

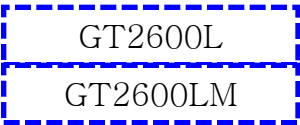
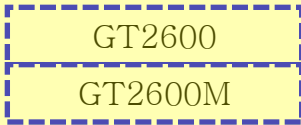
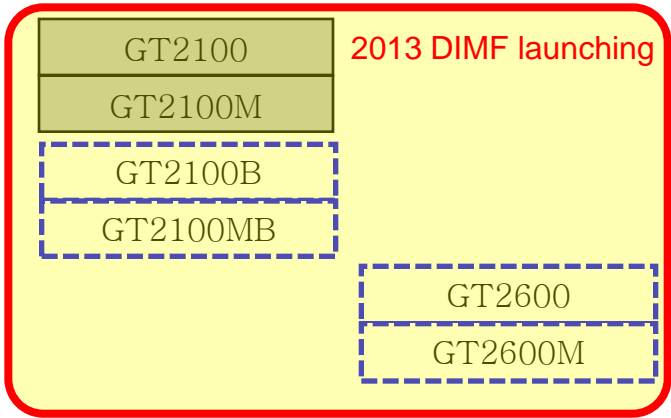
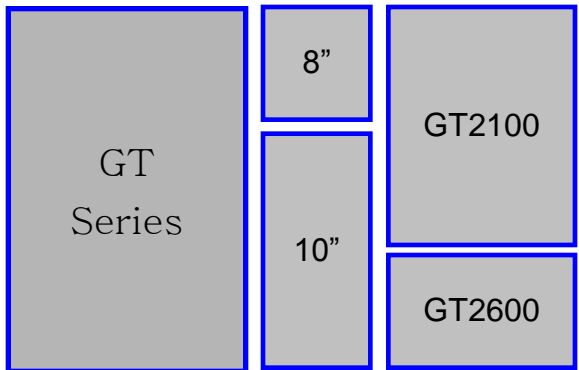
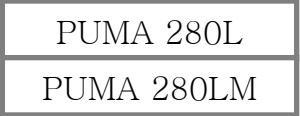
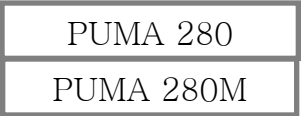
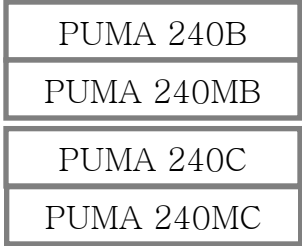
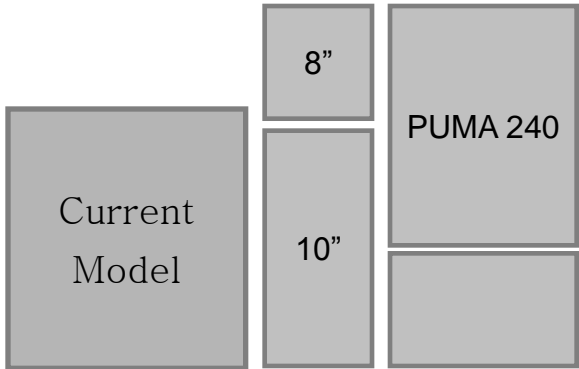
Contents

1. Turning Center Line-up

2. Major model introduction

- Lynx series
- PUMA GT series
- PUMA 2100 / 2600 / 3100 series
- PUMA 700LY / 800B
- PUMA TT 1800SY
- PUMA MX 1600ST
- PUMA SMX 2500S / 3000
- PUMA V400
- PUMA VT900M

