VAN
Precision Engineering

MR20 V7
MR20 V8

MR38 V7
MR38 V8

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Dear Industrialists;

We, VAN CNC Takım Tezgahları A.Ş. manufacture high precision CNC sliding head lathe machines. We started this production with four models in 2019, and we continue to 2023 with 10 machine models and more than a hundred happy customers.

With Fully equipped machines with high precision, innovative solutions and user-oriented innovations we offer to our users, VAN CNC has become one of the world's best machine manufacturers.

The most important thing that has led to success on this adventure, we are working together with a team of specialist is that we produce high precision machine tools that eliminate the problems experienced by users with the machine tools, bringing innovative solutions to their needs because of our 15 years experience at CNC sliding head lathes. I would say to proudly that we have a professional team that has adopted the principle of not only producing machines for you, but also providing precise engineering services that produce fast and permanent solutions to the production problems you encounter today and tomorrow.

Our main technology and most distinctive characteristic in our CNC sliding head lathes that we produce slant bed dovetail slide structure in all versions with hand-made scraping method. Also, we produce our own high precision spindles under the supervision of experienced quality control department in our factory. As you know, this precision process of production requires experience and knowledge at a very difficult and controlled method of production. Because of the efficiency of this process, we are able to manufacture our high precision and rigid machines, offering them all over the world with confidence and pride.

We will increase our production capacity in 2023 by completing the construction new production area with a total covered area of 10.000 m2 end of this year. Also, our target having a 60.000 m2 total production area with an annual production capacity of 1000 machines by the end of the 5th year.

As a principle, we allocate minimum 25% of our annual budget to our R&D department for innovative design and development processes. As it is, along this way we started with four model in 2019, now we have two machine series and totaly ten models. Additionally, in 2024, we will continue to offer you for your manufacture solutions of complicated and small parts which require multiple axes with two new series, Prime(12-Axis) and Micro 7...

We, VAN CNC, are proud to announce that we receive great interest from Europe and other countries as evidenced by increased number of customers worldwide and we will start exporting to many countries in the Americas in 2024.

As VAN CNC, we are now among the best brand in the sector with our high precision, fully automatic and fully equipped Cnc sliding head lathes, providing solutions to users with 100% customer satisfaction.

We are proud and happy to present you Van Sliding Head Lathes...

Yours sincerely,
Fatih VAN

Fatih Van

VAN GLOBAL MAP

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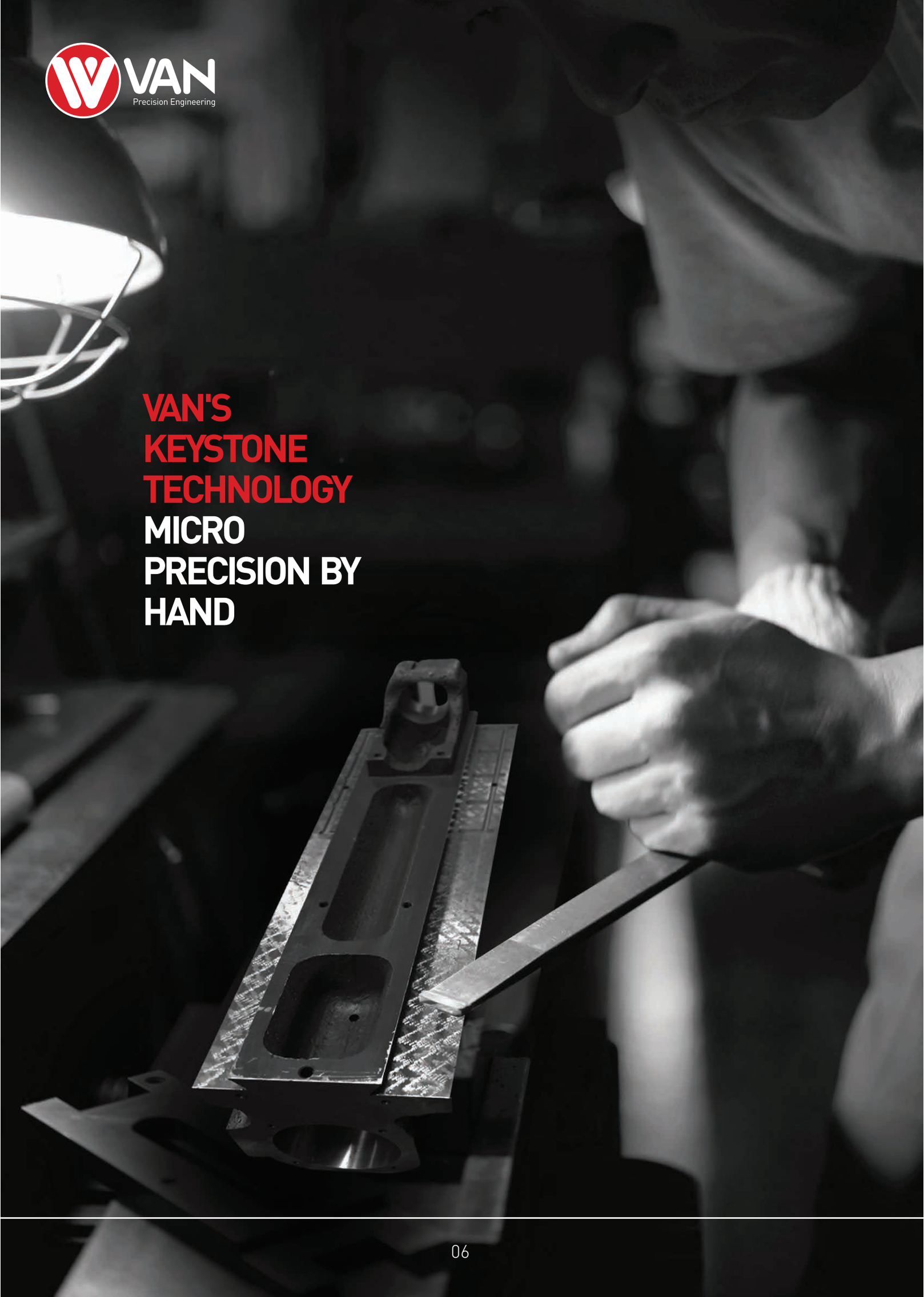
WHY **VAN MR ?**

- In all MR models, the carrier skids have a **Dove Tail** slide.
- **HFO** (Chip breaking software) in all MR models.
- **NSK, THK** and **KORTA** brand C3 class precision ground ball screws
- **THK** brand LM Guide Block with anti-vibration feature
- Cutting oil cooling system in all MR models.
- High pressure pump system up to 40 bar in all MR models.
- Compared to its competitors in all MR models, the driven tools engine powers are min. used as 75% stronger.
- All MR models have a special interface with Industry 4.0 support.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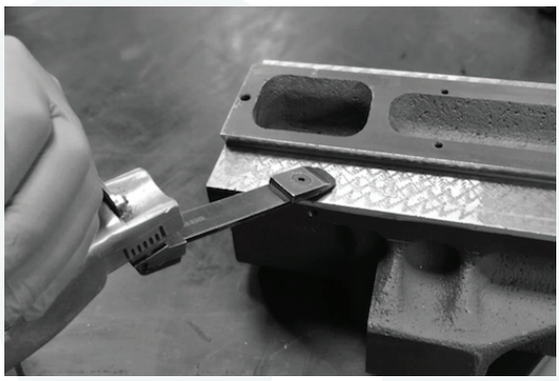
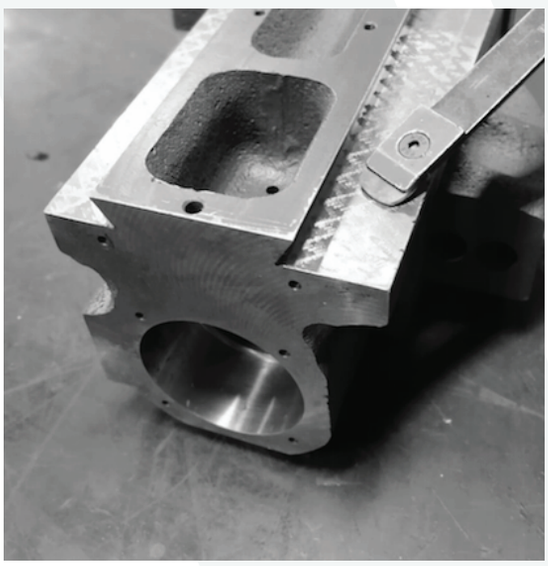
VAN'S
KEYSTONE
TECHNOLOGY
MICRO
PRECISION BY
HAND

Precision that forms the basis of scraped slide scraping operation and extra added to the **Machine Abilities:**



The Scraped slide are an important part of which **VAN** is proud. technology field. The extraordinary vibration of these slide its absorbition properties, only hard turning By providing the robustness required for the cutting operations, In this feature, the tools give us the vibration to minimal values.

