

INSTRUCTION MANUAL

RESIN TROWEL BTPT75H





Beton Trowel BV

Use this guide along with the parts lists attached to locate and identify components of your trowel. When ordering replacement parts, be sure to provide the model number and serial number from the trowel.

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Contact

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Foreword

Quality assurance / machine break in

The machine is the product of extensive engineering development designed to give long life and unmatched performance. The trowels are shipped fully assembled, and only require filling with fuel and a brief check of lubricant levels in preparation for operation.

You can help ensure that your trowel will perform at top levels by observing a simple routing on first use. Consider that your new trowel is like a new car. Just as you would break in a new car to the road or any new machine to the job, you should start gradually and build up to full use. Learn what your machine can do and how it will respond. Refer to the engine manufacturer's manual for run-in times. Full throttle and control may be used after this time period, as allowed by material. This will serve to further break in the machine on your specific application, as well as provide you with additional practice using the machine.

We thank you for the confidence you have placed in us by purchasing a Beton Trowel machine and wish you many years of satisfied use.

Table of contents

Foreword	3
Operation	5
1 Use	5
2 Safety precautions	5
3 BEFORE OPERATION	6
4 OPERATION (Floating)	6
5 OPERATION (Finishing)	7
6 STARTING THE ENGINE	7
7 MANOEUVRING THE TROWEL	8
8 FUNCTION AND CONTROLS	8
Maintenance	9
1 Preventative maintenance and routine service plan	9
Labels	10
Specifications	11
1 Technical data sheet	11
2 Parts	11
Declaration of Conformity	18

Operation

1 Use

The PortaTrowel reproduces the action of hand troweling while giving a higher quality dense finish with greater wear resistance. The angle or pitch of the blades is adjustable during operation from a floating position, with the blades completely flat, to a finishing position with the blades tilted. The following figure shows the location of the controls and main operating functions for the PortaTrowel.

2 Safety precautions

- ❖ Always keep unauthorized, inexperienced, untrained people away from this machine.
- ❖ Rotating and moving parts will cause injury if contacted. Make sure guards are in place. Keep hands and feet away from moving parts.
- ❖ Fuel the machine only when the engine is stopped, using all necessary safety precautions.
- ❖ The engine must always be stopped before attempting any repair or adjustments. Ignition switch should be off.
- ❖ To avoid slipping and loss of control when starting the trowel, the operator should maintain good footing. It is recommended that the operator wear safety shoes for added protection.
- ❖ Be careful when working around pipes or ducts protruding from the floor or slab edges. If the trowel blades hit such obstacles, damage to the machine or possible operator injury may result.
- ❖ When starting the machine, do not exceed 1/3 throttle position. A higher setting may cause the centrifugal clutch to engage and the handle to rotate.
- ❖ Be careful not to come in contact with the muffler when the engine is hot, serious burns may result!
- ❖ Over time, the blades will form a sharp edge. Be careful when handling the old blades.



Never operate the machine in an explosive atmosphere, near combustible materials or where ventilation does not clear exhaust fumes. Repair fuel leaks immediately. Refer to your engine owner's manual for more safety instructions.

3 **BEFORE OPERATION**

The following items should be checked on a daily basis before operating the trowel.

- Engine oil level
- Blade condition and pitch control operation
- Stop Switch operation

CONNECTING THE HANDLES

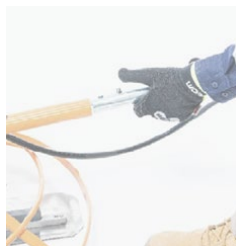
Only 1.8m Clip Together Handles can be used with the PortaTrowel (Other handles do not fit)



1. Turn the locking knob to loosen the control block clamp from the PortaTrowel handle connection adaptor, slide the control block upwards and remove from the handle.



2. With the control block removed from the PortaTrowel slide the orange painted end of the clip together handle through the control block. Slide the control block so that is sitting approx.. half way along the handle (900mm from either end) – Tighten the control block into this position with the locking knob.



