CNC Precision Multi-Tasking Lathe

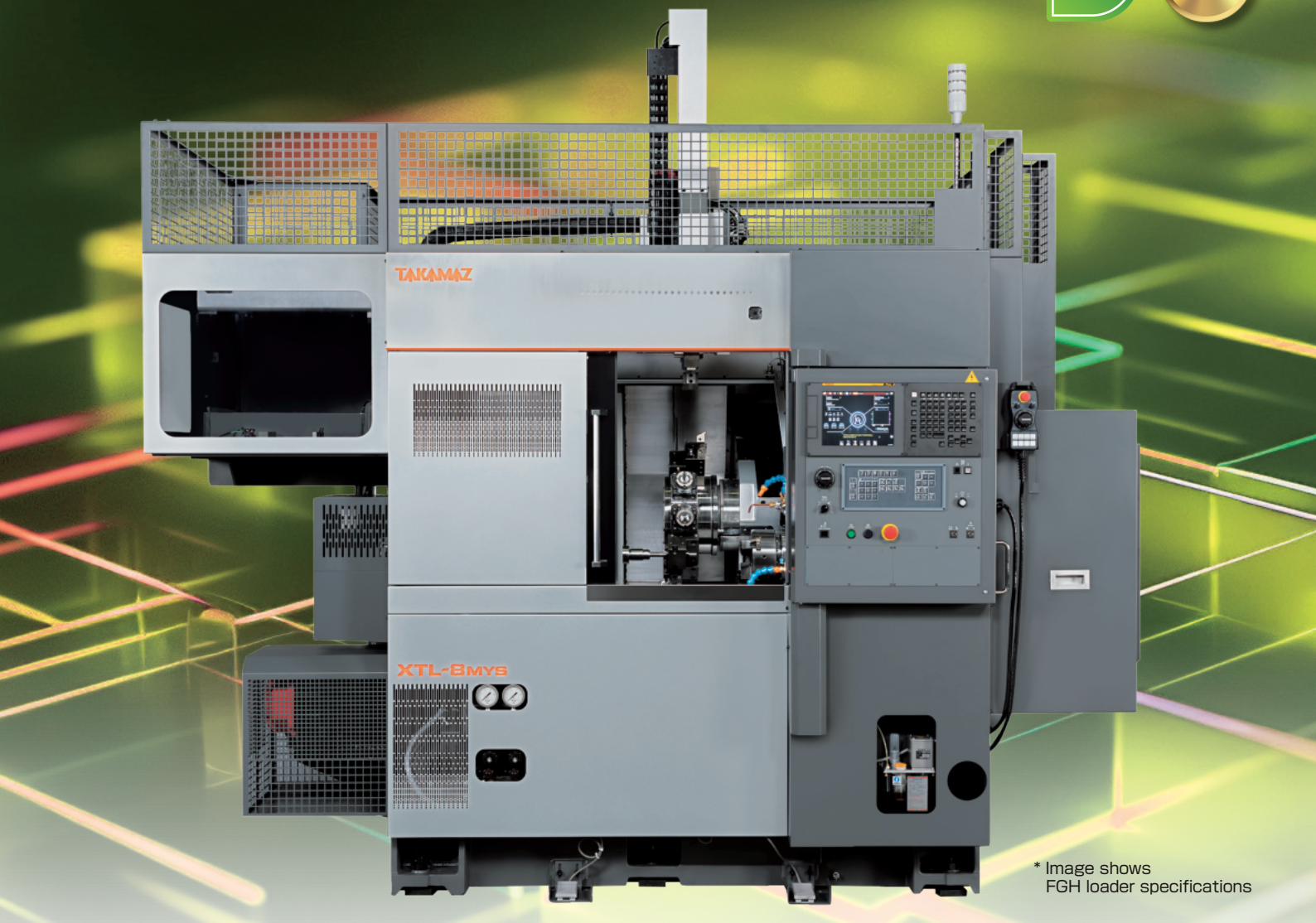
TAKAMAZ

# XTL-8MYS

## Multi-Tasking Lathe with Y Axis/Sub-spindle Ideal for Shaft Work

energy saving

NEW




* Image shows FGH loader specifications

### Standard Sub-spindle to Complete Products with Front/Back Machining

Providing a sub-spindle as standard makes it possible to complete products requiring back face machining as a second process on a single machine. Completely synchronized rotation of the two spindles also enables consistent high accuracy in shaft work machining.