3. Oil & Gas Application



Under development



Global Standard Turning Center

- 8" Next Generation 2 – Axis Turning Center



Major Specifications

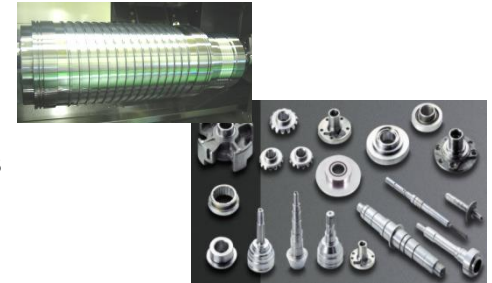
- Spindle Speed : 4,500 r/min
- Spindle Motor Power, Torque : 25/20 hp / 183 N·m
- Chuck Size : 210 mm (8")
- Recommended turning diam : 210 mm
- Travel Distance [X/Z] : 230/580 mm
- Rapid Traverse [X/Z] : 24/30 m/min
- CNC Controller : Fanuc-0iTD

Family Models

- GT2100 / GT2100M

Applications

- Automobile parts
- Precise machine parts
- General machine parts



Main Features

- Enhanced productivity with optimal structure
- No Coolant Leakage & Improved chip disposal
- Save Foot print
- Proven quality (Complete field monitoring test, 6 months)

Major Competitors

- MAZAK, MORISEIKI, OKUMA

Global Standard Turning Center

- 8" Next Generation 3 – Axis Turning Center



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Main Features

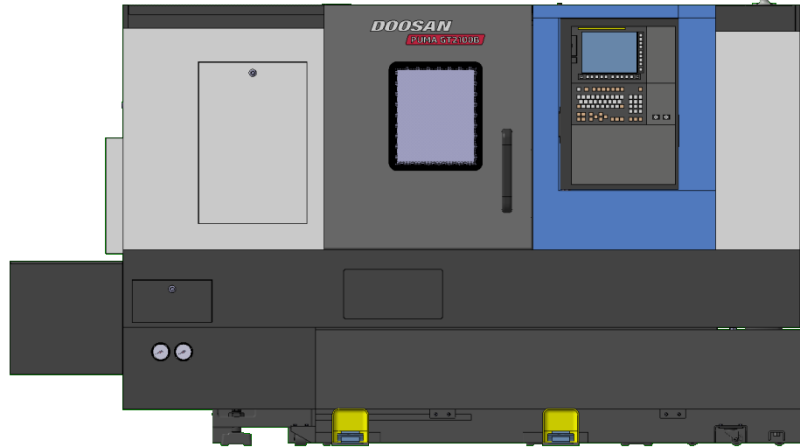
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Major Competitors

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Global Standard Turning Center

- 10" Next Generation 2 – Axis Turning Center (Base on GT2100)



Major Specifications

- Spindle Speed : 3,500 r/min
- Spindle Motor Power, Torque : 25/20 hp / 523 N·m
- Chuck Size : 255 mm (10")
- Recommended turning diam : 255 mm
- Travel Distance [X/Z] : 230/580 mm
- Rapid Traverse [X/Z] : 24/30 m/min
- CNC Controller : Fanuc-0iTD

Family Models

- GT2100B / GT2100MB

Applications

- Automobile parts
- Precise machine parts
- General machine parts



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Global Standard Turning Center

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Family Models

- GT2100B / GT2100MB

Applications

- Automobile parts
- Precise machine parts
- General machine parts



Main Features

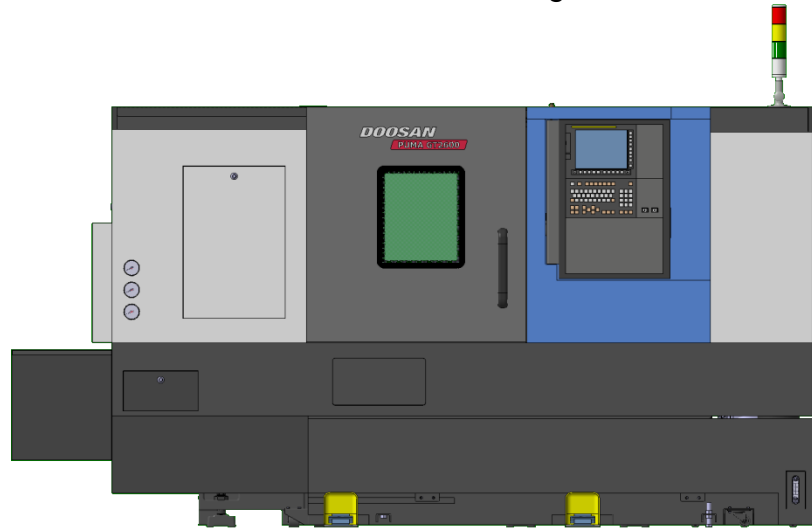
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Major Competitors

