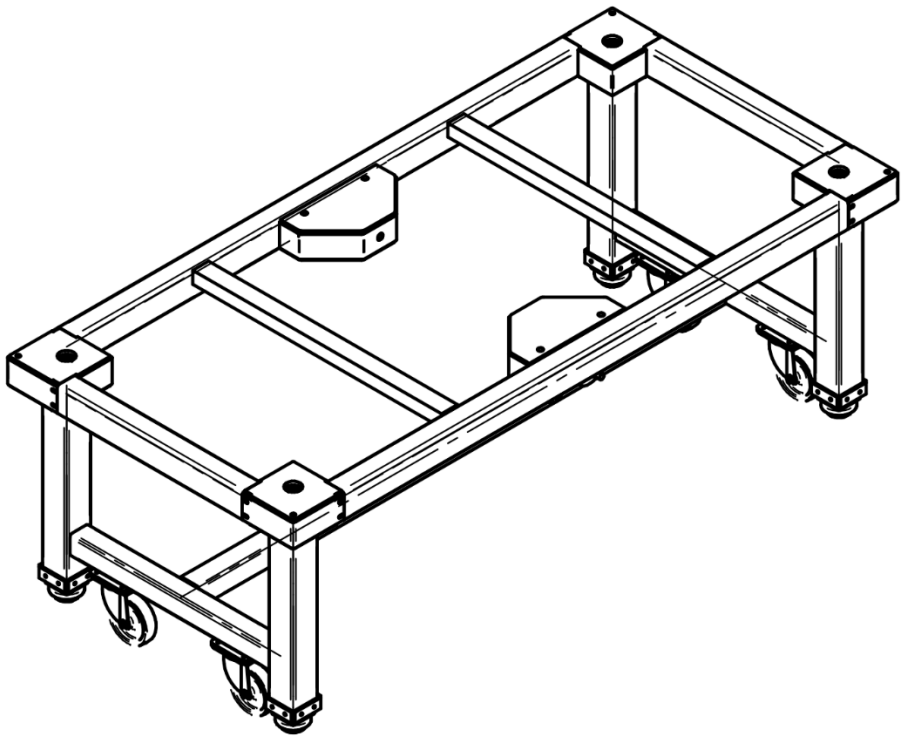
Operating Instructions

PETec Advanced

Height-Adjustable Work Table

Mechanical height adjustment using a cordless drill



Machine type: PETec Advanced
Drive: Mechanical height adjustment using a cordless drill, 24 mm socket
Manufacturer: PETec GmbH, Zum Osterfeld 6, 59872 Meschede, Germany
Version: 2026-07-02

1 Quick Guide

1.1 Raising the Table

Attach a 24 mm socket to the cordless drill and connect it to the table drive.
Only use a cordless drill with the impact function deactivated. The impact function must not be used, as it may damage the drive. Set the cordless drill to the “Up” rotation direction according to the marking on the table. Operate the cordless drill slowly and evenly until the desired working height has been reached. Only raise the table until the desired position has been reached or slight resistance can be felt. As soon as the end position has been reached, do not continue turning.

1.2 Lowering the Table

Set the cordless drill to the “Down” rotation direction according to the marking on the table. Operate the cordless drill slowly and evenly until the desired working height has been reached. When lowering the table, ensure that no persons, objects or body parts are located underneath the table.
For versions equipped with castors, the table can be lowered until the table feet lift off the floor and the table rests on the castors. The table may only be moved in this lowered transport position.

WARNING

Use only a cordless drill with a suitable 24 mm socket for height adjustment.
Impact wrenches and cordless drills with the impact function activated must not be used. The shock-type load may damage the drive, gearbox or height adjustment mechanism.

NOTICE
The table must not be adjusted beyond the mechanical end position. As soon as clear resistance can be felt, the adjustment process must be stopped immediately. Before each height adjustment, ensure that the load is securely positioned on the table and cannot slip or tip over.

2 General Information

2.1 Purpose of These Operating Instructions

These operating instructions describe the safe transport, installation, commissioning, operation, care, maintenance and inspection of PETec Advanced tables with mechanical height adjustment using a cordless drill. They are intended for operators, operating personnel, maintenance personnel and qualified persons.
These operating instructions are an integral part of the table. They must be read and understood before any work is carried out. The operator must ensure that all persons involved are instructed and trained according to their respective tasks.