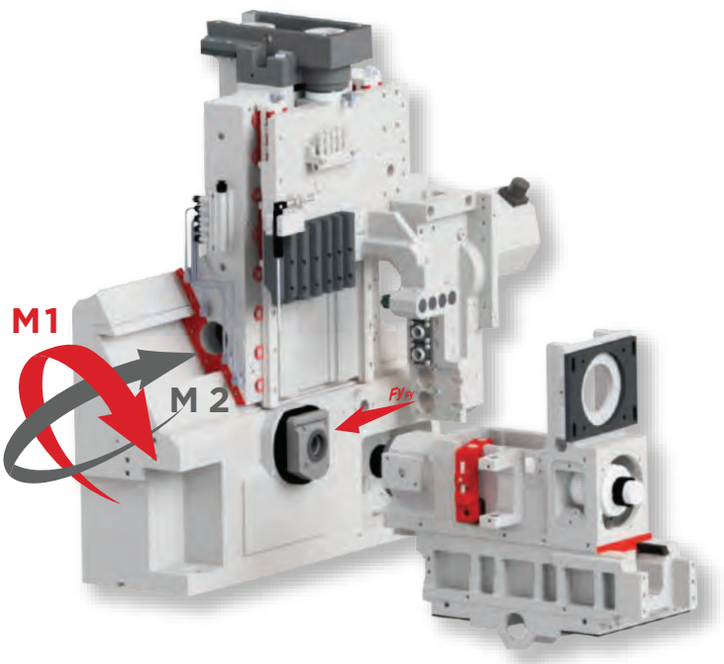
a robust body and high It has enabled us to obtain precision part surfaces. In the scraping process, the slides controls the contact areas by applying red or blue paint the scraping press on their surface takes up to 2 micron shavings per minute. Complete a single slide depending on the moving distance of the machine, it can take up to 7 to 8 hours. dovetail slides, single in order to create an axis, two contact surfaces are scraping on each side, which makes a total of four it means that the location must be scraped. Here are all the professional technicians in the field they assume responsibility for Scraping surfaces and eliminate any individual differences in order to lift, the required thrust and pull forces are measured by torc meters when scraping heat is performed. it is ensured to be among the desired standard tolerances. So although scraping processes are human although it is made by hand, all products come out within the established standards.



Exceptional ease of maintenance

Ease of maintenance, scraped dovetail slide its basic feature is. worked time and work in linear slides depending on their distance, they hang up and slide and linear blok the set must be changed. It is also expensive and repaired it's a long operation. Of course, this change the detection stage of the process until the last degradation of surface qualities in time and part cause inconsistency in geometric values on it will be. On the other hand, the scraped dovetail slide type even the guards on the slide make simple adjustments, 10 over years of high precision machining and you can maintain the rigidity levels....

COMPARISON OF MOMENT LOADING OF SHEAR FORCES



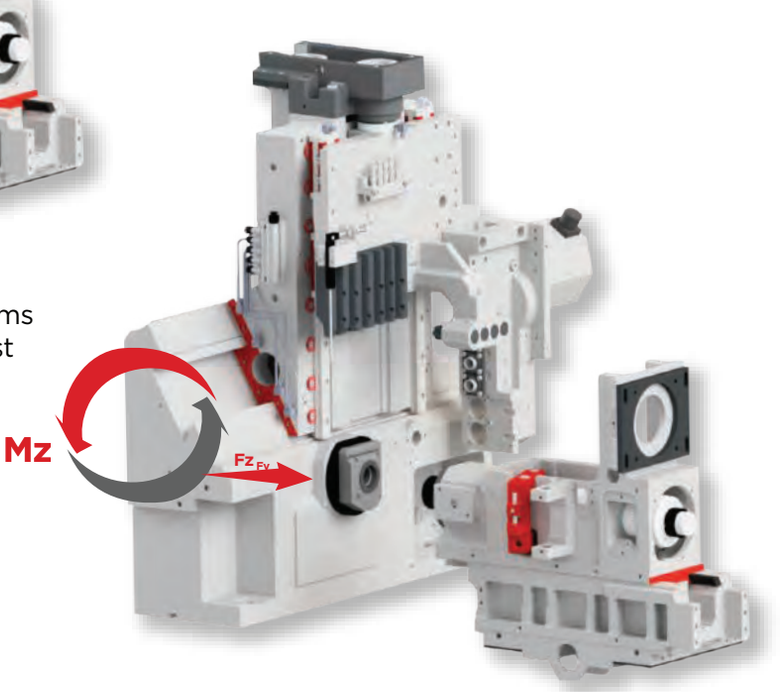
Radial and axiel charges are shown.
Here from horizontal and vertical skid systems 45° egic when compared with forces at least the cutting forces of the bank you'll see he's impressed.

Slant type - My: 1
Vertical type - My: 1,3
Horizontal type - My: 1,9

My: M1+M2

10 YEAR DOVE TAIL WARRANTY

FZ OF THE PUSH FORCE MOMENT LOADING COMPARISON

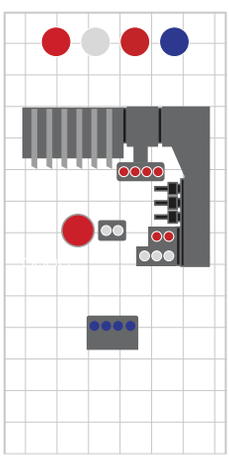
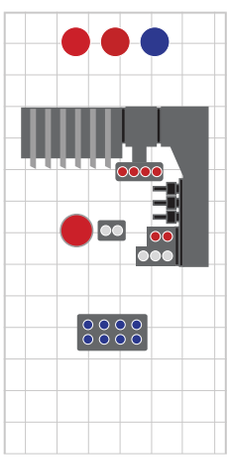
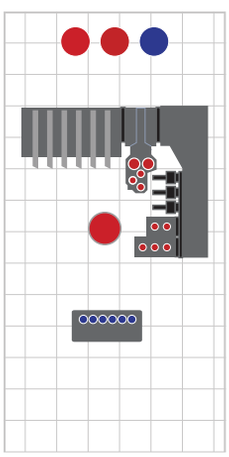
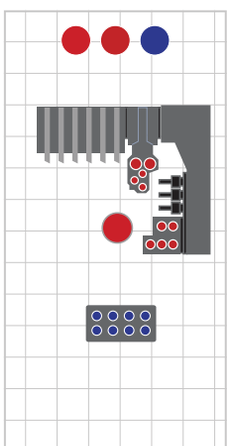
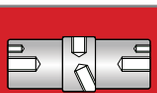
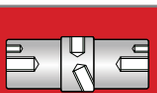
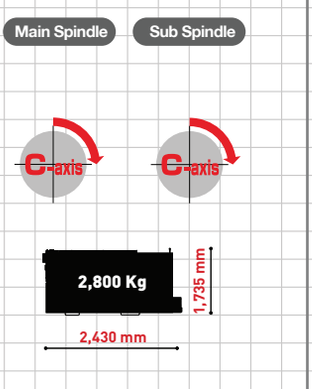
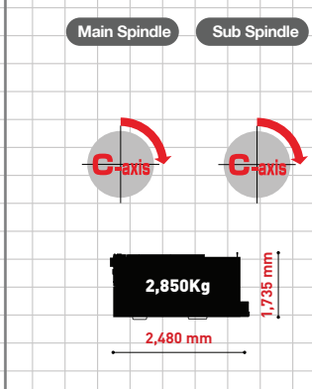
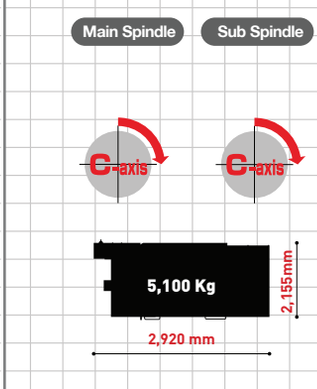
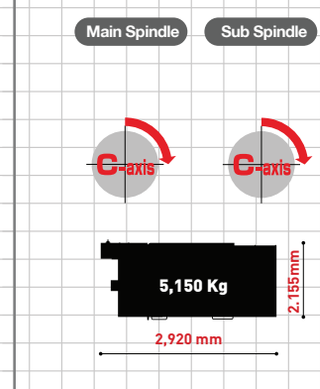


As for the need force the moment load of the slant type is the smallest when compared to that of the vertical type and horizontal type.

Slant type - Mz: 1
Vertical type - Mz: 1,3
Horizontal type - Mz: 1,5

Mz: M1+M2

MR SERIES

MR20 V7	MR20 V8	MR38 V7	MR38 V8
20 mm	20 mm	38 mm / 42 mm	38 mm / 42 mm
205mm	205mm	320mm	320mm
			
			
			
Page 12	Page 14	Page 18	Page 20

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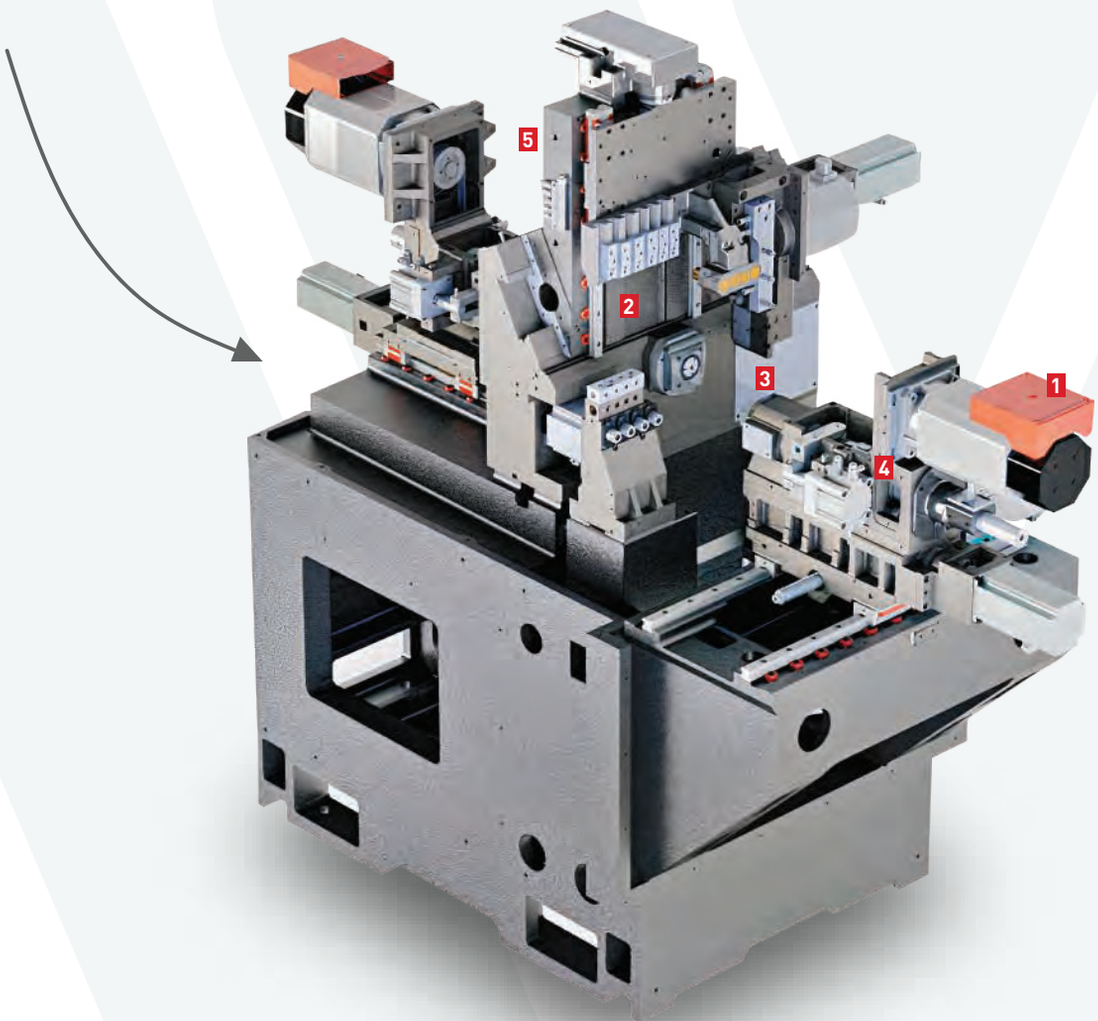
WE ARE PROUDLY **PRODUCING**

