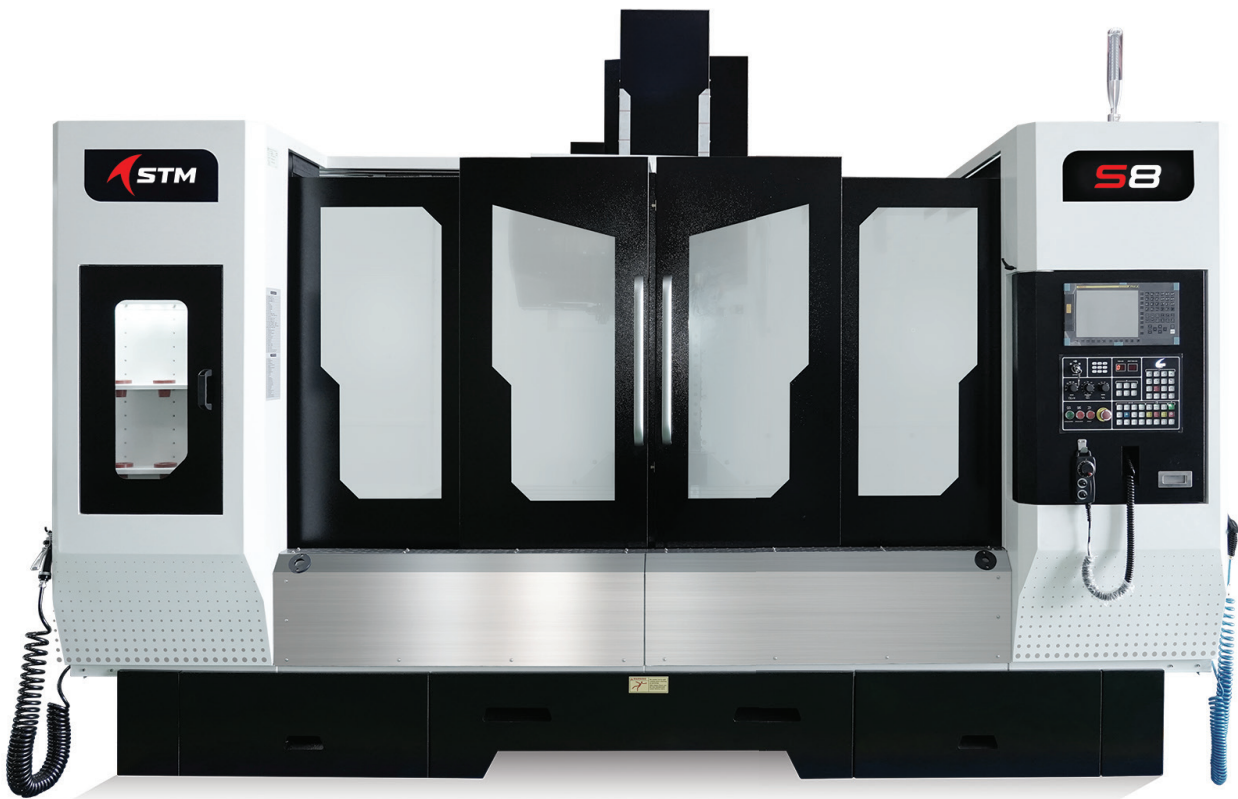


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The Latest Generation
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S&T
GROUP
SINCE 1996



Established in 1996, S&T GROUP is a renowned provider of high-quality machinery. Leveraging our strengths in industrial trading business, and built with a formidable customer base, S&T GROUP got into manufacturing activity to sustain the Group Vision, "Making Technology Affordable" to Indian customers.

Established in June 2015, with the state of the art manufacturing facilities in very less time span, now STM (S&T Machinery Pvt. Ltd.) is one among top 5 machine tools brands in India.



S&T MACHINERY (P) LTD.

(Manufacturing Unit of S&T Group)

Impressive
Performance

Robust
Construction

Enhanced
Productivity

Great
Reliability

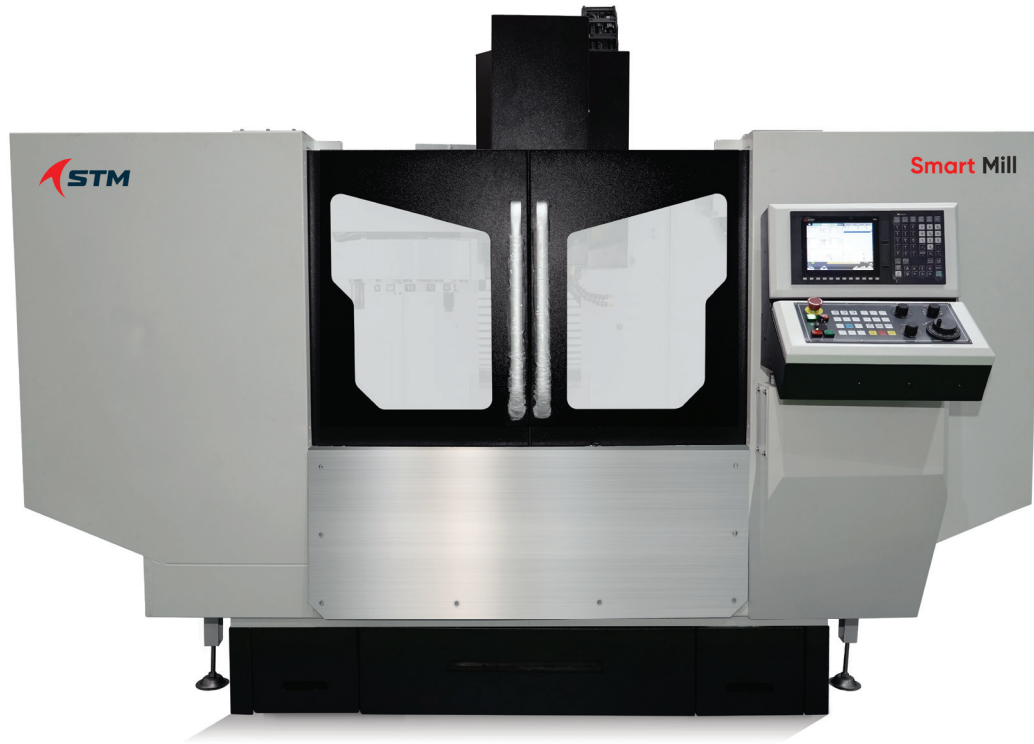


S&T has been offering machining solutions for more than 25+ years. Quality-conscious manufacturers have relied on S&T for world-renowned products and dependable after-sales service and support. Our extensive expertise in the machine tool business

has enabled us to comprehend the machining industry's demands. Our entry into machining center production in India is yet another step toward making sophisticated technology more accessible to the Indian manufacturing sector.



SMART MILL



FEATURES

- **'A' Shape** Structured Column with multiple cross ribs provides high cutting performance and superior kinematics.
- **Wide Casting Base** enhances heavy cutting and provides uniform stability for full travel.
- **LM Ball Guideways in all three axes** offer better cutting dynamics and machine life.

Belt Drive Spindle BBT40

6,000rpm
8,000rpm (Optional)

SMART MILL - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|---------------|
| X, Y, Z travel | 900/400/400mm |
| X, Y, Z ball screws | C5 32mm |
| Spindle nose to table surface | 100~500mm |
| Spindle center to telescopic cover | 459mm |

Table

| | |
|-----------------------------|------------------|
| Table size | 1470 * 350mm |
| T slot (size x qty x dist.) | 14mm x 3 x 125mm |
| Max. table load | 200Kg |

Spindle

| | |
|-----------------|-----------------------------|
| Speed | 6,000rpm (Opt: 8,000rpm) |
| Taper | BT40 |
| Transmission | Belt Type |
| Guide ways type | LM Ball |

Feed Rate

| | |
|-------------------------------|---------------|
| Rapid feed rate of X,Y,Z Axis | 10/10/10m/min |
| Cutting feed rate | 1-8,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|------------|
| Position accuracy | ±10 micron |
| Repeatability | ±10 micron |

Automatic Tool Changer

| | |
|-----------------------|---------------------------------|
| Tool storage capacity | Umbrella 12 ATC |
| Max. tool diameter | Full: 80mm Next empty: 125mm |
| Max. tool length | 200mm |
| Max. tool weight | 6Kg |

CNC Controller & Motor

| | |
|----------------|----------------------------|
| CNC controller | Mitsubishi E80 (Opt: M80) |
| Spindle motor | 3.7/5.5kW (Opt: 5.5/7.5kW) |

