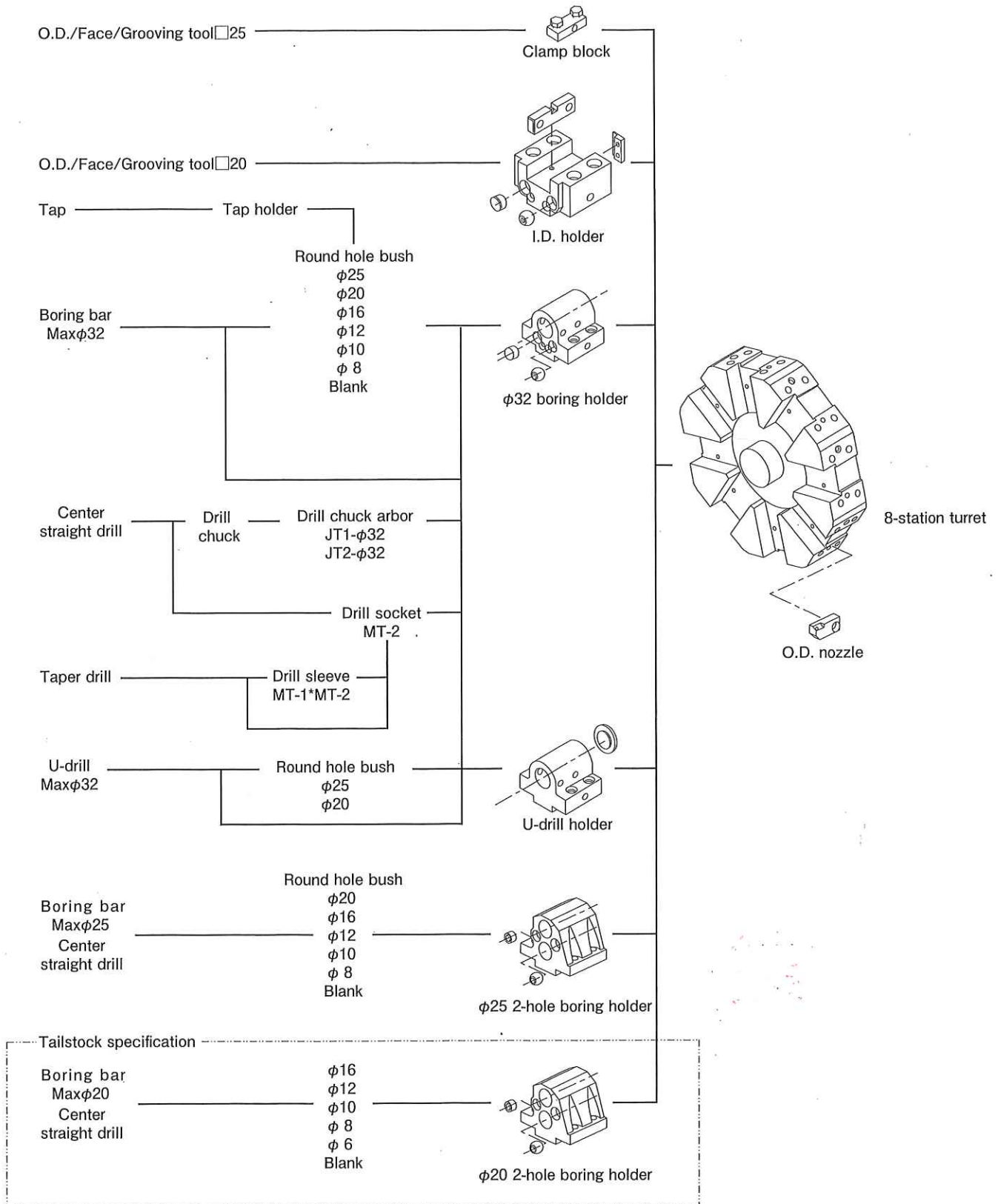
The tailstock unit allows shaft work to be handled as well.



|           | Item             | Unit |        |
|-----------|------------------|------|--------|
| Tailstock | Pointed End      |      | MT - 4 |
|           | Quill O.D.       | mm   | φ56    |
|           | Quill stroke     | mm   | 85     |
|           | Tailstock stroke | mm   | 220    |
|           | Max. thrust      | kN   | 3.5    |