2.2 Explanation of Symbols and Notices

The following symbols and notices must be observed. They are classified according to ISO 3864-2 (ANSI Z535.4).

DANGER

Indicates an imminently hazardous situation.
Failure to observe this information will result in death or very serious injury, including permanent disability.

WARNING

Indicates a potentially hazardous situation.
Failure to observe this information may result in death or very serious injury, including permanent disability.

CAUTION

Indicates a potentially hazardous situation.
Failure to observe this information may result in property damage as well as minor or moderate injury.

NOTICE
Indicates general information, useful user tips and work recommendations that do not affect the safety and health of personnel.

2.3 Personnel Qualification

Operating personnel must be instructed in the safe operation of the table. Maintenance and adjustment work may only be carried out by qualified and authorized personnel. Inspections after repair work or significant modifications must be documented by a qualified person.
Work on safety-relevant components may only be carried out after approval by PETec or by appropriately qualified specialist personnel.

3 Safety

3.1 Basic Safety Instructions

WARNING

Hazard due to improper use
The table may only be used for its intended purpose. Modifications, overloading, one-sided loading, operation with damaged components or undocumented repairs may result in serious injury and property damage.

Keep the work area clean and free from tripping hazards.
Keep unauthorized persons away from the work area.
Perform a visual and functional inspection before each use.
Observe the maximum permissible load and correct load distribution.
Do not transport or lift persons on the table.
Do not stand underneath a raised load or underneath moving parts.
Avoid crushing and shearing points in the area of the mechanism, castors, guides and underside of the table.
If unusual noises, stiffness, visible damage or unclear function occur, take the table out of service immediately.

3.2 Intended Use

The PETec Advanced table is designed as a height-adjustable work table for working on the tabletop. Depending on the version, it can be used as a workbench, assembly table or welding table. Height adjustment is carried out mechanically using a cordless drill with a 24 mm socket or adapter. Intended use includes compliance with these operating instructions, internal safety instructions, maintenance intervals and documented inspections.

3.3 Improper Use

Transporting persons or standing on the tabletop during height adjustment.
Exceeding the permissible load capacity or operating the table with improper load distribution.
Operating the table on unsuitable, insufficiently load-bearing or uneven ground.
Moving the table contrary to the intended transport position or with an unsecured load.
Using the table as a lifting platform, ladder, attachment point, crane substitute or press device.
Operating the table with damaged guides, chains, drive elements, castors, brakes or protective components.
Unauthorized modifications to load-bearing or safety-relevant components.

3.4 Personal Protective Equipment

Safety shoes during transport, installation and work involving heavy workpieces.
Protective gloves during assembly, cleaning and maintenance work.
Safety glasses during cleaning, lubrication or adjustment work.
Wear close-fitting clothing. Secure jewelry, loose straps and long hair.

3.5 Residual Risks

Hazard	Cause	Measure
Crushing / shearing	Height adjustment, guides, castors, underside of the table	Keep hands and body parts away from the danger zone; do not intervene during movement.
Crushing / shearing	Height adjustment, guides, castors, underside of the table	Keep hands and body parts away from the danger zone; do not intervene during movement.
Entanglement	Rotating drive elements and tool holder	Guide the cordless drill safely; avoid loose clothing; do not remove covers.
Falling parts	Unsecured workpieces or attachments	Secure workpieces; do not overload the tabletop.
Loss of function	Wear, lack of maintenance, incorrect adjustment	Perform regular maintenance; take the table out of service in the event of malfunction.

4 Product Description

4.1 Design and Main Assemblies

Depending on the version, the work table consists of a load-bearing steel frame, a tabletop support or customer-specific work surface, a mechanical height adjustment system with guide elements, heavy-duty castors or adjustable machine feet, and a drive interface for the cordless drill.

① Steel frame
② Chain tensioner
③ Cordless drill interface
④ Heavy-duty castors
⑤ Tabletop support
⑥ Adjustable machine feet
⑦ Adjustable guide rails

