nova

Smart Tools, Powerful Solutions

Voyager DVR
Drill Press

OPERATING INSTRUCTIONS

Teknatool INTERNATIONAL

Model: 58003 (EU model)

Original Operating Instructions DT58003_Voyager DVR_BDA_2024.V03

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Applied directives/standards

- Machinery Directive 2006/42/EC
- Electromagnetic Compatibility (EMC) Directive 2014/30/EU

Applied harmonised standards:

EN ISO 12100:2010
EN 60204-1:2006+A1: 2009+AC:2010
EN 12717:2001+A1:2009
EN 61000-6-2:2005+AC:2005
EN 61000-6-4:2007 + A1:2011

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Introduction

This manual contains instructions on safety, assembly, operation and maintenance, and spare parts lists.

If you take into account the recommendations given in these instructions, the **NOVA VOYAGER DVR** will give you years of failure-free service.

01 | Warranty

This product is subject to the statutory warranty according to Austrian law from the time the product is handed over.
There is no basic claim to replacement or rescission.
In case of a complaint, please contact your local dealer. He will coordinate the further procedure with you.

02 | Intended use

The machine described in these operating instructions is only suitable for drilling and milling wood, plastics, metals and similar machinable materials, provided that their machining does not entail any risk regarding dust, chips and thermal decomposition products. Information on this can be found on the respective safety data sheet. Processing explosive and highly flammable materials is prohibited.
Any use other than that of the machine's intended purpose shall be considered improper and is therefore not permitted. The manufacturer or importer will not assume any liability for damages resulting from improper use.
The machine may only be operated if it is in proper working and safe condition. The term “intended use” also implies observing the operating conditions as well as the specifications and instructions given in this manual. The machine may only be operated with parts and accessories recommended by the manufacturer.

03 | Basic health and safety instructions for power tools

Please note:

Failure to read and observe these operating instructions may result in serious injury. As with all machinery, operating a drill press can lead to dangerous situations. Careful use and handling can significantly reduce the risk of injury. Neglecting basic precautions can lead to user injuries. The machine is designed exclusively for the recommended use. Therefore, do not carry out any work on the machine that is not intended by the manufacturer and do not make any changes whatsoever. Keep the operating instructions in the direct vicinity of the machine and accessible at all times. If you have any questions regarding the use of the machine you cannot find an answer to in these operating instructions, please contact your dealer.

Workplace safety

a. **Keep your workplace clean and well lit.** Messy or unlit workplaces can lead to accidents.

b. **Screw the machine to a stable surface to ensure a safe operation.** Secure the machine against tipping over.

c. **Do not use power tools in potentially explosive environments where flammable liquids, gases or dusts are present.** Power tools may produce sparks which can ignite the dust or vapours.

d. **Keep children and other people away while using the power tool.** Distraction can cause you to lose control of the power tool.

Electrical safety

a. **Work on electrical equipment may only be carried out by qualified personnel in compliance with the safety regulations.** Disconnect the machine from the power supply and secure it against restarting before working on electrical equipment.

b. **The plug of the power tool must fit into the socket. The plug must not be changed in any way. Do not use adapter plugs together with earthed power tools.** Unmodified plugs and matching sockets reduce the risk of an electric shock.

c. **Avoid physical contact with earthed surfaces such as pipes, heaters, stoves and refrigerators.** There is an increased risk of an electric shock if your body is earthed.

d. **Keep your power tool away from rain or moisture.** Water entering a power tool increases the risk of an electric shock.

e. **Do not misuse the power cord to carry the power tool, hang it up or pull the plug out of the socket. Keep the power cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled power cords increase the risk of an electric shock.

f. **If operating the power tool in a damp environment cannot be avoided, use a residual-current circuit breaker.** Using a residual-current circuit breaker reduces the risk of an electric shock.

Personal safety

a. **Be attentive, pay attention to what you are doing and take the utmost care when operating a power tool. Do not use a power tool when you are tired or under the influence of drugs, alcohol or medication.** One moment of carelessness when using a power tool can cause serious injury.

b. **Only operate the machine when it is in perfect technical condition.** Immediately rectify any defects found on the machine or the safety equipment.

c. **Wear personal protective equipment and safety glasses.** Wearing personal protective equipment such as dust mask, non-skid safety shoes, hard hat or ear protection, depending on the type and use of the power tool, reduces the risk of personal injury.

d. **Avoid unintentional starting. Ensure the power tool is switched off before connecting it to the power supply and/or battery pack, picking it up or carrying it.** Carrying power tools with your finger on the switch or connecting activated power tools to the power supply can cause accidents.

e. **Remove any adjusting tool or spanner before turning the power tool on.** A tool or spanner that gets caught in a rotating part of the power tool can cause injuries.

f. **Avoid an abnormal posture. Ensure secure footing and maintain balance at all times.** This enables better control of the power tool in unexpected situations.

g. **Wear suitable clothing. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

h. **If dust extractors and collectors can be installed, ensure these are connected and used properly.** Using a dust extractor can reduce dust-related hazards.

i. **Do not let familiarity gained from frequent use of the power tool allow you to become careless and ignore tool safety principles.** Within a fraction of a second, careless behaviour can lead to serious injuries.

j. Only carry out adjustment and set-up work when the machine is at a standstill.

k. Before carrying out maintenance and repair work, switch off the machine and secure it against being switched on again. Disconnect the power plug.

Use and care of the power tool

a. **Do not overload the power tool. Use the appropriate power tool for your work.** Using the right power tool will enable you to work better and safer within the indicated power range.

b. **Do not use a power tool if its switch is defective.** A power tool that cannot be turned on or off is dangerous and must be repaired.

c. **Disconnect the plug from the socket and/or remove the battery pack before making any adjustments to the device, changing inserts or putting the power tool away.** This precaution prevents the unintentional start of the power tool.

d. **Store idle power tools out of the reach of children. Do not allow persons unfamiliar with the power tool or its instructions to operate the power tool.** Power tools are dangerous when used by inexperienced people.

e. **Maintain power tools and accessories with care. Check whether moving parts are working properly and are not jammed, and whether parts are broken or damaged to the extent that the function of the power tool is impaired. Have damaged parts repaired before using the power tool.** Many accidents are caused by poorly maintained power tools.

f. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to jam and easier to control.

g. **Use the power tool, accessories, etc., according to the present instructions. Take into account the working conditions and the work to be performed.** The use of power tools for other than its intended applications can lead to dangerous situations.

h. **Keep handles and gripping surfaces dry, clean and free from oil and grease.** Slippery handles and gripping surfaces do not allow for safe handling and control of the power tool in unexpected situations.

i. **Only connect the type F plug of the machine to an earthed socket.** Do **not** turn on the machine if it is not earthed.

Service

a. **Only have your power tool repaired by qualified personnel and only with original spare parts.** This ensures that the safety of the power tool is maintained.

04 | Health and safety instructions for drill presses

a. Wear **personal protective equipment (PPE).**

Ear protection: Wear ear protection for longer work. Certain materials can produce an increased noise level during drilling.

Safety glasses / face shield: Always wear at least safety glasses when working on the machine. If necessary, use a full eye protection or face shield, since normal eyeglasses are usually only shock-resistant and safety glasses only protect the eyes. A face shield protects eyes and face.

Respiratory protection: When processing different types of wood, exotic wood-based and other materials, and when performing certain tasks like sanding, sawing or drilling, dusts are produced that are harmful to health. Therefore, operate the machines only in well-ventilated areas and wear respiratory protection. Use also a suitable dust extractor and/or a filtering system of the circulating air.

b. **Inform yourself about the drill press before using it for the first time.** If you are unfamiliar with the function of a drill press, get professional support. An instruction by an experienced and trained person is strongly recommended.

c. **Minimum age.** The minimum age to use the machine is 16 years.

d. **Wear suitable clothing.**

Rotating parts can be dangerous. Clothing, jewellery and long hair can get caught in the rotating parts. Therefore, do not wear loose clothing or jewellery and use a headgear or hairnet. Avoid wearing gloves that can get caught during drilling. Wear protective footwear and make sure the floor is non-slip.

e. **Do not work in damp, dark and dangerous environment**. The drill press is designed exclusively for indoor use. Protect the machine from hazy or damp locations and do not expose it to wet conditions. Ensure adequate lighting and ventilation of the workplace. Avoid areas with explosive atmospheres. Failure to comply with these rules may result in warranty loss.

f. **Before starting work, check your workpieces for foreign objects (nails, screws) that could adversely affect processing.**

g. **Keep your workplace neat and clean.** Untidy workplaces and tables cause accidents. Do not switch on the drill press until all objects (tools, pieces of wood, etc.) have been removed from it. Only remove chips and workpieces when the machine is at a standstill. Keep the immediate work area and floor free from dirt and leftover pieces. Accumulated sawdust is a fire and accident risk.

h. **Never work without the chuck guard set correctly.**

i. In case of a **power failure**, the workpiece is no longer slowed down. The run-down time may be longer.

j. **Avoid unintentional starting.** Make sure that the main switch is in the “OFF” position when connecting the drill press to a type F socket.

k. **Do not leave the machine running unattended.** Do not leave the drill press until the power is turned off and the machine has come to a complete stop.