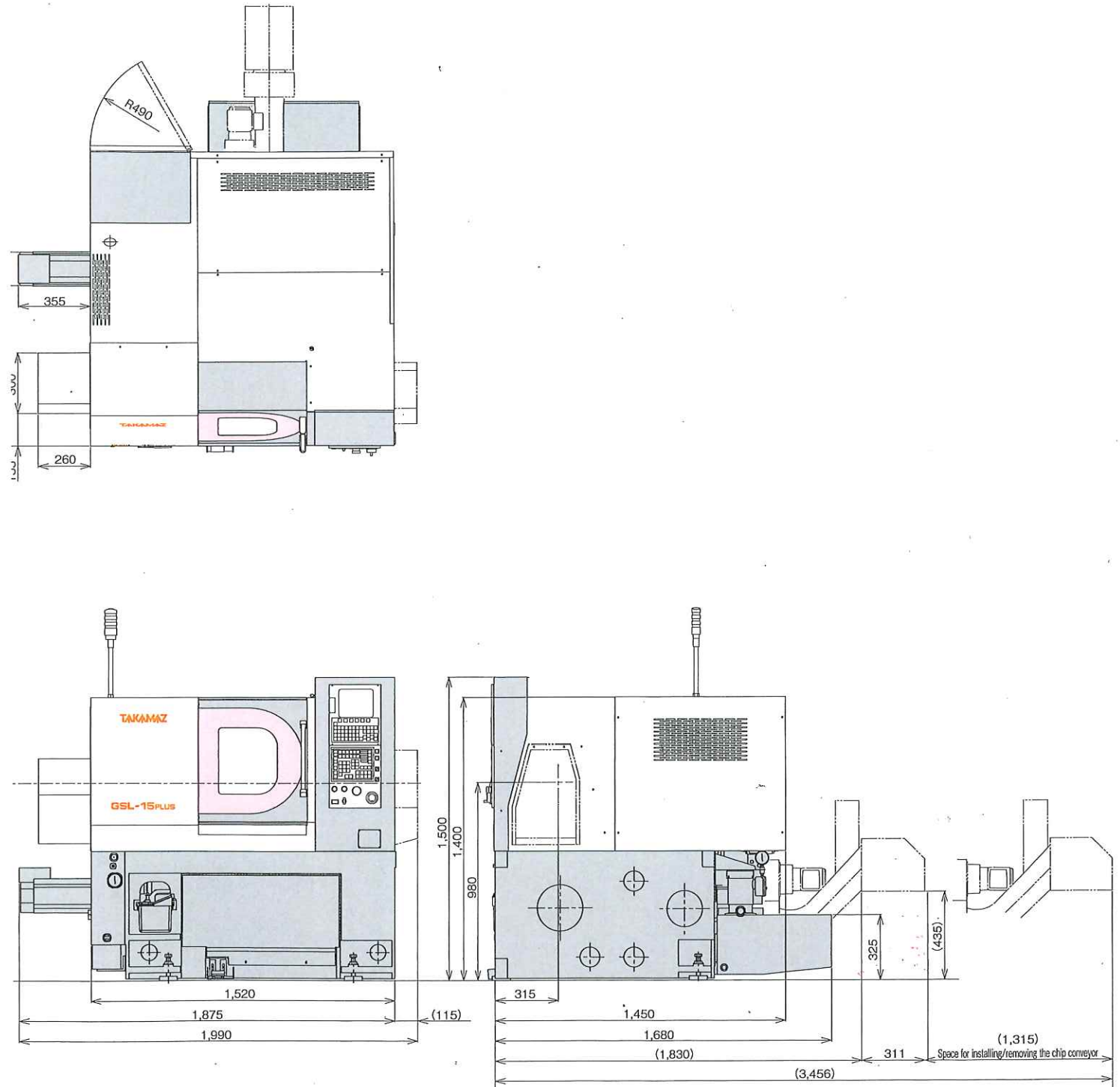
## Tooling System

### GSL-15 PLUS





### GSL-15 PLUS



Unit(mm)