Coolant

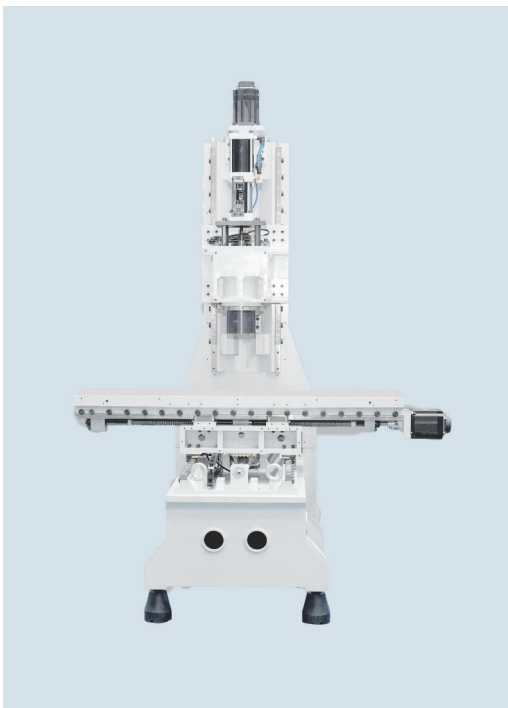
| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 70L |

Air & Power Supply

| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 10kVA |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 2,223 x 1,769 x 2,263mm |
| Machine net weight (approx.) | 2,500Kg |



SMART MILL - FRAME



Energy Efficiency (Optimized Design)

- Spindle and motors consume less power without sacrificing performance.

Easy Lubrication (Hassle-Free Maintenance)

- Automated lubrication system for consistent performance.

Reduced Vibration (Stable Cutting)

- Robust "A"-shaped frame absorbs vibrations effectively.

Reduced Displacement Resistance (Consistent Precision)

- Minimal resistance during axis movement ensures repeatable accuracy.



FEATURES

- **'A' Shape** Structured Column with multiple cross ribs provides high cutting performance and superior kinematics.
- **Wide Casting Base** enhances heavy cutting and provides uniform stability for full travel.
- **LM Ball Guideways in all three axes** offer better cutting dynamics and machine life.
- Imported BBT40/BBT30 Spindle with G1 Balanced Grade offers **excellent finish up to 0.45 Ra and increases tool life.**
- The latest **Mitsubishi, Fanuc and Siemens Controllers** are available.
- 10,000 mm/min Cutting Feed Rate and 48 m/mm Quick Rapid provide **great efficiency** and productivity.

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Direct Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm / 15,000rpm (Optional)

S1 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|---------------|
| X, Y, Z travel | 550/410/480mm |
| X, Y, Z ball screws | C3 32mm |
| Spindle nose to table surface | 100~580mm |
| Spindle center to telescopic cover | 459mm |

Table

| | |
|-----------------------------|------------------|
| Table size | 650 x 410mm |
| T slot (size x qty x dist.) | 14mm x 3 x 125mm |
| Max. table load | 250Kg |

Spindle

| | |
|----------------|------------------------------|
| Speed | 8,000rpm (Opt: 10,000rpm) |
| Taper | BBT40 (Opt: BBT30) |
| Transmission | Belt Type |
| Guideways type | LM Ball |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 48/48/48m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.005 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|---------------------------------|
| Tool storage capacity | 20T ATC Arm Type |
| Max. tool diameter | Full: 80mm Next empty: 125mm |
| Max. tool length | 250mm |
| Max. tool weight | 5Kg |

CNC Controller & Motor

| | |
|----------------|-------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | 5.5/7.5 (Opt: 7.5/11kW) |

Coolant

| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 200L |

Air & Power Supply

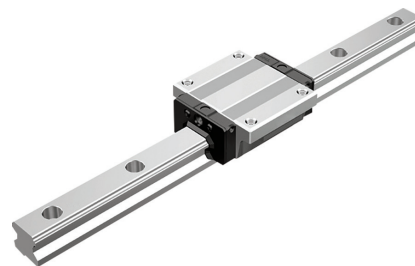
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 20kVA |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 2,235 x 2,075 x 2,495mm |
| Machine net weight (approx.) | 2,800Kg |



S1 - FRAME



Ball Guideways

High Speed & Low Friction – Enables faster movement and efficiency.

High Accuracy – Ensures precise positioning and repeatability.

Smooth & Quiet Operation – Reduces vibration and noise.

Compact with High Load Capacity – Supports heavy loads in a smaller footprint.



FEATURES

- **'A' Shape** Structured Column with multiple cross ribs provides high cutting performance and superior kinematics.
- **Wide Casting Base** enhances heavy cutting and provides uniform stability for full travel.
- **LM Roller Guideways in all three axes** offer better cutting dynamics and machine life.
- Imported BBT40 Spindle with G1 Balanced Grade offers **excellent finish up to 0.45 Ra and increases tool life**.
- The latest **Mitsubishi, Fanuc and Siemens Controllers** are available.
- 10,000 mm/min Cutting Feed Rate and 36 m/mm Quick Rapid provide **great efficiency** and productivity.

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Direct Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm / 15,000rpm (Optional)

S2 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|---------------|
| X, Y, Z travel | 640/450/500mm |
| X, Y, Z ball screws | C3 32mm |
| Spindle nose to table surface | 100~600mm |
| Spindle center to telescopic cover | 524mm |

Table

| | |
|-----------------------------|-----------------|
| Table size | 800 x 450mm |
| T slot (size x qty x dist.) | 18mm x 5 x 95mm |
| Max. table load | 500Kg |

Spindle

| | |
|----------------|------------------------------|
| Speed | 8,000rpm (Opt: 10,000rpm) |
| Taper | BBT40 |
| Transmission | Belt Type |
| Guideways type | LM Roller |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 36/36/36m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.005 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|---------------------------------|
| Tool storage capacity | 20T ATC Arm Type |
| Max. tool diameter | Full: 80mm Next empty: 125mm |
| Max. tool length | 300mm |
| Max. tool weight | 8Kg |

CNC Controller & Motor

| | |
|----------------|-------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | 5.5/7.5 (Opt: 7.5/11kW) |

Coolant

| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 200L |

Air & Power Supply

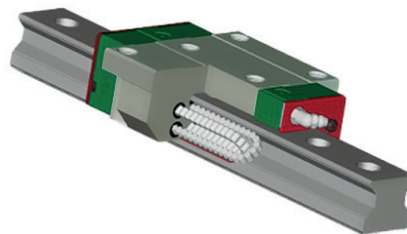
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 20kVA |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 2,235 x 2,075 x 2,785mm |
| Machine net weight (approx.) | 4,000Kg |



S2 - FRAME



The Roller Type Linear Motion Guideways features low friction and resistance to stick-and-slip.

These qualities make them particularly well-suited for highspeed cutting and finishing.

The quality of the workpiece surface is improved, and the necessity for hand polishing is minimised.



FEATURES

- **'A' Shape** Structured Column with multiple cross ribs provides high cutting performance and superior kinematics.
- **Wide Casting Base** enhances heavy cutting and provides uniform stability for full travel.
- **LM Roller Guideways in all three axes** offer better cutting dynamics and machine life.
- Imported BBT40 Spindle with G1 Balanced Grade offers **excellent finish up to 0.45 Ra and increases tool life**.
- The latest **Mitsubishi, Fanuc and Siemens Controllers** are available.
- 10,000 mm/min Cutting Feed Rate and 36 m/mm Quick Rapid provide **great efficiency** and productivity.

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Direct Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm / 15,000rpm (Optional)

S3 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|---------------|
| X, Y, Z travel | 760/450/500mm |
| X, Y, Z ball screws | C3 32mm |
| Spindle nose to table surface | 100~600mm |
| Spindle center to telescopic cover | 524mm |

Table

| | |
|-----------------------------|-----------------|
| Table size | 900 x 450mm |
| T slot (size x qty x dist.) | 18mm x 5 x 95mm |
| Max. table load | 500Kg |

Spindle

| | |
|----------------|------------------------------|
| Speed | 8,000rpm (Opt: 10,000rpm) |
| Taper | BBT40 |
| Transmission | Belt Type |
| Guideways type | LM Roller |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 36/36/36m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.005 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|---------------------------------|
| Tool storage capacity | 20T ATC Arm Type |
| Max. tool diameter | Full: 80mm Next empty: 125mm |
| Max. tool length | 300mm |
| Max. tool weight | 8Kg |

CNC Controller & Motor

| | |
|----------------|-------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | 5.5/7.5 (Opt: 7.5/11kW) |

Coolant

| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 270L |

Air & Power Supply

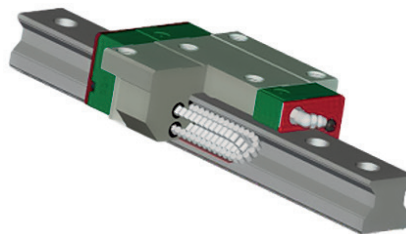
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 20kVA |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 2,500 x 2,075 x 2,785mm |
| Machine net weight (approx.) | 4,200Kg |



S3 - FRAME



The Roller Type Linear Motion Guideways features low friction and resistance to stick-and-slip.

