

DRECHSELMEISTER

MIDI PRO

Woodturning Lathe

Original Operating Instructions



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Original Operating Instructions Version 2024_V06_EN
DDMIDI-PRO



DRECHSELMEISTER



DRECHSELMEISTER

Dear customer,

Thank you for choosing the **DRECHSELMEISTER MIDI PRO** lathe.

The **MIDI PRO** is a lathe that combines innovation with tried-and-true methodologies. This woodturning lathe is the great result of a cooperation of experienced woodturners and engineers and is suitable for beginners, advanced turners, professionals and artists alike at an exceptional price-performance ratio.

Continuous support is important to us. If you have any questions concerning our products or service, please call us or send us an e-mail. We are happy to hear from you. Your experience enables us to further improve the quality of our lathes.

Sincerely yours

Note:

For the purpose of continuous improvement, the manufacturer reserves the right to make technical changes and changes to the information provided at any time without prior notice and without incurring any obligations on the manufacturer. No part of this document may be reproduced or transmitted in any form without express written permission, regardless of the means of doing so.



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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 60204-1:2018;
EN ISO 13849-1:2015;
EN 61000-6-2:2019;
EN 61000-6-4:2019

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Explanation of symbols

	Wear eye protection		Damage and/or danger to persons, lathe, material, or environment		Important notes
	Wear ear protection		Environmentally hazardous substance		Do not dispose together with domestic waste
	Wear protective footwear		Imminent danger to health and risk of serious injuries		
	Wear respiratory protection		Notes on using the operating instructions		

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 **MIDI PRO** will give you years of failure-free service.

1 | 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.

2 | 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 woodturning lathe 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. 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. **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.
- c. **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. **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.
- b. **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.
- c. **Keep your power tool away from rain or moisture.** Water entering a power tool increases the risk of an electric shock.
- d. **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.
- e. **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. **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.

- c. **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.
- d. **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.
- e. **Avoid an abnormal posture. Ensure secure footing and maintain balance at all times.** This enables better control of the power tool in unexpected situations.
- f. **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.
- g. **If dust extractors and collectors can be installed, ensure these are connected and used properly.** Using a dust extractor can reduce dust-related hazards.
- h. **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.

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.

3 | General health and safety instructions for woodturning lathes

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



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



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.

If you are using the woodturning lathe commercially, an automatic chip and dust extractor approved by the professional association must be installed.

- b. **Inform yourself about the lathe before using it for the first time.** If you are unfamiliar with the function of a lathe, get professional support. An instruction by an experienced and trained woodturner is strongly recommended.
- c. **Minimum age.** The minimum age to use a lathe 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 turning. Wear protective footwear and make sure the floor is non-slip.

- e. **Do not work in damp, dark and dangerous environment.** The lathe is designed exclusively for indoor use. Protect the lathe 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. **Keep your workplace neat and clean.** Untidy workplaces and tables cause accidents. Do not switch on the lathe until all objects (tools, pieces of wood, etc.) have been removed from it. Keep the immediate work area and floor free from dirt and leftover pieces. Accumulated sawdust is a fire and accident risk.
- g. In case of a **power failure**, the workpiece is no longer slowed down. The run-down time may be longer.
- h. **Avoid unintentional starting.** Make sure that the main switch (if present) is in the "OFF" position when connecting the lathe to a type F socket.
- i. **Do not leave the lathe running unattended.** Do not leave the lathe until the power is turned off and the machine has come to a complete stop.
- j. **Use the right tool.** Use only suitable tools or accessories for wood turning. Avoid unnecessary force of the tools. Keep the woodturning tools 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.
- k. **Working on the lathe.** Make sure the electrical voltage is switched off and then check the spindle by turning it with your hand to see whether the workpiece can move freely. Check the workpiece to prevent parts of it from chipping during turning. When using adhesives (even cyanoacrylate superglues), bear in mind that they can still be liquid in voids or wide cracks even after hours of drying. During turning, they can leak due to the centrifugal forces and fly in the direction of the chip flight, i.e. in the direction of the woodturner, posing a health or injury risk. Always check that the correct speed is set before switching on the spindle. Use the lowest speed for new or out-of-balance workpieces. Always turn at the recommended speed. For more information see page 18. Do not try to slow down workpieces by hand. Place the tool rest as close as possible (about 5-10 mm) to the workpiece. Before each start, rotate the workpiece by hand to make sure that it runs freely. Turn off the lathe from time to time and readjust the tool rest.
- l. **Pay attention to secure footing** (foot position, balance).
- m. **Make sure there is enough work space around the machine.** Untidy work surfaces and floors can lead to injuries.
- n. **Use only original accessories** and follow the steps described in the operating instructions. Using accessories from other manufacturers may result in injuries.

4 | Safety devices

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



Danger!

The lathe may only be operated with functioning safety devices. Switch off the lathe 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.

Warning labels on the lathe

All warning labels on the lathe are for your safety. Always keep them readable and pay attention to their meaning.



Overview of safety devices

The lathe has various safety devices:



1. Protective conductor connected to the local power via a type F plug.
2. Cover above the pulley drive. Access only possible with a tool.
3. Covers on the electric motor.
4. Emergency stop button on the mobile control box.

EMERGENCY STOP / ON and OFF function

The lathe has a red combination switch (0) which is used to trigger an **EMERGENCY STOP** or to turn off the machine normally. By pressing the **red** button (0), all machine functions are stopped.

To restart, press the **green** ON button (I). This button will light up after activation. The illumination will go out as soon as the red button is pressed and the machine comes to a standstill.

The toggle switch is used to switch between forward and reverse rotation. If the reverse rotation is activated, the orange indicator lamp lights up.

Use the rotary knob to control the motor speed.

The back side of the mobile control box is magnetic. So, the control box can be positioned anywhere on the bed or on any other flat metal surface.



Caution!

When using a chuck, faceplate, etc., use the reverse rotation only after having installed an unwind-protection system (if necessary, ask your specialist dealer). Stop the forward rotation first, wait until the workpiece comes to a complete stop and only then switch to the reverse rotation. This also reduces the risk that the workpiece unwinds from the spindle.

5 | Technical data

Dimensions

Length x height x depth1,160 mm x 470 mm x 420 mm

Weight

Machineapprox. 65 kg

Distance between centres

.....approx. 450 mm

Distance between centres with additional bed 230 mm (option)approx. 680 mm

Distance between centres with additional bed 2x 230 mm (option)approx. 910 mm

Centre heightapprox. 178 mm

Headstock

Spindle thread with unwind-protection grooveM33 x 3.5 mm

BoreMorse taper MT 2 with 10 mm through hole through headstock

Indexing24 positions (15-degree increments)

Pivoting0 to 180 degrees with detent positions at 0, 30, 60, 90 degrees

Drive~240 volt, three-phase motor, IP54, 1,420 rpm, 50 Hz, 750 W

Power supply240 volt ~ L1-N-PE, 50 Hz

Speed ranges (rpm on spindle)Range L: 60 – 1,000 rpm

.....Range M: 150 – 1,900 rpm

.....Range S: 350 – 3,700 rpm

Range is changed by relocating the Poly V belt

Tailstock

BoreMorse taper MT 2 with 10 mm through hole

Quill travel100 mm with scale

Tool rest250 mm with 1" shaft (25.4 mm)

Emission sound pressure level<79 dB (A)

PaintRAL 7047 Telegrey 4 / RAL 5003 Sapphire blue

Basic equipment

250 mm tool rest, 95 mm faceplate, live centre MT2, 25 mm 4-prong drive centre, double taper, open-ended spanner for loosening the faceplate, operating tools, mobile control box, knockout bar and operating instructions.