HIGH RIGIDITY
MACHINE STRUCTURE

Maksimum Rigidity,
Long term Precision and best in class
Complete with Components,
PERFECT DESİGN



BASIC PARTNERS

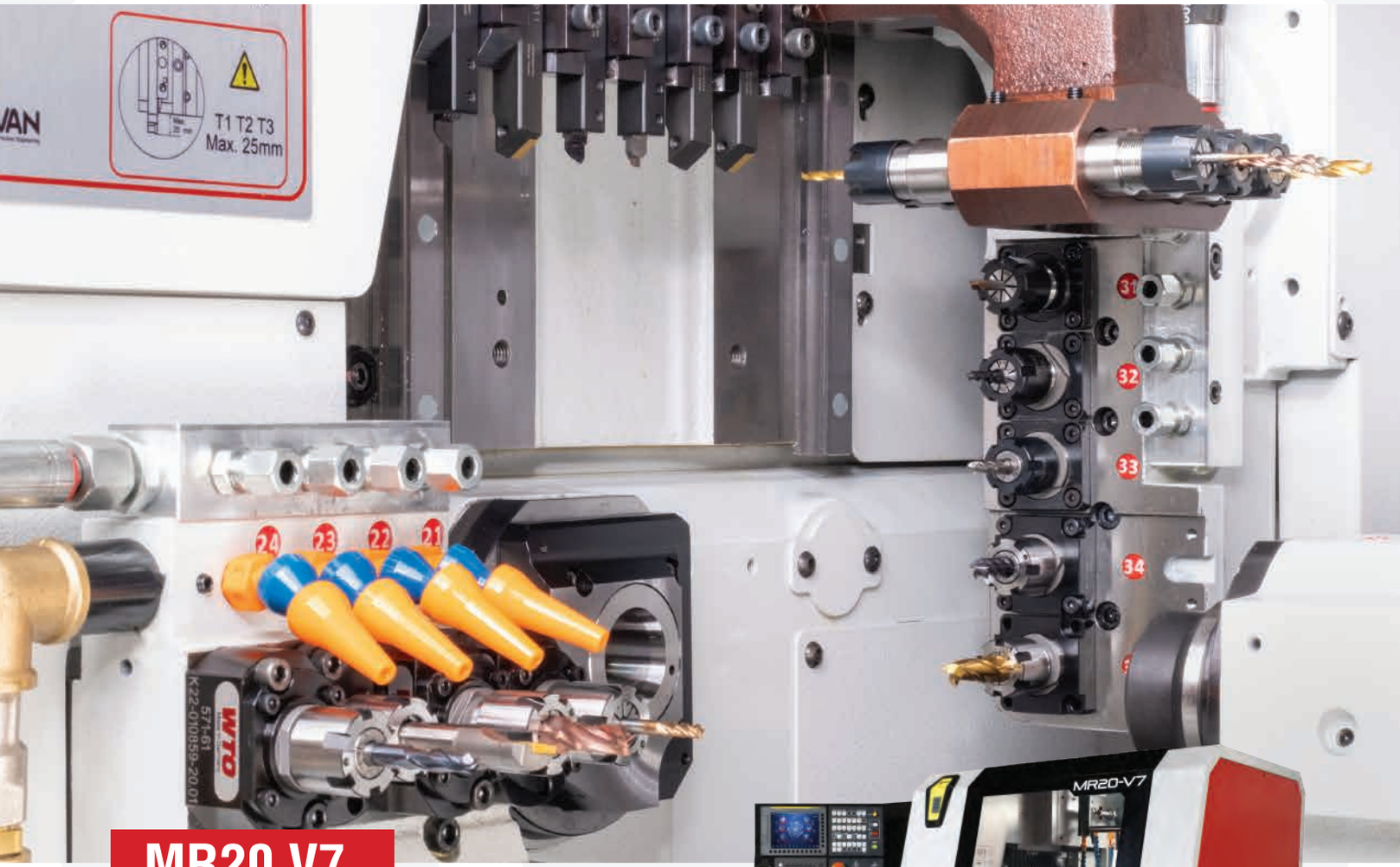
1 **FANUC (Japan)**
Oi-TF Plus / 32i-B Plus serie is used

2 **THK (Japan)**
SRS series **LM Guide** and SHS series **LM Blocks** are used.

3 **NSK, THK (Japan), KORTA (Spain)**
All **ball screws** used are precision-engineered and selected as Class C3

4 **SMC (Japan), FESTO (Germany)**
Class of **Pneumatic systems** used it was chosen as the best

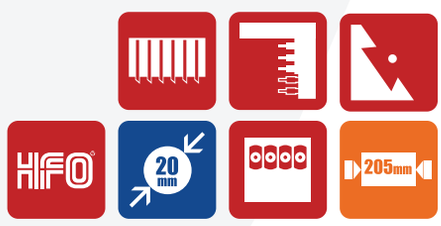
5 **SKF (Germany)**
The **skid lubrication systems** are optimal for every skid.İt is special micro-organisms that provide lubrication precision equipment



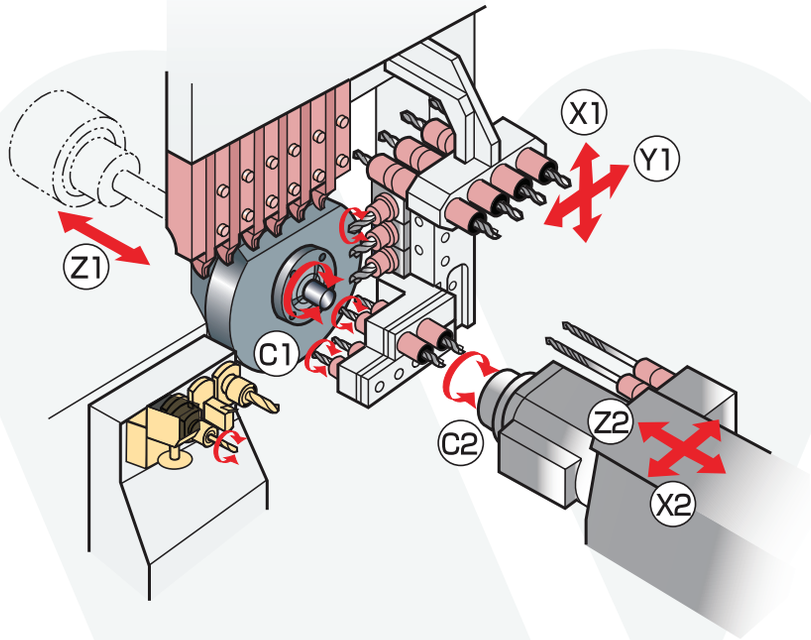
MR20 V7

This model **VAN**'s speed, power and precision combine it is a popular model. 2.5 kW (8 Nm) power driven tool motor, which can drill holes as deep as tool your milling and drilling operations with strength you can get maximum efficiency from your performance. Grinded C3 class ball screw used on all axes with the shaft, you will redefine the name of precision.

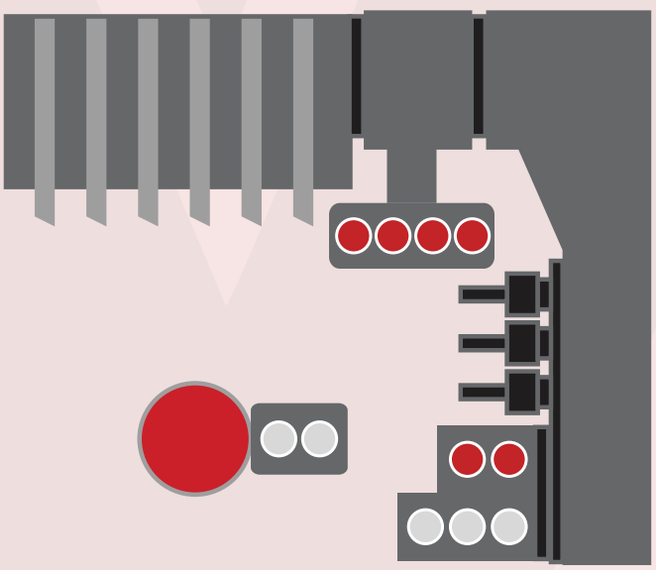
More convenient to separate the operation process and to this depending on how you can reduce part time increasing Sub spindle capabilities you can be more flexible in your production plans.