# SPECIFICATION

## Machine Specifications

| Item      |                         | Unit              | GSL-10H               | GSL-15 PLUS                                 |                |
|-----------|-------------------------|-------------------|-----------------------|---|----------------|
|           |                         |                   |                       | Without tailstock                           | With tailstock |
| Capacity  | Max. turning diameter   | mm                | φ180                  | φ310  |                |
|           | Max. turning length     | mm                | 190                   | 300   |                |
|           | Max. bar diameter       | mm                | φ26(Hollow)           | Solid                                       |                |
|           | Chuck size              | inch              | Collet,6              | 8   |                |
| Spindle   | Spindle nose            | JIS               | A <sub>2</sub> -5     | A <sub>2</sub> -6                           |                |
|           | Spindle bearing I.D.    | mm                | φ75                   | φ100  |                |
|           | Through-hole on spindle | mm                | φ46                   | φ61   |                |
|           | Spindle speed           | min <sup>-1</sup> | Max.4,500             | Max.3,500                                   |                |
| Tool post | Type                    |                   | 8-station turret      | 8-station turret                            |                |
|           | Tool shank              | mm                | □20                   | □25(I.D.□20)                                |                |
|           | Boring holder I.D.      | mm                | φ25                   | φ32   |                |
|           | Max. stroke             | mm                | X:120 Z:230           | X:175 Z:330                                 | X:160 Z:330    |
|           | Rapid traverse rate     | m/min             | X:12 Z:18             | X:18 Z:24                                   |                |
| Motors    | Spindle motor           | kW                | AC5.5/3.7             | AC7.5/5.5                                   |                |
|           | Feed motor              | kW                | X:AC0.75 Z:AC1.2      | X:AC1.2 Z:AC1.8                             |                |
|           | Coolant motor           | kW                | AC0.25                | AC0.4                                       |                |
|           | Hydraulic motor         | kW                | AC0.75                | AC0.75                                      |                |
| Tailstock | Pointed End             |                   | -                     | -   | MT-4           |
|           | Quill O.D.              | mm                | -                     | -   | φ56            |
|           | Quill stroke            | mm                | -                     | -   | 85             |
|           | Tailstock stroke        | mm                | -                     | -   | 220            |
|           | Max. thrust             | kN                | -                     | -   | 3.5            |
| Size      | L×W×H                   | mm                | 1,610 × 1,390 × 1,585 | 1,875(With tailstock:1,990) × 1,680 × 1,500 |                |
|           | Machine weight          | kg                | 1,620                 | 2,300                                       | 2,500          |
|           | Total electric capacity | KVA               | 12                    | 14  |                |

## Standard Accessories

| Item   | GSL-10H          | GSL-15 PLUS                        |
|--|------------------|------------------------------------|
| <input type="checkbox"/> Boring holder   |                  | 2 sets                             |
| <input type="checkbox"/> Clamp block   |                  | 8 sets                             |
| <input type="checkbox"/> Coolant block(O.D.nozzle)                                     |                  | 8 sets (For reverse cutting tools) |
| <input type="checkbox"/> Hydraulic chucks  | - (Parts order)  | 1 set (Solid)                      |
| <input type="checkbox"/> Hydraulic chucking cylinder                                   | 1 set (Hollow)   | 1 set (Solid)                      |
| <input type="checkbox"/> Hydraulic unit  |                  | 1 set                              |
| <input type="checkbox"/> Thread cutting unit(Including constant surface speed control) |                  | 1 set                              |
| <input type="checkbox"/> Coolant unit  | 1 set (125 lit.) | 1 set (110 lit.)                   |
| <input type="checkbox"/> Work light  |                  | 1 set                              |
| <input type="checkbox"/> Signal light  |                  | 1-color                            |
| <input type="checkbox"/> TAKAMAZ instruction manual                                    |                  | 1 set                              |

## Parts Order

| Item   | GSL-10H | GSL-15 PLUS    |
|--|---------|----------------|
| <input type="checkbox"/> Tool holders          |         | ○              |
| <input type="checkbox"/> Collet chucks         | ○       | -              |
| <input type="checkbox"/> Hydraulic chucks      | ○       | (Standard)     |
| <input type="checkbox"/> Rear chip conveyor    |         | ○(Spiral type) |
| <input type="checkbox"/> Front air blower      |         | ○              |
| <input type="checkbox"/> Automatic door system |         | ○              |

※Delivery will be separate from machine order.This is handled as parts order.