Optional accessories

- Tailstock quill ER25 MIDI
- Additional bed 230 mm
- Quick-change system "Easy" for Midi Pro
- Locking ring ASR EUROLOCK

Nameplate

Modell / Type / Serie(s)	MIDI PRO 1417N-INV KC-INV	
Motor / Power	1 / N / PE 230V/50 Hz 0,75 kW	
Techn. Daten / Specification	0 – 3.700 U/min (RPM) M33x3,5 MK 2	
Baujahr / Year		
Gewicht / Weight	65 kg	
Serien-Nr. / Serial No.	A FU -	
		Neureiter Maschinen GmbH Kellau 167, AT-5431 Kuchl

6 | Information on noise emission

The measurement is carried out in accordance with the standards EN ISO 3744:2010 & EN ISO 3746:2010 & EN ISO 11203:1996 & EN 61029-2-4.

The emission level measured according to these DIN standards 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.

7 | Frequency inverter



The frequency inverter is very quiet and programmed ready for use. Do not make any changes to the frequency inverter. The programming screw on the frequency inverter may only be operated by qualified personnel. To change the speed of the lathe, use only the rotary knob on the mobile control box.

The frequency inverter is programmed with a soft start and soft stop. You cannot shorten the run-down time with the handwheel. Just let the workpiece come to a stop by itself. In the event of a power failure, the run-down time is extended.

8 | Functional description

A lathe is a machine used to work on mostly cylindrical or prismatic pieces of wood. For this, the workpieces are mounted with special fixing devices between headstock and tailstock or with special clamping devices (chucks, faceplates, etc.) and then they are driven via an electric motor.

The electric motor drives the spindle via belt pulleys. The **MIDI PRO** allows you to choose between three speed ranges (transmissions). The fine tuning of the motor speed is done via a frequency inverter. To make the fine adjustment, use the rotary knob on the mobile control box. It allows you to continuously adjust the motor speed in the respective speed range. This enables you to choose the rotational speed suitable for the diameter of your workpiece. This improves the safety during turning and the quality of the workpiece surface.

To switch on the drive unit, plug the power cord into an earthed socket and activate the main switch. Turn on the motor on the mobile control box and adjust the motor speed with the rotary knob.

Automatic shutdown

The **MIDI PRO** is equipped with a zero-voltage switch which shuts down the lathe in the event of a power failure and prevents a restart when power is restored. Furthermore, the drive may be switched off by the frequency inverter in the event of an overload. In order to be able to restart the lathe in all cases, eliminate the cause: In the event of a power failure, restore the power supply; in case of an overload, reduce the load or select the belt pulley for the lower speed range.

The tool rest serves to minimise the risk of injury. The turning tools are guided by hand to the workpiece. The cutting forces that occur must be absorbed by the operator. In order to deflect these forces, the turning tools must constantly rest firmly on the tool rest.

Before using the lathe for the first time, read the operating instructions carefully in order to become familiar with the dangers that may arise from operating the machine (in particular from rotating parts and forces involved).

If you do not have any experience in turning, familiarise yourself with the lathe before starting to work. Seek advice from experienced woodturners and let them instruct you.

Various dealers offer basic and advanced woodturning classes. Video material and books can also be useful.

9 | Installation site requirements

Requirement	Recommendation
Lathe installation site	Place the lathe near a power source (type F socket). Make sure the ground is level, firm and has a sufficient load capacity. Leave enough space around the machine. Make sure there is enough room for the additional bed or other optional accessories. Other machines installed in the workshop must not affect the operation of the lathe.
Lighting and ventilation	Pay attention to good lighting (illuminances according to DIN 5035) and ventilation. In addition, use adjustable lighting for your work area on the lathe so that no shadows are cast on the workpiece. We recommend the installation of a light source with a value of at least 300 lux, better 500 lux, at the cutting edge of the tool. If possible, place the lathe near a window.
Electrical equipment	In order to operate the lathe, a suitable household 240 V type F socket is required, which is protected by at least a B 16 (ampere) circuit breaker. Electrical cables and sockets must comply with local electrical codes. In case of doubt, ask your electrician. Avoid using an extension cord. This lathe is designed for a voltage of 240 V ($\pm 10\%$) according to IEC 60038. If it is operated outside of this voltage, it may run irregularly or may be damaged.
Ambient temperature	Operate the lathe at an ambient temperature of $+10^{\circ}\text{C}$ to $+32^{\circ}\text{C}$ (climate class SN). If the lathe is not used for a period of more than 3 months, the ambient temperature should not exceed 30°C. If the lathe is not used for more than 1 year, the electrolytic capacitors may deteriorate. Especially in the cold season, give the machine enough time to adapt to the temperatures at the installation site before assembly.
Ventilation	Ventilate your workplace adequately. The degree of ventilation depends on the size of the workshop and the number of manufactured workpieces. The use of dust extractors and filters reduces your health risk.
Working height	Adjust the height of the lathe so that the centre of the spindle is at the level of your elbow.
Working space	When fixing the lathe to the table or ground, leave a space of at least 80 cm around the lathe for repair and maintenance work.
Stand (option)	When using the lathe without a stand, choose a suitable installation surface.



1 Headstock

- 1.1 Handwheel
- 1.2 Belt pulley cover
- 1.3 Spindle with M33 thread and unwind-protection groove
- 1.4 Faceplate (to be mounted on the spindle)
- 1.5 Drive centre
- 1.6 Electric motor
- 1.7 Motor tensioning lever (rear side)
- 1.8 Motor fixing lock handle
- 1.9 Digital speed indicator
- 1.10 Frequency inverter
- 1.11 Release knob

2 Bed

- 2.1 Carrying handles
- 2.2 Mobile control box

- 2.3 Holes for mounting the additional bed (on the sides and below the cover plate)
- 2.4 Magnetic cover plate
- 2.5 Adjustable rubber feet

3 Tailstock

- 3.1 Handwheel
- 3.2 Quill fixing lock handle (rear side)
- 3.3 Quill
- 3.4 Live centre
- 3.5 Tailstock clamping lever (rear side)

4 Banjo

- 4.1 Banjo clamping lever
- 4.2 Lock handle
- 4.3 Tool rest



- A** Bed with headstock, tailstock, banjo
- B** Frequency inverter
- C** Housing for frequency inverter (already mounted on frequency inverter)
- D** 95 mm faceplate with M33 x 3.5 mm thread and two 5 mm grub screws
- E** 25 mm MT2 4-prong drive centre, MT2 live centre and double taper
- F** Magnetic mobile control box

Accessories packed in the top cover

- G** Knockout bar
- H** Carrying handles with mounting screws
- I** Magnetic locking pins (for locking the spindle and the index plate)
- J** 3/8" x 50 mm adjustable rubber feet
- K** 3/8" x 50 mm screws for fixing the lathe on table or workbench
- L** Tool rest 250 mm with 1" shaft (25.4 mm)
- M** Open-ended spanner for releasing the faceplate from the spindle
- N** Magnetic cover plate for front opening
- O** Motor tensioning lever with spring washer
- P** Hex keys #3 and #4



12 | Lathe assembly



Caution!