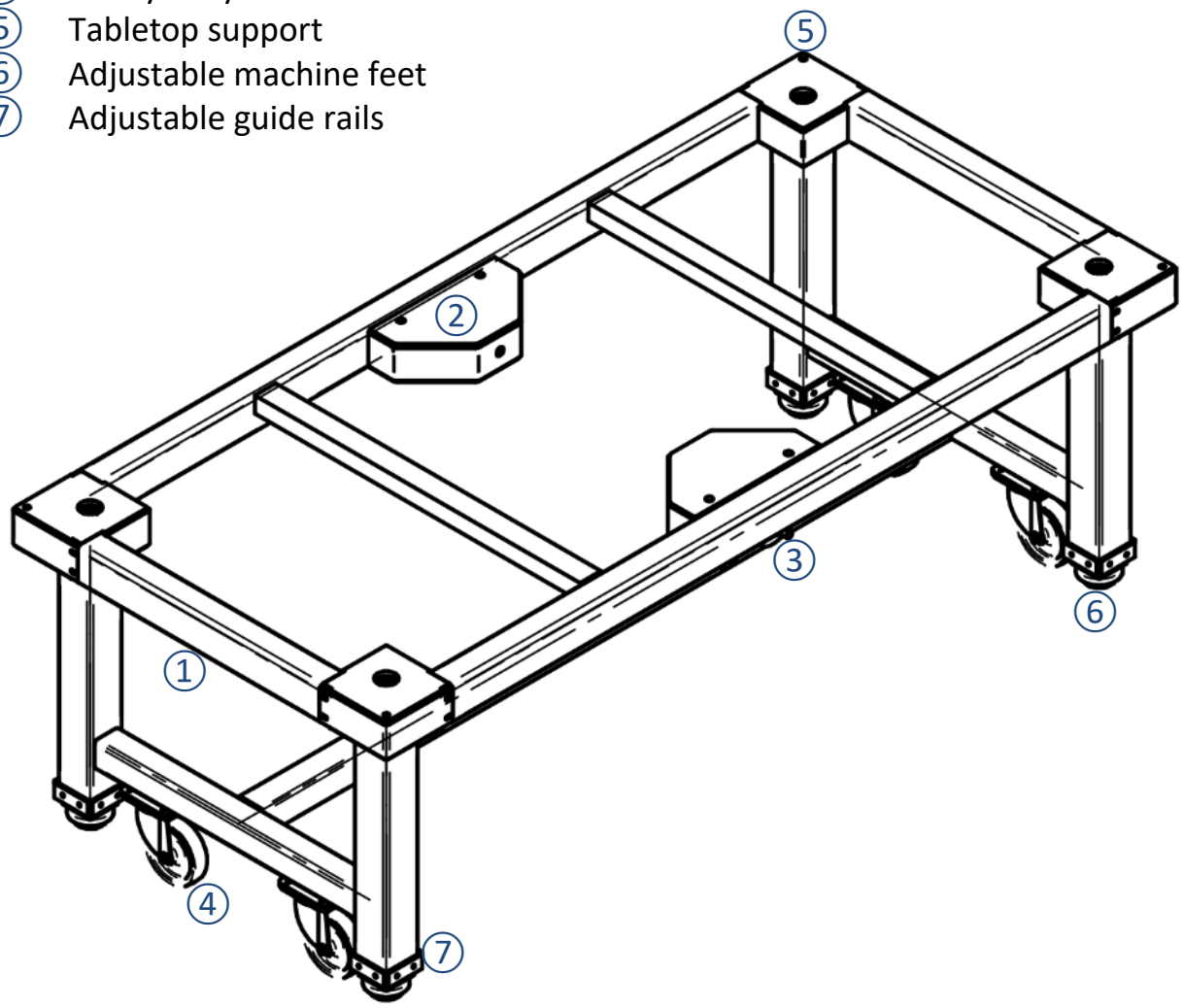


Figure: Design and main assemblies of the height-adjustable work table.
The illustration shows an example of the basic design with steel frame, tabletop support, mechanical height adjustment, drive interface, guide elements, castors and adjustable feet. The actual version may vary depending on the variant, tabletop and customer-specific equipment.

4.2 Technical Data

Important
The binding technical data can be found on the type plate, the data sheet and the order documents of the respective table.

Maschine Type	Advanced
Drive	Mechanical, using a cordless drill
Tool	24 mm socket / adapter

5 Transport, Installation and Location Selection

5.1 Transport

Move the table only using suitable lifting and transport equipment.
Before transport, remove or secure loose workpieces, tools and attachments.
When lifting, observe lifting points and center of gravity. Do not attach loads to components that are not approved for lifting. Keep transport routes clear and sufficiently dimensioned.
After transport, check for visible damage.