These qualities make them particularly well-suited for highspeed cutting and finishing.

The quality of the workpiece surface is improved, and the necessity for hand polishing is minimised.



FEATURES

- To match greater accuracy and higher reliability at higher speed, **VL 850 is developed with high dynamic structure support and cutting kinematics.**
- **Broad base and heavy column improves vibration damping** and balance the machine during machining with heavy cutting parameter.
- Broad table supported by precision LM Roller Guideways to **offer high load carrying capacity.**
- **Best suited for high material removal** application from production to die mould.
- The latest **Mitsubishi, Fanuc and Siemens Controllers** are available.

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Direct Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm / 15,000rpm (Optional)

S4 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|---------------|
| X, Y, Z travel | 850/510/510mm |
| X, Y, Z ball screws | C3 40mm |
| Spindle nose to table surface | 140~650mm |
| Spindle center to telescopic cover | 524mm |

Table

| | |
|-----------------------------|------------------|
| Table size | 1000 x 500mm |
| T slot (size x qty x dist.) | 18mm x 5 x 100mm |
| Max. table load | 800Kg |

Spindle

| | |
|----------------|------------------------------|
| Speed | 8,000rpm (Opt: 10,000rpm) |
| Taper | BBT40 |
| Transmission | Belt Type |
| Guideways type | LM Roller |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 36/36/36m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.005 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|---------------------------------|
| Tool storage capacity | 24T ATC Arm Type |
| Max. tool diameter | Full: 80mm Next empty: 125mm |
| Max. tool length | 300mm |
| Max. tool weight | 8Kg |

CNC Controller & Motor

| | |
|----------------|-----------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | 7.5/11kW (Opt: 7.5/11/15kW) |

Coolant

| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 330L |

Air & Power Supply

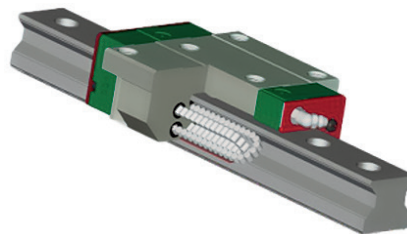
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 20kVA (Opt: 25 kVA) |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 2,630 x 2,300 x 2,785mm |
| Machine net weight (approx.) | 5,500Kg |



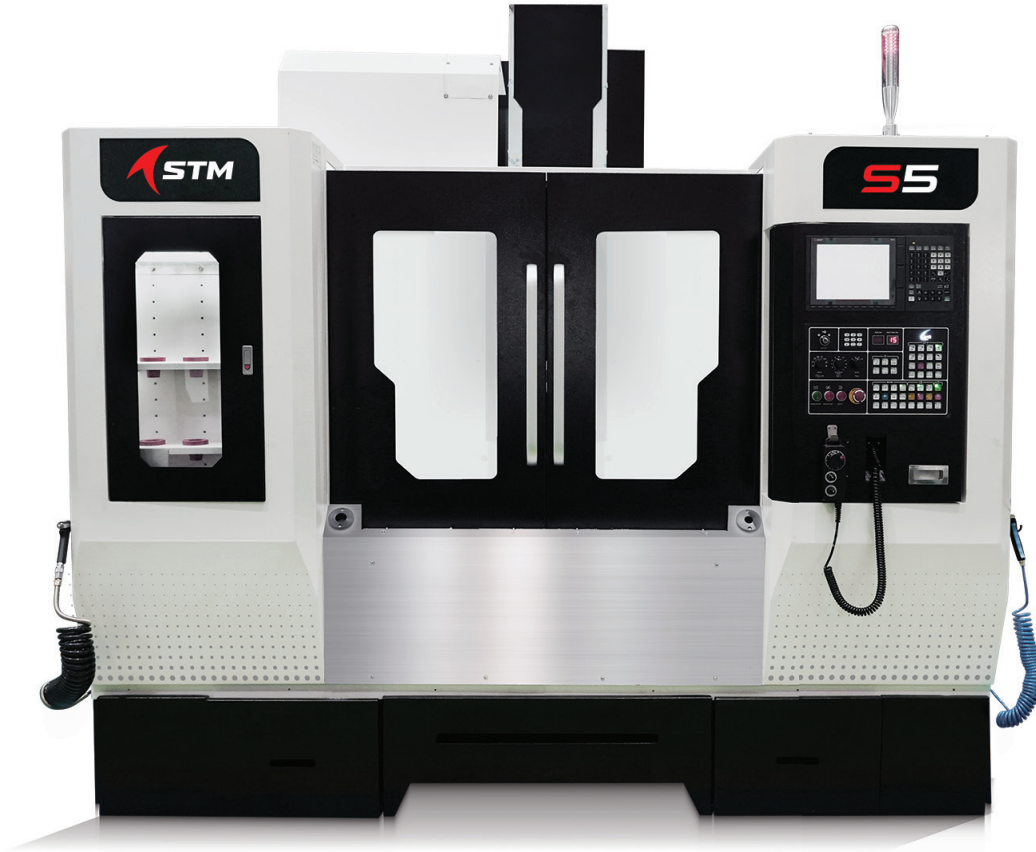
S4 - FRAME



The Roller Type Linear Motion Guideways features low friction and resistance to stick-and-slip.

These qualities make them particularly well-suited for highspeed cutting and finishing.

The quality of the workpiece surface is improved, and the necessity for hand polishing is minimised.



FEATURES

- **'A' shape column** with multiple cross ribs provides high cutting performance and vibration damping.
- Large projects benefit greatly from **a wide base** during heavy machining.
- LM Roller Guideways in all three axes offer **better cutting dynamics and machine life**.
- Imported BBT40 Spindle with G1 balanced grade offers **excellent finish up to 0.45Ra** and enhanced tool life.
- The latest **Mitsubishi, Fanuc and Siemens** controllers are available.
- **10,000rpm (Optional) Spindle with ceramic bearing** enables for precise machining and Finish.
- 10,000mm/min Feed and 36m/min quick rapid provide **great efficiency and output**.

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Direct Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm / 15,000rpm (Optional)

S5 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|----------------|
| X, Y, Z travel | 1000/510/510mm |
| X, Y, Z ball screws | C3 40mm |
| Spindle nose to table surface | 140~650mm |
| Spindle center to telescopic cover | 524mm |

Table

| | |
|-----------------------------|------------------|
| Table size | 1100 x 510mm |
| T slot (size x qty x dist.) | 18mm x 5 x 100mm |
| Max. table load | 850Kg |

Spindle

| | |
|----------------|------------------------------|
| Speed | 8,000rpm (Opt: 10,000rpm) |
| Taper | BBT40 |
| Transmission | Belt Type |
| Guideways type | LM Roller |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 36/36/36m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.005 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|---------------------------------|
| Tool storage capacity | 24T ATC Arm Type |
| Max. tool diameter | Full: 80mm Next empty: 125mm |
| Max. tool length | 300mm |
| Max. tool weight | 8Kg |

CNC Controller & Motor

| | |
|----------------|-------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | 7.5/11kW (Opt: 11/15kW) |

Coolant

| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 330L |

Air & Power Supply

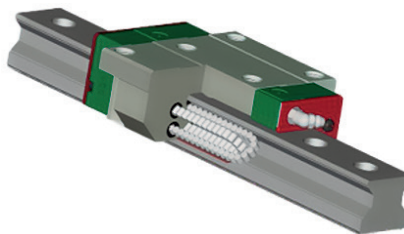
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 20kVA (Opt: 25 kVA) |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 2,910 x 2,300 x 2,785mm |
| Machine net weight (approx.) | 5,800Kg |



S5 - FRAME



The Roller Type Linear Motion Guideways features low friction and resistance to stick-and-slip.

These qualities make them particularly well-suited for highspeed cutting and finishing.

The quality of the workpiece surface is improved, and the necessity for hand polishing is minimised.



