



MR 20 V7

MR 20 V8

MR 38 V7

MR 38 V8

SWISS TYPE
AUTOMATIC LATHE

MR 20
MR 38



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Dear Industrialists;

As **Van Cnc** Takım Tezgahları San. Tic. A.Ş. we produce high-precision swiss type automatic lathe machines and their benches. In this journey, in which we first started with 4 main models, we have gathered our past experiences for you in all our models.

In all of the products we have made, we use dovetail type, scraped skid technology. As you all know, this method of manufacturing is a difficult and laborious method. But as with every difficult method and process, we offer you high precision and high rigidity in the results of this manufacturing method.

As **Van** machine tools, the place where we determine our quality is in the segment where the best are located, and we have taken our place in the sector with our fully equipped machines. For this reason, the equipment used in all our machines and offered as an option by many of our competitors is presented as standard in our machines. (All of these topics are detailed in the following pages of the catalog.)

Our machines are equipped with the latest technology components and software. One of them, **HFO** (chip breaking option),

is available in all our machines. As you know, this option is achieved by perfectly transmitting the oscillation movement of servo motors from all the components (coupling, screw shaft, axis car, axis table and Axis body) to the tool bit. It is a necessity that all the components and machine body we use in between are high precision.

We are a team that has adopted the principle of not only providing you with a machine, but also providing precision engineering services that will find solutions to the production problems you encounter and get involved in, and we are proud to offer our machines to you.



Fatih VAN
CEO



WHY **VAN?**

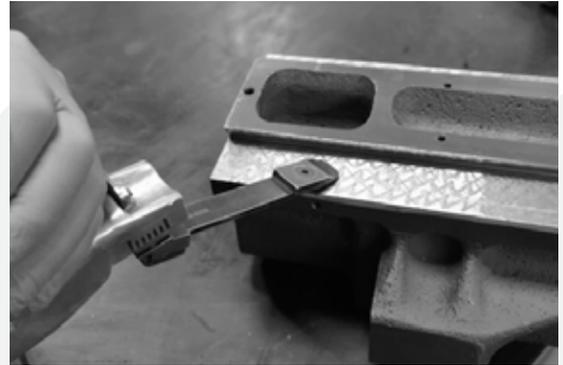
- ✔ In all MR models, the carrier skids have a swallow skid system.
- ✔ High pressure pump system up to 40 bar is offered as standard in all MR models. Cutting oil
- ✔ Cooling system is offered as standard in all MR models
- ✔ HFO (chip breaking software) is standard on all MR models.
- ✔ Compared to its competitors in all MR models, the LIVE Team engine powers are min. used as 75% stronger
- ✔ All MR models have a special interface with Industry 4.0 support
- ✔ **2 years mechanical**, 2 years of electronics warranty

WE OFFER YOU
PRECISION MANUFACTURING
SOLUTIONS, NOT JUST A MACHINE

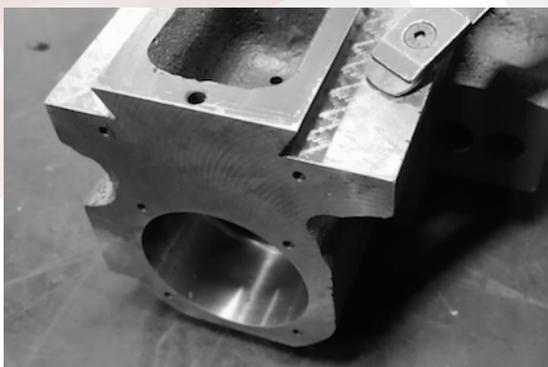
**VAN'S
KEYSTONE
TECHNOLOGY
MICRO
PRECISION
BY HAND**

Precision that forms the basis of scraped sleds scraping operation and extra added to the machine abilities:

Scraped sleds, An important one that **VAN** is proud of technology is the field. The extraordinary vibration of these sleds thanks to its damping properties, only hard turning by providing the robust required for their operations, the cutter teams shake us in this feature to minimal values a strong body and high, which is needed by lowering it allows us to obtain precision part surfaces



In the scraping process, the skid 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 sled depending on the moving distance of the machine, it can take up to 7 to 8 hours. Swallow sledges, single in order to create an axis, two contact surfaces are rasped 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 torkmeters 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.

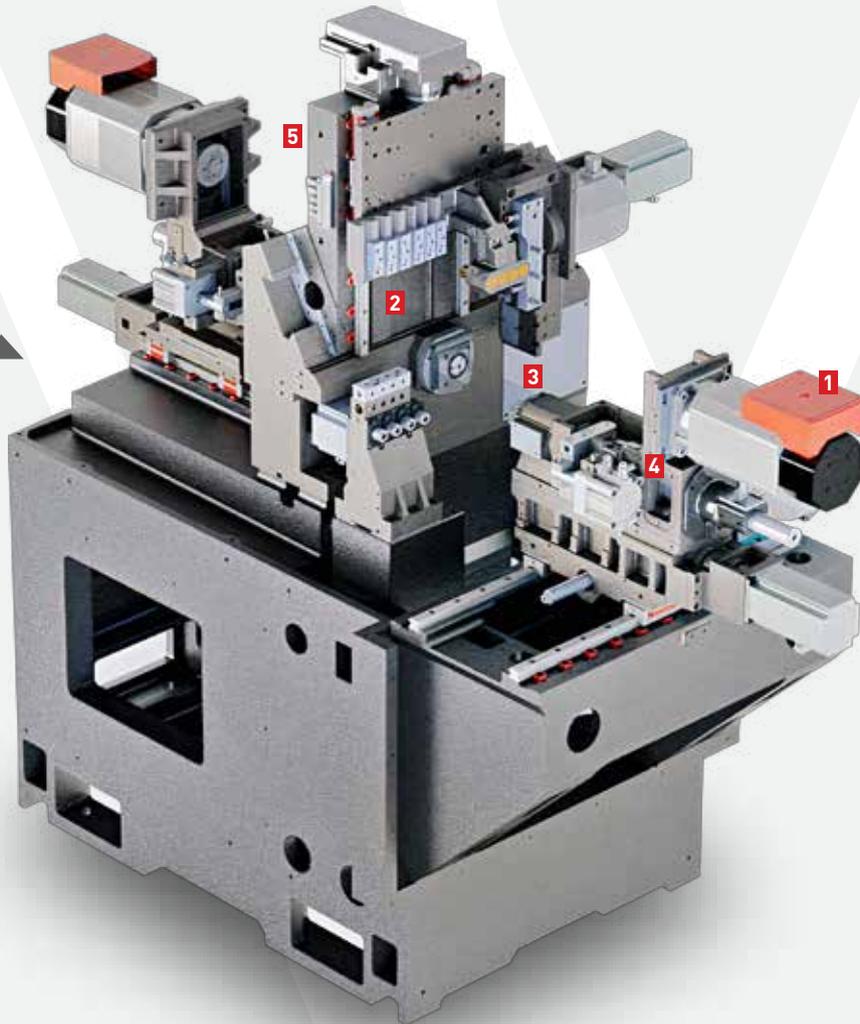


Exceptional ease of maintenance

Ease of maintenance, Scraped swallow sledges its basic feature is. Law and work in linear sleds depending on their distance, they hang up and sled and car 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, Aberasyon swallow type 10 by making simple adjustments, even yourself on skids high precision machining for more than years and you can maintain rigidity levels...