- Pay attention to the weight of the components and handle them carefully to avoid injuries.

- Make sure that all screw connections are tightened firmly, but not over-tightened. Check all screw connections for tightness after eight operating hours.

Lathe assembly

With the help of a second person, lift the **MIDI PRO** lathe out of the polystyrene packaging and place it on a sufficiently stable surface. Pay attention to the cables of the frequency inverter and the mobile control box. Mount the rubber feet first.



Then, mount the carrying handles using the supplied screws. They will allow you to move the machine more easily and to avoid damaging surfaces when putting the machine down.



Assembly of the frequency inverter

Mount the frequency inverter on the rear side of the headstock. Remove screw "a" and loosen screw "b" (Fig. 9). Leave a distance of approx. 4-5 mm to the headstock (Fig. 10). Push the frequency inverter with its housing onto the lower screw (b), pass the upper screw (a) through the hole and screw it loosely into the headstock (Fig. 11).

Now tighten the two screws firmly (Fig. 12 + 13).

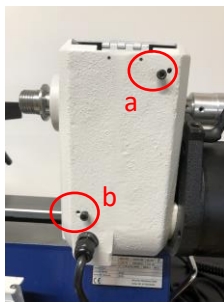


Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 13

Finally, mount the lever for tensioning the drive belt on the motor flange. Use the supplied spring washer (Fig. 14 + 15). It prevents the tensioning lever from coming loose.



Fig. 14



Fig. 15

After 8-10 operating hours, check all screw connections and retighten them if necessary.

Mounting and adjusting the stop bar with alignment aid

Loosely fix the stop bar with alignment aid and bring the headstock to the outmost left position on the bed.

Align the headstock as described in chapter 13 "Operating the lathe", section "Aligning the headstock at any position on the bed".

Push the hooked part of the stop bar against the bolt on the headstock so that it fits well. Finally, tighten the hex head screws firmly with a 10 mm ring or open-ended spanner.



13 | Operating the lathe

Main switch

The main switch, which regulates the power supply, is installed on the rear side of the frequency inverter box. This toggle switch, which lights up when activated, is positioned in such a way that it is easy to find and use while working.



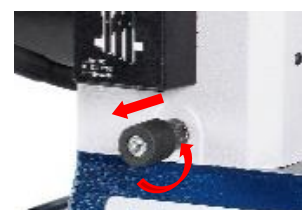
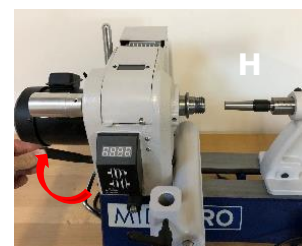
Headstock

The headstock consists of: drive unit (electric motor) with lock handle and lever for tensioning and loosening the belt, belt pulleys with transmission, spindle with M33 x 3.5 mm thread and unwind-protection groove (ASR), Morse taper 2 (MT2), 24-position indexing device, locking screw for cover, handwheel and digital speed indicator in rpm on the spindle.



Aligning the headstock at any position on the bed

The headstock can be clamped at any position on the bed. For spindle turning, it is necessary to align the headstock with the tailstock. To turn the headstock, loosen the release knob by turning it and pulling it towards you. Loosen the clamping lever on the left side of the headstock, move the headstock to the desired position and turn it until it is flush with the bed and the tailstock.



Mount the double taper (H) in the tailstock and insert it into the spindle by moving the tailstock so that it slides in without any resistance.



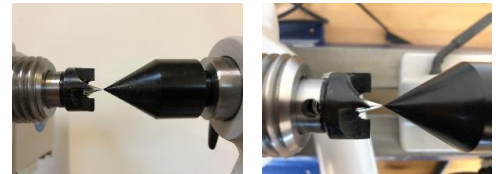
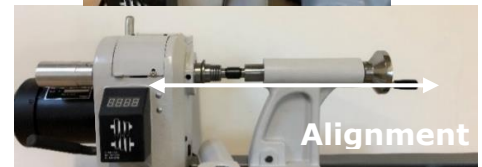
If necessary, align the headstock accordingly by gripping the motor tensioning lever with your left hand and the tailstock with your right hand and agitating them in opposite directions.

As soon as the quill and the spindle are in alignment, lock the headstock with the clamping lever.

Make sure that the headstock does not twist while being clamped.

Alternatively, you can also align the headstock with the 4-prong drive centre and the live centre. Release the headstock as described above and align the tip of the drive centre with the tip of the live centre.

Lock the headstock when the 4-prong drive centre and the live centre are in alignment.



Caution!

Make absolutely sure that the machine is always switched off before turning or displacing the headstock or before aligning it by means of the double taper (pull the power plug). Otherwise, injuries or material damages may occur.



Realign the headstock as described above every time you have turned the headstock, e.g. for outboard turning.

Morse taper

The Morse taper is a standardised tool taper. With its help, different attachments are friction-locked in the spindle and the quill. Common sizes for woodturning lathes are MT1 (smaller lathes), MT2 (small, medium and larger lathes) and MT3 (larger lathes).



A clean fit of the taper in the hollow shaft is decisive for the best possible power transmission. Even the slightest contamination can lead to damages in the shaft (of headstock and quill). Therefore, make sure to clean both the taper of the tool and the hollow shaft of the spindle and quill at **each** tool change. Use a dry, clean rag or a bottle brush and avoid oils and greases as these reduce friction.

It is sufficient to hand-drive tools into the shaft. It is not necessary to hit them into place.

Changing the 4-prong drive centre

Insert the supplied knockout bar from the outside into the through hole of the headstock. Now, try to eject the 4-prong drive centre by pushing it slowly while carefully holding the 4-prong drive centre on the outside with your hand.



Caution!

To avoid injuries, do not hold the 4-prong drive centre at its tip.

Changing the live centre and accessories

The live centre and further accessories (e.g. drill chuck, mill-drill) can be ejected by turning the tailstock handwheel counterclockwise. Alternatively, the live centre can also be ejected from behind with the knockout bar. To prevent the tools from falling, hold them on the outside with your free hand.