## Controller Specifications

| Item   | GSL-10H  | GSL-15 PLUS           |
|--|--|-----------------------|
|  | TAKAMAZ & FANUC Oi Mate-TD                     | TAKAMAZ & FANUC Oi-TF |
| Controlled axes                                  | 2 axes (X, Z)                                  |                       |
| Simultaneously controllable axes                 | Simultaneous 2 axes                            |                       |
| Least input increment                            | 0.001mm (X in diameter)                        |                       |
| Least command increment                          | X : 0.0005mm Z : 0.001mm                       |                       |
| Auxiliary function                               | M-code 3 digit                                 |                       |
| Spindle function                                 | S-code 4 digit                                 |                       |
| Tool function                                    | T-code 4 digit                                 |                       |
| Tape code  | EIA (RS232C) / ISO (840) automatic recognition |                       |
| Cutting feedrate                                 | 1~5,000mm/min                                  | 1~7,000mm/min         |
| Command system                                   | Incremental / Absolute                         |                       |
| Linear interpolation                             | G01  |                       |
| Circular interpolation                           | G02, G03                                       |                       |
| Cutting feedrate override                        | 0~150%   |                       |
| Rapid traverse override                          | FO, 100%                                       |                       |
| Program file name                                | -  | 32 characters         |
| Program number                                   | 4 digits                                       | -                     |
| Backlash compensation                            | 0~9,999 $\mu$ m                                |                       |
| Program memory capacity                          | 512Kbyte(1,280m)                               |                       |
| Tool offsets                                     | 64 sets  |                       |
| Registered programs                              | 400 pcs.                                       |                       |
| Tool geometry / Wear offset                      | Standard                                       |                       |
| Canned cycle                                     | G90, G92, G94                                  |                       |
| Radius designation on arc                        | Standard                                       |                       |
| Tool offset measurement input                    | Standard                                       |                       |
| Background editing                               | Standard                                       |                       |
| Direct drawing dimension programming             | Standard                                       |                       |
| Custom macro                                     | Standard                                       |                       |
| Custom macro common variables                    | #100~#199, #500~#999                           |                       |
| Pattern data input                               | Standard                                       |                       |
| Nose R compensation                              | G40, G41, G42                                  |                       |
| Inch / Metric conversion                         | G20 / G21                                      |                       |
| Programmable data input                          | G10  |                       |
| Run hour / Parts count display                   | Standard                                       |                       |
| Extended part program editing                    | Standard                                       |                       |
| Multiple repetitive cycle                        | G70~G76  |                       |
| Multiple repetitive cycle II                     | -  | Pocket-shaped         |
| Canned drilling cycle                            | Standard                                       |                       |
| Constant surface speed control                   | G96, G97                                       |                       |
| Continuous thread cutting                        | G32  |                       |
| Variable lead thread cutting                     | G34  |                       |
| Thread cutting retract                           | Standard                                       |                       |
| Clock function                                   | Standard                                       |                       |
| Help function                                    | Standard                                       |                       |
| Alarm history display                            | 50 pcs.  |                       |
| Self-diagnosis function                          | Standard                                       |                       |
| Sub-program call                                 | Up to 10 loops                                 |                       |
| Decimal point input                              | Standard                                       |                       |
| 2nd reference point return                       | G30  |                       |
| Work coordinate system setting                   | G50, G54~G59                                   |                       |
| Stored stroke check 1                            | Standard                                       |                       |
| Stored stroke check 2,3                          | Standard                                       |                       |
| Input / Output interface                         | USB Flash Memory, Memory card, Ethernet        |                       |
| Alarm message                                    | Standard                                       |                       |
| Graphic display                                  | Standard                                       |                       |
| Conversational programming with graphic function | Standard                                       |                       |
| Abnormal load detection                          | Standard                                       |                       |
| Starting condition check function                | Standard                                       |                       |
| Automatic data backup                            | -  | Standard              |
| TAKAMAZ maintenance functions                    | Standard                                       |                       |
| FANUC set of manuals                             | CD-ROM   | DVD-ROM               |

## Optional Specifications (Parts Order)

| Item                          | GSL-15 PLUS   |
|-------------------------------|---|
| Tool life management          |   |
| Multiple M codes in one block | Max.2   |
| Spindle orientation           | 1 set / 2~6 sets  |
| TAKAMAZ Support Lite          | Workpiece counter, Tool counter, Constant wear compensation |





# GSL series

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