FEATURES

- **'A' shape column** with multiple cross ribs provides high cutting performance and vibration damping.
- Large projects benefit greatly from a **wide base** during heavy machining.
- LM Roller Guideways in all three axes offer **better cutting dynamics and machine life**.
- Imported BBT40 Spindle with G1 balanced grade offers **excellent finish up to 0.45Ra** and enhanced tool life.
- The latest **Mitsubishi, Fanuc and Siemens** controllers are available.
- **10,000rpm (Optional) Spindle with ceramic bearing** enables for precise machining and Finish.
- 10,000mm/min Feed and 36m/min quick rapid provide **great efficiency and output**.

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Belt Drive Spindle BBT50

6,000rpm | 8,000rpm (Optional)

Direct Drive Spindle BBT40

10,000rpm | 12,000rpm / 15,000rpm (Optional)

Direct Drive Spindle BBT50

8,000rpm | 10,000rpm (Optional)

S6 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|----------------|
| X, Y, Z travel | 1100/650/610mm |
| X, Y, Z ball screws | C3 40mm |
| Spindle nose to table surface | 130~740mm |
| Spindle center to telescopic cover | 650mm |

Table

| | |
|-----------------------------|------------------|
| Table size | 1200 x 600mm |
| T slot (size x qty x dist.) | 18mm x 5 x 100mm |
| Max. table load | 1000Kg |

Spindle

| | |
|----------------|---------------------------------------------------------------------------|
| Taper / Speed | BBT40: 8,000rpm (Opt: 10,000rpm) BBT50: 6,000rpm (Opt: 8,000rpm) |
| Transmission | Belt Type |
| Guideways type | LM Roller |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 36/36/36m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.005 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|
| Tool storage capacity | 24T ATC Arm Type |
| Max. tool diameter | Full: 80mm (BT50-120mm) Next empty: 125mm (BT50-200mm) (BT40-300mm) (BT50-350mm) (BT40-8Kg) (BT50-15Kg) |
| Max. tool length | |
| Max. tool weight | |

CNC Controller & Motor

| | |
|----------------|-------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | 7.5/11kW (Opt: 11/15kW) |

Coolant

| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 450L |

Air & Power Supply

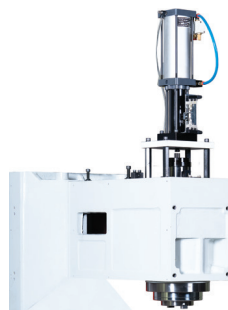
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 20kVA (Opt: 25/30kVA) |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 3,135 x 2,675 x 3,020mm |
| Machine net weight (approx.) | 7,000Kg |



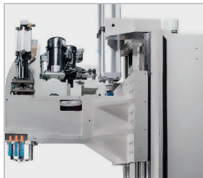
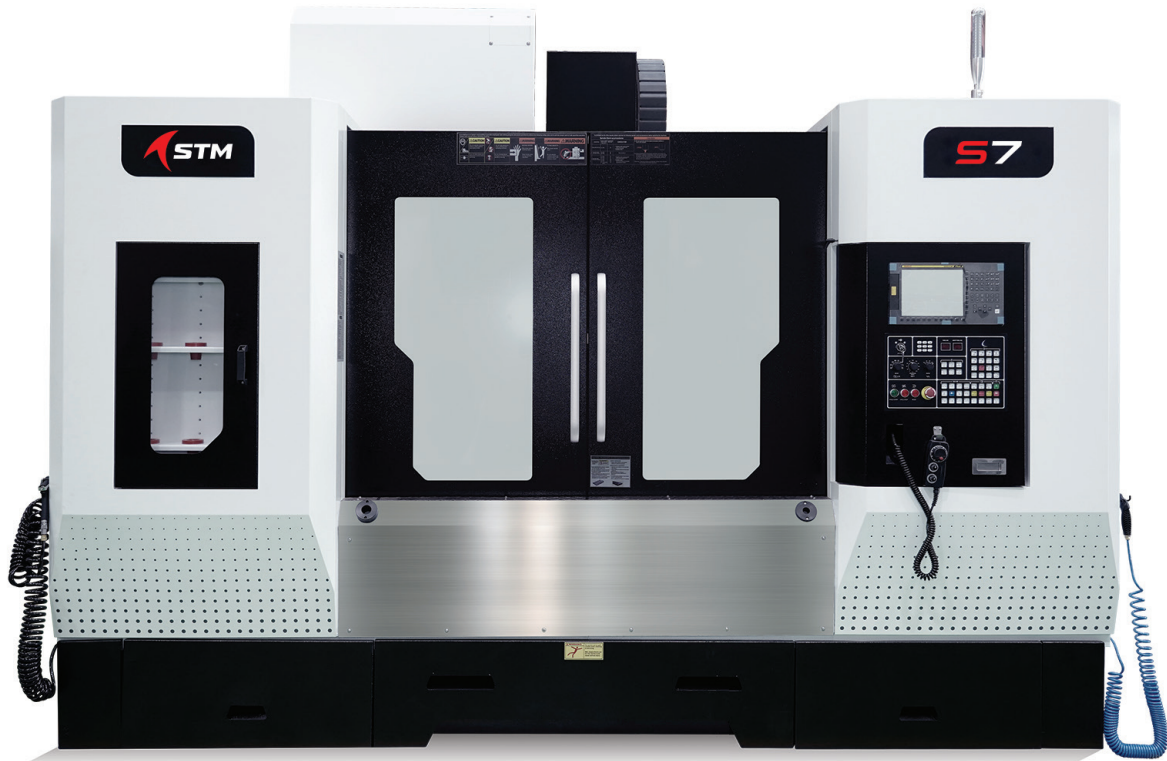
S6 - FRAME



BBT#50 - 6,000rpm Belt (Optional)

BBT#50 spindle is ideal for heavy cutting applications that result in higher material removal rates.

In addition, the spindle also features high precision and low thermal growth.



The sufficient depth from spindle center to machine column not only accommodates 700mm Y-Axis travel but enables easy access for large-diameter face milling cutters.

FEATURES

- **'A' shaped column** with multiple cross ribs provides high cutting performance.
- Large projects benefit greatly from a **wide base** during heavy machining.
- LM Roller Guideways in all three axes **offer better cutting dynamics and machine life.**
- Imported BBT40 Spindle with G1 balanced grade offers **excellent finish up to 0.45Ra.**
- The latest **Mitsubishi, Fanuc and Siemens controllers** are available.
- **10,000rpm (Optional) Spindle with ceramic bearing** enables for precise machining and Finish.
- 10,000mm/min Feed and 30m/min quick rapid provide **great efficiency and output.**
- The X-Axis LM Roller Guideways include 6 blocks to **offer consistent stability during large component machining.**

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Belt Drive Spindle BBT50

6,000rpm | 8,000rpm (Optional)

Direct Drive Spindle BBT40

10,000rpm | 12,000rpm / 15,000rpm (Optional)

Direct Drive Spindle BBT50

8,000rpm | 10,000rpm (Optional)

S7 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|----------------|
| X, Y, Z travel | 1300/700/700mm |
| X, Y, Z ball screws | C3 40mm |
| Spindle nose to table surface | 120~820mm |
| Spindle center to telescopic cover | 714mm |

Table

| | |
|-----------------------------|------------------|
| Table size | 1450 x 650mm |
| T slot (size x qty x dist.) | 18mm x 5 x 140mm |
| Max. table load | 1500Kg |

Spindle

| | |
|----------------|---------------------------------------------------------------------------|
| Taper / Speed | BBT40: 8,000rpm (Opt: 10,000rpm) BBT50: 6,000rpm (Opt: 8,000rpm) |
| Transmission | Belt Type |
| Guideways type | LM Roller |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 30/30/24m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.005 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|----------------------------------------------------------------------------------------------|
| Tool storage capacity | 24T ATC Arm Type |
| Max. tool diameter | Full: 80mm (BT50-120mm) Next empty: 125mm (BT50-200mm) (BT40-300mm) (BT50-350mm) |
| Max. tool length | (BT40-8Kg) (BT50-15Kg) |
| Max. tool weight | |

CNC Controller & Motor

| | |
|----------------|--------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | 11/15kW (Opt: 15/18.5kW) |