Tailstock

Never loosen the quill of the tailstock or the tailstock itself while the workpiece is rotating. The tailstock disposes of an MT2 quill. The quill guide is equipped with a lock handle which must always be locked after having clamped a spindle blank with the handwheel. Next to the lock handle, there is a socket head screw for readjusting the quill. The clamping lever for locking the tailstock on the bed is mounted on the rear side of the tailstock. By loosening the circlip, it can be removed and placed on the front of the tailstock if desired.



Regularly make sure that the tailstock is firmly locked on the bed. The tailstock guarantees a perfect alignment between live centre and drive centre. This assures low-vibration turning and is the best prerequisite for exact drilling with the tailstock.

To move the tailstock along the bed, loosen the clamping lever, move the tailstock to the desired position and lock the lever again.

To turn the quill in or out, loosen the lock handle of the quill and turn the handwheel. The quill can be used with live centres and tools with a Morse taper no. 2 (MT2). To mount the tool, quickly and firmly insert it into the quill shaft by hand. Do not hit the accessories (e.g. live centre, drill chuck) into the shaft.

Make sure that the tools you are using are well seated in the Morse taper. Some tools have an extended Morse taper – in this case, it may be possible that the tools are not yet firmly locked when the scale indicates "0". Turn the quill towards the headstock until the taper is firmly locked.



Caution!

The tip can cause injuries. Remove the live centre when not in use.

Tool rest

Loosen the clamping lever, move the banjo to the desired position on the bed and lock the lever again.

Place the tool rest close to the workpiece. Choose the setting that suits you best. Before switching on the lathe, turn the workpiece by hand to ensure that it is not in contact with the tool rest. When turning, stop the lathe at intervals and readjust the tool rest.



Danger!

- As long as woodturning tools are in contact with the workpiece, they must rest firmly on the tool rest.
- To avoid pinching your fingers during sanding or polishing, remove the tool rest from the workpiece.

Clamping mechanism (eccentric clamp)

If the headstock, tailstock or banjo cannot be firmly fixed on the bed, it may be necessary to readjust the eccentric clamp. Pull the headstock, tailstock or banjo to the end of the bed and slightly tighten the lock nut on the underside.



Locking the spindle

The lathe is equipped with a 95 mm faceplate. Before loosening the faceplate, unscrew the two socket head screws that prevent the faceplate from unwinding.

To lock the spindle, insert the spindle locking pin into the hole on the spindle.

Now, use the open-ended spanner to loosen the faceplate.



Make absolutely sure that you do not turn on the motor while locking the spindle.



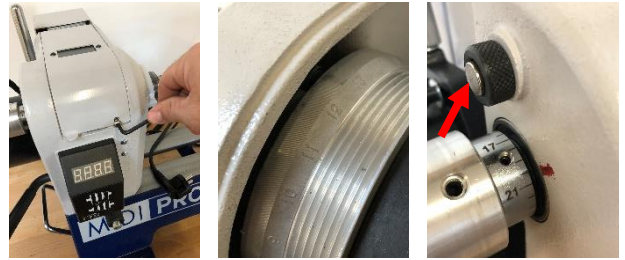
24-position indexing device

By inserting the magnetic pin (red arrow), the 24-position indexing device engages. This allows a uniform division of 15° steps during one rotation of the spindle.

With this graduation, the spindle can be divided 24, 12, 8, 6, 4 and 2 times per rotation.



Make absolutely sure that the power plug is disconnected. Do not turn on the motor while indexing.



You can read the respective setting on the large belt pulley inside or on the handwheel outside.

Run-down brake

Your **MIDI PRO** lathe disposes of a run-down brake that can be regulated using the toggle switch on the frequency inverter housing. Choose the setting "→ STANDARD" when working on medium to large workpieces. Choose the setting "← FAST" when working on small workpieces (up to approx. 5 kg). This reduces the waiting time until the machine comes to a complete standstill.



14 | Spindle with groove for unwind-protection system (ASR EUROLOCK)

In order to meet increased safety standards, the spindle of your **DRECHSELMEISTER** lathe has a groove that allows the easy fixture of an ASR unwind-protection system.

When used with optionally available ASR accessories (see pictures below), a fixed clamping of spindle and accessories is enabled. Especially when working on larger workpieces, this effectively prevents the accessories from unwinding from the spindle thread.



Fig. ASR locking ring
DDKS22-FPS



Fig. Unwind-protection
chuck

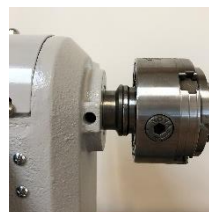


Fig. Clamping without
locking ring



Fig. Unwind-protection
system in use

15 | Guidelines for rotational speeds

Especially in case of workpieces with a larger diameter (30 cm or more), make sure to reduce the imbalance as far as possible (e.g. using a bandsaw) before turning.

The given speed recommendations refer to turning an already round workpiece.

For roughing a workpiece blank, select a lower speed. Start with the lowest possible speed and increase it slowly. Always stay below the speed at which the machine starts to vibrate.

Due to the different properties of wooden workpieces, we cannot guarantee that the recommended values are always correct. It may be necessary to select a lower speed as indicated.

Please note that these recommendations are not based on calculations or simulations. Instead, we aim to comply with accident prevention regulations in a conservative form.

If you have any questions on this subject, please contact a competent person or your dealer.

Turning above the bed

Workpiece diameter	Turning rpm
up to 15 cm	1000
15 – 20 cm	800
20 – 25 cm	650
25 – 30 cm	500
30 – 35 cm	450

Recommendations on working with the 95 mm faceplate



CAUTION! Observe the rule of thirds!

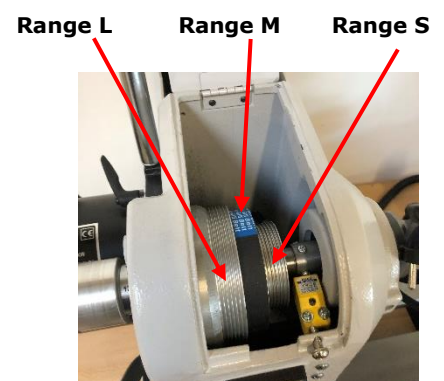
The faceplate should not be smaller than 1/3 of the workpiece diameter.
For workpieces with a diameter of more than 29 cm, use bigger faceplates.

- Select the speed corresponding to the workpiece conditions.
- Create a flat supporting surface.
- Avoid impact stress.
- Shorter thick screws are better than long thin ones. (Shear force)
- Do not use faceplates with recognizable damages.
- Always use the supplied tool to remove the faceplate from the spindle.
- Never stand in a critical area while working (critical: directly in front of the workpiece).
- Only mount blanks that are as homogeneous and round as possible.
- Do not use unbalanced, cracked or crack-prone wood.
- Avoid using risky and untrained techniques or turning tools that can get caught / stuck.