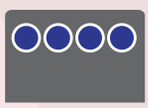
KINEMATICS



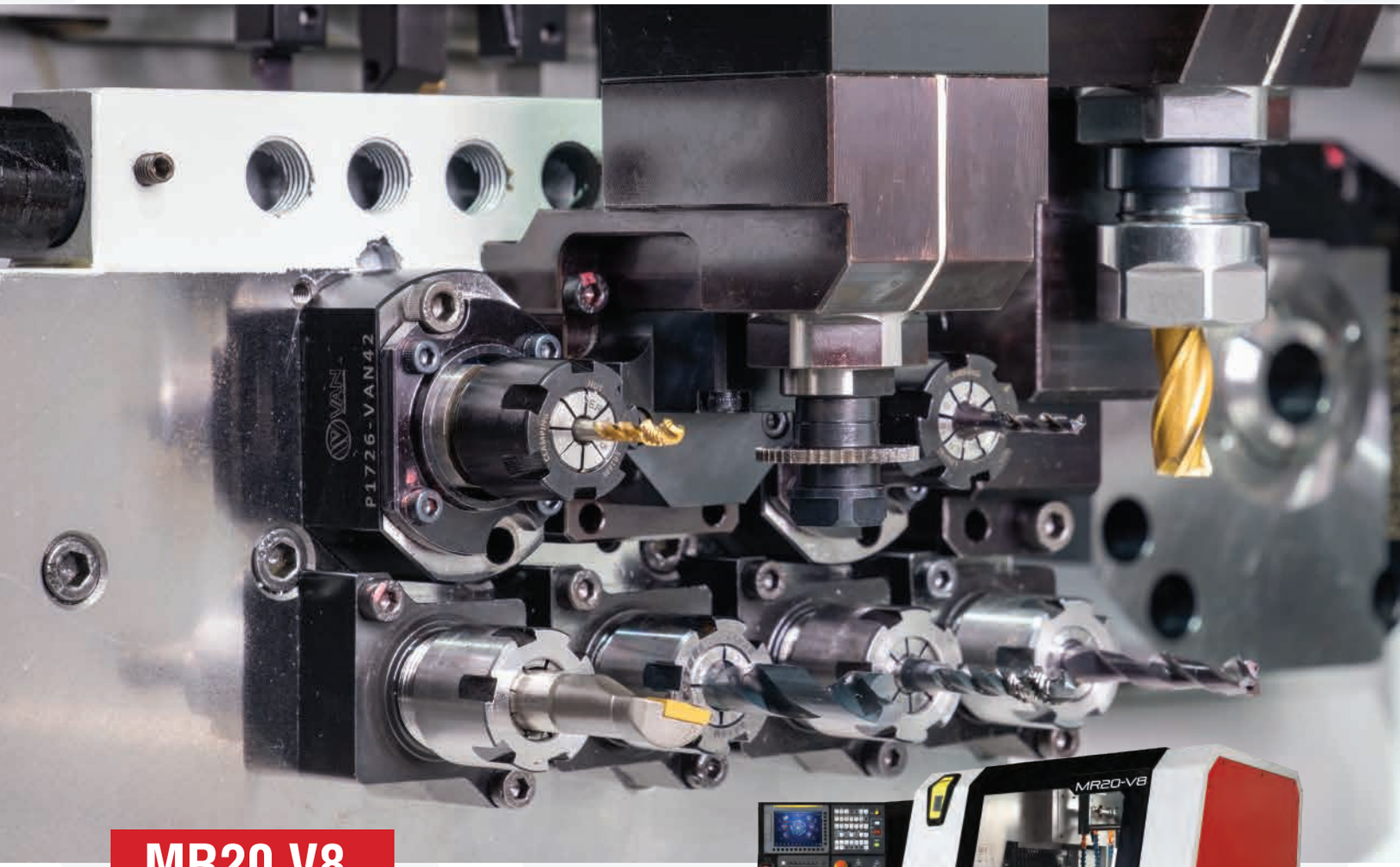
Main Spindle Specifications	
Maximum Turning Dimesions	20 mm
Maximum Turning Lenght	205 mm
Turning Tool Capacity	6 pcs.
Radial Power Driven Tool	5 pcs.(3 pcs. Std)
Minumum Input Increment C Axis	(0,001)
Main Spindle Rpm	500-10,000
Main Spindle Motor	3,7 kW (30 min. %60 ED) / 2,2 kW (Contiunous)
Power Driven Tool Rpm	8,000 rpm
Power Driven Tool Motor	AC Servo 2,5 kW / 8 Nm
Cooler Tank Capacity	170 L
Coler Tank Motor	1,5 kW
Power Comsuption	16 kVA
Rapid Feed Rate	35,000 mm/min.
Sleeve Holder Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M8 X P1,25
Power Driven Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M8XP1,25



Sub Spindle Specifications	
Maximum Turning Capacity	20 mm
Maximum Turning Lenght	80 mm
Power Driven Tool Capacity	4 (std.)
Spindle Motor	2,2 kW (30 dk %60 ED) / 1,5 kW (Contiunous)
Spindle Motor Rpm	10,000
Sleeve Holder	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M8 X P1,25
Power Driven Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M6 X P1,0
Power Driven Tool Rpm	8,000 rpm



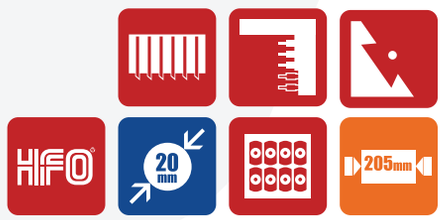
Sub Spindle Power Driven Tool Block



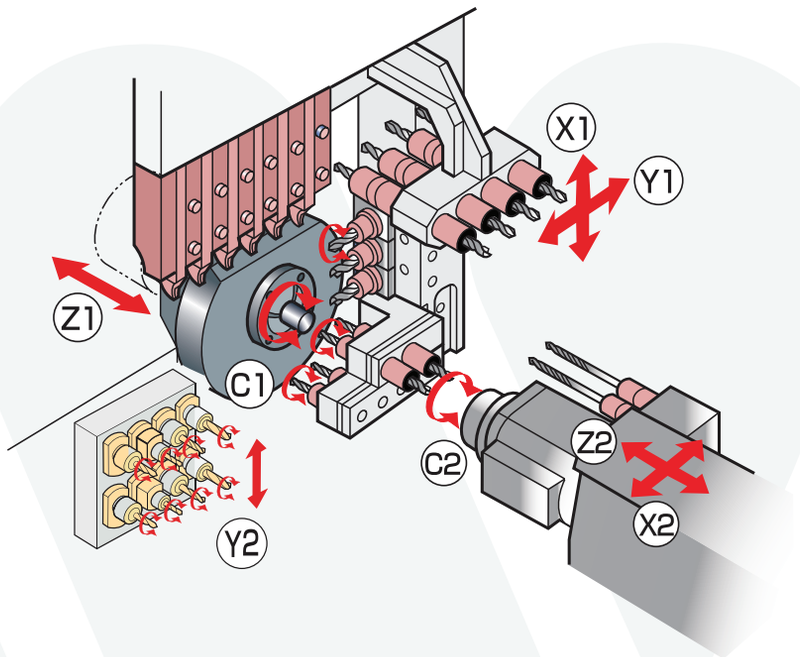
MR20 V8

Model MR 20 V8 on the sub-spindle of model MR 20 V7 it is an 8-axis model with a Y2 axis. The machine is equipped with 8 driven tools capacity on the sub-spindle. In this way, the part you will process can more easily separate the operation phases and you can reduce your machining time.

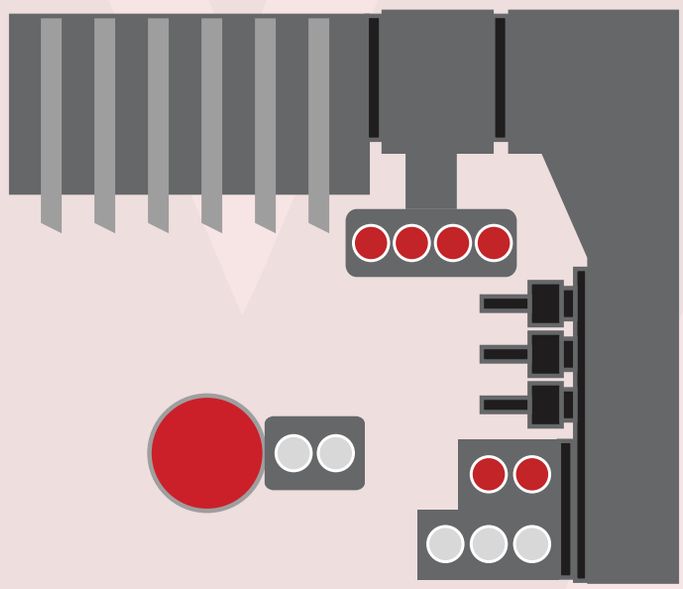
The slide system of the Y2 axis features a **dovetail** slide, ensuring maximum precision and rigidity.