l. **Use the right tool.** Use only suitable tools or accessories. Avoid unnecessary force of the tools. Keep the drill bits in good condition. Sharp and clean tools guarantee best results and minimise the risk of injury. Ensure that the tool is in the correct position to the workpiece.

m. **Pay attention to secure footing** (foot position, balance). Never step on the machine.

n. **Make sure there is enough work space around the machine.** Untidy work surfaces and floors can lead to injuries. Ensure there is sufficient space for operating and guiding the workpieces.

o. **Use only original accessories** and follow the steps described in the operating instructions. Using accessories from other manufacturers may result in injuries.

p. **Do not operate the drill press** until it is completely assembled and installed.

q. **If it is necessary to replace the fuse, the machine** must be disconnected from the power supply. Pull the plug out of the socket.

r. **Check the set-up with the spindle off.** Rotate the workpiece by hand to check the clearance before turning on the spindle. Always check that the correct speed is set before switching on the spindle.

s. **Do not open any covers or switches**.

t. **Do not make adjustments when the spindle is turning.**

u. **Tighten all clamp handles before operating the machine**.

v. **Always operate the drill press at the recommended speed.** Consult the speed chart in these instructions.

w. **Do not operate the drill press if any parts are missing, damaged or broken.**

x. **Keep the safety devices in place.**

y. **Secure your workpiece (e.g. with bar clamps).** A loose workpiece can turn into a dangerous projectile and cause serious injuries.

05 | Safety devices

Safety devices serve to protect persons and material. Without intact safety devices serious injuries can occur.

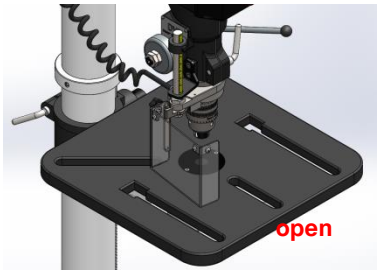
Danger!
The drill press may only be operated with functioning safety devices. Switch off the machine immediately if you discover that a safety device is faulty or disassembled. All additional systems installed by the operator must be equipped with the prescribed safety devices. Immediately correct any defects found in the safety devices and check the correct functioning of the safety devices every day.

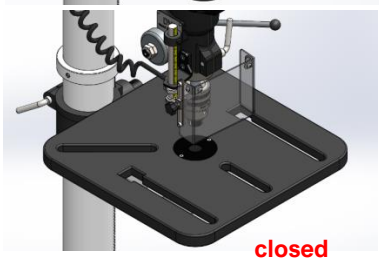
Chuck guard

Your **NOVA VOYAGER DVR** Drill Press is equipped with a chuck guard.
As soon as the guard is opened, the protective device is triggered and work is no longer possible. The motor cannot be restarted until the chuck guard is closed. There is no need to perform any operation on the control panel. The drill press will automatically detect when the guard is opened or closed and react accordingly.

Note: The chuck guard functionality is included in firmware version R2P05x.

Make sure to have the chuck guard covering at least the entire chuck.





EMERGENCY STOP function

The EMERGENCY STOP push button is located on the front of the drill press. To release the EMERGENCY STOP button, turn the button in the direction of the arrow.

Furthermore, an undervoltage protection prevents the drill press from restarting after a power failure.

06 | Drill Press Technical data

Technical data of the drill press	
Dimensions [h x w x d]	1,794 x 448 x 578 mm
Weight	approx.. 140 kg
Swing	approx. 228.5 mm
Stroke	approx. 152 mm
Min. distance spindle to table	approx. 155 mm
Max. distance spindle to table	approx. 724 mm
Distance spindle to base	approx. 1,220 mm
Drill chuck	3 - 16 mm
Spindle taper	MT 2
Quill diameter	approx. 60 mm
Table dimensions	419 x 419 mm
Table tilt	-45 to +45° (continuously adjustable)
Table rotation	360° (continuously rotatable)
Base dimensions [l x w]	approx. 565 x 445 mm
Column diameter	approx. 92 mm

Motor data	
Motor type	DVR Direct Drive Smart Motor
Power	2 HP (1470 W)
Min. speed	50 rpm
Max. speed	3,000 rpm (max. 5,500 rpm when unlocked)
Default speed	900 rpm
Input voltage (V)	115 V ~ 240 V
Input frequency (Hz)	50 / 60 Hz
Input current (A)	10 A (max.)
Power factor	≥0,95

07 | Operating and storage conditions

Operating / room temperature	+5 to +40 °C
Storage / transport temperature	-25 to +55 °C
Humidity (non-wetting)	30 to 90 %

08 | Information on noise emission

The measurement is carried out in accordance with standard EN ISO 19085-1:2021 annex F:

Measurement conditions / additional information according to EN ISO 19085-1:2021 annex F
with ISO 11202 for the emission noise pressure with accuracy level 3
and ISO 3744 for the acoustic power with accuracy level 3

	Idle	Operation
A-weighted emission sound pressure level L_{pa} in dB at workplace	54	80
Uncertainty K_{wa} /K_{pa} in dB	4	

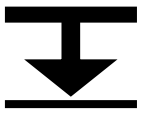
If the stated noise emission values have to be checked, the measurements must be taken following the same procedure and in the same operating and installation conditions as described.

Caution!
The noise emission values stated are only valid, when the same operating and installation conditions apply. Other operating and installation conditions, e.g. a different work process, can lead to higher noise emission values with the danger of underestimation.

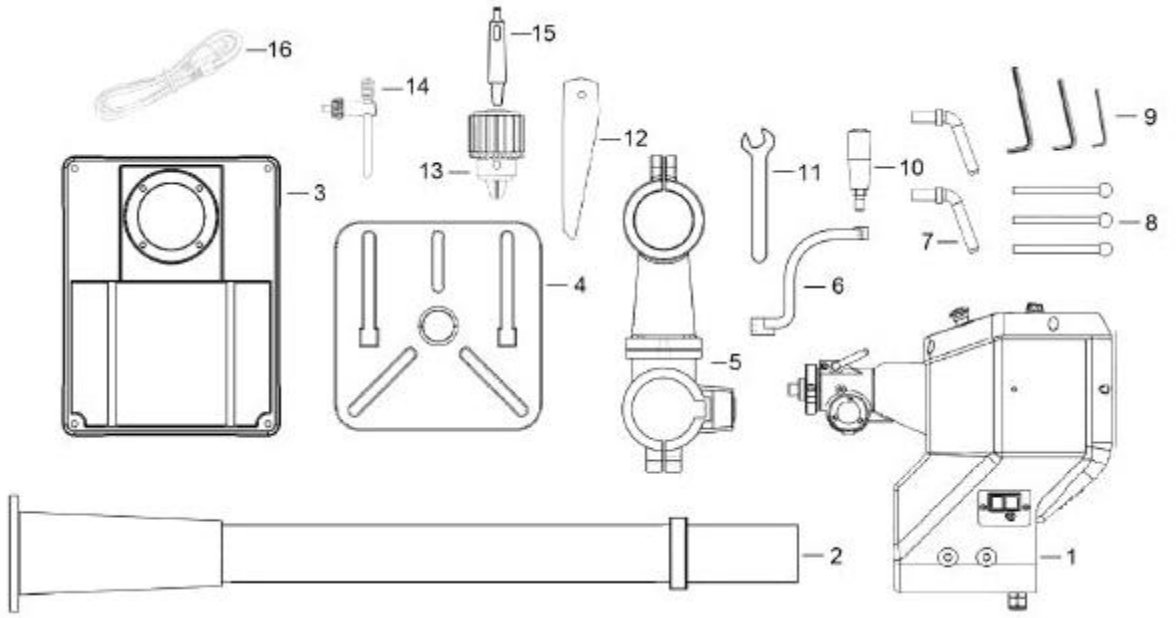
Caution!
The measured emission level cannot reliably be used to determine whether precautionary measures are needed, since factors such as the duration and type of work, the workshop size and the existence of other sources of noise (e.g. machines running at the same time) have a decisive influence on the noise level. The acceptable exposure rates may vary from country to country. For all these reasons, we recommend the user to wear an appropriate ear protection while working on the machine.

09 | Labels on the machine

10 | NOVA Voyager DVR Features

	Direct drive power and consistent torque	2 HP DVR Smart Digital Motor delivers correct speed and power to maintain optimal torque to the drill head. • No belts • No vibrations • No power loss	A belt drive usually has a power loss of around 20%. The DVR motor delivers constant torque no matter what materials are used.
	Smart Digital Motor	Smart sensors are interacting in a number of ways. An intelligent assistant for greatest possible safety and performance.	
	Stable cast iron table	Maximum flexibility and a variety of options for the user. Solid cast iron for maximum stability. Woodworking design to provide maximum clamping and accessory options.	419 x 419 mm tilting and rotating
	Electronic variable speed	Versatile for a variety of projects – from large deep hole drilling, mortising, through to high speed sanding. 50 – 3,000 rpm (customisable up to 5,500 rpm)	
	Electronic depth stop	Automatically stops at the depth you have set.	
	Forward and reverse rotation	Suitable for left-handed drill bits. For maximum flexibility.	
	Self-start	Enables one-handed drilling by automatically turning on and off.	
	Braking	Emergency stop	

11 | Transport package content



Item	Description	Order number
1	Headstock	8338055
2	Column	8338028
3	Base	8338025
4	Table	8338046
5	Table arm	8338054
6	Crank handle arm for table adjustment	8338036
7	Clamping lever	8338032
8	Quill driving handle	8338009
9	Hex key (3x)	AK4, AK5, AK6
10	Crank handle for table adjustment	8338037
11	Open-ended spanner	8338047
12	Chuck drift	8338049
13	Drill chuck	8338051
14	Chuck key	8338052
15	Chuck arbour	8338053
16	Cable (for possible firmware update)	55407

12 | Assembling and adjusting the drill press

Caution!
Your **NOVA Voyager DVR** Drill Press should be assembled by two persons to avoid injuries. Read the operating instructions before assembly. Do not connect the drill press to the power supply until it is fully assembled.