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Global Standard Turning Center

- 10" Next Generation 2 – Axis Turning Center



Major Specifications

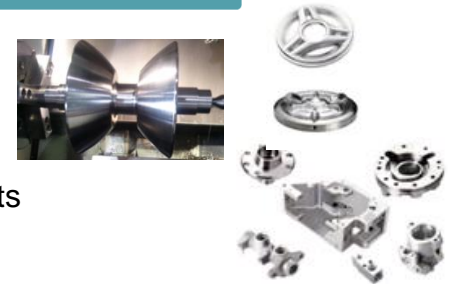
- Spindle Speed : 3,500 r/min
- Spindle Motor Power, Torque : 30/25 hp / 622 N·m
- Chuck Size : 255 mm (10")
- Recommended turning diam : 255 mm
- Travel Distance [X/Z] : 265/680 mm
- Rapid Traverse [X/Z] : 24/30 m/min
- CNC Controller : FANUC-0iTD

Family Models

- GT2600 / GT2600M

Applications

- Automotive Parts
- Hydraulic & pneumatic parts
- Industrial Machine Parts



Main Features

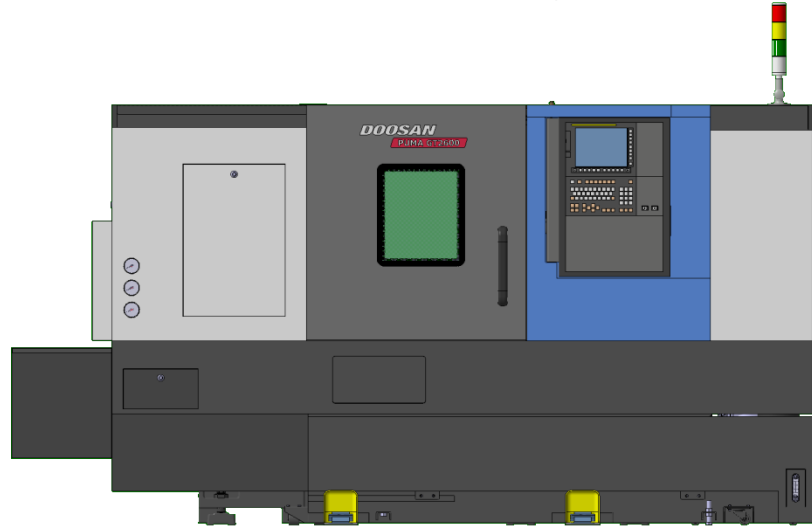
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Major Competitors

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Global Standard Turning Center

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Main Features

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Major Competitors

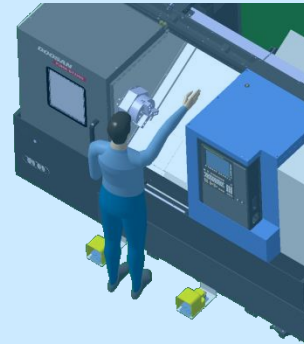
- MAZAK, MORISEIKI, OKUMA

Features (Customer Evaluation)

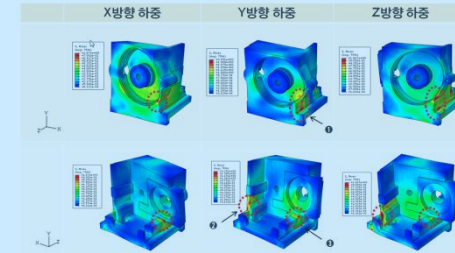


1. Enhanced productivity with optimal structure

- Excellent Accessibility to Work
 - Optimize distance to change tool tip of tool post (from field monitoring)