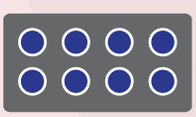
KINEMATICS



Main Spindle Specifications	
Maximum Turning Dimesions	20 mm
Maximum Turning Lenght	205 mm
Turning Tool Capacity	6 pcs.
Radial Power Driven Tool	5 pcs.(3 pcs. Std)
Minumum Input Increment C Axis	(0,001)
Main Spindle Rpm	500-10,000
Main Spindle Motor	3,7 kW (30 min. %60 ED) / 2,2 kW (Contiunous)
Power Driven Tool Rpm	8,000 rpm
Power Driven Tool Motor	AC Servo 2,5 kW / 8 Nm
Cooler Tank Capacity	170 L
Coler Tank Motor	1,5 kW
Power Comsuption	16 kVA
Rapid Feed Rate	35,000 mm/min.
Sleeve Holder Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M8 X P1,25
Power Driven Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M8XP1,25



Sub Spindle Specifications	
Maximum Turning Capacity	20 mm
Maximum Turning Lenght	75 mm
Power Driven Tool Capacity	8 (std.)
Spindle Motor	2,2 kW (30 dk %60 ED) / 1,5 kW (Contiunous)
Spindle Motor Rpm	10,000
Sleeve Holder	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M8 X P1,25
Power Driven Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M6 X P1,0
Power Driven Tool Rpm	8,000 rpm



Sub Spindle Power Driven Tool Block

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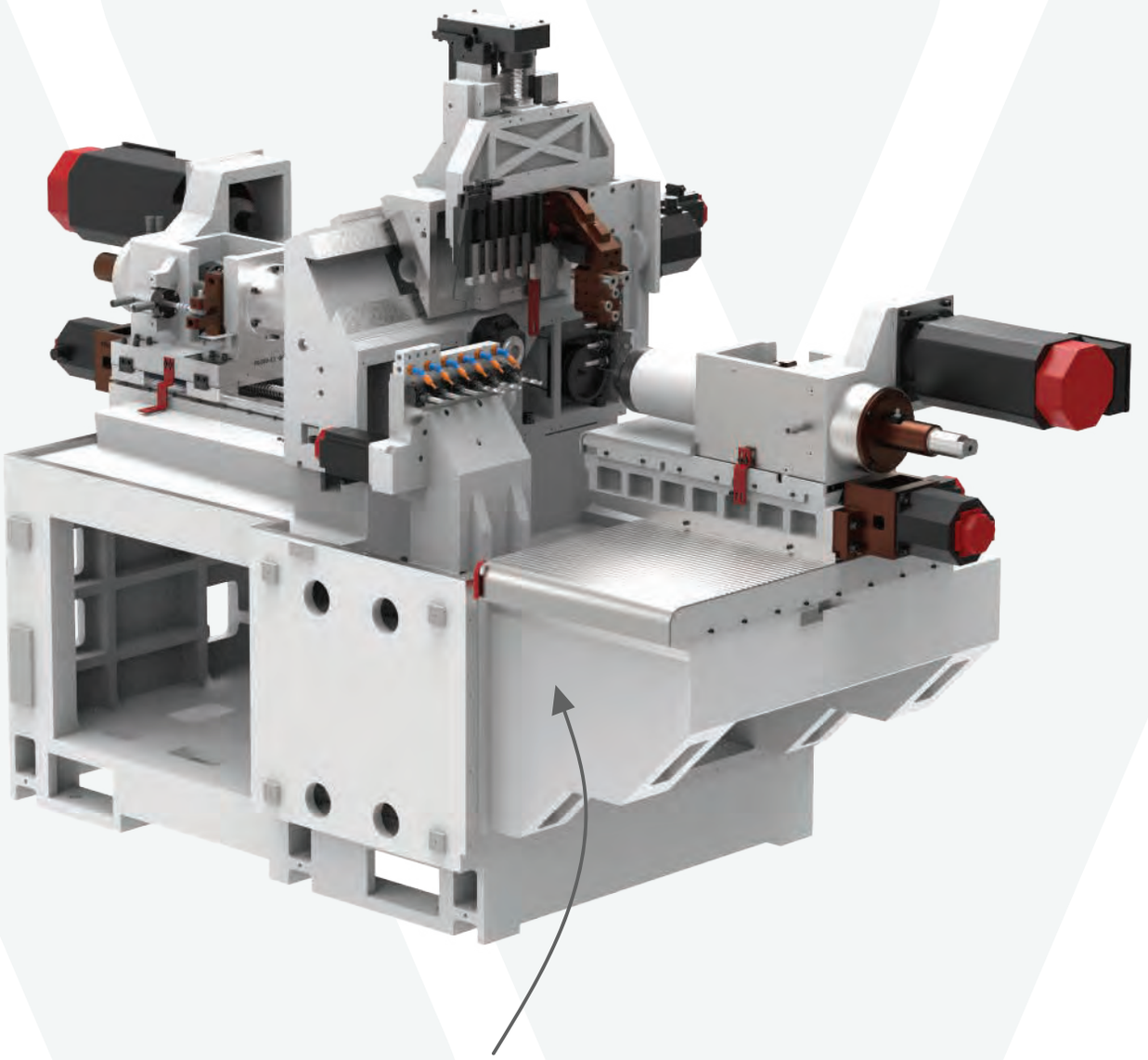
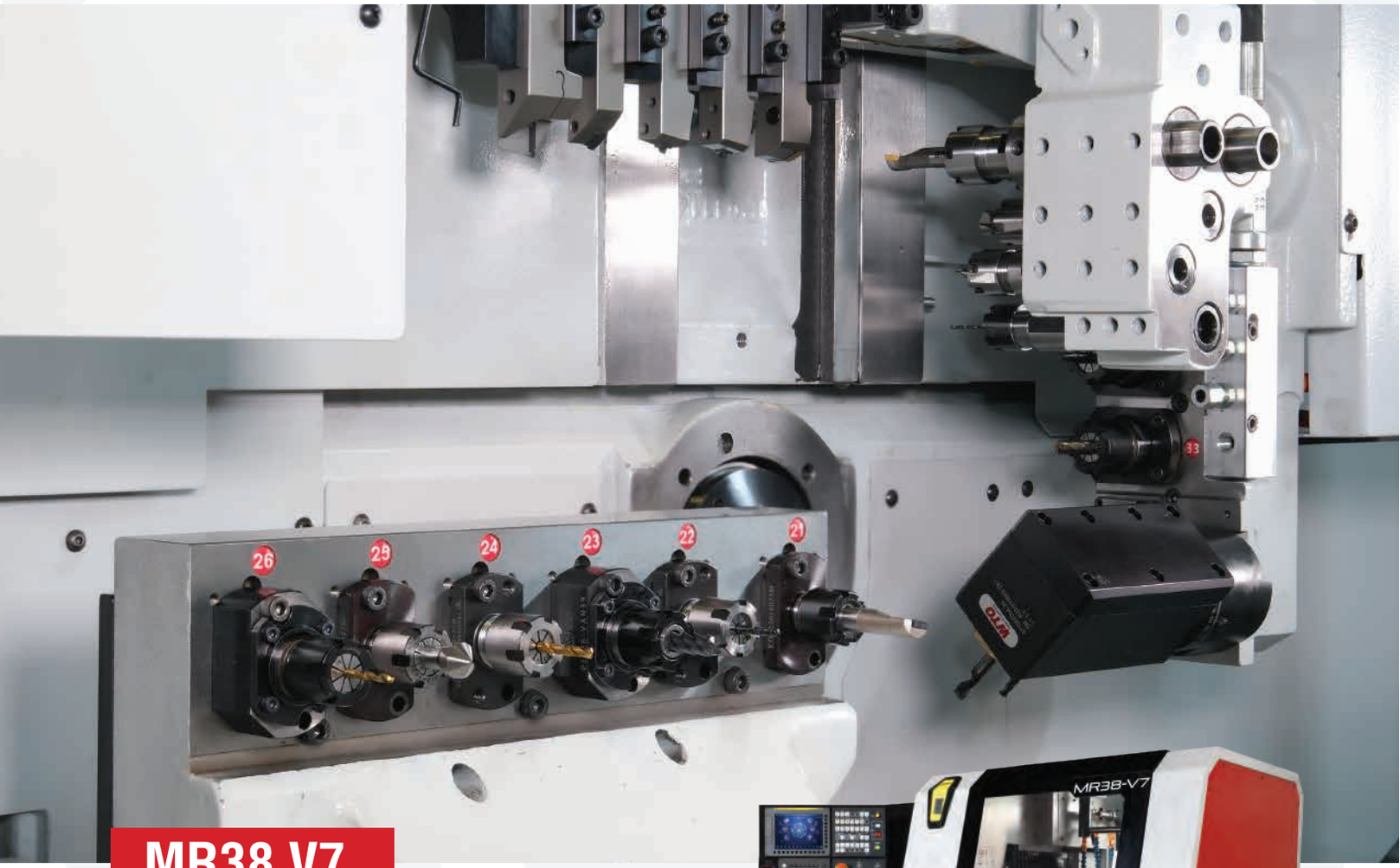
HIGH RIGIDITY
MACHINE STRUCTURE



MR38 Series has **Mono Block** machine body structure for maximum rigidity.