5.2 Location Selection

The location must be level, load-bearing, non-slip and free from obstacles.
Escape and rescue routes must not be obstructed.
Provide sufficient space for operation, height adjustment, maintenance and material handling.
Avoid crushing and shearing points between the table and its surroundings.
For tables with castors: apply the brakes before starting work, if provided by the version.

5.3 Alignment and Adjustment

Position the table at the intended location.
Check the ground and support points.
Align the table horizontally. Use suitable measuring equipment.
Adjust castors, leveling feet or height compensation according to the version.
Ensure that the height adjustment can move through the entire intended range without collision.

CAUTION

A table that is not properly aligned may result in increased wear, stiffness, uneven guidance and reduced stability.

6 Commissioning

6.1 Inspection Before Initial Commissioning

Check the scope of delivery, accessories and documents against the order documents.
Check the table for transport damage, loose components and visible deformation.
Document the type plate and serial number. Provide the operating instructions and instruct operating personnel.
Check installation, alignment and freedom of movement. Check the function of castors, brakes and, if applicable, leveling feet.
Test height adjustment without load slowly over a short range.
Only test height adjustment with a permissible test load after a successful no-load test.

6.2 Initial Commissioning Checklist

Nr.	Inspection point	OK / n. OK.	Remarks
1	Operating instructions available	[ ]	
2	Personnel instructed	[ ]	
3	Location load-bearing and level	[ ]	
4	Table aligned	[ ]	
5	Freedom of movement checked	[ ]	
6	Drive interface checked	[ ]	
7	Guide rails checked	[ ]	
8	Chain / drive checked	[ ]	

7 Operation and Height Adjustment

7.1 Operating Principle

Height adjustment is carried out using a cordless drill. The adapter or 24 mm socket is placed onto the drive interface of the table. Depending on the version, clockwise or counterclockwise rotation of the cordless drill raises or lowers the table.

7.2 Suitable Cordless Drills

For reliable and fast height adjustment, we recommend a professional cordless drill with an 18 V battery and at least 2,000 rpm. If the tool is too weak, adjustment will be slow or uneven. We also recommend using a brushless cordless drill, as it operates without carbon brushes, is more efficient, has a longer service life and provides more consistent torque.

Important
For combination tools with hammer drill or impact function, always use screwdriving mode – never impact mode, as this may damage the mechanism

Figure: *Drive interface for height adjustment using a cordless drill.*

WARNING – Crushing Hazard

During height adjustment, no hands, tools, cables or body parts may be located within the movement range of the table. The operator must observe the entire movement range

7.3 Performing Height Adjustment

Check the work area and instruct persons to leave the danger zone.
Secure the load and workpieces against slipping.
Set the cordless drill to a suitable gear and torque setting.
Place the 24 mm socket or adapter fully and straight onto the drive interface.
Hold the cordless drill securely with both hands and start slowly.
Move the table to the desired height. Continuously observe the movement.
Stop immediately if increased resistance can be felt or the end position is reached.

Raising the Table

Attach a 24 mm socket to the cordless drill and connect it to the table drive. Only use a cordless drill with the impact function deactivated. The impact function must not be used, as it may damage the drive. Set the cordless drill to the “Up” rotation direction according to the marking on the table. Operate the cordless drill slowly and evenly until the desired working height has been reached. Only raise the table until the desired position has been reached or slight resistance can be felt. As soon as the end position has been reached, do not continue turning.

Lowering the Table

Set the cordless drill to the “Down” rotation direction according to the marking on the table.
Operate the cordless drill slowly and evenly until the desired working height has been reached.
When lowering the table, ensure that no persons, objects or body parts are located underneath the table.
For versions equipped with castors, the table can be lowered until the table feet lift off the floor and the table rests on the castors. The table may only be moved in this lowered transport position.

7.4 Adjusting the Yellow Machine Feet

To ensure that the table stands securely even on uneven ground, the yellow machine feet can be adjusted up and down manually by turning the

Figure: *Adjustable machine feet.*

7.5 Moving / Relocating the Table

If the table version is equipped with castors, the table may only be moved according to its intended function.
Workpieces and attachments must be secured or removed before moving the table. The castors and brakes must be checked before starting work. Do not move the table with an unsecured or unstable load.
Do not park the table on inclined surfaces.
After moving the table, apply the brakes and check that it stands securely.
For heavy loads, observe additional internal transport instructions.