HIGH RIGIDITY MACHINE STRUCTURE

Maximum Rigidity,
Long term Precision and best in class
Complete with components
PERFECT DESIGN



BASIC PARTNERS

1 FANUC (Japan)
Oi-MODEL F Plus, 31i / 32i-MODEL B series are used.

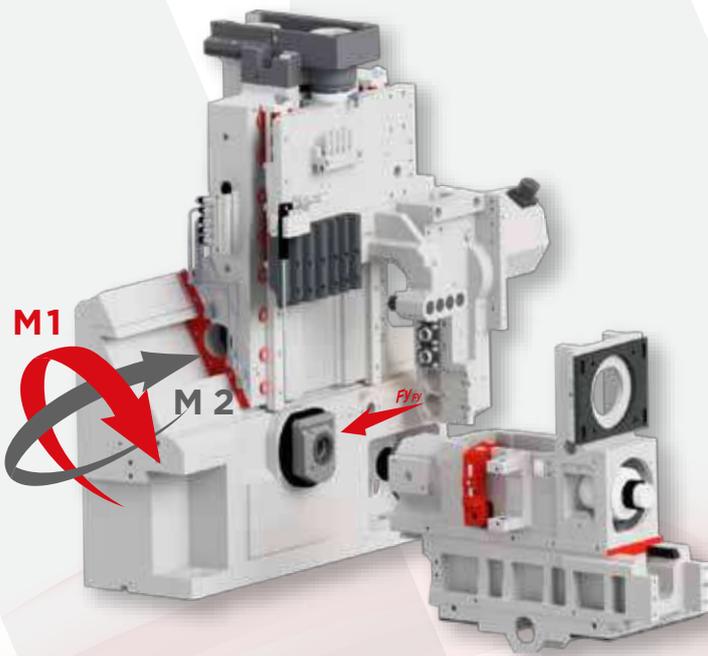
2 THK (Japan)
Linear skids and LM guide the SHS and SRS series are used.

3 NSK (Japan)
All ball screws used are precision-engineered and selected as Class C3.

4 SMC (Japan)
Class of Phnomatic systems used
It was chosen as the best.

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

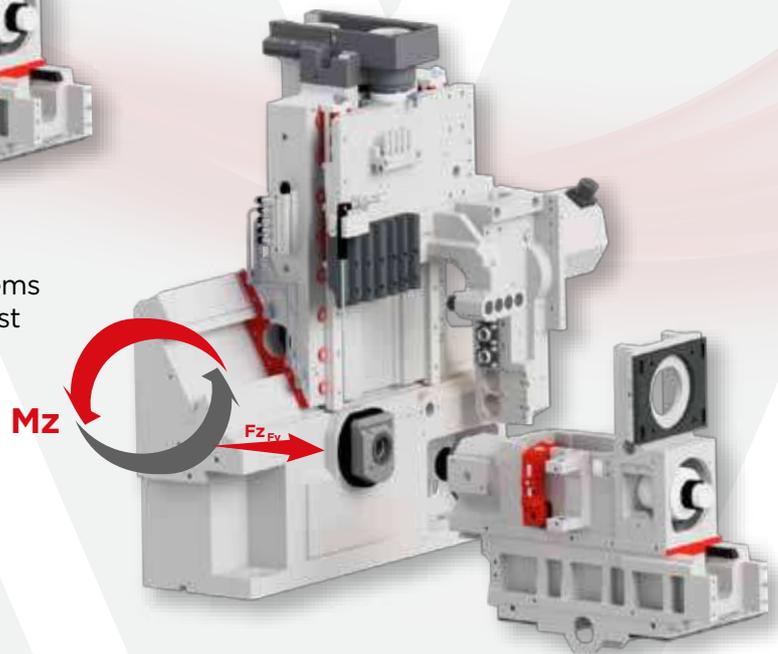
COMPARISON OF MOMENT LOADING OF SHEAR FORCES



Radial and axial 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

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.

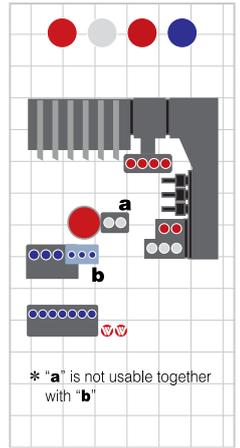
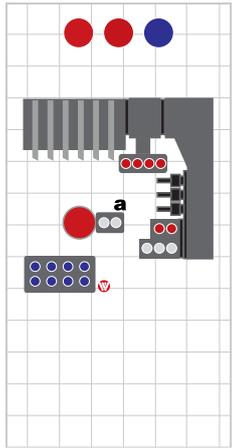
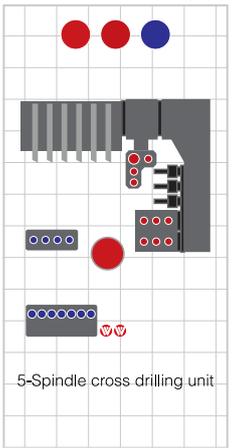
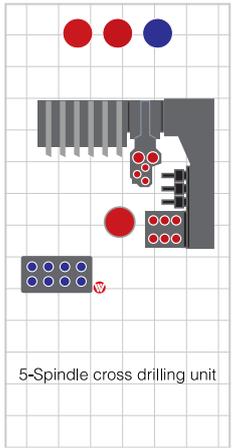
- Slant type - Mz: 1
 - Vertical type - Mz: 1,3
 - Horizontal type - Mz: 1,5
- Mz: M1+M2



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INDEX

MR SERİSİ

MR 20 V7	MR 20 V8	MR 38 V7	MR 38 V8
			
			
 <p style="font-size: small;">* "a" is not usable together with "b"</p>		 <p style="font-size: small;">5-Spindle cross drilling unit</p>	 <p style="font-size: small;">5-Spindle cross drilling unit</p>

● Sub spindle
 ● Front-end working tool
 ● Front/Rear-end working tool
 ● Rear-end working tool

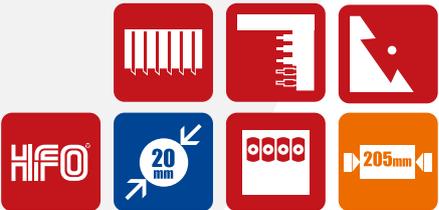
			
Main spindle Sub spindle	Main spindle Sub spindle	Main spindle Sub spindle	Main spindle Sub spindle
			