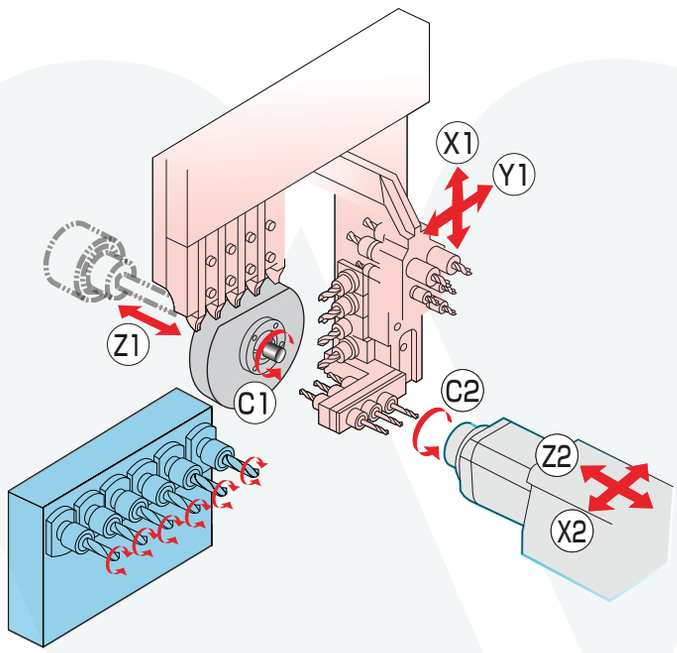


MR38 V7

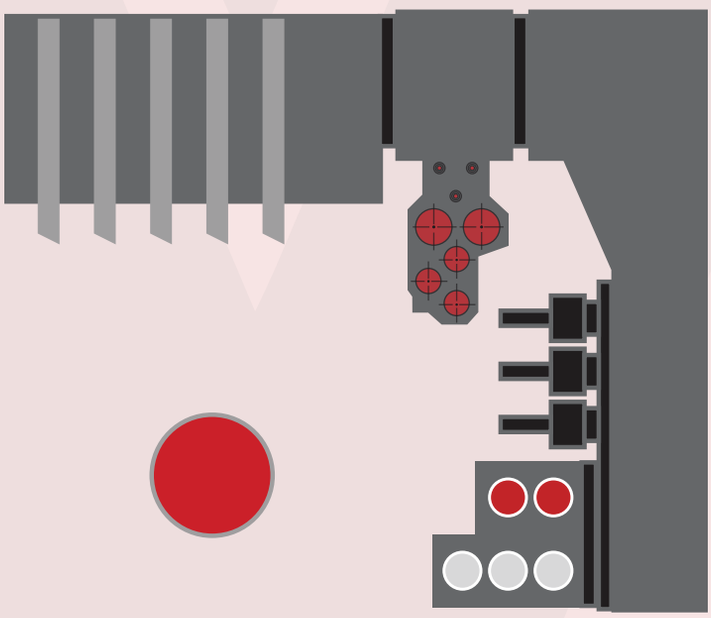
It is a **hybrid** version of the **MR 38 V7 VAN**. Here as a machine capacity CNC Sliding Head Lathe maximum 38mm diameter, as a vending machine raw material up to a maximum diameter of 42mm you can work. The machine have **11 kW** in main spindle motor its power. Especially the automotive industry needs 42mm diameter size with this machine we can solve.

Also, it leaves short wastage raw material for the hybrid, that is, with out guide bush operation feature of the machine.

KINEMATICS



Main Spindle Specifications	
Maximum Turning Dimesions	38 mm (42 mm N.G.B.)
Maximum Turning Lenght	320 mm (80 mm N.G.B.)
Turning Tool Capacity	5 pcs.
Radial Power Driven Tool	5 pcs.(3 pcs. Std)
Minumum Input Increment C Axis	(0,001)
Main Spindle Rpm	500-8,000
Main Spindle Motor	11 kW (30 min. %60 ED) / 7,5 kW (Contiunous)
Power Driven Tool Rpm	6,000 rpm
Power Driven Tool Motor	AC Servo 2.5 kW / 8 Nm
Cooler Tank Capacity	250 L
Coler Tank Motor	1,5 kW
Power Comsuption	45 kVA
Rapid Feed Rate	35,000 mm/min.
Sleeve Holder Tool	
Maximum Drilling Capacity	23 mm
Maximum Tapping Capacity	M16 X P2
Power Driven Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M8XP1,25



Sub Spindle Power Driven Tool Block

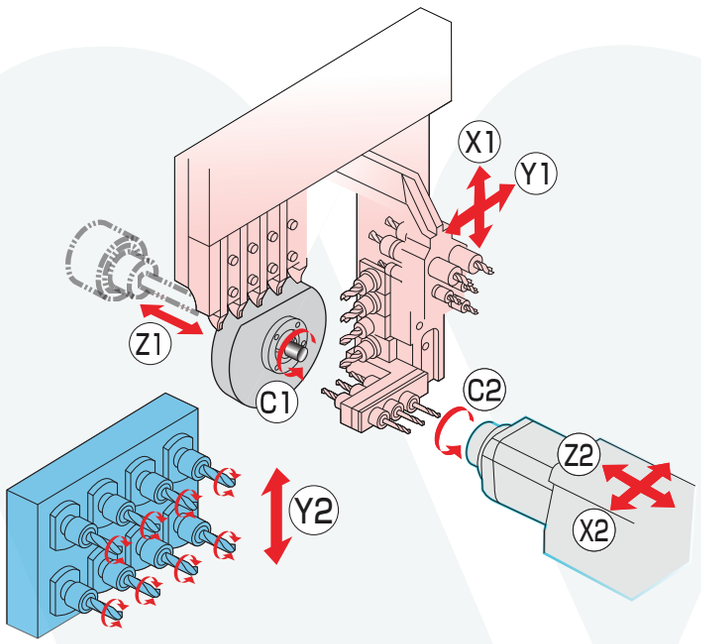
Sub Spindle Specifications	
Maximum Turning Capacity	38mm (42 mm)
Maximum Turning Lenght	125 mm
Power Driven Tool Capacity	6 (std.)
Spindle Motor	5,5 kW (30 dk %60 ED) / 3,7 kW (Contiunous)
Spindle Motor Rpm	8,000
Sleeve Holder	
Maximum Drilling Capacity	14 mm
Maximum Tapping Capacity	M12 X P1,75
Power Driven Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M6 X P1,0
Power Driven Tool Rpm	6,000 rpm

MR38 V8

This model technically has the same features as the **MR 38 V7**, and it includes **8 power driven tools** in the sub-spindle. In this way, you can more complex machining and shortening the processing time.

The machine has the capability to connect with various functional tools, such as the sub-spindle slotting unit, radial tool, axial tool.

KINEMATICS



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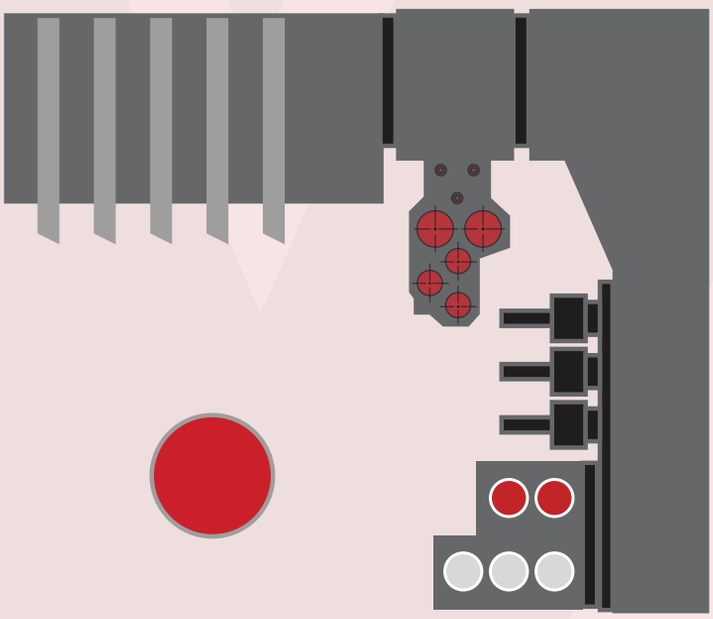
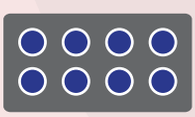
Maximum Turning Lenght	320 mm (80 mm N.G.B.)
Turning Tool Capacity	5 pcs.
Radial Power Driven Tool	5 pcs.(3 pcs. Std)
Minumum Input Increment C Axis	(0,001)
Main Spindle Rpm	500-8,000
Main Spindle Motor	11 kW (30 min. %60 ED) / 7,5 kW (Contiunous)
Power Driven Tool Rpm	6,000 rpm
Power Driven Tool Motor	AC Servo 2.5 kW / 8 Nm
Cooler Tank Capacity	250 L
Coler Tank Motor	1,5 kW
Power Comsuption	45 kVA
Rapid Feed Rate	35,000 mm/min.
Sleeve Holder Tool	
Maximum Drilling Capacity	23 mm
Maximum Tapping Capacity	M16 X P2
Power Driven Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M8XP1,25



Sub Spindle Specifications	
Maximum Turning Capacity	38mm (42 mm N.G.B.)
Maximum Turning Lenght	125 mm
Power Driven Tool Capacity	8 (std.)
Spindle Motor	5,5 kW (30 dk %60 ED) / 3,7 kW (Contiunous)
Spindle Motor Rpm	8,000
Sleeve Holder	
Maximum Drilling Capacity	14 mm
Maximum Tapping Capacity	M12 X P1,75
Power Driven Tool	
Maximum Drilling Capacity	10 mm
Maximum Tapping Capacity	M6 X P1,0
Power Driven Tool Rpm	6,000 rpm



Sub Spindle Power Driven Tool Block

BEST DESIGN
FOR OPTIMUM USABILITY

VAN MR Series machine the interior is designed to be more large and spacious. This by means of adjusting the machine, tools activities such as changing can be easily achieved. Also the large door window of the machine you can easily see inside.

Additional options added to machine case design it has a structure that will easily hide it inside. For this, the parts of the machine are inside the factory it will not be distributed and will cause any business accident won't give in.

HFO FUNCTION (OPTION)

HFO The chip breaking innovation *High Frequency Oscillation

One of the most important software technologies that **Van** offers you is the ability to break talas. What we all know chip control is a very important factor in Chip manufacturing. Especially 17-4 Stainless Steel, 316 Stainless Materials such as steel, 360 brass, aluminum and Black Derlin remove long thread-shaped chip, this kind of software it will allow you to remove the Chip in much smaller pieces when the materials are processed.