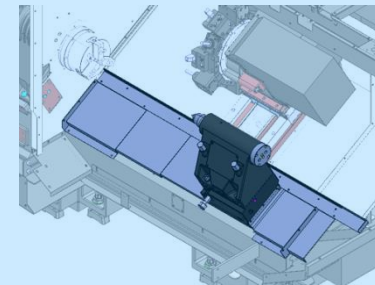


- Productivity, workability increase
 - Long tool life
 - Improved roughness (from field monitoring)



2. No Coolant Leakage & Improved chip disposal

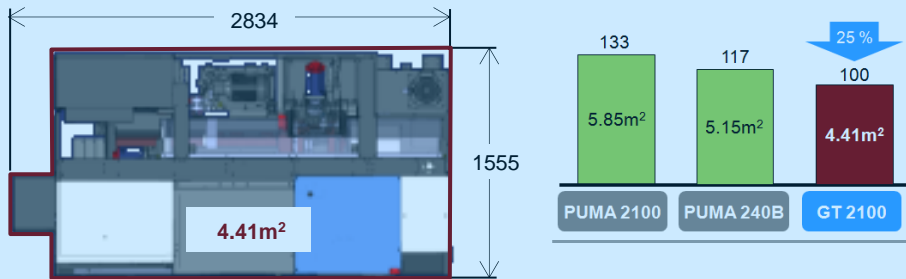
- Full cover design in working space
 - Improved chip disposal (from field monitoring)



- No coolant leakage structure (from field monitoring)

3. Save Foot print

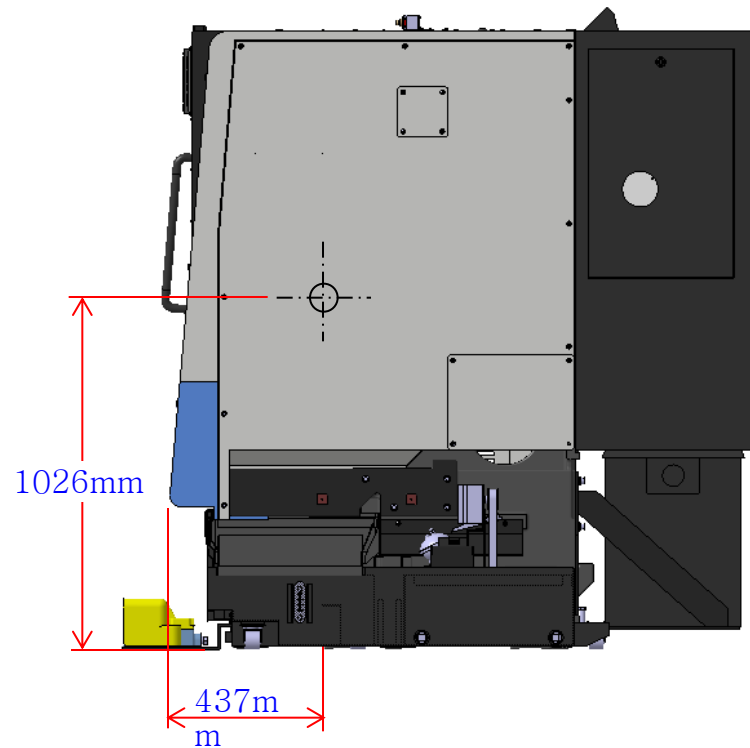
- Optimize Space for Installation
 - Space saving by 25%~14% compared with the previous



