

TransPol-5

Instruction Manual

Original Instructions



CE

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1 About this manual



CAUTION

Struers equipment must only be used in connection with and as described in the Instruction Manual supplied with the equipment.



Note

Read the Instruction Manual carefully before use.



Note

If you wish to view specific information in detail, see the online version of this manual.

2 Safety

2.1 Intended use

TransPol-5 is a portable grinding and polishing device for on-site materialographic preparation. TransPol-5 is typically used for testing surfaces of workpieces that are not suitable for transport or which are part of assembled constructions.

TransPol-5 equipment is intended for use in materialographic applications where the prepared surface can be processed for further materialographic examination.

The equipment is designed to be used only with Struers consumables specifically designed for this purpose and this type of machine.

The machine must be operated only by skilled/trained personnel.

Do not use the machine for the following

Preparation (grinding or polishing) of materials other than solid materials suitable for materialographic studies.

The machine must not be used for any type of explosive and/or flammable material, or materials which are not stable during machining, heating or pressure.

Do not use the machine with non-compatible accessories, battery or consumables.

Model

TransPol-5

2.2 TransPol-5 safety precautions



2.2.1 Read carefully before use

Ignoring this information and mishandling of the equipment can lead to severe bodily injuries and material damage.

General safety precautions

1. The operator must read the Instruction Manual and, where applicable, the Safety Data Sheets for the applied consumables.
2. The operator must read the safety precautions and Instruction Manual, as well as relevant sections of the manuals for any connected equipment and accessories.
3. Struers equipment must only be used in connection with and as described in the Instruction Manual supplied with the equipment.
4. The equipment is designed to be used only with Struers consumables specifically designed for this purpose and this type of machine.
5. Consumables: only use consumables specifically developed for use with this type of materialographic machine.
6. The machine must be installed in compliance with local safety regulations. All functions on the machine and any connected equipment must be in working order.
7. This machine must be operated and maintained only by skilled/trained personnel.
8. Make sure that the electrical parts are kept in good working condition. If damage to a cable is observed, it must be replaced immediately.
9. Use an isolation transformer in wet and humid locations.
10. Always protect the motor and control unit from rain and moisture.
11. Always switch off the electrical power supply and remove the plug or power cable before dismantling the machine or installing additional components.
12. The machine must be disconnected from the electrical power supply before any service.
13. The machine must not be used for any type of explosive and/or flammable material, or materials which are not stable during machining, heating or pressure.
14. The device is intended for use as a hand-held grinding/polishing instrument. Do not press the Start button unless you are holding the motor unit firmly.
15. Do not operate the machine if there are visible cracks or damage to the unit, the cables or to the grinding/polishing consumables to be used.
16. Make sure that the carrying handle and the shoulder strap are intact before use. Replace it if it is damaged. Before you carry or hang the equipment by the shoulder strap, make sure that the strap is intact and that the buckle is correctly fastened.
17. Take care not to drop the device as this may result in damage to the shaft or the motor.
18. The grinding unit must not be used without reduction gear.
19. Always clamp the grinding tools carefully.

20. Do not exert excessive pressure during grinding or polishing as this may result in damage to the shaft or the motor.
21. If you observe malfunctions or hear unusual noises, switch off the machine and call technical service.
22. In case of fire, alert bystanders and the fire brigade. Disconnect the electrical power supply. Use a powder fire extinguisher. Do not use water.
23. Do not use the machine with non-compatible accessories, battery or consumables.
24. If grinding accessories that are not recommended by Struers are used, they must be approved of for speeds above 8500 rpm. Do not use grinding consumables with a diameter larger than 10 mm.
25. Dismantling of any part of the equipment, during service or repair, should always be performed by a qualified technician (electromechanical, electronic, mechanical, pneumatic, etc.).
26. If the equipment is subjected to misuse, incorrect installation, alteration, neglect, accident or incorrect repair, Struers will accept no responsibility for damage to the user or the equipment.
27. Always use safety goggles and dust mask when working with the device.
28. Risk of hand to arm vibration during manual preparation. Prolonged exposure to vibration may cause discomfort, joint damage or even neurological damage.
29. Use anti-vibration gloves during grinding to reduce the effects of vibration. Limit grinding operations to a maximum of 10 minutes. Wait for 5 minutes before continuing grinding.
30. Wear suitable gloves to protect fingers from abrasives and warm/sharp specimens.
31. The device can become hot during continuous use. Protective gloves are recommended. Do not touch the rotating shaft or consumable during operation.
32. Keep clear of rotating parts during operation.
33. When working at machines with rotating parts, take care to prevent clothes and/or hair from being caught by the rotating parts. Appropriate safety clothing must be used.
34. Prolonged exposure to loud noises may cause permanent damage to a person's hearing. Use hearing protection if the exposure to noise exceeds the levels set by local regulations.