3. With the control block now locked halfway along the handle push the silver end of the handle with the push button locking pin into the PortaTrowel handle and secure into position

4 OPERATION (Floating)

It is recommended that during floating, blades be kept in a flat position with the trowel working at $\frac{1}{2}$ to $\frac{3}{4}$ of the full speed, and each pass should overlap the previous by half the width of the trowel. A second trowel pass may be required for the desired finish. Crossover floating is recommended for this pass with blade pitch at a slightly higher level and trowel at about $\frac{3}{4}$ of the full speed. After the floated slab has set sufficiently it is ready for the finishing operation.



CAUTION:

Do not let the machine stand in one spot on the soft cement. Lift from the slab when the floating operation is complete.

5 OPERATION (Finishing)

Subject the desired concrete surface finish, the operator should adjust the blade pitch based on the hardness or plasticity of the concrete surface. When the concrete is wet or plastic, begin with the blades lying flat or at a small angle on the surface. When the concrete has sufficiently hardened, increase the blade pitch and keep it at a level corresponding to the concrete hardness and the desired finish. Check the obtained finish and adjust blade pitch as necessary. As a rule, the greater the blade pitch, the smoother the finish. However, excessive blade pitch will cause the blades to wear rapidly.

To fill a hole or cut down a hump, move the unit back and forth over the hole or hump. More passes may be needed for the desired surface finish.

6 STARTING THE ENGINE

1. Move the Throttle Control Lever to "MIN" position.
2. Move the Stop Switch to "ON" position.
3. Place the Choke Lever in the "CLOSED" position.
4. When starting cold or after prolonged use without prior operation press the fuel prime bulb three times.
5. Grasp the start grip and slowly pull the rope towards you. When hard resistance is felt, pull the starter grip briskly and smoothly to start the engine.
6. If the engine starts, return the Choke Lever to "OPEN" position; If the engine is not started, repeat step 5
7. Run the engine for a few minutes to make sure the machine is in normal working condition.
8. To start troweling, push the Throttle Control Lever towards "MAX" position.

7 MANOEUVRING THE TROWEL

1. To move the trowel back and forth push the handle outwards and then drag back toward you in the same way you would operate a bullfloat.
2. To move the trowel from left to right, gently twist the handle from left to right using a slow and gentle motion, the tilt steer function operates in the same way as a bullfloat transferring weight from the back to the front of the trowel.

8 FUNCTION AND CONTROLS

1. The PortaTrowel reproduces the action of hand troweling while giving a higher quality dense finish with greater wear resistance. The angle or pitch of the blades is adjustable during operation from a floating position, with the blades completely flat, to a finishing position with the blades tilted. The following figure shows the location of the controls and main operating functions for the PortaTrowel.
2. Guard Ring – NEVER put hands or feet inside the guard ring while the engine is running, Never operate the PortaTrowel with a damaged guard ring or with the guard ring removed.
3. Blade Pitch Control – Turn the hand knob clockwise to increase blade pitch, and counter-clockwise to decrease blade pitch.
4. Engine – Honda GX35 (1.5hp) petrol engine.
5. ON / OFF Switch – On / off switch located on the handle for easy access
6. Handle – The PortaTrowel handle is made up of multiple 1800mm clip together handles joined together to achieve the required external reach of the PortaTrowel subject to each specific job – The maximum number of 1800mm handles that can be joined together is three – Extending the length beyond three handles will result in reduced control of the unit.
7. Throttle Control Lever – Controls the speed of engine. Push the lever downwards to increase engine speed, upwards to decrease engine speed.
8. Gearbox – Transfers power from engine to the spider assembly for blade rotation. Ensure concrete is not allowed to build up on the gearbox and that the gearbox is cleaned after each use. Build-up of concrete may cause the gearbox to overheat

9. Spider Plate & Trowel Arm – Provides blade rotation and pitch. Always clean and lubricate the spider plate and blades arms after each use, spider plates and blades arms that are not cleaned and maintained will result in uneven blade wear and machine wobble that may impact the final finish of the concrete surface
10. Combination blades – Allows for both floating and finishing of the concrete. Gloves should always be worn when replacing or handling blades as worn blades will have a sharp edge.