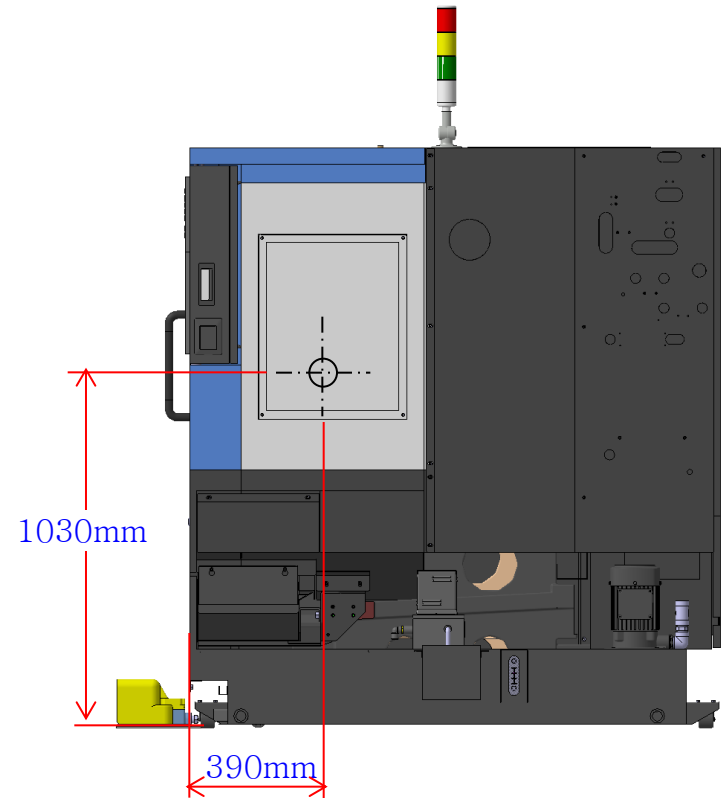
1. Enhanced productivity with optimal structure

Excellent accessibility to chuck

- Distance from cover to spindle center 437mm → 390mm (17.2" – 15")



PUMA 240



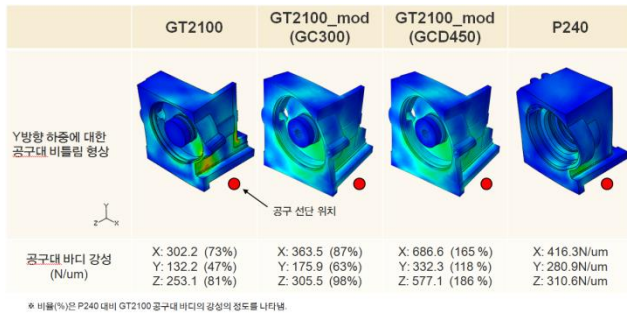
PUMA GT 2100

1. Enhanced productivity with optimal structure

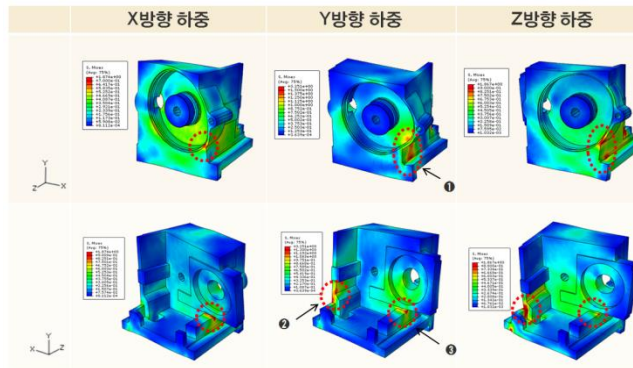
TURRET / TOOL POST

BED

• 3D Analysis

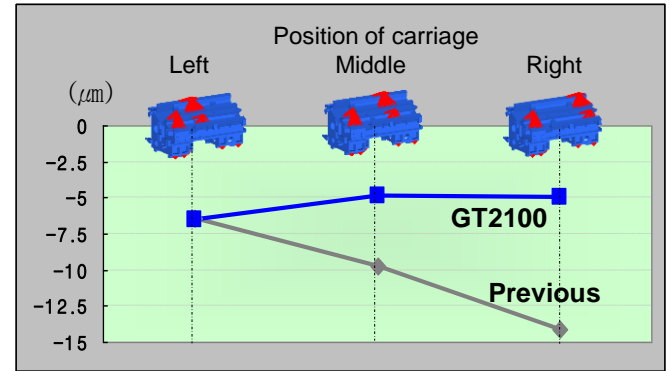


• X,Y,Z axis Rigidity of GT tool post body are superior to previous.