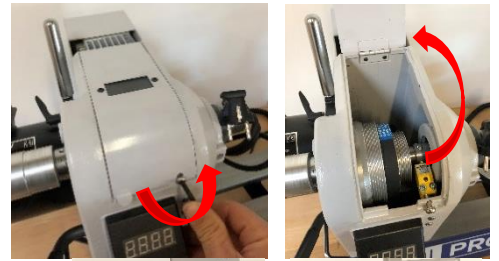
Changing the speed range by changing the belt pulley

The motor drives the pulleys of the spindle via three belt pulleys and a Poly V-belt. When working on workpieces with a larger diameter, a slower belt speed is needed to maintain the optimum torque. This means, if you have been turning e.g. spinning tops using a fast belt speed and then you want to turn a bowl with a diameter of 30 cm or more, the motor power can be reduced under heavy use. In this case, another speed range must be selected.

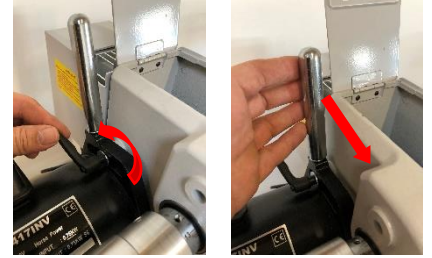
For this purpose, there are three belt pulleys underneath the cover on the headstock which allow you to choose between three different speed ranges. To change the speed range, proceed as follows:



1. Disconnect the power plug, loosen the socket head screw on the headstock and open the cover.



2. Release the lock handle on the motor flange. Pull the motor with the tensioning lever forwards. This will release the tension of the Poly V belt.



3. Now, place the belt on the corresponding belt pulleys on motor and spindle.

Range L: 60 - 1,000 rpm
Range M: 150 - 1,900 rpm
Range S: 350 - 3,700 rpm



4. Then, push the motor with the tensioning lever backwards to tension the belt.

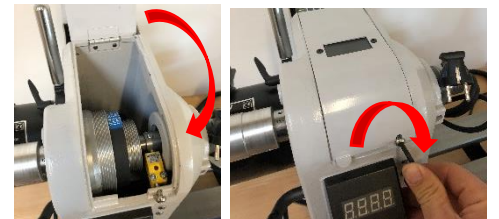
Secure this position again with the lock handle.



5. Close the cover and tighten the socket head screw with the hex key.

Now plug in the power plug again.

The new speed range is set.



16 | Working on workpieces



Danger!

- Always wear eye protection.
- Make sure the workpiece is securely mounted. Always start with a low motor speed and then increase it until you reach the optimum speed.
- If the motor speed is too high, out-of-balance workpieces can be thrown out of the lathe and seriously injure you.
- After the EMERGENCY STOP button has been pressed, the lathe slowly reduces the speed to zero. Do not try to stop the workpiece by hand during the run-down phase. There is a high risk of injury from splinters and overheating.
- Make sure that your fingers do not get pinched between workpiece and tool rest.



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



- The 4-prong drive centre must hold the workpiece securely. Pre-punch the workpiece using the 4-prong drive centre and a wooden mallet.
- Use a support (steady rest) when turning long and thin, or long workpieces, especially when the workpiece starts vibrating.
- Use the woodturning tools carefully. Make sure to place the tool on the tool rest before moving it towards the workpiece.
- When working with dangerous types of wood, always use a dust extractor and/or a respiratory mask and wear safety glasses.
- Do not use heavy, out-of-balance workpieces. If the workpiece starts vibrating, immediately reduce the speed or switch off the machine and restart it at a lower speed.



- Do not use any workpieces with cracks or insufficient strength (e.g. due to rot).
- Mount the workpiece securely.
- Select an appropriate chuck.
- Select the motor speed according to the diameter of the workpiece. Please note the recommendations on page 18.

Pay special attention to the mounting of the workpiece. It has to be done as safely as possible. There are different possibilities for this. Consult books, obtain video material or attend a woodturning class.

Pay particular attention to safety and out-of-balance workpieces. Use a balanced speed, mount the workpiece securely and try to remove the imbalance of the workpiece as far as possible before mounting it.

Mounting blanks for spindle turning

Make sure that the workpiece is optimally centred as the imbalance must be minimised, especially when working with larger workpieces. A deep impression of the 4-prong drive centre increases the secure hold of the workpiece during turning.

Take a square piece of wood (turning square) and find the centre at both ends. Use a pencil to draw diagonals between the corners. You can also use a centre finder.

Then, place the square on a solid surface and punch the 4-prong drive centre with a wooden, rubber or Teflon mallet exactly into the centre of the head end of the wood. This gives you four deep impressions at one end of the square where the 4-prong drive centre can easily penetrate and hold the workpiece securely.

Insert the 4-prong drive centre into the spindle and make sure it is tight. Now, press the marked end of the square into the 4-prong drive centre. Slide the tailstock towards the other end of the square leaving a little space and lock the tailstock with the clamping lever on the rear side on the bed. Turn the handwheel to drive the live centre into the marked centre of the other end of the square. Finally, lock the quill with the lock handle.

Do not press the workpiece into the mounted 4-prong drive centre with the tailstock. This would create an unnecessary pressure on the tailstock and headstock and would make it more difficult for the 4-prong drive centre to penetrate into the square, especially in the case of hardwood.

The blank is now properly mounted.



Adjusting the tool rest

Place the banjo in front of the workpiece and lock the clamping lever. During adjustment of the tool rest, make sure that the blank can still rotate freely. There should be a gap of approx. 5-10 mm between the workpiece and the tool rest. Lock the tool rest with the lock handle.

As a general rule, the wood should be cut with the tool. If the selected speed is too slow, the wood will "hammer" against the tool and tear out. In this case, considerable forces will be exerted on the tool and workpiece. This can lead to dangerous situations. Therefore, it is better to choose a suitable speed (see page 18). This will give you a better cut and less force will be exerted on the workpiece. Compare it to working with a plane. If you move the plane very slowly, it is much more difficult to cut the fibres.



Mounting blanks for faceplate turning

Use a bandsaw to cut the blank to a round shape before mounting it on the lathe. This makes it easier to start turning and reduces vibrations. To mount the pre-shaped blank on a faceplate or chuck, you need a flat surface. If necessary, plane hollow or curved surfaces. Screw faceplates onto the blank with at least six wood screws. Especially for larger workpieces, the faceplate is the safe method for initial mounting.

As an alternative to mounting workpieces on a faceplate, modern chucks allow mounting workpieces by means of woodworm screws or corresponding drill holes. When using chucks, read the operating instructions of the respective manufacturers.



Speed selection

The speed in rpm to be selected depends mainly on the size of the workpiece. But other factors such as imbalance, weight, hardness and density also have an influence on the right speed. If the speed is too slow, it is usually not possible to produce smooth surfaces. If the speed is too high, the lathe starts to vibrate, possibly causing the workpiece to fly out of the fixture and leading to serious injuries or damages.

Heavy, out-of-balance and/or large workpieces



When the headstock is pivoted, you must secure the machine against slipping or tilting before working on heavy, out-of-balance and/or large workpieces.

For this, you can screw the lathe to your workbench. Use the additional holes on the feet.