2.3 Safety messages

Signs used in safety messages

Struers uses the following signs to indicate potential hazards.



ELECTRICAL HAZARD

This sign indicates an electrical hazard which, if not avoided, will result in death or serious injury.



DANGER

This sign indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.



WARNING

This sign indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.



CAUTION

This sign indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.



CRUSHING HAZARD

This sign indicates a crushing hazard which, if not avoided, could result in minor, moderate or serious injury.

General messages



Note

This sign indicates that there is a risk of damage to property, or a need to proceed with special care.



Hint

This sign indicates that additional information and hints are available.

2.4 Safety messages in this manual



CAUTION

Struers equipment must only be used in connection with and as described in the Instruction Manual supplied with the equipment.



CAUTION

Make sure that the actual electrical power supply voltage corresponds to the voltage stated on the type plate of the battery pack.
Incorrect voltage can damage the electrical circuit.



CAUTION

Always connect the battery charger to the battery pack before you connect the battery charger to the electrical power supply.



CAUTION

Prolonged exposure to loud noises may cause permanent damage to a person's hearing.
Use hearing protection if the exposure to noise exceeds the levels set by local regulations.

**CAUTION**

Risk of hand to arm vibration during manual preparation.
Prolonged exposure to vibration may cause discomfort, joint damage or even neurological damage.

**CAUTION**

Do not use the machine with non-compatible accessories, battery or consumables.

**CAUTION**

Be careful when you grind in locations where generating sparks can be hazardous.

**CAUTION**

Before you remove the mounted handle and mount a new handle, switch off the machine.

**CAUTION**

Before you mount or change a polishing cloth, switch off the machine.

**CAUTION**

Before you mount or change grinding paper, switch off the machine.

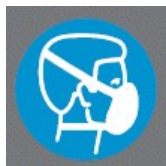
**CAUTION**

Do not operate the machine if there are visible cracks or damage to the unit, the cables or to the grinding/polishing consumables to be used.

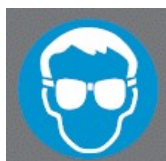
2.5 Symbols on the device

These symbols are located on the control panel:

A Wear a protective mask



B Wear safety goggles



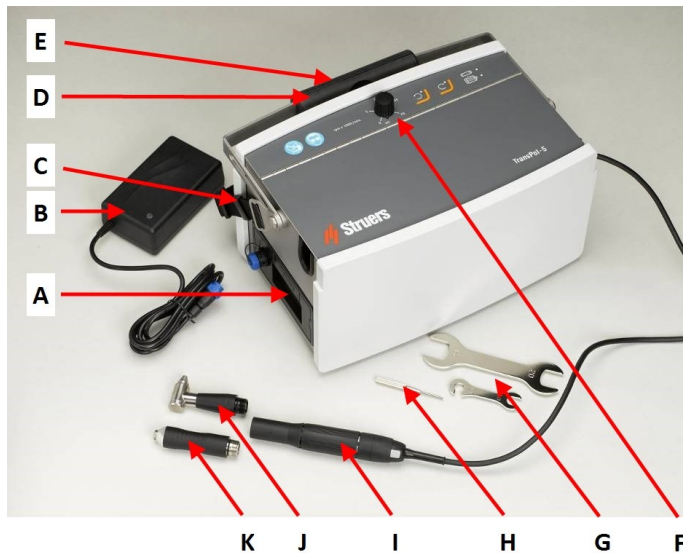
3 Getting started

3.1 Device description

- TransPol-5 is for on-site materialographic preparation and enables further materialographic examination.
- TransPol-5 is intended to be used for in-situ coarse grinding and fine polishing, e.g. materialographic examination of welded tubes.
- The equipment is compact and portable. It is packed in a carrying case which is suitable for transport by one person.
- TransPol-5 has a replaceable battery. When the battery pack is inserted, the equipment can be connected directly to the electrical power supply.
- During use, TransPol-5 can be carried in a shoulder strap or placed securely on a plane surface. The operator can also place the carrying case up to 3 meters from the work place and switch TransPol-5 on and off on the device handle. An angled handle and a straight handle are supplied with TransPol-5.
- The operator selects the grinding/polishing surface. The operator selects a suitable method, accessory and abrasive disc to be applied. The operator moves the equipment to the area where the inspection will be made.
- The operator turns the on/off button on the control panel of the machine to switch on the machine.
- The operator presses the start/stop button on the motor unit handle to start the grinding/polishing process.
- The operator must wear protective equipment such as safety goggles and gloves to protect against hazardous particles and fumes that may occur during operation of the equipment.
- In case of excess heat and/or power consumption, the unit switches off automatically.
- The operator stops the machine by pressing stop on the motor unit.
- The operator cleans the specimens before the next preparation step or inspection.
- After use, the operator removes the abrasive disc and places the equipment in the case so that it is protected and ready for transport.