### Focused on Shaft Work

The machine has a maximum turning length of 404 mm. A highly rigid square box-way slide construction is adopted along with a ϕ100-mm main spindle and ϕ75-mm sub-spindle.
It can share chucks and toolholders with XT-8M and XT-8MY models. The machine construction allows machining over the full Z-axis stroke even with special high chuck specifications.

### Features High-level Power Tool Performance (BMT55 Turret)

Improvements in productivity are achieved with motor outputs of AC 5.5/3.7/2.2 kW and a milling unit with a maximum tool size of ϕ20 mm. The turret's half-indexing mechanism allows up to 24 tools to be mounted.This makes it possible to reduce time for setup changes.
(A maximum of 12 power tools can be mounted.)

### Combines Productivity with Energy Savings

The energy-saving level selection function and idle stop function can be used to reduce power consumption, not just while the machine is running but during setup work too. The chuck stroke check function (option) allows you to adjust the chuck clamping confirmation position from the NC screen rather than by using proximity switches, and reduces the time spent on setup changes in high-mix production.

### Improved Operability with the TAKAMAZ Operation System

With the automation specifications, a FANUC control loader is available. It improves working convenience during setup with the loader teaching function and tool offset support function. In addition, data on the machine status can be saved for each workpiece, making workpiece traceability achievable.

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# XTL-8MYS

## Machine Specifications

| | Item | | Unit | XTL-8MYS | |
|---|---|---|---|---|---|
| | | | | Main-spindle | Sub-spindle |
| Capabilities | Max. turning diameter | | mm | φ220 | |
| | Max. turning length | | mm | 404 | |
| | Max. bar diameter | | mm | Solid (φ42, φ51) | Solid (φ35) |
| | Chuck size | | inch | 8 | 6 |
| Spindle | Spindle nose | | JIS | A2-6 | A2-5 |
| | Spindle bearing I.D. | | mm | φ100 | φ75 |
| | Through-hole on spindle | | mm | φ61 | φ46 |
| | Spindle speed | | min-1 | 4,000 | |
| Tool post | Type | | | 12-station Turret | |
| | Tool shank | | mm | □25 | |
| | Boring holder I.D. | | mm | φ40 | |
| | Max. stroke | | mm | X:175 Z:550 Y:+35, −40 A:400 | |
| | Rapid traverse rate | | m/min | X:18 Z:24 Y:10 A:30 | |
| Power tools | Tool storage capacity | | pcs. | 12 | |
| | Rotation speed | | min-1 | 4,000 | |
| | Capacity | Drill | mm | φ20 | |
| | | Endmill | mm | φ20 | |
| | | Tap | mm | M16 | |
| Cs-axis | Rapid traverse rate | | deg./min | 36,000 | |
| Motors | Spindle motor | | kW | AC15/11 | AC7.5/5.5 |
| | Feed motor | | kW | X:AC1.7 Z:AC2.5 Y:AC1.0 A:AC1.7 | |
| | Coolant motor | | kW | AC 0.4 | |
| | Hydraulic motor | | kW | AC1.5 | |
| | Power tools motor | | kW | AC 5.5/3.7/2.2 | |
| Size | L×W×H | | mm | Manual machine2,764(1,840※1)×1,965×1,880<br>Machine with loader2,764(1,840※1)×1,965×2,400 | |
| | Machine weight | | kg | 5,500 | |
| Total electric capacity | | | KVA | 36~38(Depends on the specifications.) | |