If you mount an additional bed (DDBV230PRO) on the front opening of the bed, your lathe will be more stable and it will be easier for you to work on your workpiece as you will be able to place the tool rest in a more favourable position.

Woodturning tools

The description below is only intended to provide a brief overview of the different tools that can be used for wood turning. In no case does it replace attending a woodturning class or dealing with the topic of "wood turning". For video material on our lathes, please visit our website www.drechselmaschinen.at. For books and DVDs on wood turning, please ask your specialist dealer. He will also give you information about woodturning classes.



Roughing gouge

Use a roughing gouge to bring a square or slightly rectangular spindle blank into a cylindrical shape. There are two different types of roughing gouges: the English U-shaped and the German flat forged roughing gouge. The English type is only used for spindle turning whereas the German type may also be used for faceplate turning.

When roughing, adjust the tool rest slightly below the centreline of the spindle allowing the cutting edge to attack the workpiece slightly above the centreline. Use the roughing gouge until the workpiece is round.



Spindle gouge

Use a spindle gouge for more precise and finer shaping. It allows you to create large and small shapes such as coves, beads and ogees.

When spindle turning, position the spindle gouge always slightly above the centreline of the workpiece. Use the spindle gouge almost always slightly vertically and cut with the lower side of the cutting edge (near the front curve). Make sure that bevel contact is maintained when cutting with a spindle gouge.



Bowl gouge

Bowl gouges are used for faceplate turning. Bowl gouges with standard and fingernail grind are in common use.

The standard grind is easier to use and universally applicable both for the inner and outer shaping of the workpiece.

Using bowl gouges with fingernail grind requires a little more experience. When used correctly, these gouges will allow you to shape the interior quickly and effectively and to achieve a very fine chip removal (angel hair cut) on the exterior at a correct angle (approx. 45°).



Skew chisel

Skew chisels are used to create mirror-like surfaces that require little sanding. It takes a great deal of practice to use them. Use skew chisels only for spindle turning. Rectangular skew chisels are suitable for creating fine surfaces; oval skew chisels are suitable for forming long coves.

Hold the skew chisels at a lateral angle of about 45° to the workpiece. The middle third of the cutting edge does the work; the bevel maintains contact with the workpiece. The skew chisel attacks the workpiece well above the centreline.



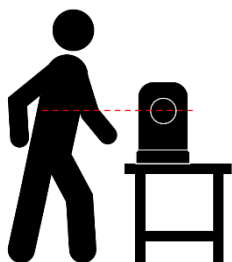
Parting tool and bedan

Use a parting tool to part the wood. The tool attacks the workpiece in the upper third and is guided in an arc to the centre.

For cutting flats during spindle turning, the same procedure is followed, but the motion is stopped when the desired diameter is reached. For this, you can also use a bedan.



17 | Work ergonomics



Installing the lathe correctly facilitates fatigue-free and safe working. It helps to handle the tools safely and to more easily achieve the desired shape of the workpiece. Place the lathe in such a way that the tips (of 4-prong drive centre and live centre) are level with your elbows when you stand upright. If possible, place the lathe near a source of natural light. Artificial light should come from above, but not fall directly into the eyes.

18 | Optional accessories

MIDI PRO additional bed 230 mm [DDBV230PRO]

This compact cast additional bed can be mounted on the left and right side of the bed, as well as on the front opening of the **MIDI PRO**.

When the additional bed is mounted on the front opening of the bed, the stability of the machine is significantly increased and the banjo can easily be moved onto the additional bed which facilitates ergonomic working when the headstock is pivoted.



With the help of one additional bed, you can extend the distance between centres by 230 mm or increase the footprint.



With the help of two additional beds, you can extend the distance between centres by 460 mm.



For mounting the additional bed see chapter 26 (page 30).

Quick-change system "EASY" for MIDI PRO [DDMIDIPRO-AS]

This useful system enables you to quickly change the mounting position of the additional bed. It consists of two mounting plates for the bed and one hooked plate for the additional bed.



Tailstock quill ER25 [DDMIDI-PINER25]

The quill-quick-change system of the **MIDI PRO** tailstock makes it possible to use a quill with a high-quality ER25 collet system. Thereby, drill bits can be inserted directly and precisely into the appropriate ER25 collet without using a separate drill chuck and without losing the distance between centres when drilling. For mounting the tailstock quill see chapter 27 (page 31).



Locking ring ASR EUROLOCK [DDKS22-FPS]

Mounting the locking ring on the groove of the spindle and of the accessory (unwind-protection groove also required here) prevents the accessory (e.g. chuck, faceplate, etc.) from unwinding during operation or braking.



19 | Care and maintenance

Maintenance / Machine care

To protect the lathe, especially in high humidity, apply a suitable wax, silicone spray or any other rust protection after each use on all corrosion-prone areas such as bed, spindle thread with MT2 and quill with MT2, as well as some screw threads.

After each use, clean the bed, the head- and tailstock taper and the M33 spindle thread with a rag soaked in alcohol or a usual solvent. Store and dispose of the used rags properly.



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.

Clean and impregnate all bare areas **immediately**, especially when working with green wood.

After each use, check the belt pulleys for dust and dirt deposits and clean them if necessary.

Grease the threaded spindle of the tailstock at least once a year or, if necessary, more often if it is subjected to high use due to drilling work. Proceed as follows:

Release the lock handle and the socket head screw. Then, unscrew the quill completely from the tailstock by turning the handwheel. Now, you have access to the quill thread for cleaning and greasing.

The re-assembly is done in the reverse order:

First, place the quill on the thread and turn the handwheel until the quill is retracted again. Then, loosely screw in the socket head screw - it should not jam the quill, just secure it against twisting. Finally, turn the lock handle into place (closer to the handwheel!) and position the tailstock on the bed.



All bearings are sealed on both sides and do not require maintenance.

Working on electrical system components



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.

20 | Troubleshooting

Symptom	Possible cause	Possible remedy
Machine does not switch on	No current	Check, if power plug is connected, check fuses
	Motor, switch or cable defective	Contact a qualified electrician
	Spindle or 24-position indexing device locked	Release locks
	No mains voltage	Check fuses
Machine switches off	Frequency inverter switched off	Wait approx. 10 minutes and turn on again
		Press red button "STOP / Reset"
	Workpiece out-of-balance	Balance out workpiece, reduce speed
Machine vibrates	Workpiece not clamped securely	Improve clamping length or diameter, support tailstock end, use steady rest
	Blunt cutting edge of tool	Sharpen or replace tool
	Cutting pressure too high	Reduce cutting depth or feed
	Workpiece clamped off-centre	Clamp workpiece centrically
	Speed too high	Reduce speed
	Belt pulleys are loose	Tighten belt pulleys
	Machine positioned on uneven ground	Level machine
	Dirt between belt pulleys and belt	Clean grooves
	Bearing defective	Check and replace if necessary
	Motor bearing defective	Have checked and replaced if necessary
	Tool rest, tailstock or headstock not firmly locked	Check and lock, tighten lock nut on the underside if necessary
	Main bearing has play	Have bearing replaced
Machine chatters	Cutting pressure too high or feed too fast/workpiece surface too rough	Reduce pressure / feed
	Blunt woodturning tool	Sharpen woodturning tool
	Tips are not aligned	Readjust headstock
	Woodturning tool springs	Move tool rest closer to workpiece
	Workpiece too large	Reduce belt speed
Poor motor power	Poly V belt is loose	Retighten belt

21 | Decommissioning

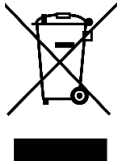
Please observe the following notes when preparing for final decommissioning:



- 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.