3.2 TransPol-5 - overview

TransPol-5

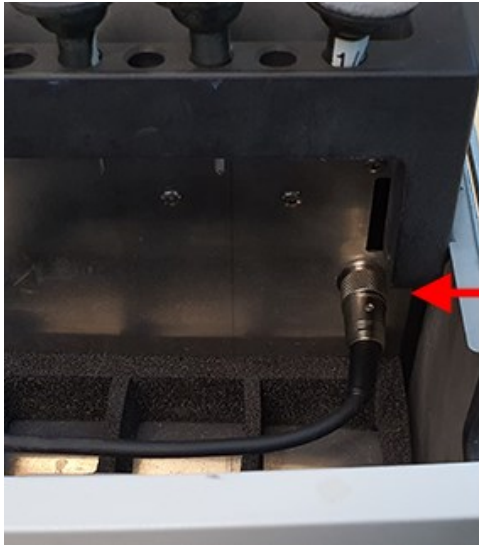


- A** Battery pack with connection for charger
- B** Battery charger
- C** Shoulder strap
- D** Carrying handle
- E** Type plate - on the back of the unit
- F** Control panel
- G** Spanners (20/24 mm, 10 mm)
- H** Locking pin
- I** Motor unit
- J** Right-angle handle
- K** Straight handle

Motor unit

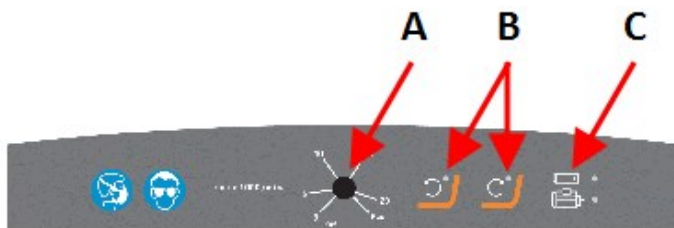


- A** Right-angle handle with quick-coupling for rubber discs
- B** Straight handle with 6 mm chuck for flapper wheel
- C** Reduction gear
- D** Motor
- E** Start/stop button



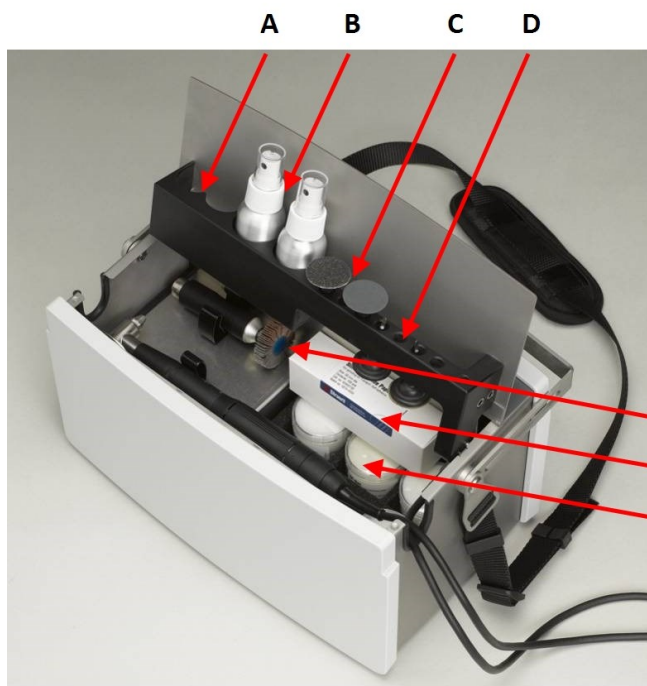
A Motor unit plugged into socket in TransPol-5 compartment

Control panel



A On/Off switch and speed regulator
B Function buttons
C Status indicators

Storage compartment



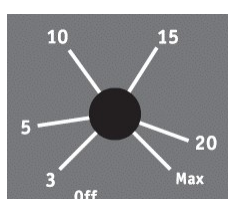
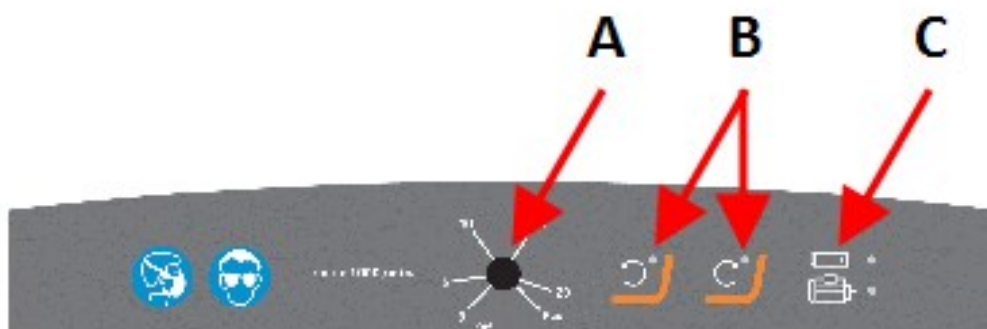
- A** Storage space for diamond paste
- B** Spray bottles for cleaning agent
- C** Grinding discs (mounted on rubber discs)
- D** Rubber disc
- E** Flapper wheel (optional) mounted on straight handle
- F** Box for storing grinding discs (supplied with new grinding discs)
- G** Storage for new polishing cloths (supplied with new polishing cloths)



Note

Keep used polishing cloths and grinding discs apart to avoid cross contamination during storage.