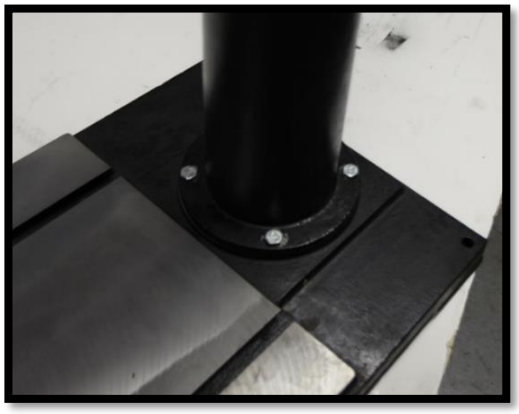
Unpacking and preparing the drill press

1. Open the transport packaging, take out the packaging material and all the components, and check the contents for completeness. Keep all materials until the drill press is fully assembled and operational.
2. Arrange all the components on the floor in the correct order for assembly (from bottom to top). Use a protective layer to prevent scratches and other damage to the drill press.

Attaching the column to the base

3. Place the base at the desired installation location. Make sure the ground is level. For safe operation, it is recommended that the drill press is bolted to the floor with 4 screws (not provided). For this, use the 4 holes in the corners of the base.

NOTE:
Do not use a mobile base with this machine.

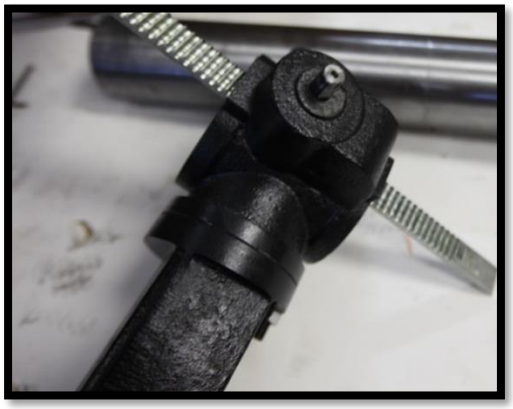


4. Align the holes in the column with those in the base. Screw the column to the base using the four included hex head screws and tighten them with a 17 mm spanner.

Mounting the table arm and the rack

5. Insert the shaft of the worm gear from the inside through the table arm while mating the worm threads with the preinstalled gear. Make sure that the maximum shaft is now exposed.

6. Insert the rack into the table arm as shown in the adjacent figure so that the rack teeth are mating with the worm gear. Pay attention to the teeth angle with respect to the table arm orientation. Position the table arm partway on the rack.



7. Slide the table arm with the mounted rack from above onto the column and insert the bottom of the rack into the mating groove in the column base.

8. Slide the top ring down and over the rack ensuring that the groove on the ring that serves as guide for the rack is facing down. Tighten the set screw.

Mounting the headstock

Caution!
When lifting the headstock, be sure to use appropriate lifting techniques to avoid injury or damage to the machine. Plan the method of attaching the headstock to the column before lifting. Only lift the headstock by the casting to avoid damaging more fragile components. Applying lubricant to the column will ease the installation.

9. Slide the headstock down over the column. Make sure that the sides of the headstock are parallel to the base. Tighten the set screws.

Final assembly steps

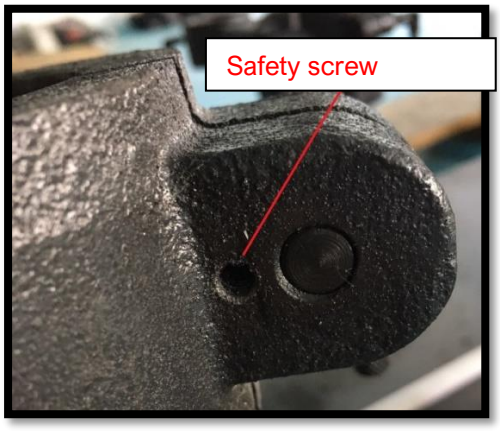
10. Attach the table vertical adjustment lever to the lifting mechanism.

11. Lock the table arm clamping lever (clamping lever on the rear of the column) and insert the table into the table arm.

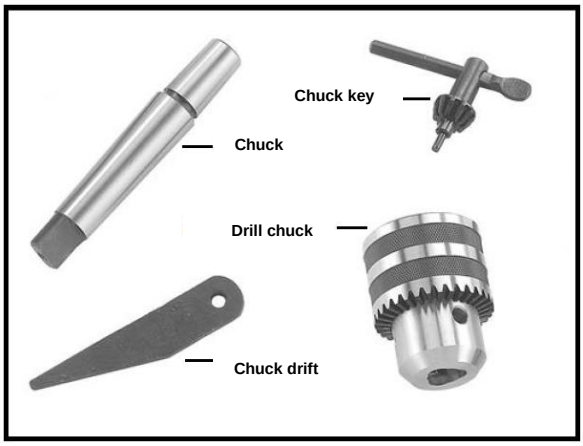
12. Loosen the safety screw of the table to allow proper locking against table rotation.

13. Install the three quill driving handles.

NOTE:
Do not overtighten the handles.



Mounting the drill chuck and chuck arbour



1. Before mounting the chuck, clean the chuck arbour Morse taper carefully to make sure it is free of grease and dirt.
2. Insert the chuck arbour into the drill chuck. Use a plastic mallet if necessary.

3. Insert the chuck arbour and drill chuck assembly into the quill of the drill press until it stops. If this is not possible, rotate the drill chuck while applying light force upwards until the chuck arbour is well seated.
4. If necessary, secure the chuck arbour by lightly tapping it with a plastic mallet (alternatively, use a hammer and a block of wood).

Caution!
Never hit the drill chuck and chuck arbour directly with a metal hammer to avoid damage.

Positioning the table

Adjust the height and rotational position of the table using the crank handle attached to the rack of the column.

1. Loosen the clamping lever on the rear of the table arm.

Note!
ALWAYS loosen the clamping lever when adjusting the position of the table!

2. Rotate the crank handle attached to the rack of the column to adjust the table height.
3. Swing the table about the column to the desired position.
4. Tighten the clamping lever. Make sure the table is securely locked in place before drilling.

Tilting the table

1. Loosen the hex head screw underneath the table using the included 27 mm open-ended spanner.
2. Loosen the safety screw underneath the screw you just loosened with a 5 mm hex key.
3. Tilt the table to the desired position.
4. Retighten the hex head screw and the safety screw. Make sure the table is securely locked in place before drilling.

Quill lock

1. To lock the quill at a certain depth, pull the quill down to the desired position.
2. Tighten the clamping lever by turning it clockwise until the quill is locked.

If the quill cannot be locked even though the clamping lever is fully tightened, proceed as follows:

a. Pull the clamping lever out along the screw until it disengages and can be turned freely.
b. Turn the clamping lever counterclockwise.
c. Release the clamping lever so that it engages again.
d. Tighten the clamping lever and lock the quill.

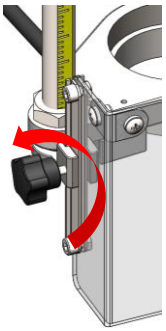
Using the mechanical depth stop

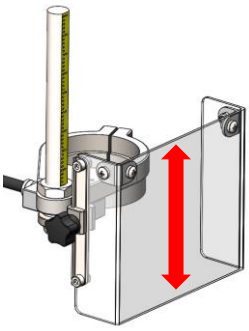
1. Press the button on the front of the quick release mechanism and slide it down to the desired position.
2. For a fine adjustment of the height, rotate the quick release mechanism along the threads.

Adjusting the chuck guard height

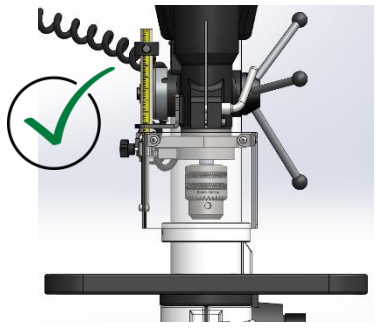
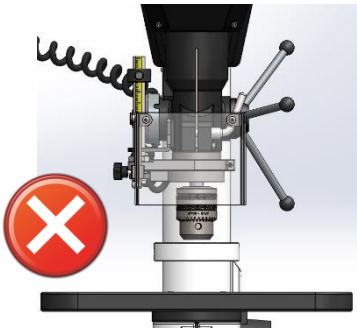
The position of the chuck guard can be adjusted vertically to cover drill chucks and tools of different sizes.