<div style="background-color: black; color: white; padding: 5px; display: inline-block;">2,600 Kg</div> <div style="border-top: 1px solid black; width: 100%; text-align: center; font-size: x-small;">2,380 mm</div> <div style="border-left: 1px solid black; border-right: 1px solid black; width: 100%; height: 100%; text-align: center; font-size: x-small;">1,710 mm</div>	<div style="background-color: black; color: white; padding: 5px; display: inline-block;">2,600 Kg</div> <div style="border-top: 1px solid black; width: 100%; text-align: center; font-size: x-small;">2,380 mm</div> <div style="border-left: 1px solid black; border-right: 1px solid black; width: 100%; height: 100%; text-align: center; font-size: x-small;">1,710 mm</div>	<div style="background-color: black; color: white; padding: 5px; display: inline-block;">3,800 Kg</div> <div style="border-top: 1px solid black; width: 100%; text-align: center; font-size: x-small;">2,400 mm</div> <div style="border-left: 1px solid black; border-right: 1px solid black; width: 100%; height: 100%; text-align: center; font-size: x-small;">1,730 mm</div>	<div style="background-color: black; color: white; padding: 5px; display: inline-block;">3,900 Kg</div> <div style="border-top: 1px solid black; width: 100%; text-align: center; font-size: x-small;">2,400 mm</div> <div style="border-left: 1px solid black; border-right: 1px solid black; width: 100%; height: 100%; text-align: center; font-size: x-small;">1,730 mm</div>
Sayfa 12	Sayfa 14	Sayfa 16	Sayfa 18



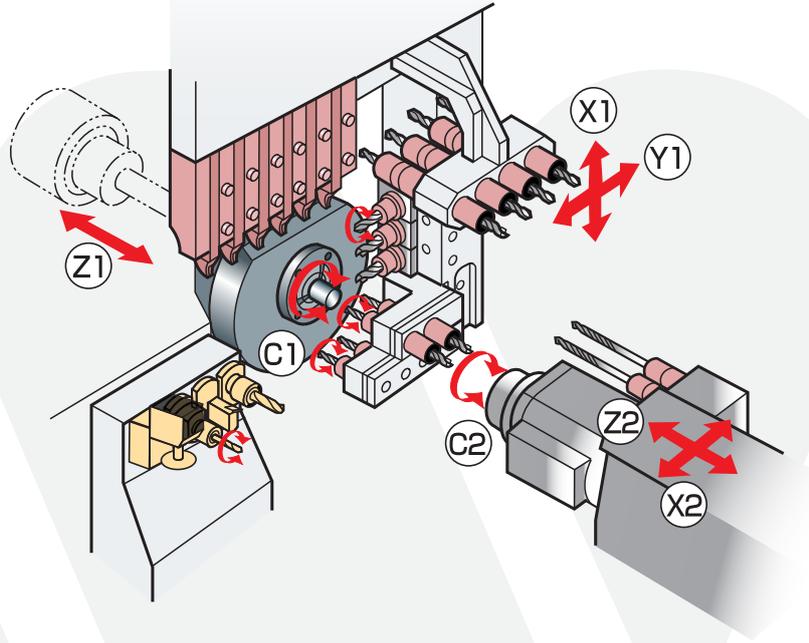
MR 20 V7

This model **VAN**'s speed, power and precision combine it is a popular model. Up to 350 mm at a time on the first side as standard 2.5 kW live 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 divide the operation process and to this depending on how you can reduce part time 2. Increasing spindle capabilities (Sub Spindle motor power 1 kW) you can be more flexible in your production plans. 2 on demand. 7 sets per spindle you can use it.



KİNEMATİK

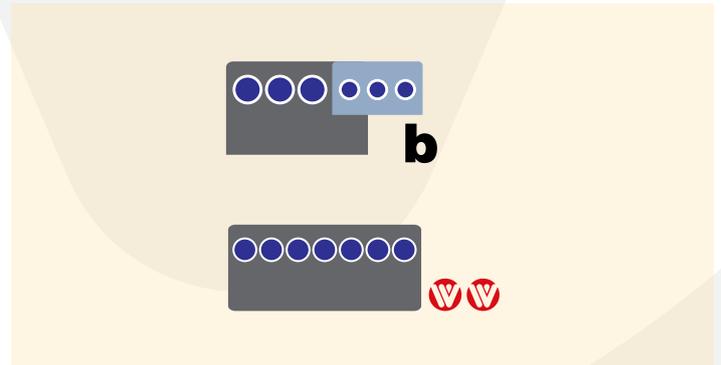
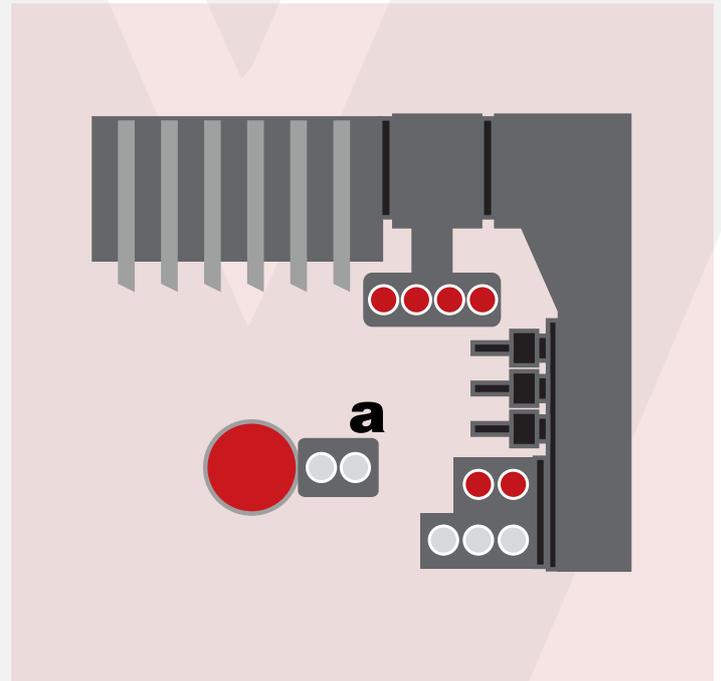


Teknik özellikler;

1. SPINDLE SPECIFICATIONS	
Maximum Machining Diameter	20 mm [23 mm option]
Maximum Machining Length	205 mm
Number Of Tools	6 Adet
Axial Rotary Tools	4 Adet (ops.)
Radial Rotary Tools	5/7 Adet (3ad. Stnd)
Minimum Input Increment	{0,001}
Main Spindle Rotation	500-10,000 rpm
Main Spindle Engine Power	3,7 kW
Rotary Tool Rotation	8,000 rpm
Engine Power Of Rotary Tool	AC Servo 2,5 kW
Cooling Tank Capacity	170 L
Coolant Tank Capacity	0,4 Kw
Power Consumption	5,2 KVA
Rapid Feed Rate	35,000 mm/dk.
Fixed Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Threading Capacity	M8 X P1,25
Maximum Guide Capacity	M8 X P1,25
Rotary Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Guide Capacity	M8XP1,25
Maximum Milling Capacity	10 mm
Maximum Splitting Capacity	3,5 mm X 8 mm

İş Mili;