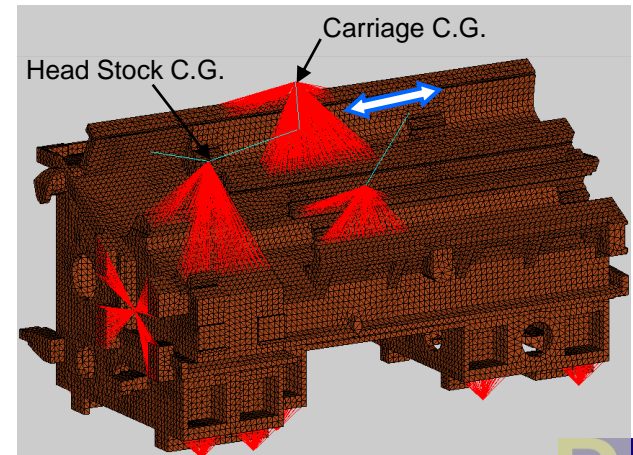
• Head Stock, Carriage Rigidity of GT are similar to previous.

• Deformation of Datum guide way



• Bed guide way is about **3 times** more stable than Previous.

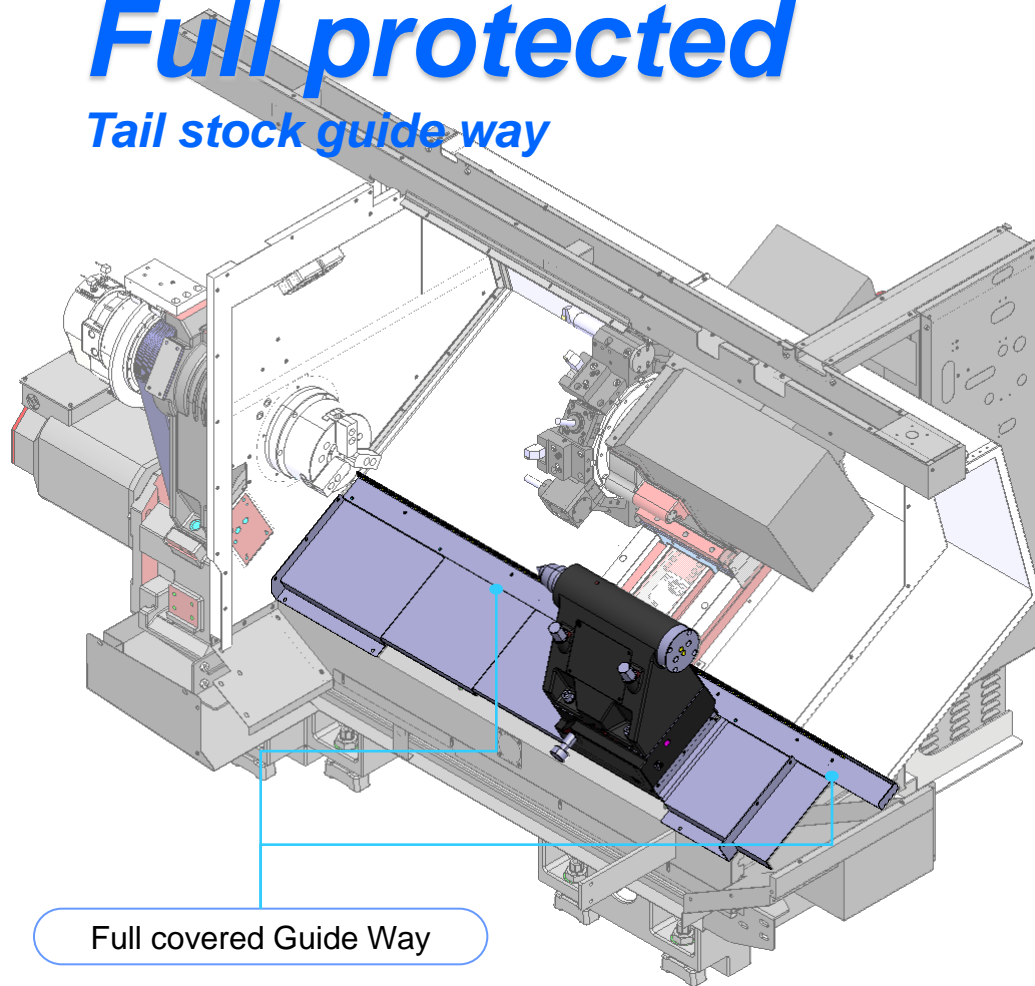
• FEM Analysis model



2. No Coolant Leakage & Improved chip disposal

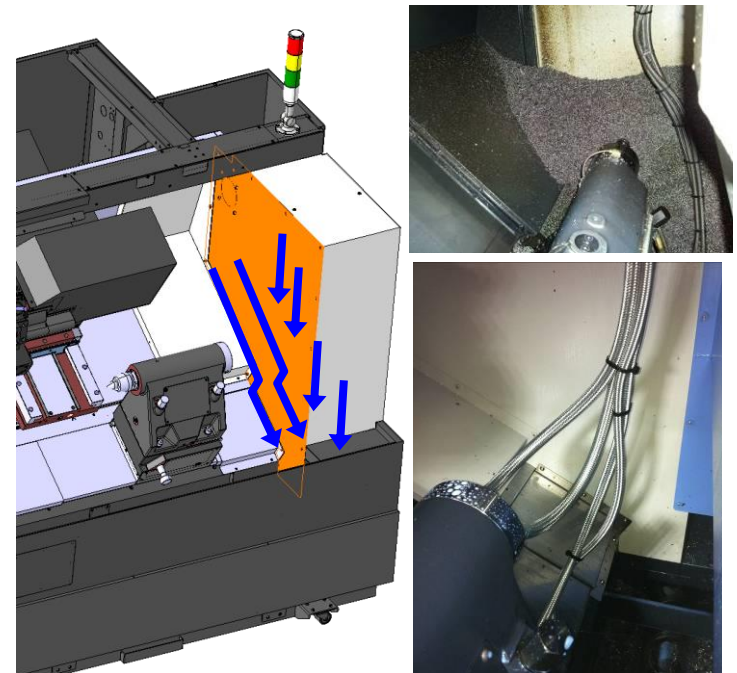
Full protected

Tail stock guide way



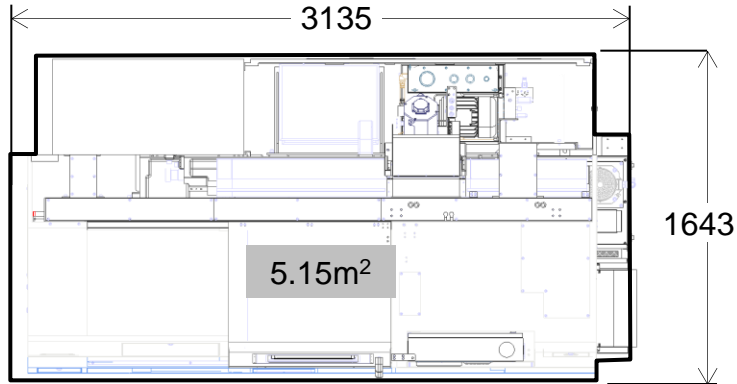
Improved

chip disposal behind tail stock

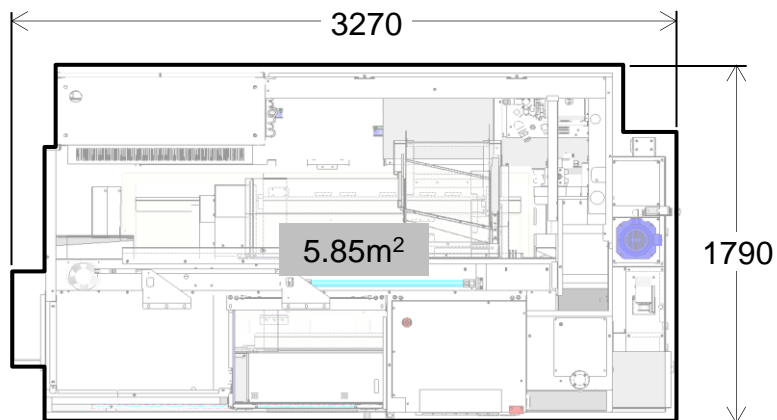


3. Smaller Footprint

PUMA 240B

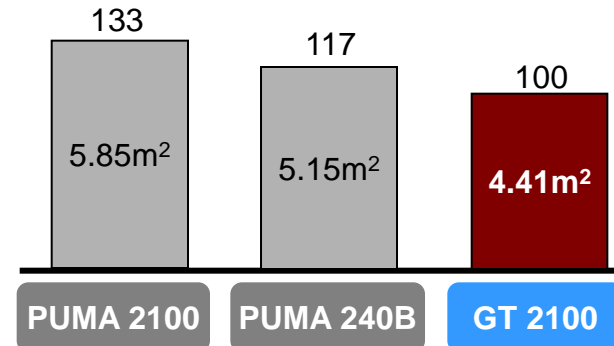
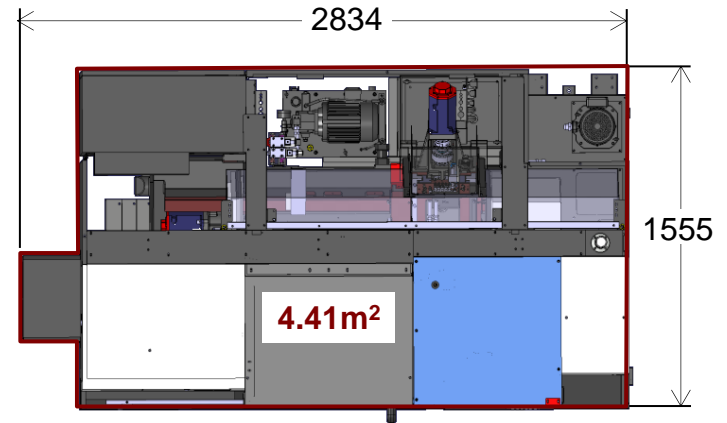


PUMA 2100



PUMA GT 2100