Maintenance

1 Preventative maintenance and routine service plan.

- ENSURE repairs and maintenance of the trowelling machine is performed by qualified personnel.
- CAUTION: Make sure the engine is shut down and cool enough before performing repairs and maintenance.
- For preventive maintenance of the engine, please refer to the Owner's Manual of the Honda engine.

The following schedule should be followed when performing regular maintenance of the trowel:

DAILY (8 – 10 HOURS)

Check the oil level in the engine crankcase before each use, refill as necessary.
Keep the trowel clean and free of concrete residue after each use.

WEEKLY (50 – 60 HOURS)

Check and clean or replace engine air filter as necessary.
Check blades for their condition and adjust or replace if necessary.
Relubricate trowel arms, thrust collars and pitch mechanism.

MONTHLY (200 – 300 HOURS)

Remove, clean, reinstall and relubricate the trowel arms and thrust collars.
Check and adjust the trowel arms for alignment

Labels

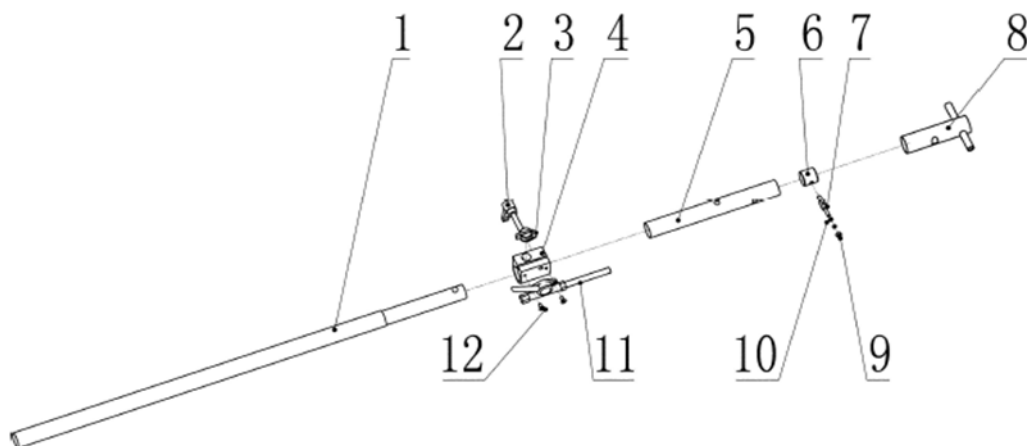
SAFETY PRECAUTIONS	
	! DANGER EXPLOSION HAZARD Never operate the machine in an explosive atmosphere, near combustible materials or where ventilation does not clear exhaust fumes.
	WARNING BURN HAZARD Never come into contact with the engine or muffler when engine is operating or shortly after it is turned off. Serious burns may occur.
	! CAUTION ROTATING HAZARD Never place hands or feet inside safety guard rings. Serious injury will result from contact with rotating blades.
	! CAUTION MOVING PARTS Before starting the machine ensure that all guards and safety devices are in place and functioning properly.
	! ATTENTION READ OWNERS MANUAL Read and understand operator's manual before using this machine. Failure to follow operating instructions could result in serious injury or death.