8 Pflege, Wartung und Prüfung

8.1 Grundsätze

Regelmäßige Pflege und Wartung erhält die Funktion, reduziert Verschleiß und dient der Betriebssicherheit. Wartungs- und Instandhaltungsarbeiten sind zu dokumentieren. Beschädigte oder verschlissene sicherheitsrelevante Bauteile dürfen nicht weiterverwendet werden.

8.2 Wartungsplan

Interval	Component	Activity	Documentation
Before each use	Entire table	Visual inspection for damage, loose parts, foreign objects and free movement	Operator inspection
Before each use	Drive interface	Check fit, wear and cleanliness	Document defects
Weekly / as required	Castors / brakes	Check function, clean, assess wear if necessary	Maintenance log
Monthly	Bolted connections	Visual inspection; tighten if necessary according to PETec specifications	Maintenance log
Every 6 months	Moving components	Cleaning, lubrication, wear inspection	Maintenance log
Every 6 months	Guide rails	Check play, running behavior and adjustment	Maintenance log
Every 6 months	Chain / chain drive	Check tension, condition, lubrication and running behavior	Maintenance log
Annually	Entire table	Inspection by a qualified person according to internal requirements	Inspection log
After repair / modification	Affected assemblies	Functional and safety inspection before recommissioning	Inspection log

8.3 Cleaning

Regularly clean the table of chips, grinding dust, welding residues, oil, grease and other contamination.
Do not use aggressive cleaning agents that may attack paint, seals, plastics or guides.
Do not clean guide elements or the chain drive with a high-pressure cleaner.
After cleaning, check moving parts for free movement.

8.4 Lubrication

All moving parts of PETec Advanced tables must be checked regularly and relubricated if necessary. This includes in particular spindles, guides, bearing points, joint points and mechanically loaded friction and sliding surfaces.

For relubrication, use high-quality multipurpose grease based on lithium soap or a comparable industrial grease for plain and rolling bearings. The grease should be suitable for high surface pressure, slow movements and use on mechanical adjustment units.

Lubrication points must be checked regularly depending on use, load and ambient conditions. For normal workshop and industrial use, visual inspection and relubrication at intervals of approximately 6 months is recommended. In the event of heavy contamination, high loads, frequent adjustment or use in dusty environments, the interval should be shortened accordingly.

Before relubrication, coarse dirt and old contaminated grease must be removed. Apply the lubricant sparingly and evenly. Excess grease must be removed so that dirt does not accumulate and the mobility of the components is not impaired.

For self-lubricating guides or low-maintenance bearing elements, aggressive cleaning agents or lubricants must not be used. Only material-compatible care and lubricating products may be used in order to preserve the sliding properties and service life of the components.

9 Adjustment Work on Guide Rails and Chain

WARNING

Adjustment work may only be carried out by qualified personnel.
Readjustment work on guide rails and the chain affects function and operational safety. Work may only be carried out with the table unloaded, secured and by authorized specialist personnel.
Before recommissioning, a functional test and documentation must be completed.

9.1 Readjusting Self-Lubricating, Adjustable Guide Rails

The guide rails ensure play-free and uniform guidance of the moving table components. They are self-lubricating and adjustable. Readjustment is required if noticeable guide play, rattling, uneven running or jamming is detected. Excessive readjustment causes stiffness and increased wear.

9.1.1 Preparation

Clear the table of workpieces and tools.
Move the table into a safe and easily accessible maintenance position.
Secure the table against unintended movement.
Remove the cordless drill and secure the power supply / operating possibility against unauthorized activation.
Clean the guide area. Remove dirt, chips and foreign objects

9.1.2 Adjustment Procedure

Slightly loosen the lock nuts of the adjustment screws.
Tighten the adjustment screws evenly and step by step. Always adjust in pairs or symmetrically to avoid jamming.
Readjust the guide only until play is minimized and movement can still be carried out smoothly.
Secure the lock nuts with the specified torque.
Move the table without load through the relevant height range and check for smooth, jerk-free movement.
If movement is stiff, slightly reduce the adjustment and check again.
After successful inspection, document the maintenance in the log.

9.2 Checking and Readjusting the Chain / Chain Drive

The chain drive transmits the movement of the mechanical height adjustment.
The chain tension must be adjusted so that the chain runs safely, does not skip and does not create excessive bearing or friction forces. A chain that is too loose may skip or cause noise. A chain that is too tight will result in increased wear and stiffness.