Coolant

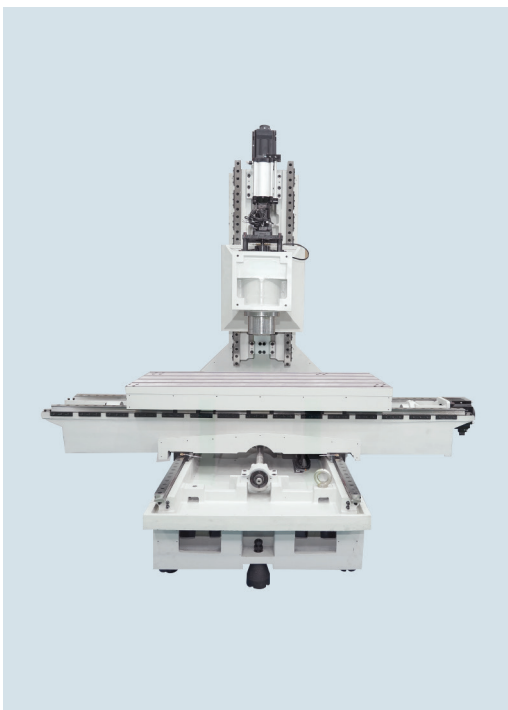
| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 560L |

Air & Power Supply

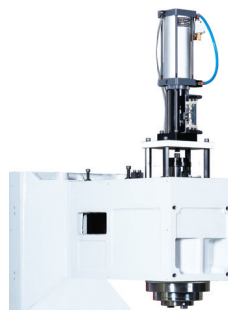
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 25kVA (Opt: 30/35kVA) |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 3,950 x 2,850 x 3,095mm |
| Machine net weight (approx.) | 8,500Kg |



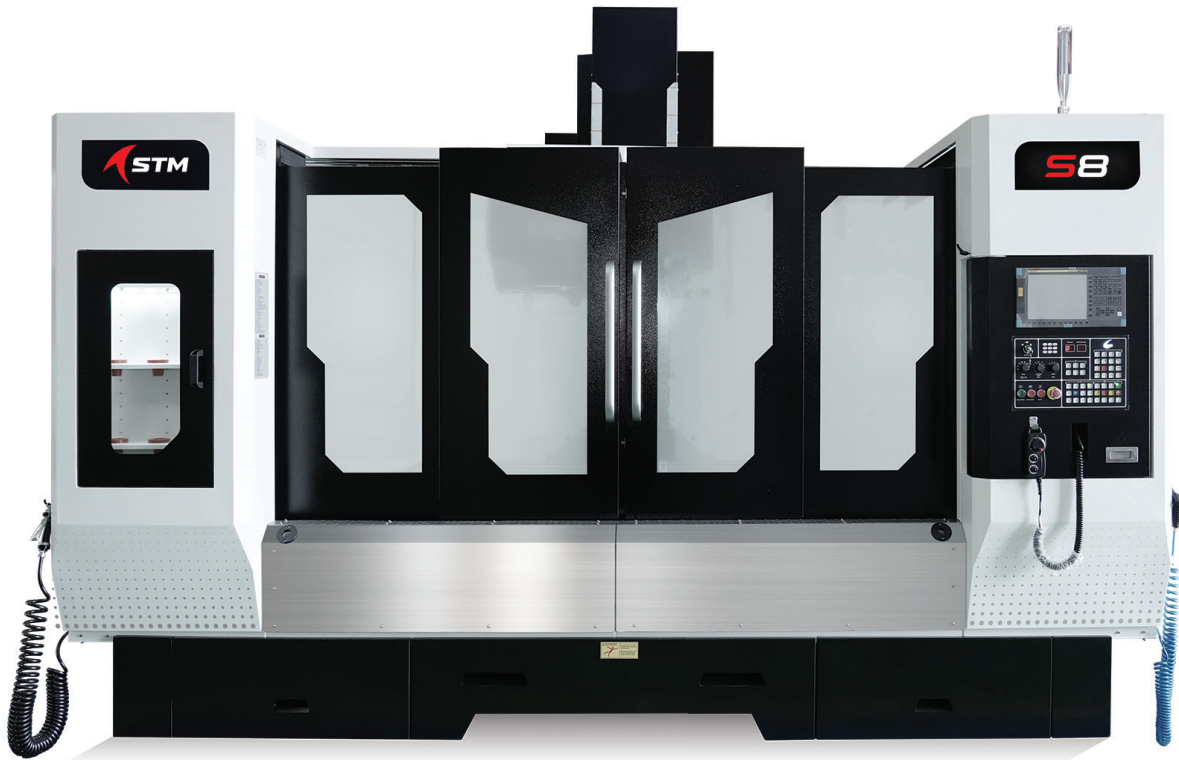
S7 - FRAME



BBT#50 - 6,000rpm Belt (Optional)

BBT#50 spindle is ideal for heavy cutting applications that result in higher material removal rates.

In addition, the spindle also features high precision and low thermal growth.



FEATURES

- **'A' shaped column** with multiple cross ribs provides high cutting performance.
- Large projects benefit greatly from a **wide base** during heavy machining.
- LM Roller Guideways in all three axes **offer better cutting dynamics and machine life**.
- Imported BBT40 Spindle with G1 balanced grade offers **excellent finish up to 0.45Ra**.
- The latest **Mitsubishi, Fanuc and Siemens controllers** are available.
- **10,000rpm (Optional) Spindle with ceramic bearing** enables for precise machining and Finish.
- 10,000mm/min Feed and 30m/min quick rapid provide **great efficiency and output**.
- The X-Axis LM Roller Guideways include 6 blocks to **offer consistent stability during large component machining**.
- Four sliding doors provide a wider opening for easy loading of long and heavy components (Optional).

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Belt Drive Spindle BBT50

6,000rpm | 8,000rpm (Optional)

Direct Drive Spindle BBT40

10,000rpm | 12,000rpm / 15,000rpm (Optional)

Direct Drive Spindle BBT50

8,000rpm | 10,000rpm (Optional)

S8 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|----------------|
| X, Y, Z travel | 1500/700/700mm |
| X, Y, Z ball screws | C3 40mm |
| Spindle nose to table surface | 120~820mm |
| Spindle center to telescopic cover | 710mm |

Table

| | |
|-----------------------------|------------------|
| Table size | 1700 x 650mm |
| T slot (size x qty x dist.) | 18mm x 5 x 140mm |
| Max. table load | 1500Kg |

Spindle

| | |
|----------------|---------------------------------------------------------------------------|
| Taper / Speed | BBT40: 8,000rpm (Opt: 10,000rpm) BBT50: 6,000rpm (Opt: 8,000rpm) |
| Transmission | Belt Type |
| Guideways type | LM Roller |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 30/30/24m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.005 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|----------------------------------------------------------------------------------------------|
| Tool storage capacity | 24T ATC Arm Type |
| Max. tool diameter | Full: 80mm (BT50-120mm) Next empty: 125mm (BT50-220mm) (BT40-300mm) (BT50-350mm) |
| Max. tool length | (BT40-8Kg) (BT50-15Kg) |
| Max. tool weight | |

CNC Controller & Motor

| | |
|----------------|--------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | 11/15kW (Opt: 15/18.5kW) |

Coolant

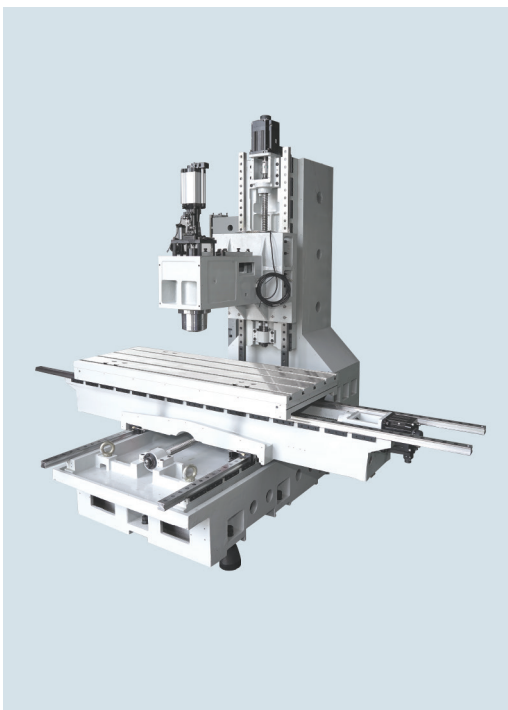
| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 560L |

Air & Power Supply

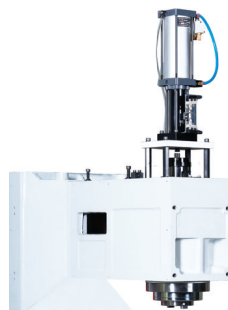
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 25kVA (Opt: 30/35kVA) |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 4,255 x 2,850 x 3,100mm |
| Machine net weight (approx.) | 8,900Kg |