1. To adjust the chuck guard height, loosen the star knob screw on the side.
2. Now move the chuck guard up or down.
3. Tighten the star knob screw again.





Caution!
Make sure to have the chuck guard covering the entire chuck. If the chuck guard is not positioned correctly, parts may be flying out towards you or may get into the moving parts of your machine, posing a safety hazard.

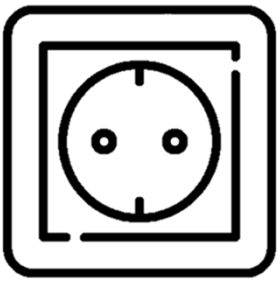
Correct positioning	Incorrect positioning
	
The chuck guard covers the entire drill chuck.	The drill chuck is exposed from the chuck guard. This is a potential safety hazard for the user.

13 | Connecting to power

Caution!

- An improper power connection may result in an electric shock.
- The machine may only be operated on TN networks (with earthed neutral conductor).
- To protect against electric shock, the operator must ensure that the machine is equipped with a protective device (residual current circuit breaker).
- The fault loop impedance and the suitability of the overcurrent protective device must be checked at the machine's installation site.
- The voltage fluctuation in the mains supply must not exceed 10 %.
- The power plug may only be plugged in after the machine has been installed at the place of use (CEE socket). Make sure that the main switch is switched off (position "0") before connecting the drill press to the power source.
- The power supply must be protected against damage.

The power cord that is installed on the drill press includes an earthing line.
Only connect the drill press to a suitable earthed socket.
Regularly inspect the power cable for signs of damage or ageing. If the power cable is not in perfect condition, the machine must not be used.

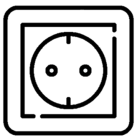
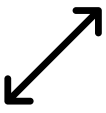


Note:
If you require an extension cord, we recommend the use of a cable that has a cross-section of 3 x 1.5 mm². Due to the expected external influences (oil, shavings, etc.), a rubber cable is best suited.
If you have any doubts or questions concerning the electrical installations, please contact a qualified electrician.

Fuse protection:
The on-site installation should be protected with a 10 A or 16 A slow-blow fuse. A residual-current circuit breaker is state-of-the-art and mandatory. The DVR drive must be protected by an error threshold of 30 mA.

14 | Setting up your drill press

Please note the following factors when selecting a location for your drill press in order to be able to use it in the best possible way:

	Place the drill press near a power source (earthed type F socket near the motor). If you have any doubts concerning the electrical installations, seek advice from a qualified electrician.
	Pay attention to good lighting. Make sure that no shadow is cast on the workpiece. If possible, place the machine near a window.
	Leave enough space around the machine in order to be able to swivel the table around. Other objects/machines must not affect the operation of the drill press.
	Ensure adequate ventilation in your workshop. The degree of ventilation depends on the size of the workshop and the amount of work that is done. The use of dust collectors and filters will reduce harmful substances and minimise your health risk.

15 | Operating the drill press

Turning the drill press ON

Insert the plug into the socket and turn on the drill press by switching the rocker switch to “I”.

When the **NOVA Voyager DVR** Drill Press has been powered up, the product name and logo will be displayed on the LCD screen followed by warning messages.

Setting the language of your drill press

Your newly acquired **NOVA Voyager DVR** Drill Press is set to English by default. In just a few steps you can change the language (to German or French):

1. Press the **<MENU / Cancel> button.**
2. Turn the dial until you reach menu item **<Configuration>** and open this submenu by pressing the dial.
3. Turn the dial until you reach menu item **<Interface Settings>** and open this submenu by pressing the dial.
4. Turn the dial until you reach menu item **<Language: English>** and press the dial to select another language.

   The language of your drill press interface has now successfully been changed.
5. Press the **<OFF>** button to return to the main menu.

Calibrating the height sensor

The first time the drill press is turned on, the drill press will prompt the user to calibrate the height sensor. To do this, follow the instructions on the screen.
Make sure to carefully position the quill height at a consistent spot during the calibration. In the event of inaccuracies, the calibration will have to be redone.

Display elements on home screen

SPD:
Predefined speed
(default #2D)

- - - mm:
Current vertical position of quill

SET:
User set depth

REV:
Appears in the top centre when the reverse mode is activated.

Keypad buttons

ON:
Start / Reset

OFF:
Stop /
Return to home screen

ZERO / Confirm:
Set zero point /
Confirm adjustment

MENU / Cancel:
Open menu /
One level back / Cancel

F1:
Favourite speed #1 /
Scroll up in menu /
Custom function

F2:
Favourite speed #2 /
Scroll down in menu /
Custom function

Note: Favourite speed #2D is the default start-up speed

F3:
Favourite speed #3 /
Custom function

F4:
Favourite speed #4 /
Custom function

ON	Press the green **<ON>** button to start the drill press at the currently set speed. Always check that the correct speed is set and make sure that the workpiece is securely mounted. When the machine is first switched on, it is set at the factory-set default speed #2D (900 rpm). Whenever the machine is disconnected from the power supply, the machine will start at the default speed. The spindle cannot be restarted until the **<ON>** button is pressed. When the **<ON>** button is pressed, the screen will display the set speed and direction of rotation for two seconds before displaying the current speed.
OFF	Press the red **<OFF>** button to stop the spindle and reset the user interface. **Note:** The **<ON>** and **<OFF>** buttons only switch the motor on and off. The pre-set speed will remain until it is adjusted or until the computer is switched off.

Use the **dial** to change the speed when the machine is running or stopped.

Turn the dial in the clockwise direction to increase the speed. Turn the dial in the anti-clockwise direction to decrease the speed. By simply turning the dial you will make a coarse adjustment. By pressing and turning the dial you will make a fine adjustment. The speed will change in increments. These increments are shown in the following table:

Speed range (rpm)	*Fine adjustment*	*Coarse adjustment*
< 200	5 rpm	20 rpm
200 – 499	5 rpm	50 rpm
500 – 999	5 rpm	100 rpm
1000 – 2999	10 rpm	200 rpm
≥ 3000	20 rpm	500 rpm

Also use the dial to confirm a selection (press briefly) and to scroll through the menus (turn clockwise: scroll down in menu, turn counterclockwise: scroll up in menu).

ZERO
Confirm

Press the button **<ZERO / Confirm>** to set the current drill height as zero point or to confirm selections in menus or on the screen.

MENU
Cancel

Press the button **<MENU / Cancel>** to call up the user interface where you are able to view and modify settings of the drill press. For further information, see chapter “User interface” (page 18).

Fx

Use the buttons **<F1> to <F4>** to apply one of the four predefined favourite speeds. You can also assign other functions to these buttons via the menu to be able to make frequently used settings more quickly. For this, go to menu item **<Edit F Shortcuts>** and select the desired function from the list.

Safety system:
If the power supply is interrupted, the computer will restart when the power is restored, but the machine will not start until the **<ON>** button is pressed.

Caution!
Never press several buttons at the same time as certain combinations open diagnostic and service functions. Some of these disable control and protection functions. If an unfamiliar screen is displayed, switch off the computer, wait one minute and reboot.

Note:
If the machine has not been used for some period (more than a month), connect the drill press to the power supply 30 to 60 minutes before the intended use.

Running the drill press

Depending on the selected pre-settings, in idle mode the display shows information such as set speed, current speed, direction of rotation and drilling depth.

When the display shows that the drill press is ready to run, press the **<ON>** button to start the motor.
Press the **<OFF>** button to stop the motor or reset the display to idle mode.
Press the **<ZERO / Confirm>** button to set a new drilling depth zero point.
The menu allows you to set the drilling depth electronically. Press the **<MENU / Cancel>** button to access the **<User Set Depth>** menu and other menu items.

User interface menu

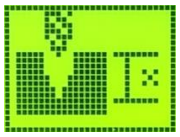
The user interface menu allows you to view and configure the parameters of the drill press. To access the menu, press the **<MENU / Cancel>** button. This is possible when the machine is idle or running.

Navigating the menu

MENU / Cancel	To cancel an operation or to exit the menu, press the **<MENU / Cancel>** button. Pressing the button several times will take you back to the home screen.
ZERO / Confirm	To select a menu item, press the **<ZERO / Confirm>** button.
F1 	To move the **cursor up**, turn the **dial** counterclockwise or press the **<F1> button.**
F2 	To move the **cursor down**, turn the **dial** clockwise or press the **<F2>** button.

Menu items

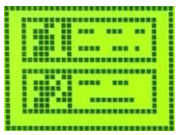
<Speed Chart>



<User Set Depth>

<Self Start>

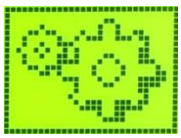
<Advance Modes>



<Edit F Shortcuts>

<Edit Fav. Speeds>

<Direction: FORWARD/REVERSE>



<Configuration>

<Speed Chart>

After selection of the drill bit type, drill bit size and workpiece material, the integrated speed chart enables your **NOVA Voyager DVR** Drill Press to determine a recommended speed and set it automatically.