22 | Terms of guarantee

Neureiter GmbH grants a five-year manufacturer's guarantee on this product from the date of purchase.

If defects in material or workmanship occur during the intended use of the **MIDI PRO**, 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 guarantee (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 guarantee 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 guarantee are valid in German-speaking countries; elsewhere different terms of guarantee may apply. In this case, please contact your local dealer.

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



EC – Declaration of Conformity

For machines (according to EC-Directive 2006/42/EC)

No. of Declaration of Conformity:	Neu-DM-221-111-EN
Distributor:	Neureiter Maschinen GmbH Gewerbegebiet Brennhoflehen Kellau 167 A – 5431 Kuchl
Responsible person for technical documentation:	Ludwig Neureiter Kellau 167 A – 5431 Kuchl
Object of the declaration:	Woodturning Lathe
Product designation:	MIDI PRO
Technical model name:	1417N-INV; 1417 MIDI PRO
Technical series name:	KC-INV

The serial number, crucial technical information and marks of conformity can be found on the rating plate of each machine.

The distributor bears the sole responsibility for issuing this EC Declaration of Conformity.

The object of the declaration described above is in conformity with the relevant **Union harmonisation legislation:**

Machinery Directive 2006/42/EC

Electromagnetic compatibility (EMC) Directive 2014/30/EU

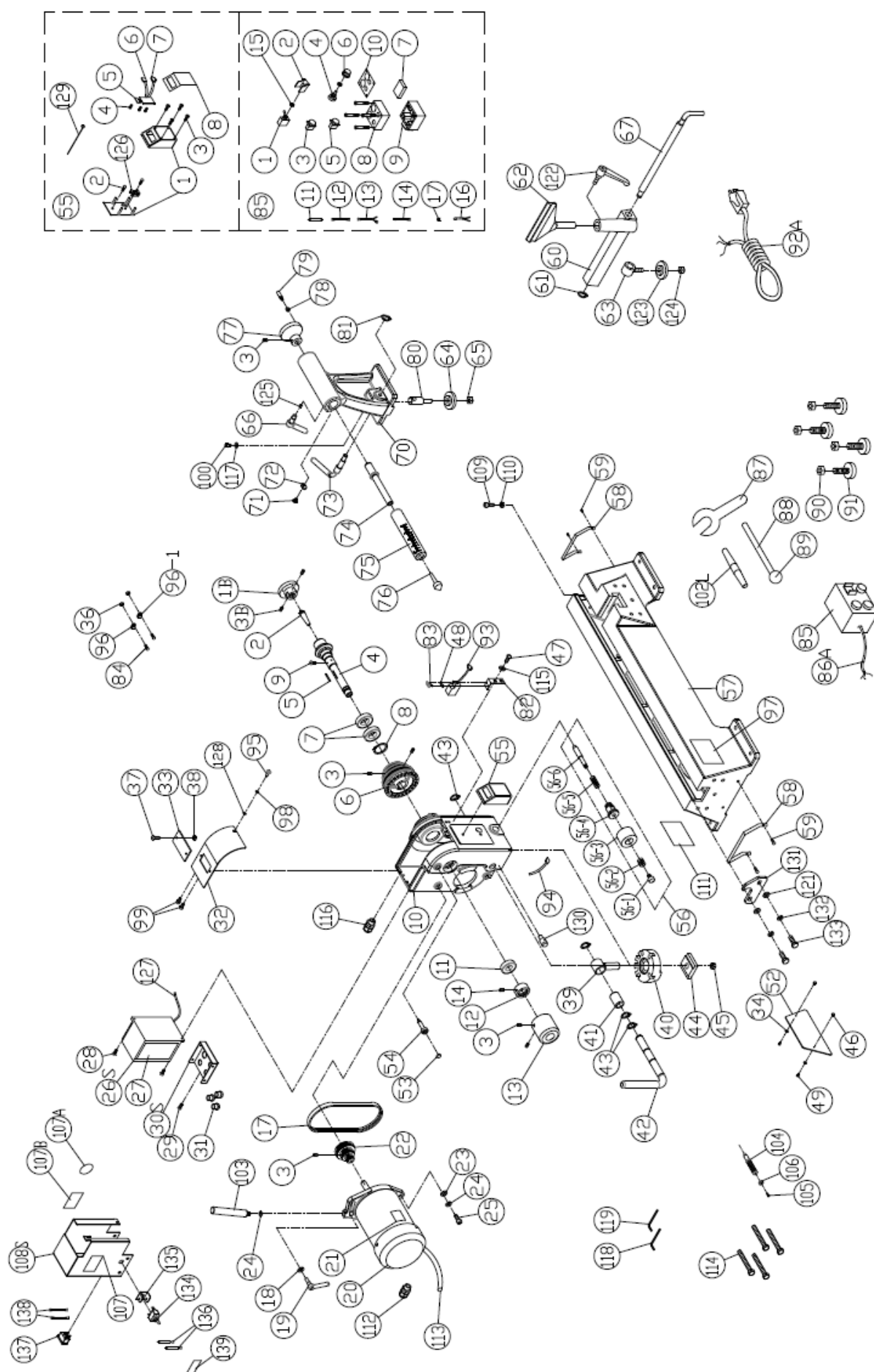
The following harmonised standards and technical specifications have been applied:

EN ISO 12100:2010	Safety of machinery General principles for design Risk assessment and risk reduction
EN 60204-1:2018	Safety of machinery Electrical equipment of machines – Part 1: General requirements
EN ISO 13849-1:2015	Safety of machinery Safety-related parts of control systems – Part 1: General principles for design
EN 61000-6-2:2019	Electromagnetic compatibility (EMC) Immunity standard
EN 61000-6-4:2019	Electromagnetic compatibility (EMC) Emission standard

Mr Ludwig Neureiter
Neureiter Maschinen GmbH
Gewerbegebiet Brennhoflehen
Kellau 167
A – 5431 Kuchl


Kuchl, 24 March 2022
Ludwig Neureiter (owner)