Space saving by **14%~25%**
compared with the previous



Field Monitoring Results

- A Company (Domestic)
- General feedback
→ **Generally GT2100 > P240**



- B Company (Domestic) : extra purchase
- General feedback
→ **Generally GT2100 > P240**



- C Company (Domestic) : extra purchase
- General feedback
→ **Generally GT2100 > P240**



■ Customer Evaluation

- 1) Compact size machine
- 2) No leakage
- 3) Excellent machined roughness
- 4) Good thermal displacement (0.03 mm for 8 hr)
- 5) Long tool life.
- P240B : 1~2 time replacing a day
- GT2100 : 1 time by 2days
- 6) Satisfied with Screw type chip conveyor
- 7) No screw type chip conveyor noise

■ Customer Evaluation

- 1) Easy installation, satisfaction for external an machine size
- 2) No leakage
- 3) FANUC system to be able to compensate for the worker accidentally
- 4) Improved chip disposal, no chip accumulating structure
- 5) Easier operation than P240
improve productivity 6-8%
- 6) No change in work dimensions
- 7) Good operator accessibility.
- 8) Satisfied with Screw type chip conveyor

■ Customer Evaluation

- 1) Compact machine size, it's more smaller
- 2) Good cutting ability, Long tool life and good surface finish
- 3) No leakage
- 4) Good thermal displacement (0.03 mm for 8 hr)
- 5) Good machining ability vs P240
- 6) Good chip disposal
- 7) Improved productivity
- 8) Looks similar to P240