Note:
The speed chart is available in both metric and imperial units. Select menu item **<Configuration>** and then submenu item **<Interface Settings>** to change the unit of measurement.

Using the speed chart

1. Select menu item **<Speed Chart>**.
2. Select the appropriate drill bit type.
3. Select the drill bit size.
4. Select the workpiece material.
5. Confirm the proposed speed.
6. The display will return to the home screen. The new set speed is now displayed here.

Note:
The speed chart only serves to provide approximate guide values. The actual speed may still have to be adapted. Select the speed based on your experience.

<User Set Depth>

Essentially, this function is an electronic depth stop that emits warning beeps when approaching the set depth and stops the motor when the set depth is reached.

To activate this function, select menu item **<User Set Depth>** and set the desired drilling depth using the **<F1>** / **<F2>** buttons or the **dial**.

Press the **<ON>** button to reset the value to “OFF”.

Press the **<ZERO / Confirm>** button to save the set depth and return to the home screen.

Press the **<MENU / Cancel>** button to cancel any changes.

To turn off the user set depth function, press the **<ON>** button and then the **<ZERO / Confirm>** button.

When drilling blind holes of a certain depth, it is recommended to set the depth to zero on the workpiece surface.

When the user set depth function is activated, the currently set depth will be displayed in a field on the home screen. When the function is not activated, the field will be blank.

When the function is activated, the machine will start beeping 10 mm (0.5”) before the drill bit reaches the set depth. The beeping will become faster the closer the drill bit gets to the set depth. Once the set depth has been reached, the motor will turn off and the machine will revert to idle. The behaviour of the machine when it reaches the set depth can be changed in menu **<Configuration>** selecting **<Interface Settings>** and **<Digital Depth Stop>**.

<Self Start> 

The self-start function automatically switches the drill press motor on and off when the drill bit reaches a pre-determined depth and thus enables one-handed drilling. The motor will start automatically when the quill is extended 7 mm (0.29”) and will stop automatically when the quill is retracted to 6 mm (0.24”).

Note:

- After activation of the self-start function via the menu, the quill has to be raised once to the top position before the first self-start begins.
- If the user is in the menu while the machine is idle, the machine will not start automatically, but it will stop automatically when the stop point is reached.
- By default, safety features such as warning sounds and a time delay before the motor self-starts are turned off. To activate the safety features, go to menu **<Configuration>**, then to menu item **<Interface Settings>** and **<Sound/Warnings>**.

<Advance Modes> 

<Pilot Hole>

This function enables you in most cases to skip the separate operation of drilling a pilot hole with a smaller drill bit. When this function is activated, the machine will begin drilling at a slower speed. As soon as the machine senses that the drill bit is well seated and grabs enough material, it will ramp up to the set run speed. The function is based on the fact that the machine continuously checks the load on the motor and responds accordingly when the load threshold (this value is determined by the material selection) has been reached.

To activate this function, toggle **<Slow Start>** to “ON”, set the start speed (250 rpm by default) and select the material (Metal, Wood or Other). If you select **<Metal>,** the load is set at the highest; if you select **<Wood>** it is set lower; and if you select **<Other>**, it is set at the lowest.

Note:
After selection of the pilot hole function, the screen will first display that the pilot hole drilling is initialising. When the initialisation is accomplished, the screen will display a ready message. **Be sure to wait until the pilot speed is reached and the screen displays the ready message before drilling.** If you start drilling prematurely, the load threshold will not be calculated correctly and the drill will likely not ramp up to full speed at the appropriate time.

<Tapping Mode>

Your drill press has two different tapping modes. Both modes require the user to guide the tap manually. Both modes should only be used when starting the drill in forward mode.

1. **<Load Sensing>:**
   This mode uses the load sensor to determine when tapping has been started and when a chip breaking cycle has to be entered. The load sensor recognises when it is necessary to change the direction of rotation for chip breaking. After a fixed amount of time, the direction of rotation changes again and the cutting procedure continues. This repeats until the drill press senses the tapping is complete OR until the user presses the **<ON>** button.

Note:
This mode is only recommended for through holes.

2. **<Chip Breaker>:**
   This mode uses the load sensor to determine when tapping has been started and when a chip breaking cycle has to be entered. After a fixed amount of time, the machine changes the direction of rotation in order to break the chip for a fixed amount of time. After this amount of time, the machine changes the direction of rotation again to continue the cutting procedure. This repeats until the drill press senses the tapping is complete OR until the user presses the **<ON>** button.

Note:
This mode is recommended for M8 (5/16") taps and above. Smaller sized taps may break at high speeds. Be careful when using the tapping modes.

<Pwr Spindle Hold>

When this function is activated, the drive spindle is held in position. This function allows easy tool-free mounting or changing of a keyless chuck.

<Edit F Shortcuts> 

The **<F1>** to **<F4>** buttons allow you to modify a large variety of settings while the motor is running or idle. To define alternative functions, select menu item **<Edit F Shortcuts>**. The current functions for each button are shown here. Select one of the function buttons to open up a list of the settings available for this button. The selected setting will be stored permanently until a factory reset is performed.

<Edit Fav. Speeds> 

The favourite speeds allow you to quickly switch between a set of predefined or user defined speeds. To set the favourite speeds, press the**<F1>** to **<F4>** buttons.

The predefined speeds are:

Button	*Favourite speed number*	*Speed (rpm)*
<F1>	#1	250
<F2>	#2D (default)	900
<F3>	#3	1600
<F4>	#4	3000

To modify the predefined values, proceed as follows:

1. Select menu item **<Edit Fav. Speeds>**.
2. Select the favourite speed to modify.
3. Modify the speed using the **<F1>** / **<F2>** buttons or the **dial**.
4. Press the **<ZERO / Confirm>** button to confirm your selection.
5. Press the **<ZERO / Confirm>** button again to save the set value permanently.

Note:

- If you confirm the new favourite speed, it will be stored permanently in the memory of the machine until a factory reset is performed.
- Changing the favourite speed #2D also changes the default speed of the machine until a factory reset.

<Direction: FORWARD/REVERSE> 

This function toggles the drill rotation direction between forward and reverse. The direction can only be changed when the machine is stopped.

<Configuration> 

<Interface Settings>

<Units>	This is to switch between metric and imperial units of measurement.
<SET Mode>	This is to choose between standard and precision mode.
<Fraction Display>	This is to choose options for the inch unit fraction display.
<Digital Depth Stop>	This is to choose from a list how the machine should behave when the set drilling depth is reached.
<Calibrate Depth>	This is where the height sensor can be calibrated.
<Idle/Run Display>	This is to choose different display options.
<Sound/Warnings>	This is to switch between different sound settings.
<Language>	This is to change the display language of the drill press.

<Motor Performance>

<Max Spd>	This is to toggle the maximum speed of the drill press between 3000 and 5500 rpm (default: 3000 rpm).
<Pwr Output>	This is to set the power output to <High>, <Med> (medium) or <Low>.
<Braking>	This is to turn the braking function on or off. The braking function provides some power to the motor after the **<OFF>** or emergency stop button has been pressed. This helps stop the spindle more quickly and reduce the free spinning time.  **Caution!** Do not press any buttons or try to use the user interface when the motor has the braking engaged. This function is turned off by default.
<Load Sensor>	This is to toggle between different settings of the load sensor: • **<Jam Detect>:** This function detects whether the drill bit gets jammed and shuts off the motor. (Default: ON) • **<Spike Detect>:** This function detects if the load on the motor spikes abnormally and shuts off the motor. (Default: ON) • **<Spike Thres.>:** This is to determine the load threshold which constitutes a load spike in percent.
<Vibr. Sensor>	This is to set the vibration sensor sensitivity. The vibration sensor automatically detects vibrations of the drill press and shuts off the machine when the safety threshold is reached (e.g. if a workpiece has been caught or is spinning around). You can choose between the following four settings: • <OFF> (default) • <LOW> • <MEDIUM> • <HIGH>

<Adv. Motor Params>	The DVR motor has built-in speed control profiles, each with slightly different PI controller coefficients and performance characteristics: • **<Soft>** – for light drilling. The controller will less aggressively add power to the motor to maintain the speed. • **<Normal>** (default) – suitable for most work and therefore the default setting. • **<Hard>** – for heavy drilling. The controller will more aggressively add power to the motor to maintain the speed.

Parameter	*Description*	*Default value*
Profile	Motor speed control profile	Normal
Kprop / Kint	PI speed controller coefficients **Note:** These parameters cannot be stored in the EEPROM memory because they are based on the speed profile parameter.	Varies
V Kprop / V Kint	PI voltage controller coefficients	2000 / 9000
DC Bus	Motor phase DC bus voltage	360V
T HtSink	Temperature of the controller heatsink	-
T Thres.	Temperature threshold for current reduction	60ºC
Spd Err	Difference between set and run speed	-

Caution!
Extreme changes to these parameters can result in undesirable and potentially unsafe motor behaviour. Contact your dealer or the **NOVA** customer service if you have any questions on what effects your changes will have.

< Password>

This function allows you to set a password that must be entered to start up the drill press. If you have forgotten the password, performing a factory reset will clear the password.