( ) : Option
※1 Bed width

## Standard Accessories

- □Boring holder ····· 2sets
- □O.D.holder ····· 2sets
- □Hydraulic chucks(8 inch) ····· 1set
- □Hydraulic chucking cylinder(Hollow) ····· 1set
- □Hydraulic unit ····· 1set
- □Chuck clamp detector ····· 1set
- □Spindle indexing device(Cs-axis) ····· 1set
- □Power tools drive unit ····· 1set
- □Thread cutting unit (Including constant surface speed control) ··· 1set
- □Sub spindle ····· 1set
- □Coolant unit ····· 1set
- □Work light ····· 1set
- □Service tool kit ····· 1set
- □TAKAMAZ Instruction manual ··· 1set

## Optional Accessories

- □Tool holders
- □Collet chucks
- □Thermony®
  (Thermal displacement correction system)
- □TAKAMAZ loader system
- □Bar feeder system
- □Unloader
- □Work set detector
- □Power tools(Face/Side milling)
- □Chip conveyor(Rear/Side)
  (Floor type／Spiral type)
- □Front air blower
- □Rear air blower
- □Rear coolant unit
- □Signal light(1-tier／2-tier／3-tier)
- □Automatic fire extinguisher
- □Automatic power shut-off device
- □Automatic door system (Auto door／Shutter)
- □Special color

## Loader Specifications

| Item | Unit | FGH(FANUC) |
|---|---|---|
| Loadable workpiece diameter | mm | φ75 |
| Weight capacity | kg | 5 |
| Rapid traverse rate | m/min | Y:160 Z:160 |

※Some machine operation switches, and the loader operation switches, are of the touch-screen type.
(Subject to change without prior notice.)

## Controller Specifications

| Item | TAKAMAZ & FANUC 0i-TF Plus XTL-8MYS |
|---|---|
| Controlled axes | 6axes (X, Z, C, Y, A, E) |
| Simultaneously controllable axes | Simultaneous 4 axes |
| Least input increment | 0.001mm (X in diameter) |
| Least command increment | X : 0.0005mm Z, Y, A : 0.001mm C, E : 0.001deg. |
| 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 | 1~7,000mm/min |
| Command system | Incremental/Absolute |
| Linear interpolation | G01 |
| Circular interpolation | G02, G03 |
| Cutting feedrate override | 0~150% |
| Rapid traverse override | F0, 100% |
| Program file name | 32 characters |
| Backlash compensation | 0~9,999μm |
| Program memory capacity | 2Mbyte (5,120m) |
| Tool offsets | 64sets |
| Registered programs | 1,000 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 |
| Spindle synchronous control | Standard |
| Sub-spindle torque skip | Standard |
| Y-axis offsets | Standard |
| 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 |
| Rigid tapping | For Power Tools only |
| Polar coordinate interpolation | Standard |
| Cylindrical interpolation | Standard |
| Stored stroke check 1 | Standard |
| Stored stroke check 2,3 | Standard |
| Input／Output interface | Flash Memory, Memory card※, Ethernet |
| Alarm message | Standard |
| Graphic display | Standard |
| Conversational programming with graphic function | Standard |
| Abnormal load detection | Standard |
| Manual handle trace | Standard |
| Automatic data backup | Max. 3 |
| Automatic screen deletion function | Standard (Standard specification only) |
| TAKAMAZ management support function | Work／Tool counter,Tool load monitor,Others |
| TAKAMAZ maintenance functions | Standard |
| FANUC set of manuals | DVD-ROM |

## Optional Specifications

| | |
|---|---|
| Input／Output interface | RS232C |
| Tool life management | |
| Multiple M codes in one block | Max. 3 |
| Spindle orientation | 1set／6sets |
| Dynamic graphic display | Supported only with standard specifications |
| Helical interpolation | |
| FANUC instruction manual | Bound |
| FANUC loader special control function | In-machine camera display function,<br>wear compensation using digital measuring devices |

※In the case of F loader specification, this is in the electric cabinet.

TAKAMAZ

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