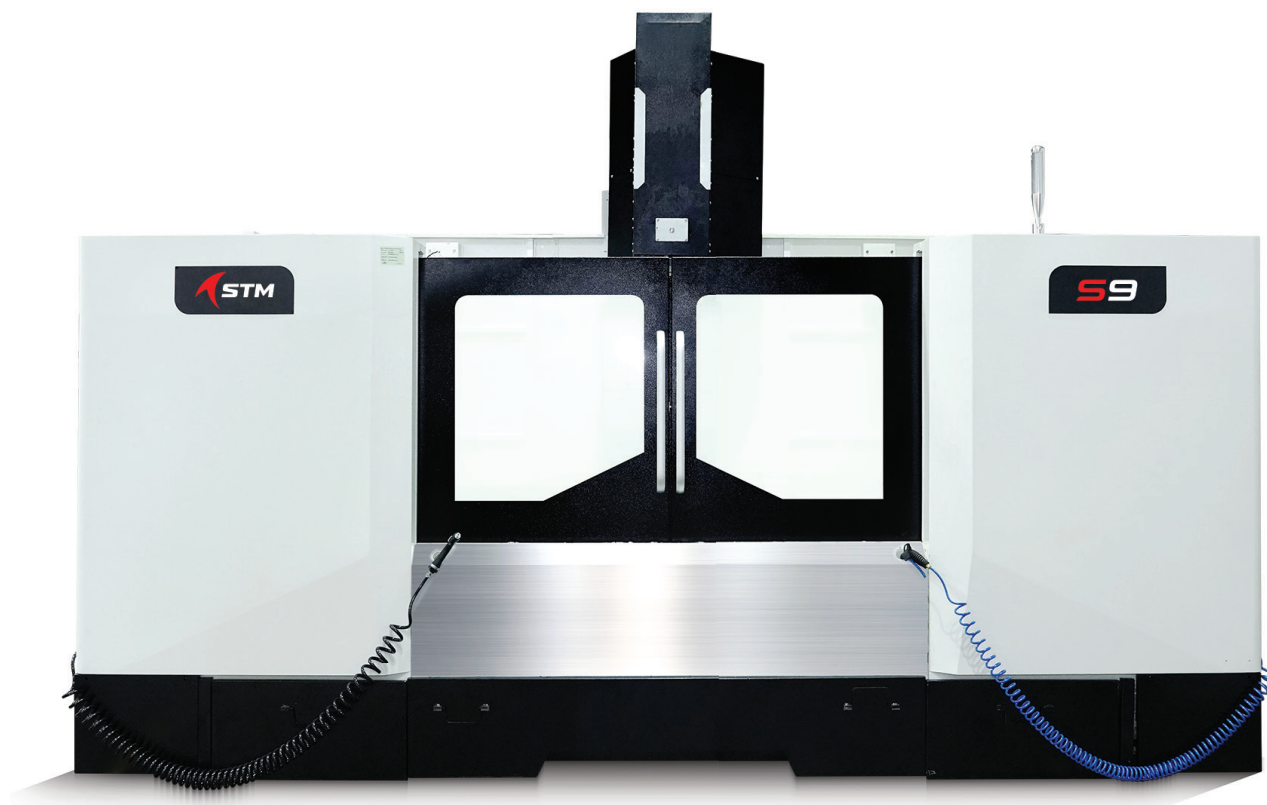
S8 - FRAME



BBT#50 - 6,000rpm Belt (Optional)

BBT#50 spindle is ideal for heavy cutting applications that result in higher material removal rates.

In addition, the spindle also features high precision and low thermal growth.



FEATURES

- **'A' shaped column** with multiple cross ribs provides high cutting performance.
- Large projects benefit greatly from a **wide base** during heavy machining.
- LM Roller Guideways in all three axes **offer better cutting dynamics and machine life.**
- Imported BBT40 Spindle with G1 balanced grade offers **excellent finish up to 0.45Ra.**
- The latest **Mitsubishi, Fanuc and Siemens controllers** are available.
- **10,000rpm (Optional) Spindle with ceramic bearing** enables for precise machining and Finish.
- 10,000mm/min Feed and 30m/min quick rapid provide **great efficiency and output.**
- The X-Axis LM Roller Guideways include 6 blocks to **offer consistent stability during large component machining.**

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Belt Drive Spindle BBT50

6,000rpm | 8,000rpm (Optional)

Direct Drive Spindle BBT40

10,000rpm | 12,000rpm / 15,000rpm (Optional)

Direct Drive Spindle BBT50

8,000rpm | 10,000rpm (Optional)

S9 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|----------------|
| X, Y, Z travel | 1600/800/750mm |
| X, Y, Z ball screws | C3 50mm |
| Spindle nose to table surface | 130~880mm |
| Spindle center to telescopic cover | 846mm |

Table

| | |
|-----------------------------|------------------|
| Table size | 1800 x 800mm |
| T slot (size x qty x dist.) | 18mm x 5 x 125mm |
| Max. table load | 2000Kg |

Spindle

| | |
|----------------|---------------------------------------------------------------------------|
| Taper / Speed | BBT40: 8,000rpm (Opt: 10,000rpm) BBT50: 6,000rpm (Opt: 8,000rpm) |
| Transmission | Belt Type |
| Guideways type | LM Roller |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 30/30/24m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.006 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|
| Tool storage capacity | 24T ATC Arm Type |
| Max. tool diameter | Full: 80mm (BT50-120mm) Next empty: 125mm (BT50-230mm) (BT40-300mm) (BT50-350mm) (BT40-8Kg) (BT50-15Kg) |
| Max. tool length | |
| Max. tool weight | |

CNC Controller & Motor

| | |
|----------------|----------------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | BBT40-11/15kW BBT50-15/18.5kW |

Coolant

| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 675L |

Air & Power Supply

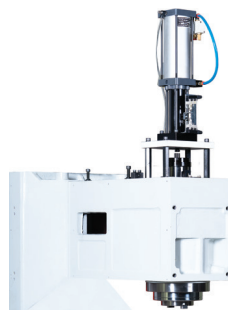
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 25kVA (Opt: 30/35kVA) |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 4,655 x 2,880 x 3,175mm |
| Machine net weight (approx.) | 11,000Kg |



S9 - FRAME

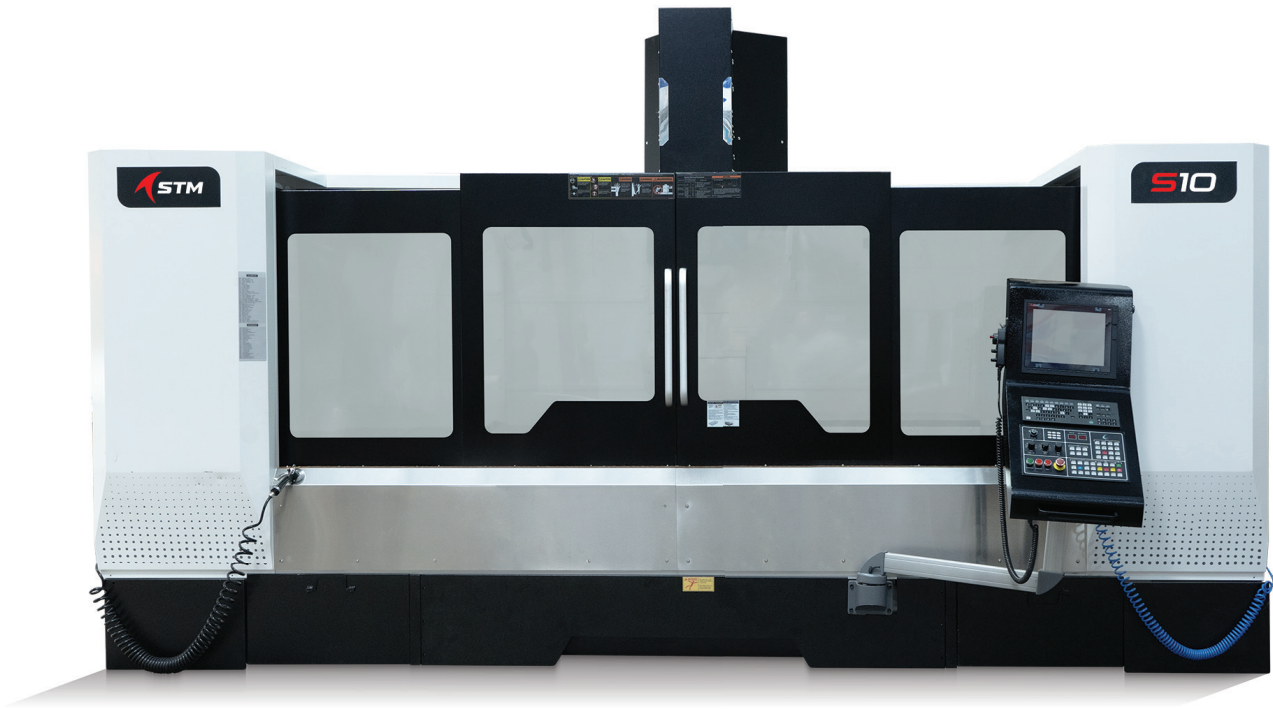


BBT#50 - 6,000rpm Belt (Optional)

BBT#50 spindle is ideal for heavy cutting applications that result in higher material removal rates.