< Upgrade FW (Firmware)>

The HMI software plays an important role in the control and functionality of the **NOVA Voyager DVR** Drill Press. The loaded firmware is responsible for controlling the features and performance of the drill press.

The firmware version can be upgraded using a USB cable and a PC with internet access.

The latest firmware version is available on the manufacturer's site www.teknatool.com. Regular updates offer new features and software improvements and thus enhance the performance of your machine.

If you have any questions, send an e-mail (in English) to: service@teknatool.com.

<Version Info>

The currently installed version of the HMI and the main board are displayed on the screen.

<Factory Reset>

If you are experiencing problems with the **NOVA Voyager DVR**, perform a factory reset.

Proceed as follows:

1. Press the **<MENU / Cancel>** button.
2. Select menu item **<Configuration>**.
3. Select **<Factory Reset>**.
4. Press the **<ZERO / Confirm>** button.
5. Turn off the drill press. Wait five minutes for the circuitry to completely discharge.
6. Turn on the drill press. The screen should now display **<Warning! EEPROM Reset>**.
7. Turn off the drill press again and wait another five minutes.
8. Turn on the drill press again. The factory reset has now been accomplished.

17 | Care and maintenance

Regular care and maintenance are essential for the long-term use of your drill press.

Caution!
Always disconnect the drill press from the power source before carrying out any maintenance procedure.

Maintenance after each use

1. Clean the work area and the drill press.
2. Vacuum shavings and dust from the headstock, table and base.

Monthly maintenance

1. Preserve exposed surfaces with appropriate agents (non-lubricating).
2. Check screws and nuts for tightness.
3. Clean all tapers to ensure a secure hold.

Half-yearly maintenance

1. Lubricate the gear and the rack of the table elevation mechanism, spindle splines and grooves on the quill with heat-resistant grease (e.g. red Stauffer grease).
2. Lubricate the spindle and quill shaft with a few drops of machine oil.

Caution!

- Cleaning rags or polishing wool soaked in oils, greases, solvents and cleaning agents are flammable. Collect them in suitable closed metal containers.
- Oil-soaked cleaning rags or polishing wool tend to self-ignite and must be stored and disposed of separately.

Danger!

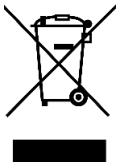
- Do not carry out work on electrical system components unless the main switch (if present) is switched off and the power plug is disconnected. Do not leave the power plug unattended and secure it against being plugged in.
- Have work on the electrical system carried out only by qualified electricians.

18 | Decommissioning

Please observe the following notes when preparing for final decommissioning:

- When decommissioning the machine, adhere to the applicable laws and regulations for disposal.

- Dispose of all parts of the machine in such a way that health and environmental damages are excluded. Check which materials can be recycled and recycle them properly.



- Do not dispose of the machine or parts of it together with domestic waste.

- Oils, greases, solvents and cleaning agents are hazardous to the environment and must not be allowed to reach sewage or normal domestic waste. Dispose of them via local recycling centres. The same applies to cleaning rags or polishing wool soaked in oils, greases, solvents and cleaning agents.

Of course, you can also bring your defective machine to your local dealer.
He will ensure proper recycling.

19 | Speed chart

The values in the table below are reference values. Depending on the material, tool and experience of the user, the actually needed speeds may vary.

Fields highlighted in red are not recommended areas

Drill bit	Tool diameter		Material						
			Soft wood	Hard wood	Acrylic	Brass	Aluminium	Steel	Glass / Tiles
	[mm]	[in]	Spindle speed						
Twist drill bit	1 ~ 5	1/16 ~ 3/16	3,000	3,000	2,500	3,000	3,000	3,000	NA
	6 ~ 10	1/4 ~ 3/8	3,000	1,500	2,000	1,200	2,500	1,000	NA
	11 ~ 16	7/16 ~ 5/8	1,500	750	1,500	750	1,500	600	NA
	17 ~ 25	11/16 ~ 1	750	500	NA	400	1,000	350	NA
Brad point drill bit	3	1/8	1,800	1,200	1,500	NA	NA	NA	NA
	6	1/4	1,800	1,000	1,500	NA	NA	NA	NA
	10	3/8	1,800	1,250	1,500	NA	NA	NA	NA
	13	1/2	1,800	1,250	1,000	NA	NA	NA	NA
	16	5/8	1,800	500	1,250	NA	NA	NA	NA
	19	3/4	1,400	250	1,250	NA	NA	NA	NA
	22	7/8	1,200	250	500	NA	NA	NA	NA
	25	1	1,000	250	250	NA	NA	NA	NA
Bullet pilot point drill bit	3 ~ 5	1/8 ~ 3/16	3,000	3,000	3,000	2,000	1,500	3,000	NA
	6 ~ 10	1/4 ~ 3/8	3,000	3,000	2,400	1,500	1,000	2,000	NA
	13	1/2	3,000	1,500	1,600	1,500	750	1,200	NA
Spade bit	6 ~ 13	1/4 ~ 1/2	2,000	1,500	NA	NA	NA	NA	NA
	16 ~ 25	5/8 ~ 1	1,750	1,500	NA	NA	NA	NA	NA
	29 ~ 38	1 1/8 ~ 1 1/2	1,500	2,000	NA	NA	NA	NA	NA
Spade bit with spur	10 ~ 25	3/8 ~ 1	2,000	1,800	500	NA	NA	NA	NA
Hole saw	25 ~ 38	1 ~ 1 1/2	500	350	NA	250	250	NA	NA
	41 ~ 51	1 5/8 ~ 2	500	250	NA	150	250	NA	NA
	54 ~ 64	2 1/8 ~ 2 1/2	350	100	NA	150	250	100	NA
Circle cutter	38 ~ 76	1 1/2 ~ 3	500	250	250	NA	NA	NA	NA
	83 ~ 203	3 1/4 ~ 8	250	250	250	NA	NA	NA	NA
Forstner bit	6 ~ 10	1/4 ~ 3/8	2,400	800	NA	NA	NA	NA	NA
	13 ~ 16	1/2 ~ 5/8	2,400	500	250	NA	NA	NA	NA
	19 ~ 25	3/4 ~ 1	1,500	500	250	NA	NA	NA	NA
	29 ~ 32	1 1/8 ~ 1 1/4	1,000	250	250	NA	NA	NA	NA
	35 ~ 51	1 1/8 ~ 2	500	250	NA	NA	NA	NA	NA
	54 ~ 102	2 1/8 ~ 4	250	250	NA	NA	NA	NA	NA
Indexable insert drill bit	6 ~ 13	3/8 ~ 1/2	1,800	500	NA	NA	NA	NA	NA
	19 ~ 25	3/4 ~ 1	1,800	750	NA	NA	NA	NA	NA
Shear cutting countersink drill bit	6 ~ 10	1/4 ~ 3/8	1,000	1,000	700	850	850	NA	NA
Countersink drill bit	2 flute		1,400	1,400	NA	NA	NA	NA	NA
	5 flute		1,000	750	750	250	250	250	NA
Glass and tile drill bit	3	1/8	NA	NA	NA	NA	NA	NA	750
	5	3/16	NA	NA	NA	NA	NA	NA	600
	6	1/4	NA	NA	NA	NA	NA	NA	500
	8	5/16	NA	NA	NA	NA	NA	NA	400
	10	3/8	NA	NA	NA	NA	NA	NA	350
	13	1/2	NA	NA	NA	NA	NA	NA	150

20 | Troubleshooting

Mechanical issues

Symptom	Where to check	How to resolve
The attached tool does not run true.	1. Inside of the spindle taper 2. Tool, arbour tapers 3. Chuck 4. Attached tool **Note:** The **NOVA** axial run-out specification is: ±0.02 mm on the spindle taper. ±0.04 mm on the end of the chuck arbour. ±0.18 mm on the end of a 100 mm straight rod attached to a chuck.	The solution depends on where the run-out is detected: 1. Inside the spindle: - Replace the entire spindle assembly. 2. Morse taper tool/arbour: - Clean all contact surfaces. - If the tool is still not running true after all surfaces have been cleaned, try replacing the tool by another one. 3. Chuck: - Replace the chuck. 4. Attached tool: - Make sure the tool is properly mounted on the chuck.  **Note:** When checking the run-out, always make sure to check from the spindle.
The quill cannot be retracted.	1. Return spring 2. Quill and quill housing: - Make sure that all moving parts are lubricated, but without excess. 3. Pinion gear of handle: - Make sure that all moving parts are lubricated with sufficient grease.	 **Note:** Support the quill to make sure that it does not fall out of the headstock. 1. Carefully release the locking bolt of the return spring housing and hand tighten it by rotating it in the anti-clockwise direction. Lock the spring housing with the locking bolt before releasing. 2. Extend the quill as far as possible and apply lubricant of a relatively high viscosity. Move the quill up and down a couple of times to spread the lubricant. 3. Remove the handle spring and release the locking set screws to extract the handle from the headstock. Apply lubricant on all contact surfaces and reassemble.
Excessive vibration	1. Workpiece mounting: - Check if the workpiece is securely mounted. 2. Drill press mounting on base: - Check if the column is securely connected to the base. 3. Stand on which the drill press is mounted. 4. Drill bit: - Check if the drill bit is blunt or damaged. 5. Wrong drilling speed.	1. Make sure that the workpiece is securely and firmly mounted to avoid vibrations. 2. Tighten all connecting screws. 3. Level the stand and, if necessary, add additional weights to dampen vibrations. If necessary, bolt the stand to the floor. 4. Use a sharper drill bit or sharpen blunt tools. 5. Refer to the speed chart.