3.2.1 Control panel



A On/Off button and speed regulator



B Button and indicator for counter-clockwise rotation



C Button and indicator for clockwise rotation



D Indicator for battery status (see [Charging the battery ▶ 19](#))



E Overload indicator (see [Overload indicator ▶ 21](#))

3.3 Accessories and consumables

Consumables

The use of Struers consumables is recommended.

Other products may contain aggressive solvents, which dissolve e.g. rubber seals. The warranty may not cover damaged machine parts (e.g. seals and tubes), where the damage can be directly related to the use of consumables not supplied by Struers.

For information about the available range, see:

- [The Struers Consumables Catalogue](https://www.struers.com) (via <https://www.struers.com>)

4 Transport and storage

4.1 Transport and storage

If, at any time after the installation, you have to move the unit or place it in storage, there is a number of guidelines we recommend that you follow.

- Package the unit securely before transportation. Insufficient packaging could cause damage to the unit and will void the warranty. Contact Struers Service.
- We recommend that you use the original packaging and fittings.

4.2 Transport



WARNING

Always remove the battery before transport.

- Clean and dry the unit before transport and storage.

Air transport



Note

Contact your transportation provider for information on local carriage restrictions. See the IATA website for further information.

Carry-on baggage

You can transport the unit and spare battery packs as “Carry-on Baggage”.



Note

There may be restrictions for treating the TransPol-5 spray bottles with liquid cleaning agents and consumables as carry-on baggage.

Checked baggage

You can transport the unit as “Checked Baggage”.

You cannot transport spare battery packs as “Checked Baggage”.

Battery charger

See the Instruction Manual for this unit.

Battery Pack

Operating environment 0 to 45°C/32 to 113°F

Transport and storage -20 to +55°C/°F

See the Instruction Manual for this unit.

For more detailed information, see the section **Technical data**.

4.3 Transport - the shoulder strap

Attaching the shoulder strap

If you wish to use the shoulder strap for hanging or carrying the unit:

1. Attach the shoulder strap to the unit.
2. Use the loops and buckle to secure the shoulder strap in place.

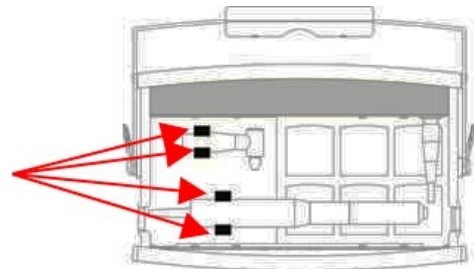
**Note**

Before each use, make sure that the carrying handle, the shoulder strap and the buckle are not damaged, and that the buckle is correctly fastened. Replace any damaged parts.



Carrying the equipment

1. Make sure that the motor unit and the handles are securely in place in the transport brackets before you carry TransPol-5.



4.4 Storage

**Note**

We recommend that you keep all original packaging and fittings for future use.

- Disconnect the unit from the electrical power supply.
- Remove any accessories.
- Clean and dry the unit before storage.
- Place the machine and accessories in their original packaging.

Battery Pack

Operating environment	0 to 45°C/32 to 113°F
Transport and storage	-20 to +55°C/°F

- For more detailed information, see the section **Technical data**.

5 Installation

5.1 Unpack the machine



Note

We recommend that you keep all original packaging and fittings for future use.

1. Cut the packing tape on the top of the box.
2. Remove the loose parts.
3. Remove the unit from the box.

5.2 Check the packing list

Optional accessories may be included in the packing box.

The packing box contains the following items:

Pcs.	Description
1	TransPol-5
1	Battery charger
1	Battery pack
1	Motor unit with reduction gear and 3 m connection cable
1	Straight handle with holder for flapper wheel
1	Right-angle handle with quick-coupling for rubber discs
4	Rubber discs
1	Spanner 20/24 mm (for right angle handle)
1	Spanner 10 mm (for straight handle)
1	Locking pin (for straight handle)
1	Shoulder strap
1	Instruction Manual set



Note

The reduction gear must always remain mounted on the motor.

Note
Make sure that the battery pack is fully charged prior to use: the LED indicator is green.

Note
The battery pack does not need to be inserted during charging.