2. SPINDLE TECHNICAL SPECIFICATIONS	
Maximum Turning Diameters	20 mm (23mm opsiyon)
Maximum Turning Length	80 mm
Maximum Number Of Tools	4 [stn.] / 6 [ops.]
Engine Power Of Sub Spindle	2,2 kW
Sub Spindle Rotation	8,000 rpm
Fixed Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Threading Capacity	M8 X P1,25
Rotary Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Threading Capacity	M6 X P1,0
Rotary Tool Rotation	8,000 rpm
Rotary Tool Motor Power	AC Servo 1 kW





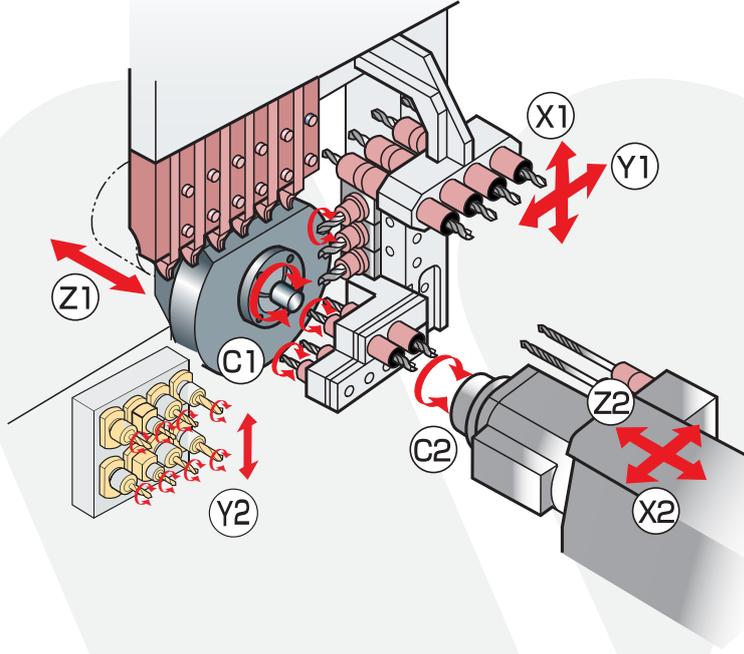
MR 20 V8

The **MR 20 V8** model is on the sub spindle of the **MR 20 V7** model. It is an 8-axis model where the Y2 axis is located. 2 here. 8 live tooling and Y2 axis on the spindle is available. In this way, the part you will process it can divide the operation stages more conveniently and total you can reduce your track time. Y2 axis sledge system has swallow sledge structure. In the work you will do on this axis it will provide maximum rigidity and precision.

Y2 axis sledge system has swallow sledge structure in the work you will do on this axis it will provide maximum rigidity and precision.



KİNEMATİK

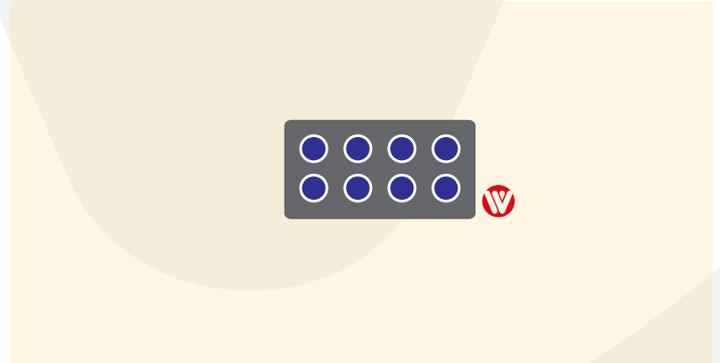
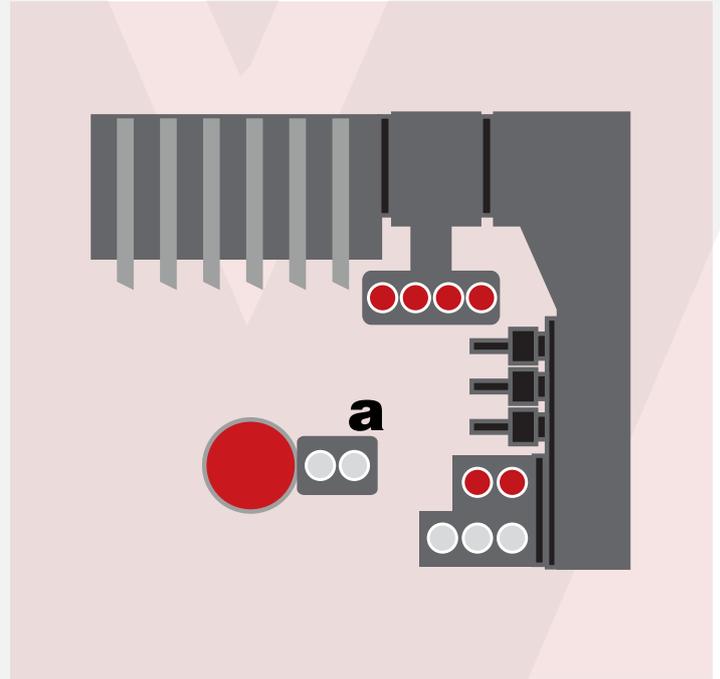


Teknik özellikler;

1. SPINDLE SPECIFICATIONS	
Maximum Machining Diameter	20 mm (23 mm option)
Maximum Machining Length	205 mm
Number Of Tools	6 Adet
Axial Rotary Tools	4 Adet (ops.)
Radial Rotary Tools	5/7 Adet (3ad. Stnd)
Minimum Input Increment	{0,001}
Main Spindle Rotation	500-10,000 rpm
Main Spindle Engine Power	3,7 kW
Rotary Tool Rotation	8,000 rpm
Engine Power Of Rotary Tool	AC Servo 2,5 kW
Cooling Tank Capacity	170 L
Coolant Tank Capacity	0,4 Kw
Power Consumption	5,2 KVA
Rapid Feed Rate	35,000 mm/dk.
Fixed Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Threading Capacity	M8 X P1,25
Maximum Guide Capacity	M8 X P1,25
Rotary Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Guide Capacity	M8X P1,25
Maximum Milling Capacity	10 mm
Maximum Splitting Capacity	3,5 mm X 8 mm

İş Mili;

2. SPINDLE TECHNICAL SPECIFICATIONS	
Maximum Turning Diameters	20 mm(23mm opsiyon)
Maximum Turning Length	80 mm
Maximum Number Of Tools	8 (döner tutucular ops.)
Engine Power Of Sub Spindle	2,2 kW
Sub Spindle Rotation	8,000 rpm
Fixed Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Threading Capacity	M8 X P1,25
Rotary Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Threading Capacity	M6 X P1,0
Rotary Tool Rotation	8,000 rpm
Rotary Tool Motor Power	AC Servo1 kW