In addition, the spindle also features high precision and low thermal growth.

S10



FEATURES

- Unique structure minimises overhang when machining big components and offers good cutting performance.
- **Extremely stable for larger components** under intensive machining.
- The Y-Axis uses **4 LM Roller Guideways** for reliable performance and dynamics.
- The LM Roller Guideways on all three axes **enhance cutting dynamics**.
- Imported BBT40 Spindle with G1 balanced grade **offers a high finish up to 0.45Ra**.
- The latest Mitsubishi, Fanuc and Siemens controllers are available.
- The **BBT50 option** increases MRR.
- High efficiency and productivity are assured with 10,000mm/min Feed and 20m/min fast rapid.
- The LM Roller Guideways include multiple shoes on all three axes for stability and smooth movement during HSM + HSC.
- Four sliding doors provide a wider opening for easy loading of long and heavy components (Optional).

Belt Drive Spindle BBT40

8,000rpm | 10,000rpm / 12,000rpm (Optional)

Belt Drive Spindle BBT50

6,000rpm | 8,000rpm (Optional)

Direct Drive Spindle BBT40

10,000rpm | 12,000rpm / 15,000rpm (Optional)

Direct Drive Spindle BBT50

8,000rpm | 10,000rpm (Optional)

S10 - TECHNICAL SPECIFICATIONS

Travel

| | |
|------------------------------------|----------------|
| X, Y, Z travel | 2000/900/850mm |
| X, Y, Z ball screws | C3 50mm |
| Spindle nose to table surface | 100~950mm |
| Spindle center to telescopic cover | 914mm |

Table

| | |
|-----------------------------|------------------|
| Table size | 2200 x 900mm |
| T slot (size x qty x dist.) | 18mm x 5 x 150mm |
| Max. table load | 2200Kg |

Spindle

| | |
|----------------|---------------------------------------------------------------------------|
| Taper / Speed | BBT40: 8,000rpm (Opt: 10,000rpm) BBT50: 6,000rpm (Opt: 8,000rpm) |
| Transmission | Belt Type |
| Guideways type | LM Roller |

Feed Rate

| | |
|-------------------------------|----------------|
| Rapid feed rate of X,Y,Z Axes | 20/20/15m/min |
| Cutting feed rate | 1-10,000mm/min |

Accuracy as per VDI - DGQ - 3441

| | |
|-------------------|--------|
| Position accuracy | ±0.008 |
| Repeatability | ±0.003 |

Automatic Tool Changer

| | |
|-----------------------|----------------------------------------------------------------------------------------------|
| Tool storage capacity | 24T ATC Arm Type |
| Max. tool diameter | Full: 80mm (BT50-120mm) Next empty: 125mm (BT50-230mm) (BT40-300mm) (BT50-350mm) |
| Max. tool length | (BT40-8Kg) (BT50-15Kg) |
| Max. tool weight | |

CNC Controller & Motor

| | |
|----------------|----------------------------------|
| CNC controller | Mitsubishi M80 |
| Spindle motor | BBT40-11/15kW BBT50-15/18.5kW |

Coolant

| | |
|-----------------------|---------------------|
| Pressure | 4Kg/cm ² |
| Coolant pump | 0.75Hp |
| Coolant tank capacity | 690L |

Air & Power Supply

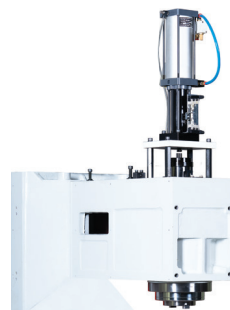
| | |
|--------------|-----------------------|
| Air source | 5-7Kg/cm ² |
| Power supply | 35kVA (Opt: 40kVA) |

Machine Size

| | |
|------------------------------|-------------------------|
| Machine dimensions (LxWxH) | 5,360 x 2,950 x 3,360mm |
| Machine net weight (approx.) | 14,500Kg |



S10 - FRAME



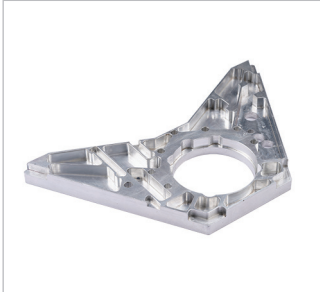
BBT#50 - 6,000rpm Belt (Optional)

BBT#50 spindle is ideal for heavy cutting applications that result in higher material removal rates.

In addition, the spindle also features high precision and low thermal growth.

PRECISION MACHINED COMPONENTS

Aerospace



Automobile



Die Mould



Electronics



Energy & Power - Turbine



Medical



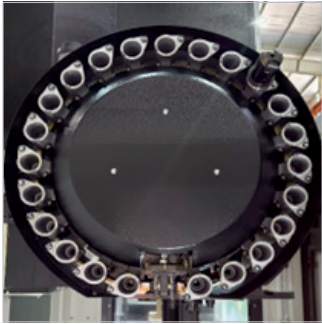
Production



Tool Room



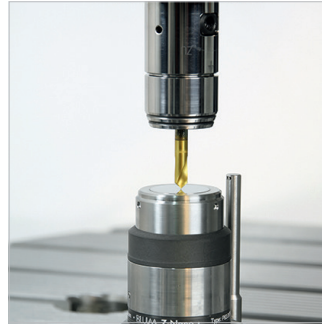
OPTIONAL



24/30 Tools ATC



Detron Rotary Table



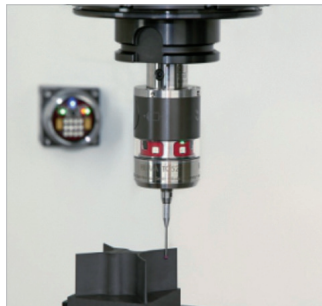
**Tool Length
Measurement
System**



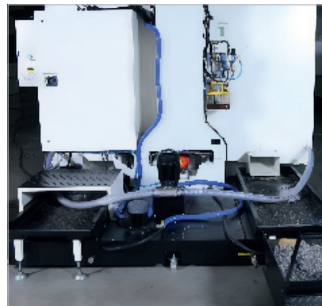
Chip Conveyor



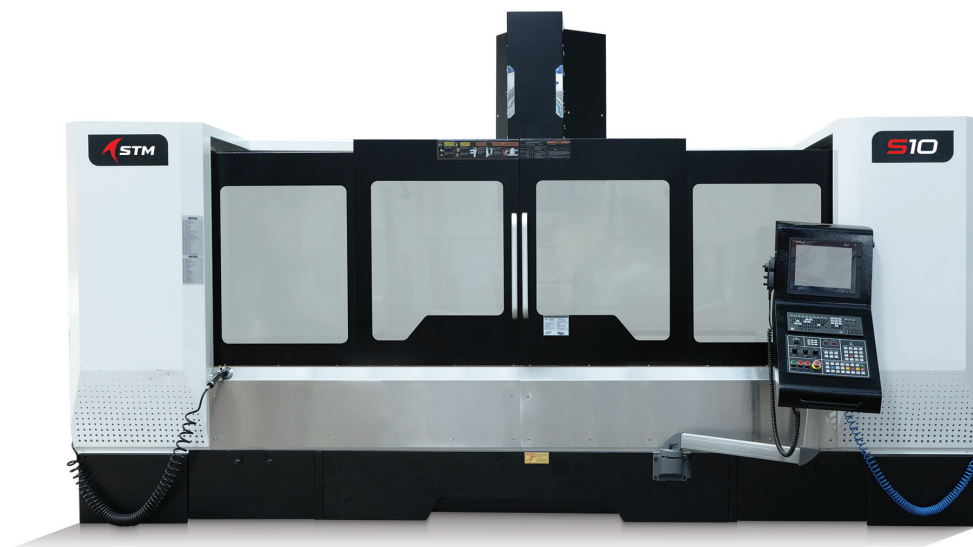
**Through Coolant
(CTS - Coolant Through
Spindle)**