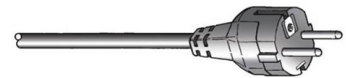
5.3 Power supply

ELECTRICAL HAZARD
The machine must be earthed (grounded).
Make sure that the actual electrical power supply voltage corresponds to the voltage stated on the type plate of the battery pack.
Incorrect voltage can damage the electrical circuit.

Note
The equipment is shipped with 2 types of electrical power cables. If the plug supplied on these cables is not approved in your country, the plug must be replaced with an approved plug.

The European Schuko plug

The 2-pin plug (European Schuko) is for use on single-phase electrical power connections.



The leads must be connected as follows:

- | | |
|--------------|----------------|
| Yellow/Green | Earth (ground) |
| Brown | Line (live) |
| Blue | Neutral |

The North American NEMA 5-15P plug

The 2-pin plug (North American NEMA 5-15P) is for use on single-phase electrical power connections.



The leads must be connected as follows:

- | | |
|-------|----------------|
| Green | Earth (ground) |
| Black | Line (live) |

5.3.1 Connecting the battery charger

When the battery pack is inserted in the machine, the equipment can be connected directly to the electrical power supply through the battery charger.



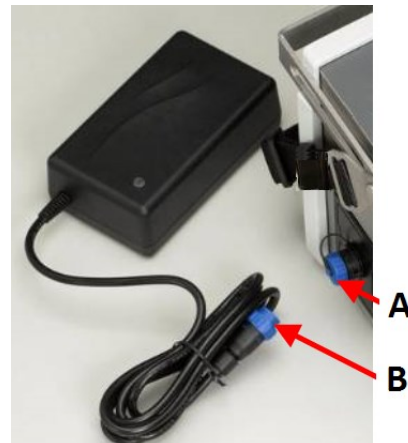
CAUTION

Always connect the battery charger to the battery pack before you connect the battery charger to the electrical power supply.

Connecting the equipment to the electrical power supply

You can connect the equipment to the electrical power supply:

1. Make sure that the battery pack is inserted in the machine.
2. Unscrew the cover covering the socket. **(A)**
3. Insert the plug from the battery charger into the socket. **(B)**
4. Connect the battery charger to the electrical power supply.



5.3.2 Charging the battery



CAUTION

Always connect the battery charger to the battery pack before you connect the battery charger to the electrical power supply.

1. Connect the battery charger to the battery pack.
2. Connect the battery charger to the electrical power supply.

The LED turns green when charging is complete.



Note

If you need to check the battery level, connect the battery to the charger or the machine.

Battery status indicator

LED indicator	Charging level	Status
Orange	20% - 0%	Maximum charge current (2 A).
Yellow	60% - 21%	The battery is charged 80 - 95 %. The charger is in timer mode and the current is less than maximum. Charging will continue for a set amount of time up to 4 hours.
Green	61% - 100%	The battery is charged 95 - 100%. Charging has stopped.

5.4 Noise

For information on the sound pressure level value, see this section: [Noise and vibration levels ▶ 27](#),



CAUTION

Prolonged exposure to loud noises may cause permanent damage to a person's hearing.
Use hearing protection if the exposure to noise exceeds the levels set by local regulations.

5.5 Vibration

For information on the total vibration exposure to hand and arm, see this section: [Technical data ▶ 26](#).



CAUTION

Risk of hand to arm vibration during manual preparation.
Prolonged exposure to vibration may cause discomfort, joint damage or even neurological damage.

How to handle vibration during operation

Manual preparation may cause vibrations in hand and arm. To lower the vibration, decrease the pressure or use a vibration-reducing glove.

- Limit grinding operations to a maximum of 10 minutes. Wait for 5 minutes before continuing grinding.

6 Operate the device



CAUTION

Do not use the machine with non-compatible accessories, battery or consumables.

Grinding

General recommendations

Grinding time	In general, the duration of a grinding step is twice as long as the duration of removing the scratches from the previous step.
Grinding speed	In general, it is recommended that the speed is highest during coarse grinding, and is reduced with the smaller grit sizes.
Grinding pressure	Grinding pressure depends on the roughness of the surface and the condition of the grinding paper. An unprepared surface and a new piece of grinding paper requires only little pressure.

Practical information



CAUTION

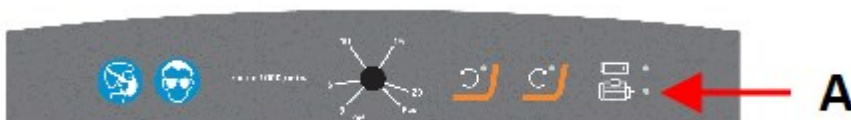
Be careful when you grind in locations where generating sparks can be hazardous.