9.2.1 Checking the Chain

Unload the table and secure it against unintended movement.
Check the chain and sprockets for wear, damage, rust, uneven running and foreign objects.
Check chain slack at the defined measuring point.
Check the chain for sufficient lubrication.
If chain links are damaged, if wear is severe or if sprockets are damaged, take the table out of service and use replacement parts.

9.2.2 Readjusting the Chain

Loosen the fastening or lock of the chain tensioner.
Increase or reduce chain tension step by step until the specified slack has been reached.
Check the alignment of the sprockets. The chain must run in alignment.
Secure the chain tensioner and fasteners with the specified torque.
Move the table without load slowly over a short range. Observe the running behavior and listen for noises.
Carry out a functional test over the intended height range.
Document the adjustment.

9.3 Functional Test After Adjustment Work

Remove tools and foreign objects.
Reinstall protective and cover elements.
Move the table slowly without load and observe the movement range.
Test the table with the permissible test load according to PETec specifications.
There must be no unusual noises, no jerking, no jamming and no impermissible play.
Complete the maintenance / inspection log and document approval for use.

10 Troubleshooting

Fault	Possible cause	Measure
Table is difficult to adjust	Overload, contamination, guide too tight, chain too tight	Reduce load, clean, check adjustment; take out of service if the cause is unclear.
Jerky movement	Contaminated guide, uneven load, incorrect adjustment	Check load distribution, clean/adjust guides, carry out functional test.
Rattling or play	Guide play, loose screws, chain slack	Check/readjust guide rails and chain; check screws.
Chain skips / noise in chain drive	Chain too loose, worn sprockets, incorrect alignment	Stop operation, check chain drive and adjust according to PETec specifications.
Cordless drill slips / tool holder damaged	Incorrect socket, wear, socket placed at an angle	Check tool holder; use suitable 24 mm socket / adapter; replace damaged parts.
Table stands unstably	Unsuitable ground, castors/brakes not secured, unfavorable load distribution	Check location, brakes, load distribution and alignment.
Unusual noises	Foreign objects, wear, lack of lubrication	Take table out of service, determine cause, document maintenance.

WARNING

In the event of safety-relevant faults, the table may only be operated again after the cause has been eliminated and a documented inspection has been completed.

11 Decommissioning, Disassembly and Disposal

11.1 Temporary Decommissioning

Clean the table and store it in a dry place.
Protect moving components against corrosion.
Secure the table against unauthorized use.
In the event of longer storage, carry out regular visual inspections.

11.2 Disassembly

Disassembly work may only be carried out by qualified personnel. Before disassembly, loads must be removed, moving parts must be secured and suitable lifting equipment must be provided. If in doubt, contact PETec.

11.3 Disposal

Components, lubricants and packaging materials must be disposed of in accordance with locally applicable regulations. Metal components can generally be recycled. Lubricants, contaminated cloths and operating materials must be disposed of separately.

12 Spare Parts and Customer Service

For repairs and spare parts, only suitable original spare parts or spare parts approved by PETec may be used. Non-approved modifications may impair safety and will result in the loss of warranty and liability claims.

Request information	Machine type, serial number, year of manufacture, fault description, photos
Documentation obligation	Document all repairs and spare part replacements.
Approval after repair	Carry out functional and safety inspection.
Questions	Contact PETec Customer Service.

13 Documentation: Instruction, Maintenance, Inspection

13.1 Training Record

No.	Name	Date	Instructed by	Signatur
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

13.2 Maintenance and Repair Log

Date	Machine type	Work performed	Name	Signatur

13.3 Inspection Log

Inspection date	Scope of inspection	Result / defects	Inspector / signature

14 Original Declaration of Conformity

Original Declaration of Conformity

Manufacturer / authorized representative:	Company name: PETec GmbH Street: Zum Osterfeld 6 City: 59872 Meschede Country: Germany
Person authorized to compile the technical documentation:	Christian Plett, Managing Director Street: Zum Osterfeld 6 City: 59872 Meschede Country: Germany
Product:	Mechanically height-adjustable work table, type Advanced

We hereby declare that the machine described above complies with the relevant provisions of Directive 2006/42/EC and that the essential health and safety requirements of Annex I have been fulfilled.

Further applied directives and harmonized standards:

EN ISO 12100 Sicherheit von Maschinen

General principles for design – Risk assessment and risk reduction

Place, Date

Meschede 02.06.2026

Christian Plett /Geschäftsführer

First name, last name, function

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