DDMIDIPRO_Neu-DM-221-111-EN



Part No.	Specification	Description
1B	1x faceplate	M33 x 95
2	1x 4-prong drive centre	MT 2
3	7x set screw	1/4" x 3/8"
3B	2x set screw	M6 x 10
4	1x spindle	M33
5	1x key	5 x 5 x 25
6	1x belt pulley	
7	2x bearing	6005
8	1x circlip	S-25
9	4x round cross-head screw	
10	1x headstock	
11	1x bearing	
12	1x damping ring	
13	1x handwheel	
14	3x set screw	#10 x 1/4"
17	1x belt	
18	1x washer	5/16"
19	1x lock handle	5/16"
20	1x motor	3/4HP
21	1x nameplate motor	
22	1x motor belt pulley	
23	1x washer	3/8"
24	2x spring washer	3/8"
25	1x cap screw	3/8" x 1 1/4"
26S	1x frequency inverter	
27	1x warning label	
28	2x cap screw	#10-24UNCx1/2
29	4x round-head screw	M5 x 10
30S	1x junction box	
31	3x strain relief	
32	1x cover	
33	1x plastic cover	
34	2x magnet	
36	2x nut	M4
37	2x round-head screw	M4
38	2x nylon nut	M4
39	1x bolt	
40	1x base	
41	1x bushing	
42	1x headstock damping lever	
43	4x circlip	S-19
44	1x damp	
45	1x nylon nut	M14 x 2
46	2x cap nut	M3
47	2x round-head screw	M4 x 15
48	2x washer	M3
49	2x flat head screw	M3 x 8
52	1x cover plate with logo	
53	1x magnet	
54	1x index plate locking pin	
55	1x rpm readout (assembly)	
56	1x release knob (assembly)	
57	1x bed	
58	2x carrying handle	
59	4x round cross-head screw	
60	1x banjo	
61	1x circlip	S-18
62	1x tool rest	6" x 1"
63	1x tool rest damping bolt	
64	1x damp	
65	1x nylon nut	M10 x 1.5P
66	1x lock handle	5/16" x 20 mm
67	1x tool rest damping lever	
70	1x tailstock	
71	1x socket head screw	#10-32 x 5/8"
72	1x guide plate	
73	1x tailstock damping lever	
74	1x threaded spindle	
75	1x quill	
76	1x live centre	MT 2
77	1x handwheel	
78	1x nut	1/4"
79	1x handle	
80	1x tailstock damping bolt	
81	1x circlip	S-10
82	1x bracket for speed sensor	
83	2x round cross-head screw	M3 x 20
84	2x round-head screw	M4 x 20
85	1x control box	
85-1	1x forward / reverse switch	
85-2	1x switch guard	
85-3	1x LED ON button	
85-4	1x speed control	
85-5	1x OFF button	
85-6	1x speed control knob	
85-7	1x magnet	
85-8A	1x control box housing	
85-9	1x strain relief	PG9
85-10A	1x label	
85-11	3x cable 1	
85-12	1x cable 2	
85-13	1x cable 3	
85-14	2x cable 4	
85-15	1x washer	
85-16	1x LED lamp	
85-17	1x LED lamp holder	
86A	1x control box cable	
87	1x open-ended spanner for faceplate	
88	1x knockout bar shaft	
89	1x knockout bar knob	
90	4x foot adjusting nut	3/8"
91	4x rubber foot	3/8"
92A	1x power cable	
93	1x cable	
94	1x power cable for rpm readout	
95	1x round cross-head screw	M6 x 15
96	1x cord snap ring	
96-1	1x cord snap ring	
97	1x label "MIDI PRO"	
98	1x washer	M6
99	2x cap screw	M3 x 8
100	1x cap screw	
102L	1x double taper	
103	1x motor tensioning lever	
104	1x spindle locking pin	
105	1x flat head screw	M3 x 8
106	1x magnet	
107	1x warning label	
107A	1x warning label	
107B	1x warning label	
108S	1x frequency inverter housing	
109	1x cap screw	M6 x 20
110	1x nut	M6
111	1x nameplate	
112	1x strain relief	
113	1x motor cable	
114	4x hex head screw	3/8" - 16 UNC x 2"
115	2x washer	M4
116	1x strain relief	M16
117	1x washer	1/4"
118	1x hex key	3
119	1x hex key	4
120	1x round-head screw	M6 x 12
121	2x washer	M6
122	1x lock handle	
123	1x damp	3/8"
124	1x nylon nut	3/4" x 10 UNC
125	1x brass insert	
127	1x cable 4	
128	1x washer	
130	1x stop	
131	1x stop plate	
132	2x spring washer	M6
133	2x hex head screw	M6 x 16
134	1x brake switch	
135	1x switch guard	
136	2x cable	
137	1x main switch	
138	2x cable	
139	1x label	



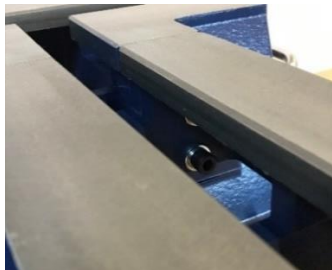
Scope of delivery:

- Additional bed 230 mm
- 2x rubber foot for height adjustment
- 4x socket head screw
- 4x circlip
- 4x washer



- First of all, mount the rubber feet on the additional bed.
- If you want to mount the additional bed on the front opening, remove the magnetic cover (see left figures below); if you want to use the additional bed as bed extension, remove the respective carrying handle (see right figures below).

Using the additional bed on the front opening



Using the additional bed as bed extension



- Position the additional bed and fix it loosely with the four screws. Use the supplied circlips and washers as well.
- Use the tailstock to align the additional bed.
To do this, slide the tailstock over the joint and clamp it. The guiding groove of the tailstock will align the additional bed exactly.
If necessary, use a rubber mallet or a mallet and a block of wood to align bed and additional bed.



Caution!

Never hit the bed or additional bed directly with a metal hammer.

- Now, tighten the four socket head screws.
- Mounting of the additional bed is now completed.





- Turn the tailstock handwheel until the quill detaches from the threaded spindle of the tailstock.



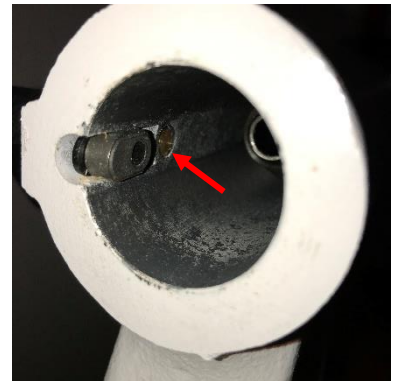
- Then, remove the quill by pulling it out towards the front.



Brass insert:

Depending on the version of your lathe, there may be a brass insert in the thread between lock handle and quill.

Therefore, open the lock handle as far as possible and make sure that the brass insert remains in its position. If necessary, push it back into the thread before inserting the quill.



- Now, push the ER25 tailstock quill into the opening of the tailstock until it touches the threaded spindle. Turn the handwheel counterclockwise to attach the quill to the threaded spindle.
- The ER25 tailstock quill is now ready for use.

Note!

This picture is symbolic. The ER25 collet chuck nut and ER25 collets are optionally available and not included in the scope of delivery of the ER25 tailstock quill.



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