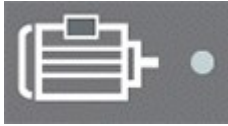
- Depending on the surface being prepared, dust and sparks may be produced during grinding. If possible, operate the machine in a well ventilated location.
- Make sure that there is sufficient light in the working area when you operate the machine.
- The right-angle handle, gear, motor and motor cable can become warm to hold, because the reduction gear throttles down the rotational speed and some energy will be lost as heat.
- Do not use the whole surface of the grinding paper. Use the outer edge of the paper for grinding. This allows for better grinding and a more uniform scratch pattern.
- Keep the grinding papers separate from the polishing cloths in order to prevent the grinding particles from contaminating the polishing cloths.
- We recommend that you keep one of the spray bottles filled with water and one spray bottle filled with alcohol, which you can use for cleaning between the steps, and before making a replica.

6.1 Preparing the device for operation

- Place the machine on a stable and level surface, which can support the weight of the machine. You can also hang it using the shoulder strap.
- Make sure that the cable to the motor unit is long enough to allow for safe operation.
- Make sure that the correct handle is mounted. If you have to change the handle, switch off the machine.

6.2 Overload indicator





A Overload indicator

The overload indicator lights up in the following situations

Description	Action
The load on the motor is too high or the motor is blocked.	<ul style="list-style-type: none"> Restart the machine: press the Start/ Stop button on the motor unit, or switch the machine off and on.
The battery pack is discharged.	<ul style="list-style-type: none"> Recharge the battery pack.
The PCB or the motor driver temperature is too high.	<ul style="list-style-type: none"> Let the machine cool down.

6.3 Coarse grinding



CAUTION

Before you remove the mounted handle and mount a new handle, switch off the machine.

1. Switch off the machine.
2. Use the 20/24 mm spanner to mount the straight handle on the motor unit and make sure that it is firmly in place.
3. Mount a flapper wheel with 6 mm shaft on the straight handle.
4. Insert the locking pin in the hole in the middle of the straight handle.
5. Use the 10 mm spanner to secure the flapper wheel.
6. Turn the On/Off button on the control panel to switch on the machine.
7. Select clockwise rotation.
8. Select the speed.
9. Press the Start/Stop button on the motor unit: the motor starts rotating.
10. Adjust the speed as needed.

Maximum speed is recommended for coarse grinding with flapper wheel.

6.4 Grinding and fine grinding



Note

Grinding is usually carried out in 4 steps: grit 60, grit 120, grit 240, and grit 500.



CAUTION

Before you mount or change grinding paper, switch off the machine.

**CAUTION**

Before you remove the mounted handle and mount a new handle, switch off the machine.

1. Switch off the machine.
2. Remove the straight handle.
The reduction gear must remain mounted on the motor.
3. Use the 20/24 mm spanner to mount the right-angle handle on the motor unit and make sure that it is firmly in place.
4. Place the rubber disc in the quick-coupling of the right-angle handle and press it firmly in place.
5. Take a piece of grinding paper with the desired grit size.
6. Mount the grinding paper on the rubber disc: remove the cover paper from the back of the grinding paper and press the grinding paper into place on the rubber disc.
7. Turn the On/Off button on the control panel to switch on the machine.
8. Select clockwise or counter-clockwise rotation.
9. Select the speed.
10. Press the Start/Stop button on the motor unit: the motor starts rotating.
11. Adjust the direction of rotation and speed as needed.

6.5 Polishing

For polishing, use DP-paste, DP-spray or DP-stick on a polishing cloth in 2, 3 or 4 steps. This depends on the material, e.g. 15 µm, 6 µm, 3 µm and finally 1 µm. In general, the preparation can be completed at 3 µm. If the surface has to be particularly fine, use ¼ µm diamonds for the final polishing.

Cloth	Diamond type
DP-Dur /DP-Dac	15 µm, 6 µm and 3 µm diamonds
DP-Mol	6 µm, 3 µm and 1 µm diamonds
DP-Nap	1 µm and ¼ µm diamonds

Mounting/changing a polishing cloth

**CAUTION**

Before you mount or change a polishing cloth, switch off the machine.

1. Mount the polishing cloth on the rubber disc: remove the cover paper and press the polishing cloth into place on the rubber disc.
2. Apply Diamond Paste or Diamond Spray on the cloth.

3. Before you perform a polishing step, and between individual polishing steps, clean the area that you want to prepare with water or alcohol.
4. During polishing, set the motor speed to relatively low, in order not to spread the diamonds outside the preparation area. Add a few drops of lubricant:
 - blue lubricant for hard materials such as steel
 - red lubricant for soft materials such as aluminum and brass.

7 Maintenance and service

Proper maintenance is required to achieve the maximum up-time and operating lifetime of the machine. Maintenance is important in ensuring continued safe operation of your machine.

The maintenance procedures described in this section must be carried out by skilled or trained personnel.

Safety Related Parts of the Control System (SRP/CS)

For specific safety related parts, see the section "Safety Related Parts of the Control System (SRP/CS)" in the section "Technical data" in this manual.

Technical questions and spare parts

If you have technical questions or when you order spare parts, state serial number and voltage/frequency. The serial number and the voltage are stated on the type plate of the machine.