Electrical issues

Symptom	Where to check	How to resolve
The drill press does not start (the screen does not light up).	First, unplug the drill press from the power source. Then, check the following points: 1. Fuse. 2. Damaged power cable. 3. Open the control panel cover to check if all the connectors are firmly seated on the main board. **Caution!** Make sure that all components have been reinstalled before reconnecting the drill press to the power supply.	If all the connectors are properly seated and the screen still does not light up, the main board may be damaged. Contact our customer service for further assistance.

Error messages

Error message	Possible cause	Remedy
`Rotor Fault <flashing>`	Rotor fault	Press the <OFF> button. Switch off the main switch. Wait one minute and switch on the machine again. Make sure the spindle is not blocked.
`RP State Error <flashing>`	Rotor position state fault. The optical sensors that give the spindle position feedback are obscured, damaged or have been disconnected. Dust may have settled on the sensors.	Spin the spindle by hand. The draught which is generated by spinning the spindle may be sufficient to clean the sensor. Try again to start the motor. If the error remains, switch off the machine and disconnect it from the power supply. Remove the upper rear cover and remove any wood dust with a vacuum cleaner. Avoid getting the nozzle too close to the electronics. Now dust may have fallen into the headstock. Suck the dust out through the vent on the front of the headstock underneath the spindle. Repeat this sequence a few times. You can also try blowing the dust off with a vacuum or compressed air pistol. Replace the cover.
`PFC Corrector <flashing>`	The built-in voltage and temperature sensors report a fault.	Check the temperature of the lower section of the headstock. If it is very high, switch of the main switch and leave the machine to cool down. If the temperature is not particularly high, the computer may have detected an under- or overvoltage from the mains power. Switch off the machine and reboot. The DVR motor has a high level of protection and is intelligently checking conditions all the time.

If an error message is displayed and the drill press cannot be used anymore, please contact your dealer or customer service. At best, you already have your invoice with the date of purchase (start of warranty) at hand. You can also contact the **NOVA** customer service directly: service@teknatool.com (in writing in English).

21 | Terms of extended warranty

Teknatool grants an extended warranty on this product from the date of purchase: 5 years on mechanical parts (working hours excluded after 2 years) and 2 years on electrical parts.

If defects in material or workmanship occur during the intended use of the product, please contact your dealer. After submission of a copy of the invoice, the defect in question will be verified in coordination with our service department and, as required, it will be repaired or the product will be replaced. The organisation of a possible transport (after consultation with our service department) lies within the responsibility of the customer. The packaging must be safe for transport.

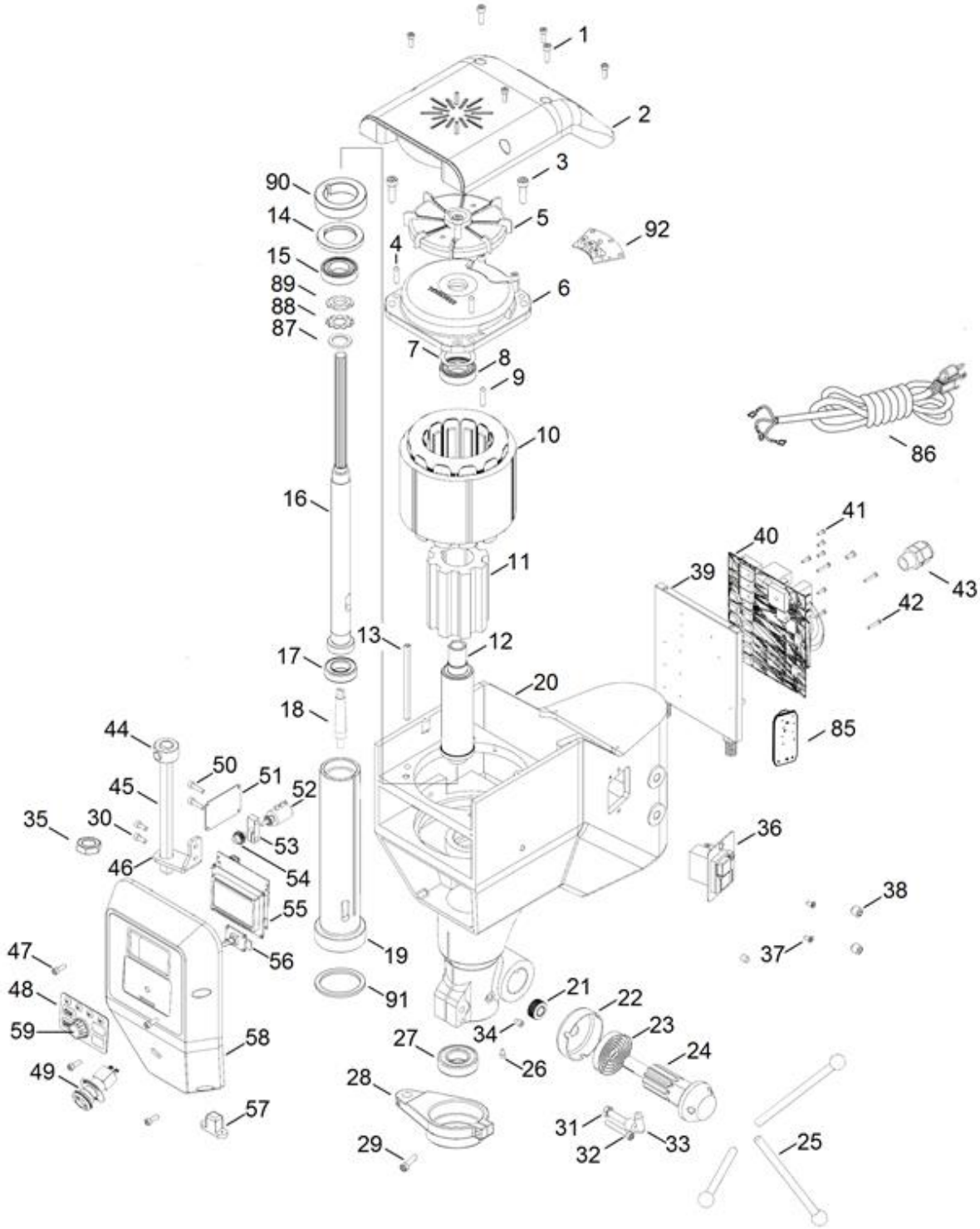
If it is determined that the complaint lies outside the granted terms of warranty (e.g. in the case of defects arising from normal wear, improper use, power overload, overvoltage, unauthorized modifications of the machine, use of force, failure to observe the safety precautions or own attempts of repair), the customer has to pay the full costs for transport and repair.

Only the terms of warranty cited here are valid, any side agreements are not recognised unless they are presented in written form and signed (documented) by the manufacturer/importer. No claim whatsoever arises from verbal agreements that have not been documented. The present terms of extended warranty are valid in German-speaking countries; elsewhere different terms may apply. In this case, please contact your local dealer.