Specifications

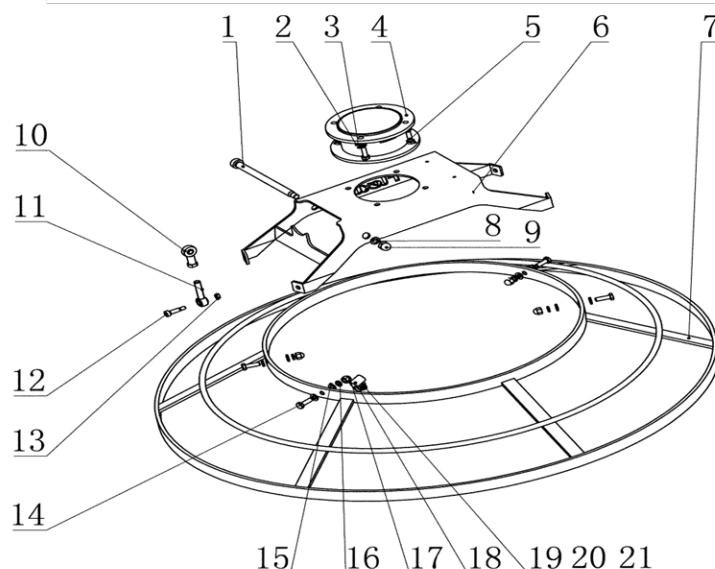
1 Technical data sheet

Model	Trowel diameter (mm)	Operating weight (kg)	Number of blades	Speed range (RPM)	Blade pitch max (deg)	Engine	Engine model	Max rated power (Hp)	Fuel type	Shipping dimensions (LxWxH) (mm)	Shipping weight (Kg)
BTPT75H	750	20	4	40-70	25	Honda	GX35	1.5Hp	Petrol	775 x 775 x 480	25