**Workpiece
Measurement System**



**Rear Chip Disposal
(for S1 / S2 / S4 / S5 / S6)**



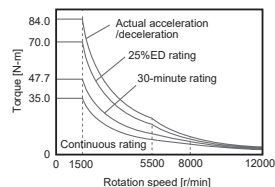
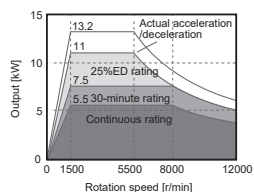
Full Guarding
**Optional on Selected Model*



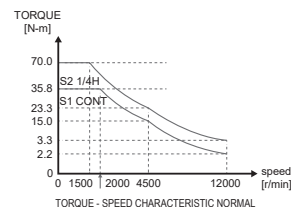
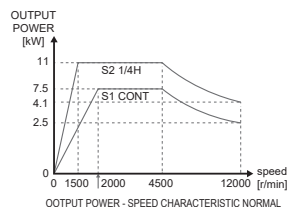
Stand Alone Operating Panel
**Optional on Selected Model*

SPINDLE SPEED VS TORQUE CHART

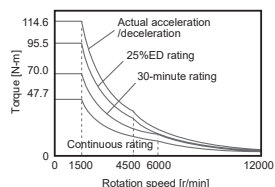
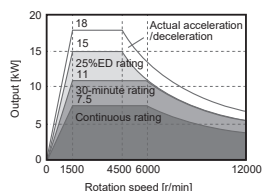
MITSUBISHI



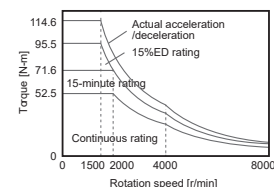
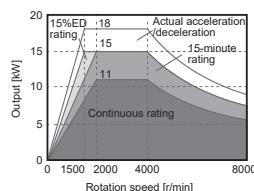
5.5/7.5/11kW



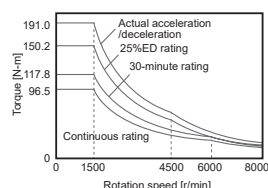
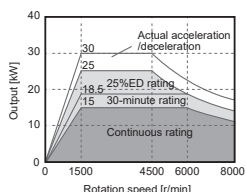
7.5/11kW



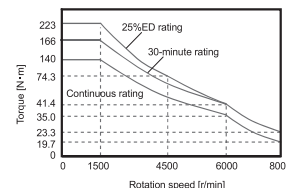
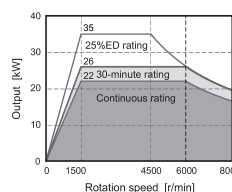
7.5/11/15kW



11/15kW

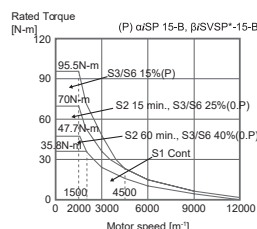
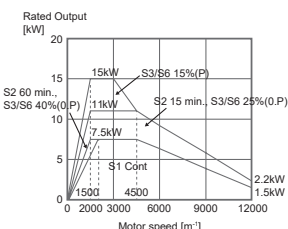


15/18.5kW

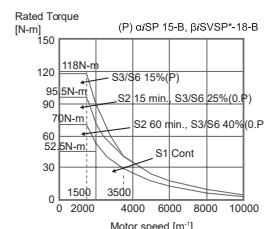
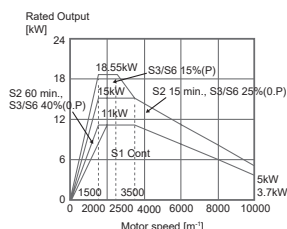


22/26kW

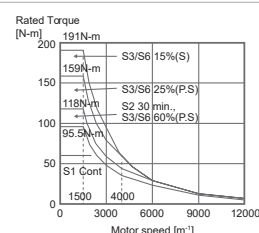
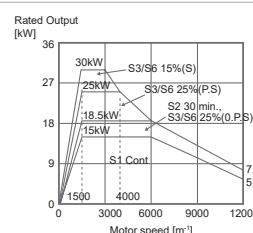
FANUC



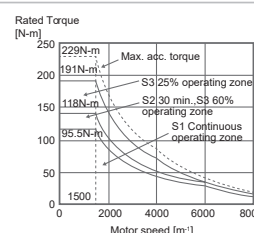
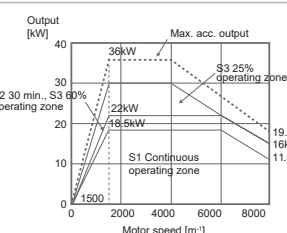
7.5/11kW



11/15kW



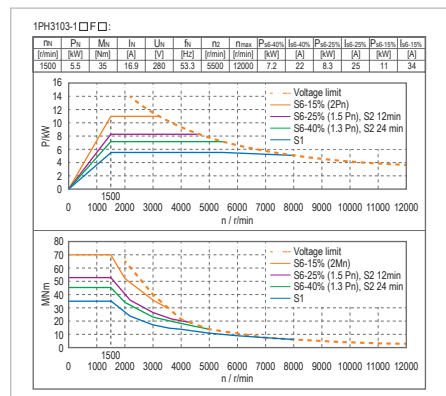
15/18.5kW



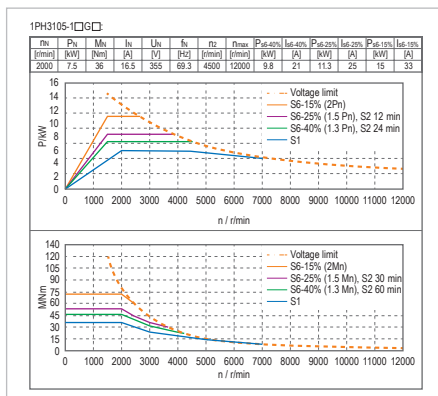
18.5/22kW

SPINDLE SPEED VS TORQUE CHART

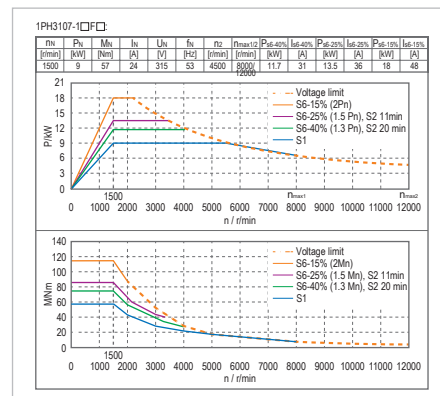
SIEMENS



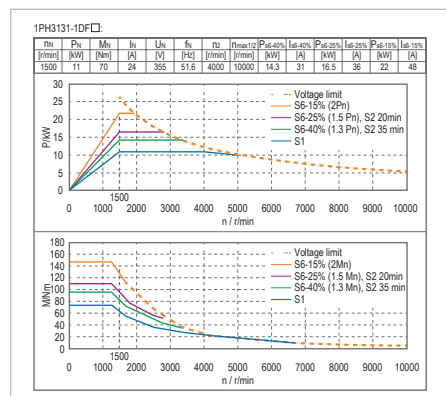
5.5/7.5 kW



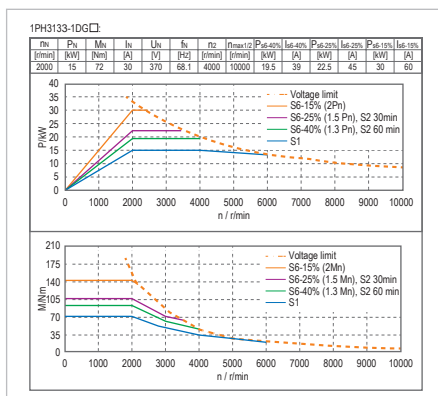
7.5/11 kW



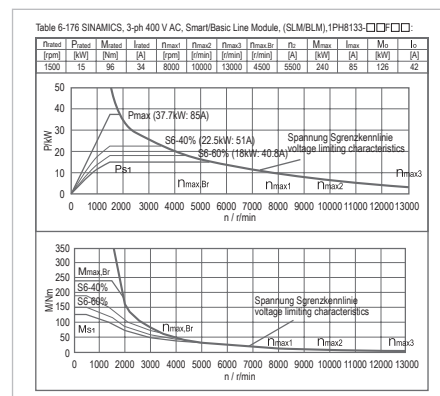
9/11 kW



11/15 kW



15/18.5 kW



18.5/22 kW

Notes:

A series of horizontal dotted lines for taking notes, spanning the width of the page.

Discover the Meaning of Value



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**S&T
GROUP**
SINCE 1996



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Delhi (West) | Faridabad | Gurugram | Hosur | Hyderabad | Indore
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**Due to continuous improvements, we reserve the right to amend any aspect or the specifications without further notice.

*** Images for reference only