7.1 General cleaning

To ensure a longer lifetime for your machine, we strongly recommends regular cleaning.



Note

Do not use a dry cloth as the surfaces are not scratch resistant.



Note

Do not use acetone, benzol or similar solvents.

If the machine is not to be used for a longer period of time

- Clean the machine and all accessories thoroughly.

7.2 Daily

- Clean all accessible surfaces with a soft, damp cloth.
- Remove the handle and wipe the handle and the thread with a soft, slightly damp cloth. Make sure that you do not to remove the reduction gear from the motor unit.

Before each use

- Check the machine before each use.
- If you hang or carry the machine by the shoulder strap, make sure that the strap is intact and that the buckle is correctly fastened.

**WARNING**

Do not operate the machine if there are visible cracks or damage to the unit, the cables or to the grinding/polishing consumables to be used.

Battery pack

Rechargeable batteries have a limited lifetime which largely depends on use and charging schedule.

To obtain the longest lifetime for the battery pack we recommend these maintenance procedures:

- If the battery pack has not been used for 3 months, recharge it.
- Do not allow the battery pack to become fully discharged.

7.3 Spare parts

For specific safety related parts, see the section "Safety Related Parts of the Control System (SRP/CS)" in the section "Technical data" in this manual.

Technical questions and spare parts

If you have technical questions or when you order spare parts, state serial number and voltage/frequency. The serial number and the voltage are stated on the type plate of the machine.

For further information, or to check the availability of spare parts, contact Struers Service. Contact information is available on [Struers.com](https://www.struers.com).

7.4 Service and repair

We recommend that a regular service check be carried out yearly or after every 1500 hours of use.

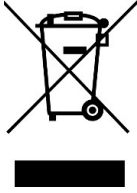
When the machine is started up, the display shows information about total operation time and the machines service information.

After 1500 hours of operation time, the display will show a message reminding the user that a service check should be scheduled.

**Note**

Service must only be performed by a qualified technician (electromechanical, electronic, mechanical, pneumatic, etc.).
Contact Struers Service.

7.5 Disposal



Equipment marked with a WEEE symbol contains electrical and electronic components and must not be disposed of as general waste.

Contact your local authorities for information on the correct method of disposal in accordance with national legislation.

For disposal of consumables and recirculation fluid, follow local regulations.

8 Technical data

8.1 Technical data - TransPol-5

Subject		Specifications
Safety standards	See the Declaration of Conformity	
Power supply	Voltage - to battery charger	100-240 V AC, 50/60 Hz, max. 1.2 A
	Voltage - from battery charger	Max 30 V DC/2 A
Operating environment	Surrounding temperature	0-45°C/41-104°F
	Humidity	< 85 % RH non-condensing
Storage and transport conditions	Surrounding temperature	-20 to +55°C/-4 to 131°F
	Humidity	< 95 % RH non-condensing
Dimensions and weight - complete equipment in carrying case)	Width	357 mm/14.0"
	Depth	269 mm/10.6"
	Height	203 mm/8"
	Weight (including accessories)	6.8 kg/15 lbs
	Length - flexible cable	3 m/9.8'
	Weight - hand held motor unit with gear and handle	350 g/0.18 lbs

8.2 Noise and vibration levels

Noise level	A-weighted sound emission pressure level at workstations	$L_{pA} = 61.4 \text{ dB(A)}$ (measured value) Uncertainty K = 4 dB Measurements made in accordance with EN ISO 11202
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Vibration level	During preparation	Vibration value 10.5 m/s Measurement: 8 m/s K value=2.5 m/s
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8.3 Diagrams