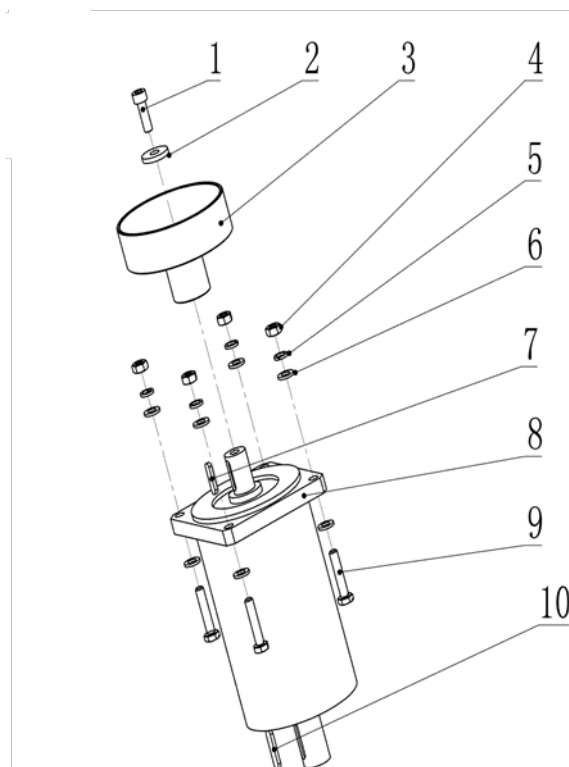
2 Parts



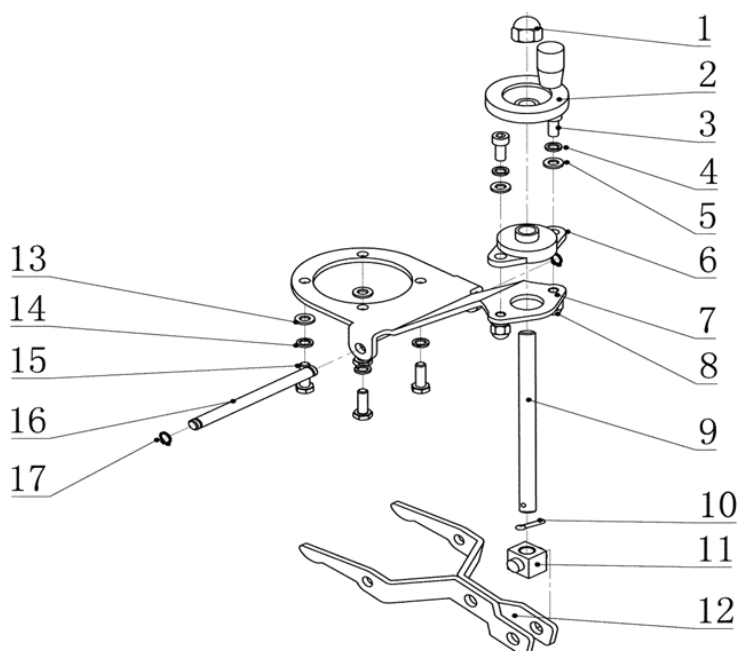
Item No	BT CODE	Product Code	Description	Qty
1	BT000056	FT401806-UNIT	HANDLE ASSY	1
2	PT300101	NPS00348-UNIT	SCREW HANDLE M10 X 40MM	1
3		NPS00739-UNIT	ON / OFF SWITCH	1
4	PT300102	NPS07509-UNIT	PORTATROWEL CLAMP	1
5	PT300133	NPS07510-UNIT	CONNECTION ADAPTOR	1
6	PT300134	NPS07511-UNIT	PIVOT BSUH	1
7	PT300103	NPS07512-UNIT	PIN SHAFT	1
8	PT300135	NPS07513-UNIT	T PIECE CONNECTION ADAPTOR	1
9	PT300136	NPS07279-UNIT	NUT M6	1
10	PT300137	NPS07514-UNIT	COLLAR	2
11	PT300104	NPS00347-UNIT	THROTTLE CONTROL & CABLE FPT30	1
12	PT300138	NPS07515-UNIT	SCREW M6 X 12MM	2
13	PT300100	NPS07245-UNIT	CENTRIFUGAL SAFETY SWITCH AY	1



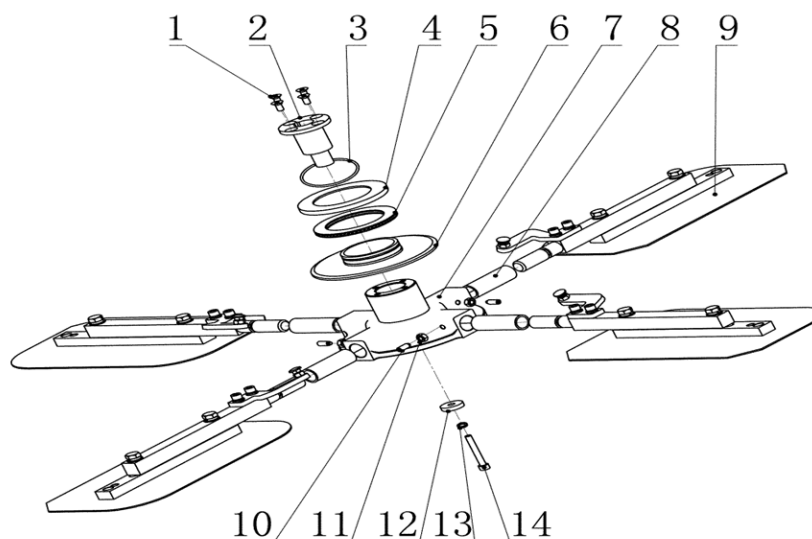
Item No	BT CODE	Product Code	Description	Qty
1		NPS00345-UNIT	FLX SCREW M10 X 140MM	1
2		NPS07267-UNIT	FLX FLAT WASHER 6MM	4
3		NPS07268-UNIT	FLX SPRING WASHER 6MM	4
4		NPS07516-UNIT	FLX SUPPORT FRAME BOSS	1
5		NPS07269-UNIT	FLX SCREW M6 X 20MM	4
6	PT300110	NPS00343-UNIT	FLX ENGINE MOUNTING PLATE	1
7		NPS00344-UNIT	FLX GUARD RING	1
8		NPS07228-UNIT	FLX WASHER	1
9		NPS07517-UNIT	FLX NUT M8	1
10	PT300106	NPS07518-UNIT	FLX BALL JOINT FEMALE	1
11	PT300107	NPS07519-UNIT	FLX BALL JOINT MALE	1
12		NPS07520-UNIT	FLX SCREW M6 X 16MM	1
13		NPS07521-UNIT	FLX NUT M5	1
14		NPS07269-UNIT	FLX SCREW M6 X 20MM	4
15		NPS07267-UNIT	FLX FLAT WASHER 6MM	8
16		NPS07268-UNIT	FLX SPRING WASHER 6MM	4
17		NPS07522-UNIT	FLX NUT M6	4
18	PT300108	NPS07523-UNIT	FLX RUBBER SLEEVED BRACKET	1
19		NPS07524-UNIT	FLX SCREW M6 X 16MM	2
20		NPS07267-UNIT	FLX WASHER 6MM	8
21		NPS07279-UNIT	FLX LOCK NUT M6	1