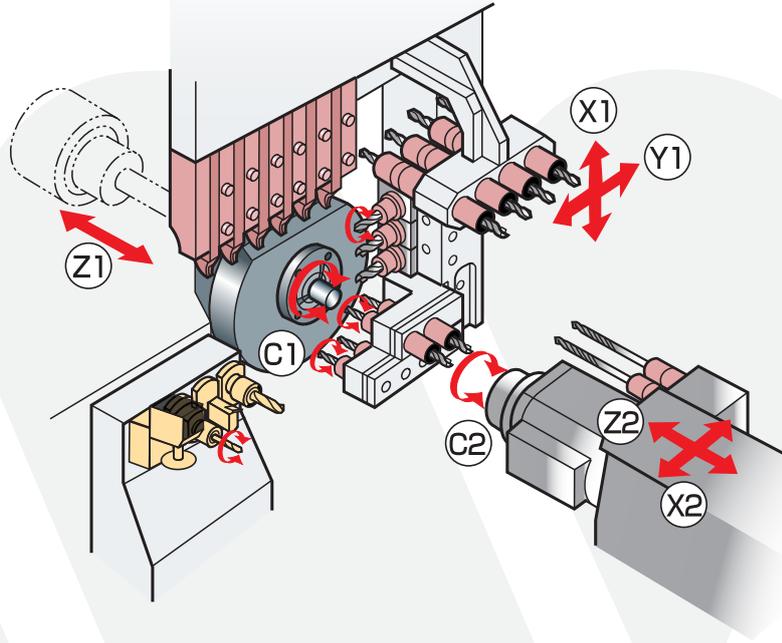
MR 38 V7

The **MR 38** is a hybrid model of the **V7 Van**. Here maximum 38 as sliding automaton, if as Automaton raw material up to 42 mm max diameter you can manipulate. Machine 11 kW main spindle motor almost a show of strength to your opponents with strength references Especially the need of the automotive industry 42 mm diameter with this machine we are able to solve.

However, the machine is hybrid, that is, without the Bush guide thanks to its working feature, it leaves short waste.



KİNEMATİK



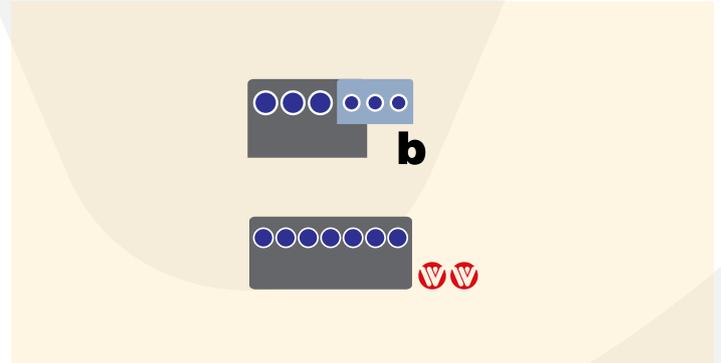
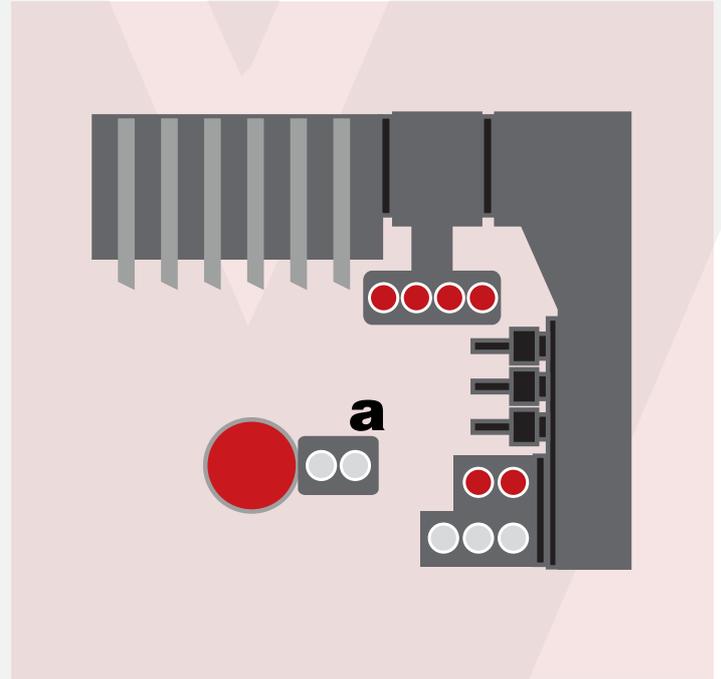
Teknik özellikler;

1. SPINDLE SPECIFICATIONS	
Maximum Machining Diameter	238 mm (NGB* 42 mm)
Maximum Machining Length	320 mm / 95 mm
Number Of Tools	6 Adet
Axial Rotary Tools	4 Adet (ops.)
Radial Rotary Tools	5/7 Adet (3ad. Stnd)
Minimum Input Increment	{0,001}
Main Spindle Rotation	500-7,000 rpm
Main Spindle Engine Power	11 kW
Rotary Tool Rotation	6,000 rpm
Engine Power Of Rotary Tool	AC Servo 3 kW
Cooling Tank Capacity	250 L
Coolant Tank Capacity	0,4 Kw
Power Consumption	21 KVA
Rapid Feed Rate	35,000 mm/dk.
Fixed Tool Capacity	
Maximum Drilling Capacity	23 mm
Maximum Threading Capacity	M16 X P2,0
Maximum Guide Capacity	M16 X P2,0
Rotary Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Guide Capacity	M8 X P1,25
Maximum Milling Capacity	10 mm
Maximum Splitting Capacity	3,5 mm X 8 mm

* NGB; Guide Bushsus çalışma ekipmanı ile

İş Mili;

2. SPINDLE TECHNICAL SPECIFICATION	
Maximum Turning Diameter	42 mm (stn.)
Maximum Turning Length	80 mm
Maximum Number Of Tools	4/7 (döner tutucular ops.)
Engine Power Of Sub Spindle	5,5 kW
Sub Spindle Rotation	500-7,000 rpm
Fixed Tool Capacity	
Maximum Drilling Capacity	14 mm
Maximum Threading Capacity	M12 X P1,75
Rotary Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Threading Capacity	M6 X P1,0
Rotary Tool Rotation	8,000 rpm
Rotary Tool Motor Power	AC Servo 1,2 kW

