

TECHNICAL SPECIFICATIONS

Length x Width x Height (including handle)	1025 x 620 x 1035 mm	40.5" x 24.5" x 41"	
Length x Width x Height (folded handle)	940 x 620 x 680mm	37" x 24.5" x 27"	
Length x Width x Height (chassis including motor)	550 x 340 x 610	21.5" x 13.5" x 24"	
Cutting width	250mm	9.8 inch	
Average depth of cut (dependent on concrete)	1 mm	0.040 inch	
Electric motors	400v	230v	110v
Power	5.5kW (7.0hp)	2.2kW (3.0hp)	1.8kW (2.5hp)
Voltage	400v (3ph)	230v (1ph)	110v (1ph)
Supply	11amp	16amp	32amp
Grinding disc rpm approximately	1675 rpm	1385 rpm	953 rpm
Weight	104kg	97kg	116kg
Working distance from wall	45 mm	1.750"	
Noise L _{WA} SWL	83.96dB (A)		
Declared Noise emissions in accordance with EN ISO 15744: 1999			
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Vibration (AEQ) at the Handle Bar (Electric Models)	Aeq = 2.11 m/s ² (K= +40% -0%)		
Noise level measured in accordance with	EN ISO 15744: 1999		
Vibration measured in accordance with	EN ISO 28927		
	EN ISO 20643		

(k) ** Equals the factor of uncertainty, which allows for variations in measurement and production. Vibration Data figures are tri-axial, which gives the total vibration emission. Because of various factors, the range of vibration from these tools may vary 2.1m/s² & 3m/s². The vibration is dependent on the task, the operators grip and power source etc.

NOTE: The above vibration levels were obtained from tri-axial measurements to comply with the requirements of "The Control of Vibration at Work Regulations 2005" and in anticipation of the revisions to the 8662 (28662) series of standards. These values are at least 1.4 times larger than the values obtained from single axis measurements.

*Based on European Union Council Directive 2002/44/EC (Physical Agents (Vibration) Directive)
This tool has been designed and produced in accordance with the following directives: 2006/42/EC Machinery Directive
If your company has any problem with our products or would like to discuss the possibility of an improvement being made to them, then please do not hesitate to contact us. Your comments are both important and appreciated.



INSTRUCTION MANUAL TCG250 FLOOR GRINDER



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This applies to trademarks, model denominations, part numbers and drawings.
Use only genuine Trelawny spares.
The use of non-Trelawny spare parts invalidates the warranty.
ORIGINAL INSTRUCTIONS

SAFETY INSTRUCTION

Foreword

Thank you for your purchase of the TRELAWNY Professional use TCG250 Floor Grinder.

This manual contains the necessary maintenance information for you to ensure proper operation and care for this machine.

See also the manual that is supplied by the engine manufacturer.

It is essential for you to read through these manuals thoroughly.

In the unlikely event that you experience problems with your TCG250, please do not hesitate to contact your local Trelawny dealer or agent. We always welcome feedback and comments from our valued customers.

General Information

Before operating, performing maintenance or repairing the TCG250 FLOOR GRINDER this manual must be read and understood by the operator, if in any doubt, ask your supervisor before using this equipment.

Local safety regulations must be followed at all times. Failure to follow these instructions could result in damage to the TCG250 and/or personal injury.

Trelawny SPT Limited disclaims all responsibility for damage to persons or objects arising as a consequence of incorrect handling of the machine, failure to inspect the machine for damage or other faults that may influence the operation prior to starting work, or failure to follow the safety regulations listed or applicable to the job site.

This machine is primarily designed for the smoothing of concrete, marble and terrazzo surfaces. It can be used both indoors and out.

Electric models are more suitable for indoor use because of the toxic exhaust gases that are produced by petrol or diesel engines.

Safety

WEAR SAFETY BOOTS, FACE MASK, SHATTERPROOF GLASSES, HELMET, GLOVES and any other personal protective equipment required for the working conditions. Avoid loose clothing; this may become trapped in moving parts and cause serious injury.

TO AVOID NUISANCE DUST, connect an industrial vacuum cleaner (minimum 3000watts or equivalent) to the 50mm (2") vacuum port situated at the rear of the machine.

ENSURE THAT THE WORK PLACE IS WELL VENTILATED. Avoid operating engine-powered machines in an enclosed area, since engine exhaust gases are poisonous.

BE VERY CAREFUL WITH HOT COMPONENTS. The exhaust and other parts of the engine are hot during operation and can remain hot for some time after shutdown.

THIS MACHINE MUST NOT BE USED IN A FIXTURE.

DO NOT REFUEL THE ENGINE WHILE THE ENGINE IS HOT OR RUNNING, there is a very real danger from explosion – always refuel when the engine is cold, and in the open air. During transportation fasten fuel cap tightly and close fuel cock.

DO NOT OPERATE ELECTRIC VERSIONS IN WET CONDITIONS.

CAUTION THIS MACHINE IS HEAVY. It weighs approximately 92kg/202lbs dependent on power unit.
Do not lift this machine manually.

Risk of Hand-arm Vibration injury

These tools may cause Hand-arm Vibration Syndrome injury if their use is not adequately managed.