In this way;

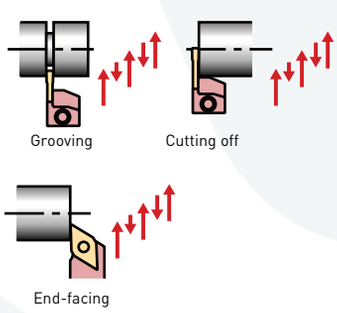
- Increased productivity with less operator intervention
- Longer tool life
- Lower processing temperatures
- Cleaner surface roughness is achieved

As well as providing advantages such as reduced risk of Burr formation;

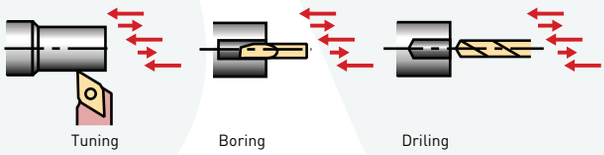
- It can be used in conjunction with Fanuc's ready-made cycles.

WHEN OPENED HFO

Ossilation at X1



Ossilation at Z1



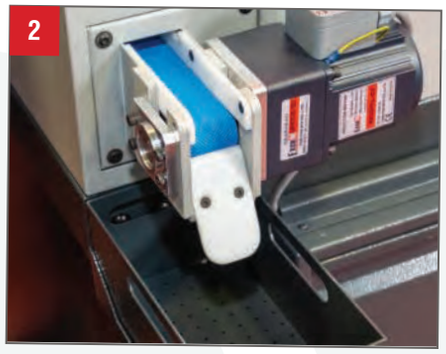
HIGHLIGHTS

1

PRODUCT RECEIVER BOX

The workpiece gripped in the back spindle is unloaded into the product chute for collection.

2



PART CONVEYOR

The part conveyor takes a workpiece out of the machine. Always by taking the part you are processing over the tape you can measure your last pieces.

3

USB MEMORY

External data with Usb and CF card can load and data from machine you may receive.

4

IN-MACHINE LIGHTING

Adjustment through Led lighting more comfortable for operator during a workspace is provided.

5

OIL HEAT AND PARTS COUNT DISPLAY

This display shows, oil temperature, the number of produced parts and time per part without interfering with the machine you can see it.

6

OIL COOLER

Oil cooling unit inside the machine you will always adjust the cutting oil it helps keep it warm.

7

HIGH PRESSURE PUMP

40 Bar and 4 output programmable the high pressure pump, team performance and your surfaces will be much better.

8

WIRED HANDWHEEL

In this way, tool reset operations much more precise and in a short time you can do it.

9

AUTO POWER OFF

When the machine manufactures the specified number of parts or when an alarm occurs, it cuts off the electricity (turning the power switch to the trip position) and saves energy.

VAN
Precision Engineering

USER FRIENDLY
CONTROL PANEL

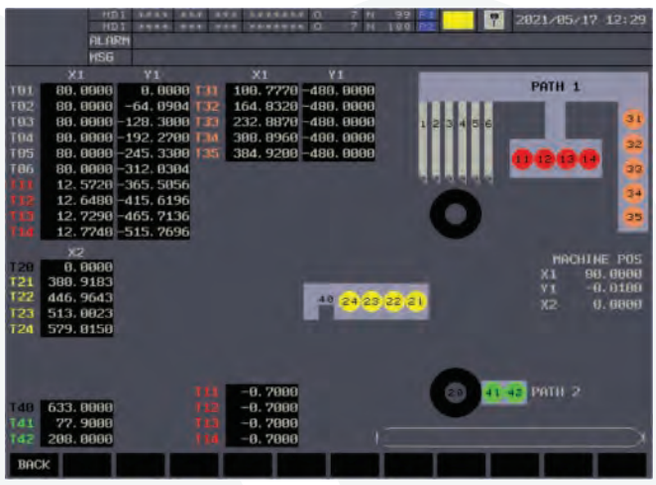
www.vanmachinery.com

USER FRIENDLY INTERFACE

FEATURES FOUND IN THE CONTROLLER

1- High Precision Program Command is offered as standard (In the program, 4 digits can be given after the comma, such as 0.0001).
2- Ability to transfer programs via USB, CF Card and Ethernet
3- It has automatic cutting control.
4- Dual channel program control is available.
5- Both channels have Polygon Turning feature.
6- Auto Power Off

INTERFACE SCREEN



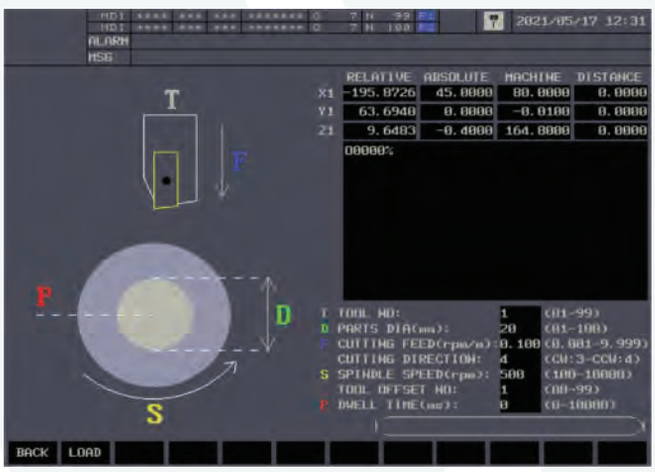
1- Our kinematics page is the easiest way to machine zeros it allows you to reach it.
2 - No changes can be made with encryption other than authorized personnel"
3- This screen for easy access to machine pos values references

1- In the graphics you have seen, the 1 week operation of the machine is our page that reports the times
2- Following the daily and weekly productivity rates of the machine you can.
3- You can save your weekly data to your computer with the help of USB memory. you can transfer.
4- The machine can be stopped by entering the number of parts to be processed.

1- In this tab, the main purpose of the machine is tool wear and made to detect breakage.
2- Activate the teach me tab on the screen you see. When we bring it, our machine is powered by the servo motor during operation saves the download data it receives in its memory.
3- In each part cycle with M codes after receiving the data The wear and breakage of the tools are controlled.

INTERFACE SCREEN

1-Lifespan determined by the teams the user uses This is the screen we are in.
2-Our machine when a tool reaches a defined number of cycles sends it alarm.
3 - The machine can be stopped by entering the number of parts to be processed.

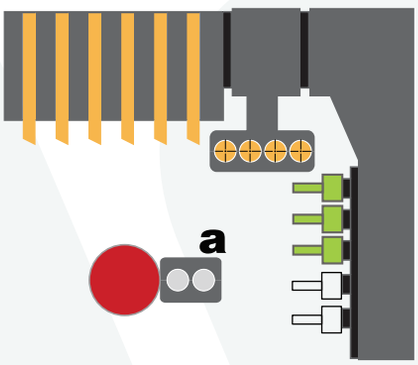


1- In this tab, you can quickly and easily use the automatic cutting program you can run.
2- The diameter of the piece shown below is the size of the rotation direction and rotation Automatic cutting is done with one key by entering the cycle.

1-Timing times that our users need most collected on one page.
2-Except for the authorized personnel with the encryption system we have made, absolutely do not change

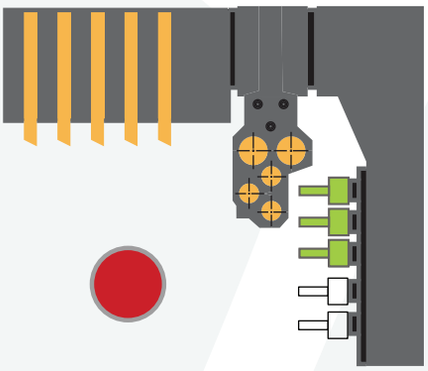
VARIATIONS

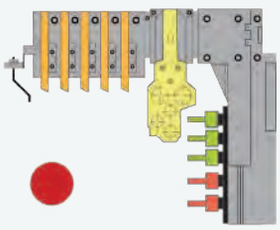
MR20 SERIES



- Turning Tool
- Power Driven Tool (Opt.)
- Sleeve Holder
- Power Driven Tool (Std)
- 3-Slot Axial Power Driven Tools (Opt.)
- Power Driven Tool 18.000 rpm (Opt.)
- 2- Slot Power Driven Tool (Opt.)
- Special Driven Tool (Opt.)