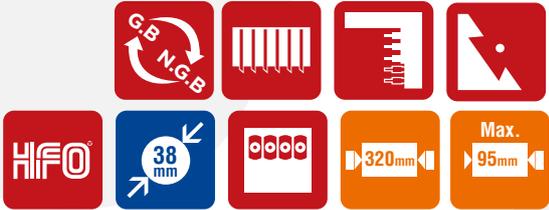




MR 38 V8

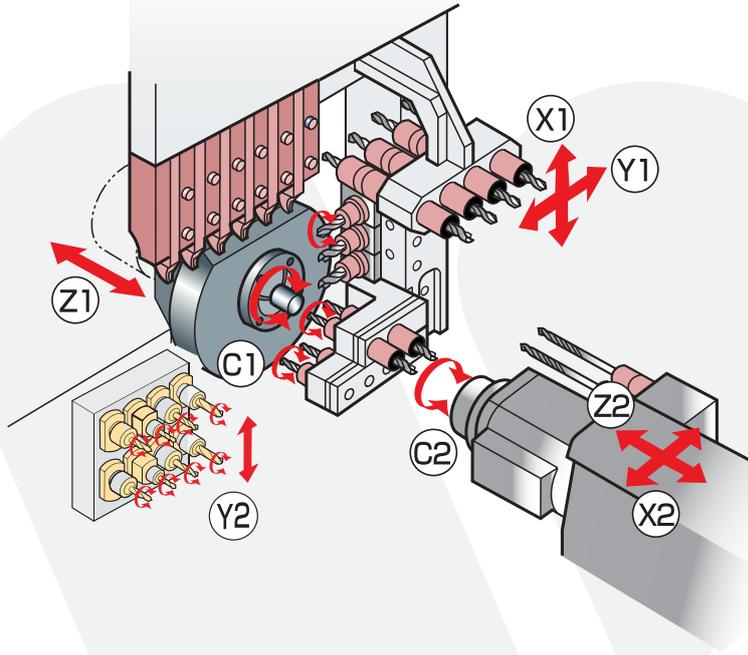
This model is technically the same as the **MR 38 V7** Bear 2 features. 8 PCs per work shaft it has a live team. In this way, more processing of complex parts and processing it is provided that their duration is shortened. Machine sub spindle saw, radial tool, axial ability to connect many functional tools, such as a tool it also gained his abilities.

Machine sub spindle saw, radial tool, axial ability to connect many functional tools, such as a tool it also gained his abilities.

- GB N.G.B
- HIFO
- 38 mm
- 320mm
- Max. 95mm

KİNEMATİK



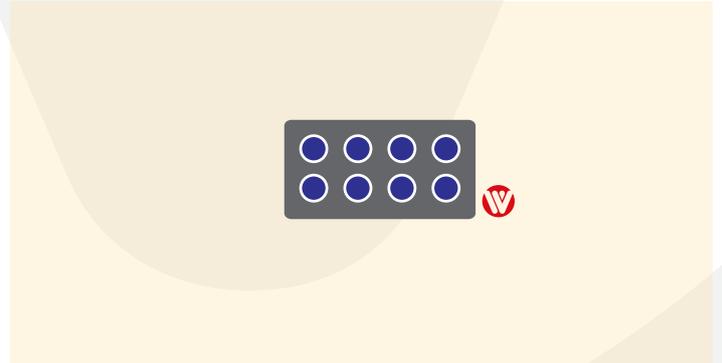
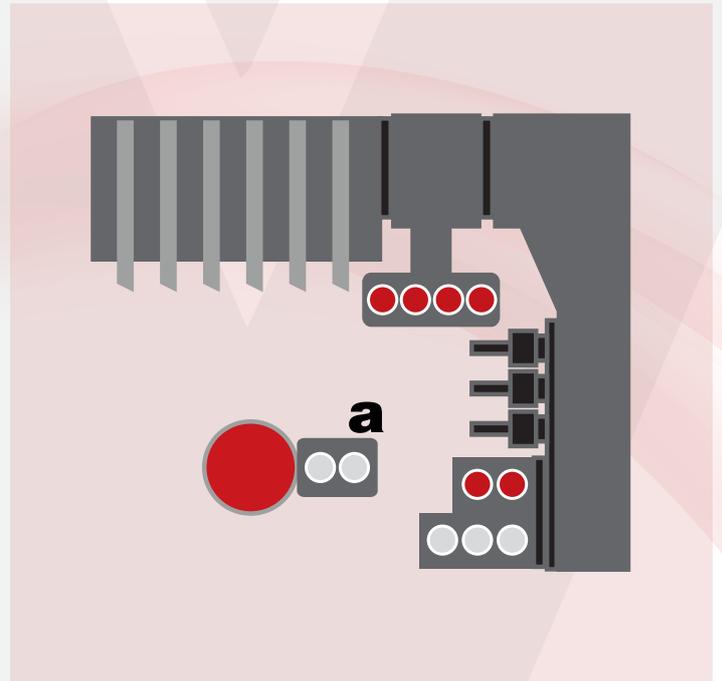
Teknik özellikler;

1. SPINDLE SPECIFICATIONS	
Maximum Machining Diameter	38 mm (NGB* 42 mm)
Maximum Machining Length	320 mm / 95 mm
Number Of Tools	8 Adet
Axial Rotary Tools	4 Adet (ops.)
Radial Rotary Tools	5/7 Adet (3ad. Stnd)
Minimum Input Increment	{0,001}
Main Spindle Rotation	500-7,000 rpm
Main Spindle Engine Power	11 kW
Rotary Tool Rotation	6,000 rpm
Engine Power Of Rotary Tool	AC Servo 3 kW
Cooling Tank Capacity	250 L
Coolant Tank Capacity	0,4 Kw
Power Consumption	21 KVA
Rapid Feed Rate	35,000 mm/dk.
Fixed Tool Capacity	
Maximum Drilling Capacity	23 mm
Maximum Threading Capacity	M16 X P2,0
Maximum Guide Capacity	M16 X P2,0
Rotary Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Guide Capacity	M8 X P1,25
Maximum Milling Capacity	10 mm
Maximum Splitting Capacity	3,5 mm X 8 mm

* NGB; Guide Bushsus çalışma ekipmanı ile

İş Mili;

2. SPINDLE TECHNICAL SPECIFICATIONS	
Maximum Turning Diameters	42 mm (stn.)
Maximum Turning Length	80 mm
Maximum Number Of Tools	8 (döner tutucular ops.)
Engine Power Of Sub Spindle	5,5 kW
Sub Spindle Rotation	500-7,000 rpm
Fixed Tool Capacity	
Maximum Drilling Capacity	14 mm
Maximum Threading Capacity	M12 X P1,75
Rotary Tool Capacity	
Maximum Drilling Capacity	10 mm
Maximum Threading Capacity	M6 X P1,0
Rotary Tool Rotation	8,000 rpm
Rotary Tool Motor Pow	AC Servo 1.2 kW



BEST DESIGN FOR OPTIMUM USABILITY

VAN MR20 compared to a model 20 machine the interior is designed to be more spacious and spacious. This by means of adjusting the machine, tools activities such as changing can be easily achieved. Also thanks to 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. In this way, 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 FOKSIYONU (OPSIYON)

HFO™ The chip breaking innovation *High Frequency Oscillation

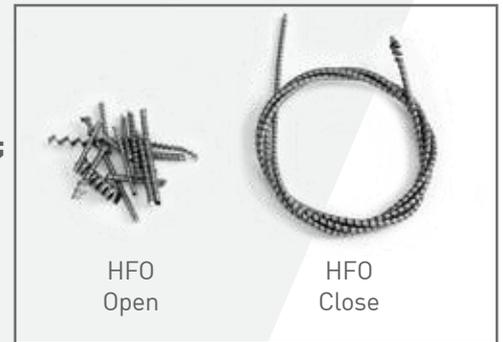
One of the most important software technologies that **Van** offers you is the ability to break talas. What we all know chip control is a very important factor in Chip manufacturing. Especially 17-4 Stainless Steel, 316 Stainless Materials such as steel, 360 brass, aluminum and Black Derlin remove long 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

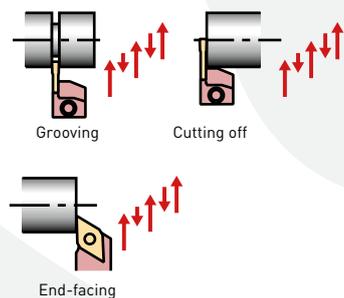
As well as providing advantages such as reduced risk of Burr formation;

- It can be used in conjunction with Fanuc's ready-made cycles.
- Can be used on any linear axis.