We advise you to carry out a risk assessment and to implement measures such as; limiting exposure time [i.e. actual trigger time, not total time at work], job rotation, ensuring the tools are used correctly, ensuring the tools are maintained according to our recommendations, and ensuring that the operators wear personal protective equipment [PPE] particularly gloves and clothing to keep them warm and dry. Employers should consider setting up a programme of health surveillance to establish a benchmark for each operator and to detect early symptoms of vibration injury.

See 'Specifications' section for vibration emission data.

Further advice is available from our Technical Department.

We strongly advise you to visit the Health & Safety Executive website <http://www.hse.gov.uk/vibration> This site provides excellent advice and information on HAV and currently, includes a Hand-arm Vibration Exposure Calculator that is easy to use to work out the daily vibration exposure for each of your operators.



INSTRUCTION MANUAL

Media Types & Applications

Grinding Blocks

All can be used wet or dry

Coarse grinding blocks

These are fitted as standard on machines fitted with the grinding block option. These are designed for the rapid removal of material. They produce a surface finish suitable for directly laying floor coverings or for two part epoxy paint coatings and for the first grind of terrazzo floor surfaces.

Medium grinding blocks

These are less aggressive than the coarse blocks, they should provide a surface finish suitable for painting or used as the next stage to the coarse grinding blocks, when achieving a polished surface on terrazzo tiles or other marble type surfaces.

Fine grinding blocks

These are the least aggressive of all the grinding media. These are generally only used for final finishing to provide a surface suitable for final polishing.

In addition, scarifying blocks and wire brushes are available which can be fitted in place of the grinding blocks.

Diamond Disc

The machine is fitted with a 20 segment diamond disc for concrete as standard (see below for specification).

All discs can be used wet or dry.

Grinding disc 10 segment

(Soft bonded diamond (Concrete))
Economy disc.

For medium to hard material, granite, cured concrete or terrazzo.

Grinding disc 20 segment

(Soft bonded diamond (Concrete))
Premium disc.

For medium to hard material, granite, cured concrete or terrazzo.

Grinding disc 10 segment

(Hard bonded diamond (Asphalt))
Economy disc.

For softer or abrasive materials - green (less than 48hrs old) or medium strength concrete, asphalt or adhesives.

Grinding disc 20 segment

(Hard bonded diamond (Asphalt))
Premium disc.

For softer or abrasive materials - green (less than 48hrs old) or medium strength concrete, asphalt or adhesives.

110v Motor

Use a centre tap transformer with a continuous rated output of at least 3.0KVA. In practice this means that a 5.0KVA transformer must be used.

The motor requires the minimum of a 32amp, 110v power supply. Always use the shortest possible length of extension cable. To avoid voltage drop the cable must be a minimum core wire size of 2.5mm² but preferably 4.0mm² cross-section. The maximum length of cable can then be 15 metres and 30 metres respectively.

240v and 415v Motors

Take particular care when using 230v or 400v Machines, ensure that the electrical supply is earthed and that breakers and fuses are correct for the loading.

The 230v motor requires the minimum of a 13amp, 220v power supply.

The 400v motor requires the minimum of a 10amp, 380v power supply. Always use the shortest possible length of extension cable. To avoid voltage drop the cable must have a minimum core wire size of 2.5mm² cross-section area. Maximum length of cable 30 metres.

Starting

IMPORTANT:

Connect a suitable commercial vacuum which has been designed for the collection of concrete dust.

Pull back on the handle bars to **raise the cutters off the floor**, pull the 'hold to run' lever against the handle bar and press the green start button on the switch box, then gently lower the cutters onto the surface being worked.

Shut Down

Simply release the "hold to run" lever.

Grinding Block Replacement

Switch off the engine powered versions and allow the engine to **cool completely**, disconnect electric motor powered versions from its power supply.

IMPORTANT:

Place the machine on a flat and level surface.

Raise the front skirt by loosening the two guard retaining bolts on either side of the machine and also hexagon headed bolt at the front of the machine, slide the guard up to the top of the slots and tighten the bolts temporarily.

Tilt the machine backwards to rest on its handle bar.

place a heavy object (10kg sand bag, etc.) across the upper part of the handle bar or rope down for additional security

Take note how the grinding blocks and wedges have been assembled, using a suitable wooden drift, knock out the grinding block, not the wooden wedge. Secure with a new wooden wedge, between the block and the inner face of the grinding block, knock the wedge into position using a suitable drift.

Replacing Diamond Discs

To remove the Diamond Discs unscrew the four retaining screws using a 8mm Allen Key.

Secure the Diamond Discs to the adapters using the M12 countersunk socket head screws and tighten using the 8mm Allen key. Reposition the front dust skirt and retighten the 10mm wing bolts and 8mm hexagon headed bolt.

Machine Storage

Long period storage: over 3months

Clean outside of machine, inspect the grinding blocks for wear; replace any worn parts as required.

Remove any build up of material from inside of grinding disc area following step in start of "Grinding Block Replacement" Section .

Cover the machine to protect it: Store the machine in a dry place.

Be sure to check security of wooden wedges after any lay up period.

A full Operation and Maintenance Manual can be downloaded in PDF format from our web site at <http://www.trelawnyspt.com>. Adobe Reader will be required which can be obtained from <http://get.adobe.com/uk/reader/>