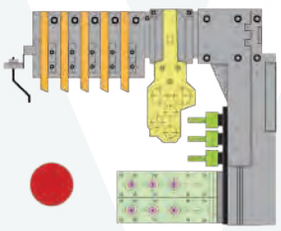
MR38 SERIES



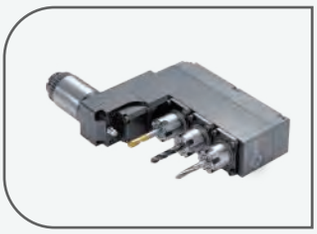


VARIATION 01
2 pcs. ER16 Power Driven Tool

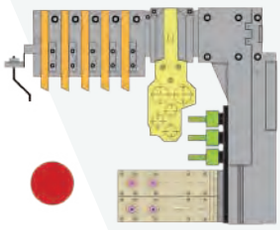
ER16 Power Driven Tool



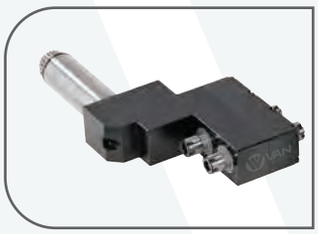
VARIATION 02
3-Slot Power Driven Tool



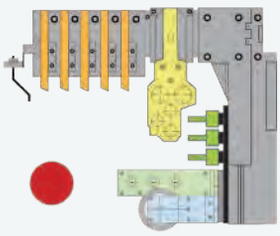
3-Slot Power driven Tool



VARIATION 03
2-Slot Power Driven Tool

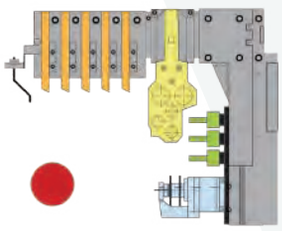


2-Slot Power Driven Tool

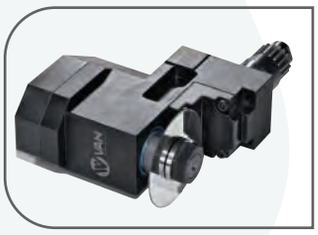


VARIATION 04
Polygon Unit

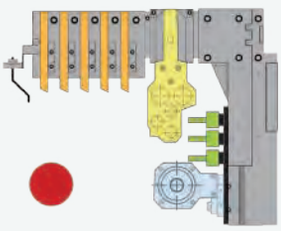
Polygon Unit



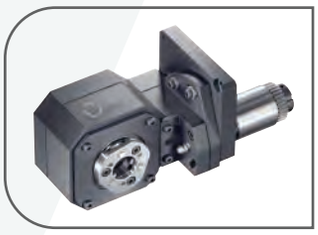
VARIATION 05
Sloting Unit



Sloting Unit



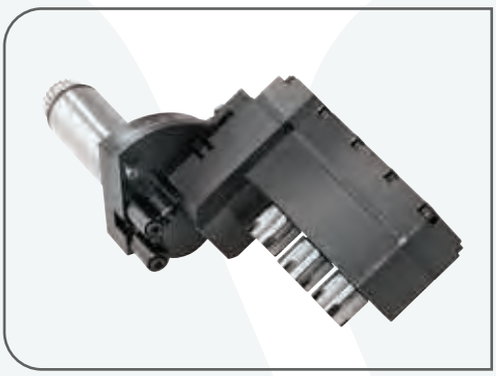
VARIATION 06
Whirling Unit

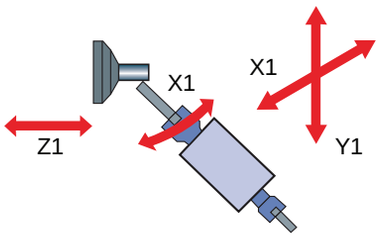


Whirling Unit

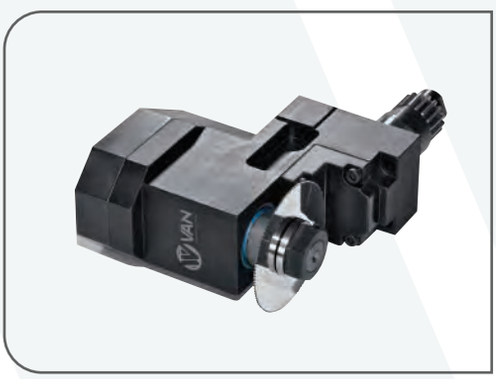
VARIATIONS

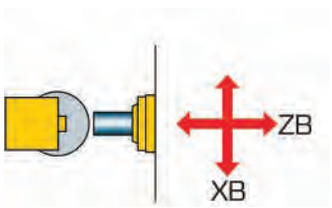
3- SPINDLE ANGEL ADJUSTABLE
CROSS DRILLING UNIT

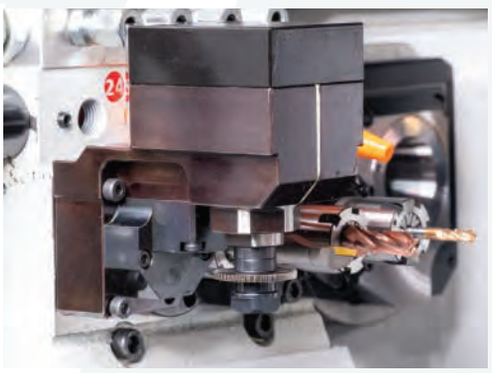




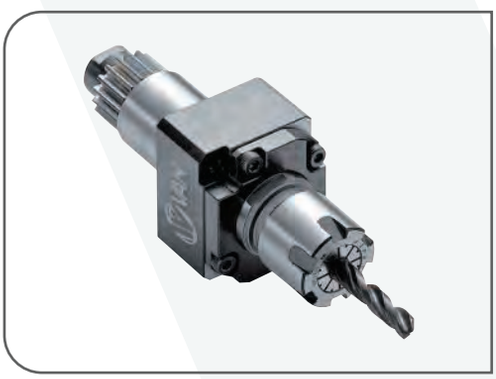
SUB SPINDLE SLOTING UNIT

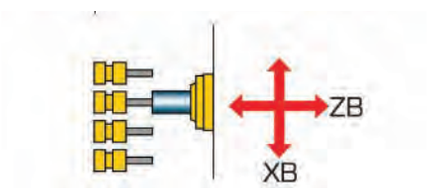




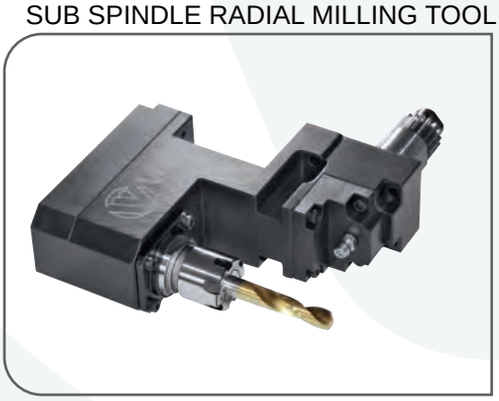


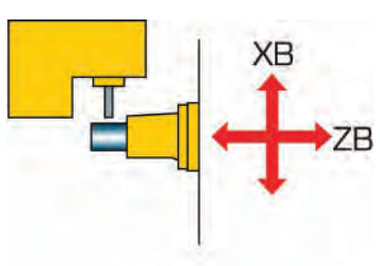
SUB SPINDLE POWER DRIVEN TOOL





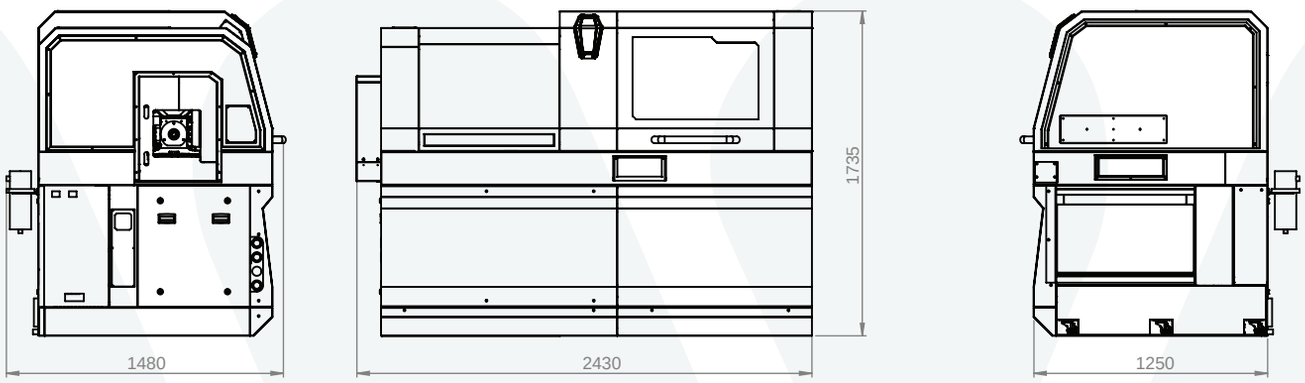
SUB SPINDLE RADIAL MILLING TOOL

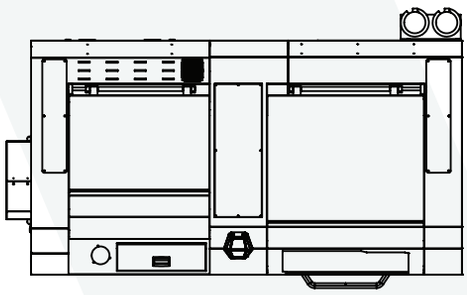




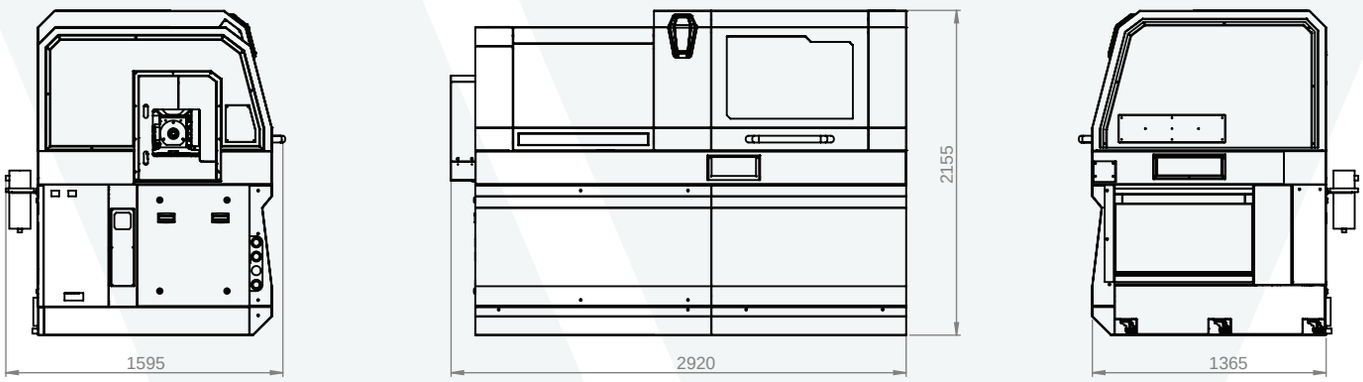
MACHINE DIMENSIONS

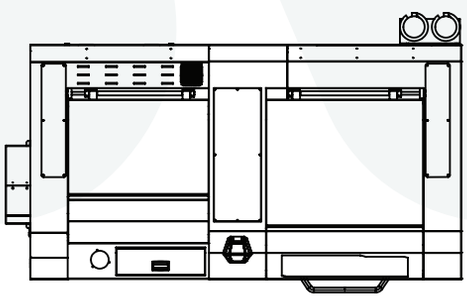
MR20 V7 / V8





MR38 V7 / V8





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