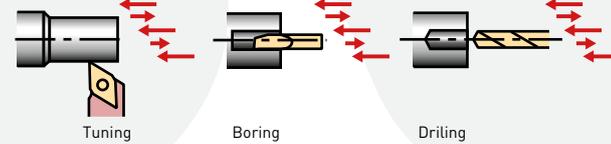


WHEN OPENED HFO

X1 Ekseninde Ossilasyon



Z1 Ekseninde Ossilasyon

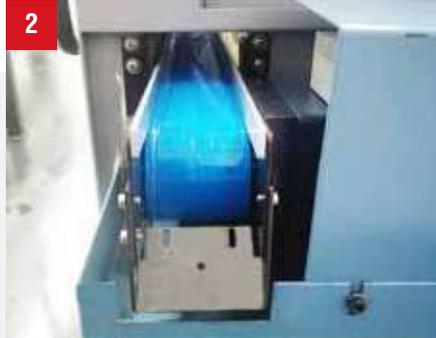


HIGHLIGHTS



PRODUCT RECEIVER BOX

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



PART CONVEYOR

Always finish with part conveyor by taking the part you are processing over the tape you can measure your last pieces.



USB MEMORY

External data with Usb and CF card can load and data from machine you may receive. Also Usb and Memory Program via Card you can run.



IN-MACHINE LIGHTING

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



OIL HEAT AND PARTS COUNT DISPLAY

Thanks to this screen, cutting running heat degree of oil and the part produced quantity without interfering with the machine you can see it.



OIL COOLER

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



DEEP HOLE DRILLING

Visually visible deep hole drilling up to 350 mm thanks to the holders feature the possibility of drilling up to of holes is provided.



HIGH PRESSURE PUMP

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



WIRED HANDWHEEL

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

USER-FRIENDLY SELF-DIRECTED INTERFACE



FEATURES FEATURED IN THE CONTROL UNIT

- 1- High Precision Program Command is offered as standard (after a comma in the Program 5 piece command, such as 0.00001).
- 2- 2 GB of program memory, ability to record 1000 programs, program in Memory Card editing feature
- 3- Ability to throw programs into a Memory Card via USB or ethernet
- 4- Automatic Cutting Control
- 5- 2. Kanalda çalışacak program kontrolü bulunmaktadır. (1. kanal 2. kanalda doğru program çağırılıp çağırılmadığını kontrol eder.)
- 6- Polygon Turning feature on both channels

USER-FRIENDLY CUSTOMIZED INTERFACE



- 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
- 4- Makina pos değerlerinin kolay ulaşılır olması için bu ekrana eklenmiştir.



- 1- Lifespan determined by the teams the user uses This is the screen we are in.
- 2- Alarm when our machine reaches a certain number sends it.
- 3- Alarm when our machine reaches a certain number sends it.



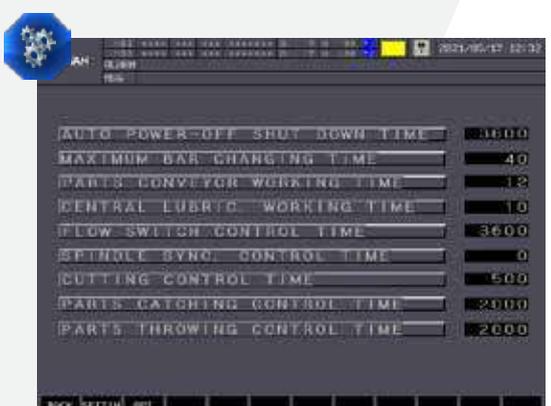
- 1- In the graphics you have seen, the 1 week operation of the machine is our page that reports the times
- 2- Following the daily and weekly productivity rates of the machine you can.
- 3- You can save your weekly data to your computer with the help of USB memory. you can transfer.
- 4- The machine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



- 1- In this tab, 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.



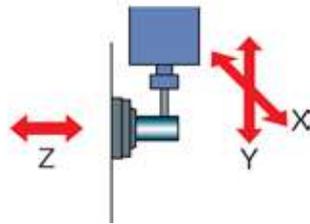
- 1- In this tab, the main purpose of the machine is tool wear and made to detect breakage.
- 2- Activate the teach me tab on the screen you see. When we bring it, our machine is powered by the servo motor during operation saves the download data it receives in its memory.
- 3- In each part cycle with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



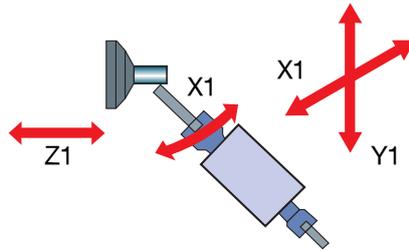
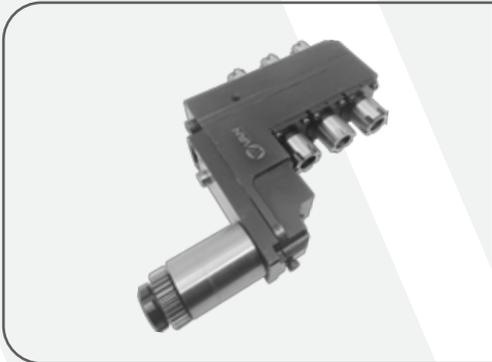
- 1- Timing times that our users need most collected on one page Timing times that our users need most collected on one page.
- 2- Except for the authorized personnel with the encryption system we have made, Absolutely do not change

OPTIONS

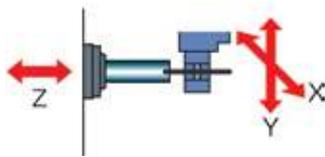
1. MILLING UNIT



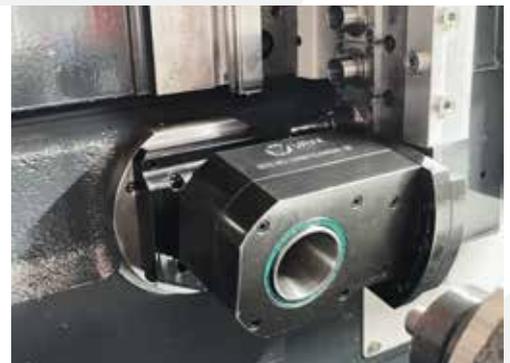
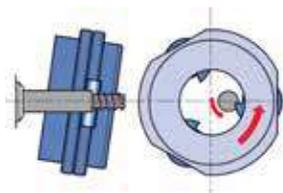
1. SPINDLE FRONT DRILLING UNI