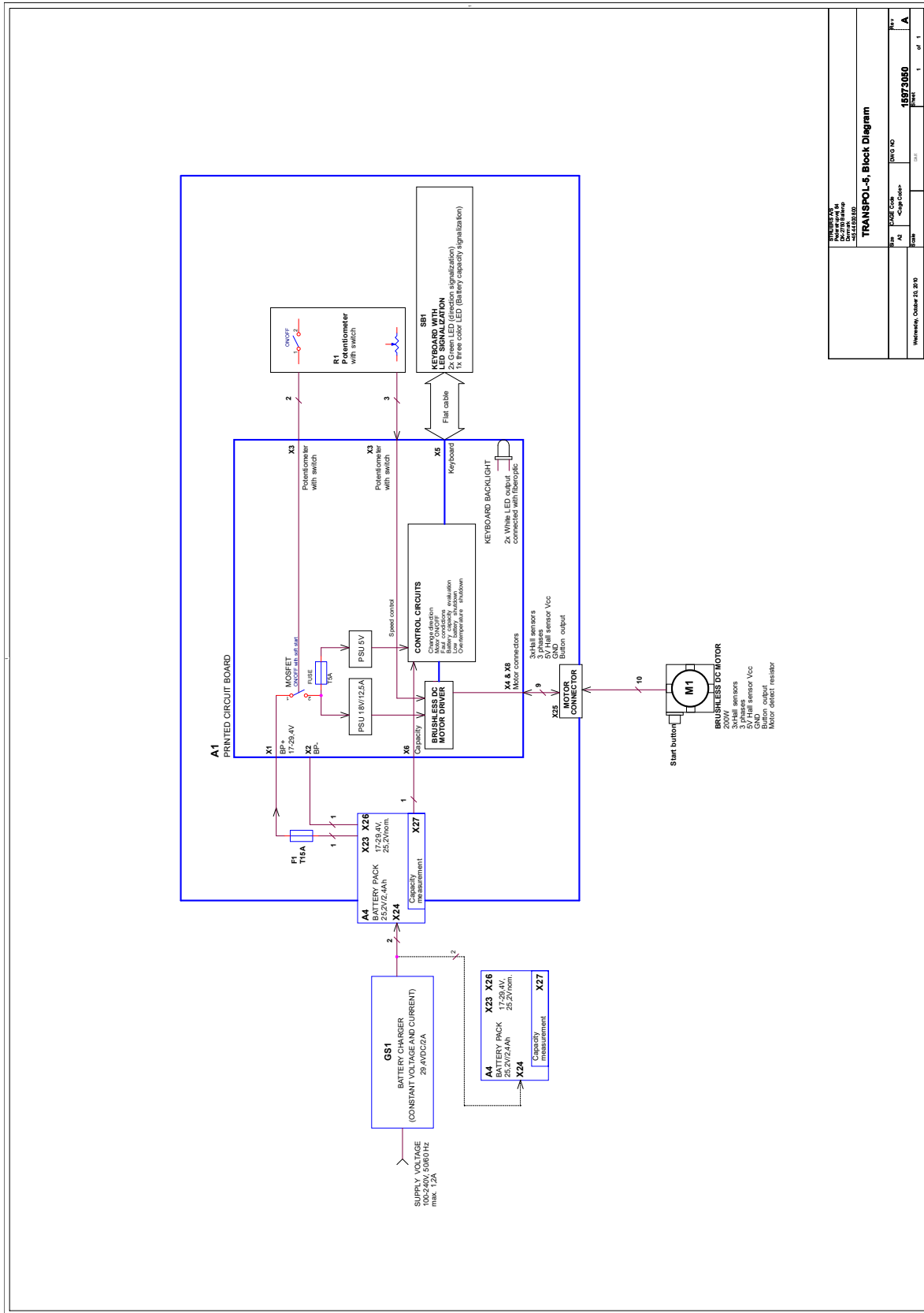
If you wish to view specific information in detail, see the online version of this manual.

8.3.1 Diagrams - TransPol-5

TransPol-5

Title	No.
TransPol-5, Block diagram	15973050 A

15973050 A



INGENIUM Control Systems WELFEDRÖBEN	
TRANSPOI-5, Block Diagram	
Part No.	15973050
Rev.	1
Issue	1
Page	1 of 1

8.4 Legal and regulatory information

FCC notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

9 Manufacturer

Struers ApS
Pederstrupvej 84
DK-2750 Ballerup, Denmark
Telephone: +45 44 600 800
Fax: +45 44 600 801
www.struers.com

Responsibility of the manufacturer

The following restrictions should be observed, as violation of the restrictions may cause cancellation of Struers legal obligations.

The manufacturer assumes no responsibility for errors in the text and/or illustrations in this manual. The information in this manual is subject to change without notice. The manual may mention accessories or parts not included in the supplied version of the equipment.

The manufacturer is to be considered responsible for effects on safety, reliability, and performance of the equipment only if the equipment is used, serviced, and maintained in accordance with the instructions for use.

Declaration of Conformity

Manufacturer	Struers ApS • Pederstrupvej 84 • DK-2750 Ballerup • Denmark
Name	TransPol-5
Model	N/A
Function	Non-destructive testing (NDT) equipment. Portable Metallographic grinding and polish equipment 0-20,000 rpm, exchangeable battery pack, 30 VDC or 100-240 VAC (50-60 Hz) charger, and accessories for grinding and polishing, discs, flapper wheels are included.
Type	597
Cat. no.	05976104
Serial no.	



Module H, according to global approach



We declare that the product mentioned is in conformity with the following legislation, directives and standards:

2006/42/EC	EN ISO 12100:2010, EN 60204-1:2018, EN 60204-1-2018/Corr.:2020
2011/65/EU	EN 63000:2018
2014/30/EU	EN 61000-6-1:2007, EN 61000-6-3:2007, EN 61000-6-3-A1:2011, EN 61000-6-3-A1-AC:2012
Additional standards	NFPA 70, NFPA 79, FCC 47 CFR Part 15 Subpart B

Authorized to compile technical file/
Authorized signatory

Date: [Release date]

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