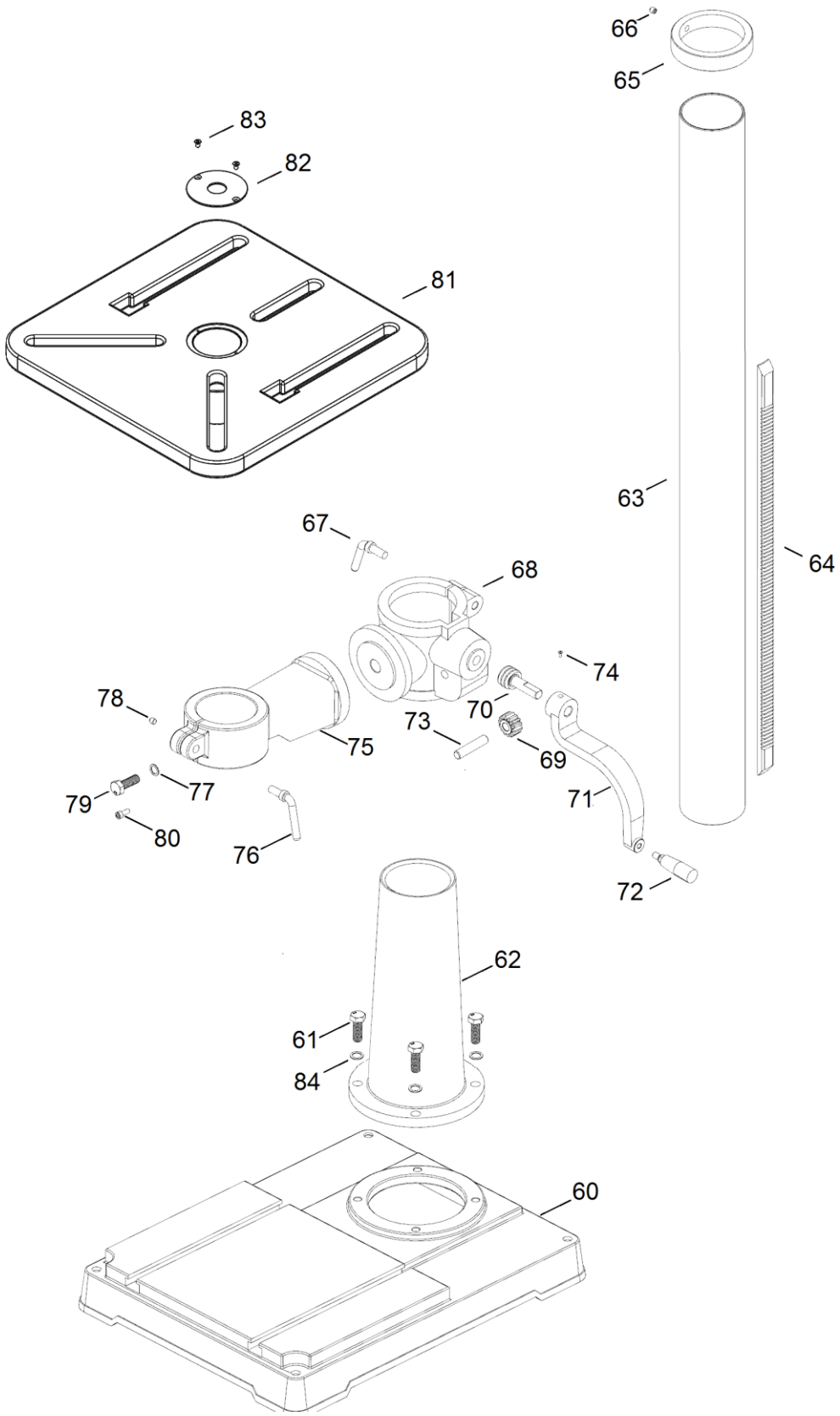
Please note that your statutory rights are not restricted by the above warranty.

Prior warranty registration is not required but advised via: https://www.teknatool.com/register-your-nova-warranty/.

22 | Exploded view - headstock



23 | Exploded view – stand and table

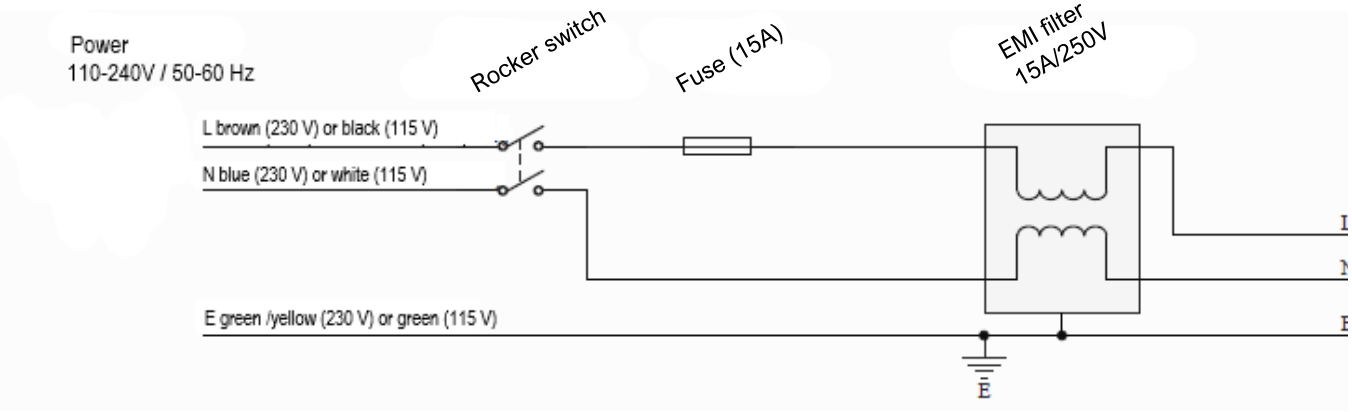


24 | Parts list - drill press

Item	Part number	Designation
01	C05016	Cap screw M5x16
02	8330355	Top cover
03	C08040	Cap screw M8
04	55431	Location pin
05	52003	Fan encoder
06	8330354	Bearing housing fan sensor
07	8338002	Wave washer
08	6005ZZ	Ball bearing
09	55430	Location pin (stator)
10	55009	DVR stator
11	55007	DVR rotor
12	8339016	DVR motor spindle
13	55050	DVR motor spindle key
14	8339017	DVR motor spindle washer
15	6005ZZ	Ball bearing
16	8338003	Spindle 152.4 mm
17	6203LLB	Ball bearing
18	8338004	Chuck arbour
19	8339012	Quill
20	8330353	Headstock housing
21	8338005	Spring nut
22	8338006	Spring cover
23	8338007	Return spring
24	8338008	Pinion shaft
25	8338009	Quill driving handle
26	C0408	Cap screw socket head M4x8
27	6205LLB	Ball bearing
28	8339041	Depth stop mount
29	C06020	Cap screw M6x20
30	CM5010180	Countersunk screw
31	8338010	Quill lock bolt
32	C06030	Cap screw M6x30
33	8338011	Clamping lever quill lock
34	8338012	Quill pin
35	NHH14	Half hex nut
36	8338014	Power switch
37	CM05010	Countersunk screw M5x10
38	SZ1216	Set collar M12x16
39	6919011	Basic sync
40	MPB0412	Main board
41	MPB0412	Flat head screw M4x12
42	MPB0325	Flat head screw M3x25
43	8338019	Cable gland M20 6-12 mm
44	8338020	Quick release mechanism
45	8339042	Mechanical depth stop rod
46	8339031	Mech. depth stop bracket
47	C05010	Cap screw M5

Item	Part number	Designation
48	8339026	Control panel
49	8338021	Emergency stop button
50	C05020	Cap screw socket head M5x20
51	8338023	Depth sensor cover
52	8339021	Depth sensor
53	8339044	Insert block
54	8339043	Depth sensor gear
55	598123011	LCD screen
	55400	HMI
56	8339028	HMI encoder
57	8338024	USB-B port
58	8339014	Front panel
59	8339032	Dial
60	8338025	Base
61	8338026	Hex head screw M12-1.75x30
62	8338027	Column base
63	8338028	Column
64	8338029	Rack
65	8338030	Rack ring
66	SZ1010	Safety screw M10x10
67	8338032	Clamping lever
68	8338033	Table arm bracket
69	8338034	Gear
70	8338035	Worm gear
71	8338036	Crank handle arm
72	8338037	Handle
73	8338038	Gear shaft
74	SZ0810	Safety screw M8x10
75	8338040	Table arm
76	8338041	Clamping lever
77	8338042	Washer 3/4”
78	SZ06010	Safety screw M6x10
79	BNMZ20040	Hex head screw M20x40
80	SZ1030	Safety screw M10x30
81	8338046	Table
82	8338047	Ring
83	C0408	Cap screw socket head M4x8
84	FW12	Washer M12
85	55170	EMI filter
86	55106	Power cable
87	FW17	Washer 17 mm
88	LW17	Spindle locking washer 17 mm
89	LN17	Spindle locking nut 17 mm
90	8339046	Rotor position disk
91	RW45	Spacer washer rubber 45 mm
92	55020	Position sensor

25 | Wiring diagram



EC – Declaration of Conformity

For Machines (according EC-Directive 2006/42/EG)

No. of Declaration of Conformity:	Neu-TT-203-301-EN
Distributor:	Neureiter Maschinen Kellau 167, AT – 5431 Kuchl Österreich
Responsible person for technical documentation:	Ludwig Neureiter Kellau 167 A – 5431 Kuchl
Subject of the declaration:	Drill Press
Model name:	**NOVA Voyager DVR Drill Press**
Model name (technical):	*15" / 16" / 18" / 20" / 22" DVR Drill Press*
Manufacturer	*Teknatool*

The serial number, crucial technical information and marks of conformity can be found on the rating plate of each machine.
All responsibility for issuing of this EC Declaration of Conformity bear the distributor.
The named object of this Declaration of Conformity is conforming with the essential requirements of the relevant European Directives:

- Machinery Directive 2006/42/EC
- Electromagnetic Compatibility Directive 2014/30/EU

Mounting and connecting instructions defined in catalogues and technical construction files must be respected by the user.

They are based on following standards:

EN ISO 12100:2010	Safety of Machinery Generic principles for design Risk Assessment and Risk reduction
EN 60204-1:2006+A1:2009+AC:2010	Safety of Machinery
EN 12717:2001+A1:2009	Safety of Machinery Electrical equipment of machines – part 1: General requirements
EN 61000-6-2:2005+AC:2005	Electromagnetic compatibility (EMC) Generic immunity standard
EN 61000-6-4:2007 + A1:2011	Electromagnetic compatibility (EMC) Generic emissions standard Part 2

Mr. Ludwig Neureiter
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Gewerbegebiet Brennhoflehen
Kellau 167
A – 5431 Kuchl

Kuchl, 2020.07.01
Ludwig Neureiter (Owner)

DT58003_Neu-TT-203-301-EN

Nova Voyager DVR Operating Instructions