1. SLOTTING UNIT

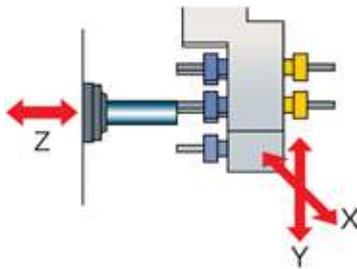
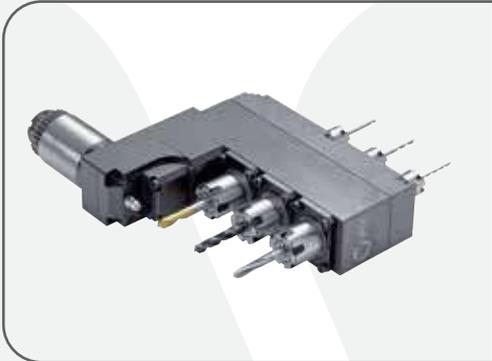


WHIRLING ÜNİTESİ

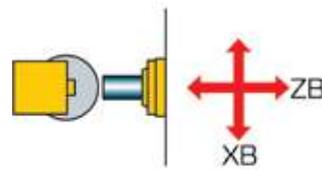


OPTIONS

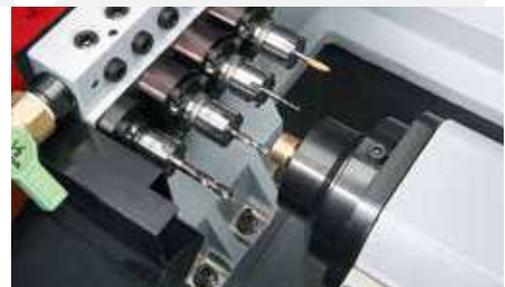
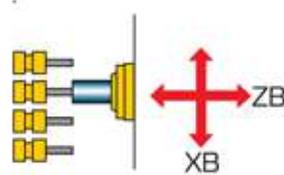
3 SPINDLE OPPOSING FRONT DRILL UNIT



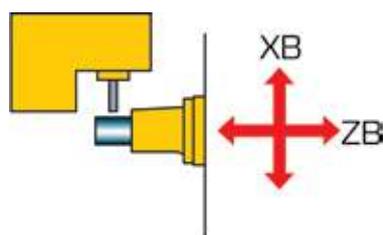
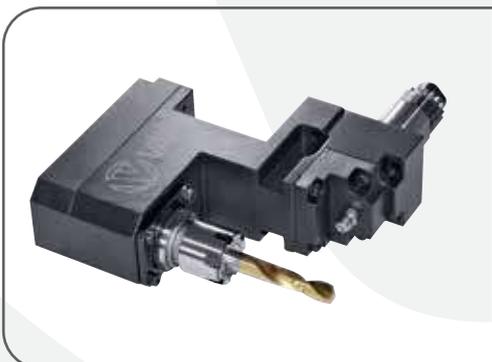
2. POLYGON MACHINING UNIT



2. MILLING UNIT

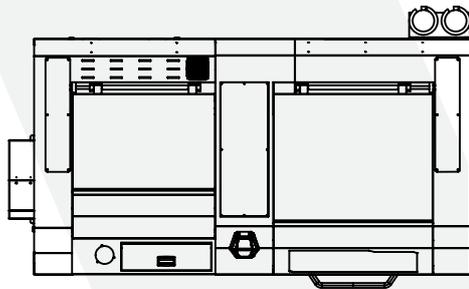
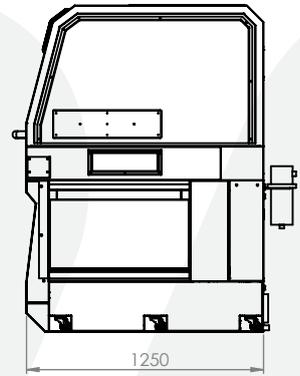
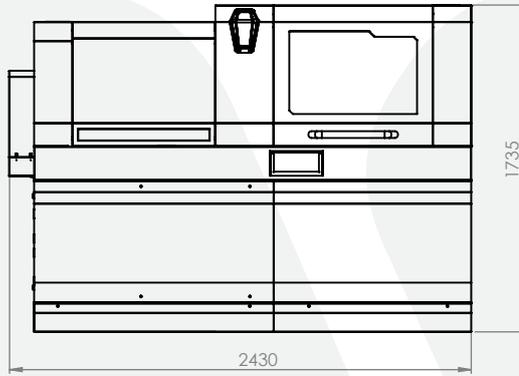
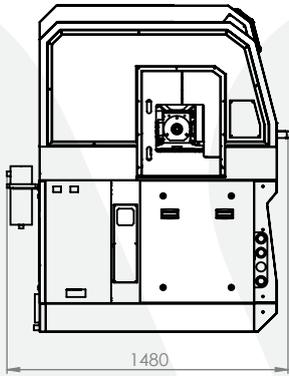


2. BACK CROSS TOOL SPINDLE

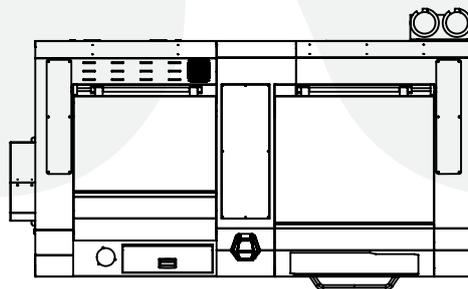
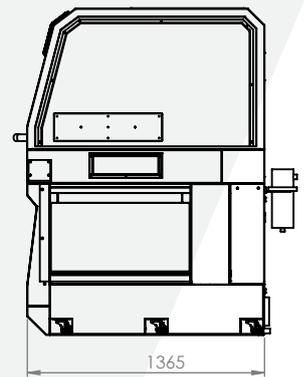
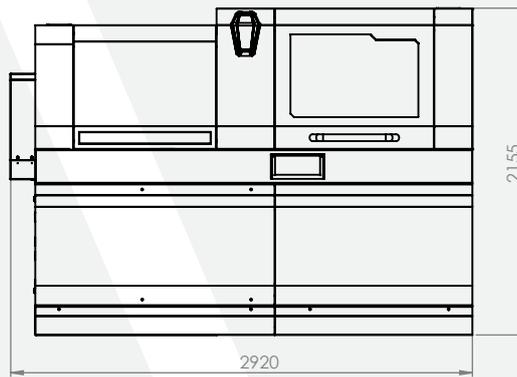
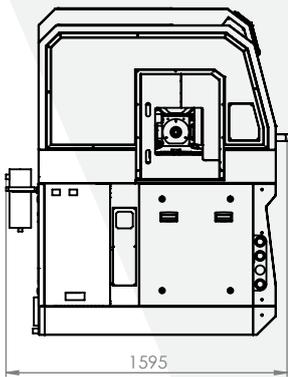


MACHINE LAYOUT DIMENSIONS

MR20 V7 / V8



MR38 V7 / V8



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