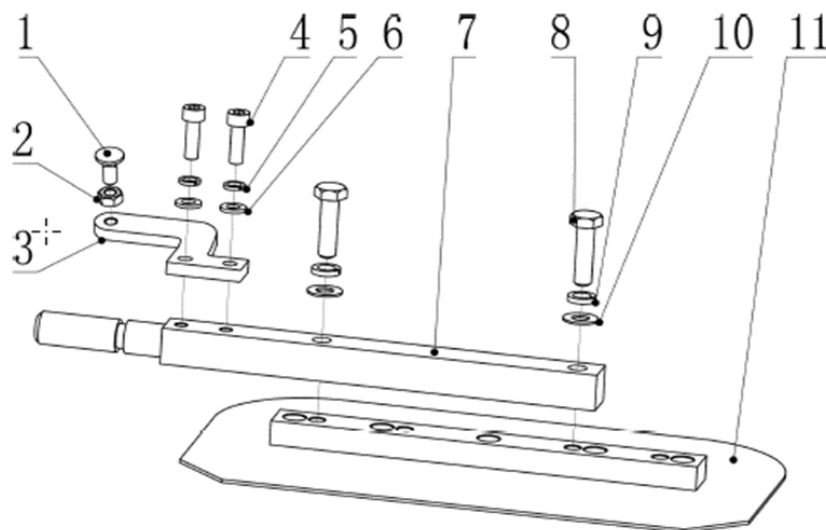
Item No		Product Code	Description	Qty
1	PT300116	NPS07525-UNIT	SCREW M6 X 20MM	1
2	PT300117	NPS07526-UNIT	LARGE FLAT WASHER 6MM	1
3	PT300118	NPS07527-UNIT	CLUTCH DRUM	1
4		NPS07279-UNIT	NUT M6	4
5		NPS07268-UNIT	SPRING WASHER 6MM	4
6		NPS07267-UNIT	FLAT WASHER 6MM	4
7	PT300119	NPS07528-UNIT	KEY STEEL 5MM X 20MM	1
8		NPS07529-UNIT	PORTATROWEL GEARBOX	1
9		NPS07530-UNIT	SCREW M6 X 30MM	4
10	PT300120	NPS07531-UNIT	KEY STEEL 6MM X 20MM	1



Item No	BT CODE	Product Code	Description	Qty
1		NPS07532-UNIT	NUT	1
2	PT300109	NPS07533-UNIT	TURN PITCH KNOB	1
3		NPS07534-UNIT	SCREW M6 X 16MM	2
4		NPS07268-UNIT	SPRING WASHER 6MM	2
5		NPS07267-UNIT	FLAT WASHER 6MM	2
6	PT300111	NPS07535-UNIT	PILLOW BLOCK BEARING	1
7	PT300139	NPS07536-UNIT	PITCH CONTROL PLATE	1
8		NPS07279-UNIT	NUT	4
9	PT300112	NPS07537-UNIT	THREADED SHAFT M10 X 140MM	1
10	PT300113	NPS07538-UNIT	PIN 2.5MM X 20MM	1
11	PT300132	NPS07539-UNIT	THREADED PIVOT BRACKET	1
12	PT300114	NPS07540-UNIT	PITCH YOLK	1
13		NPS07267-UNIT	FLAT WASHER 6MM	4
14		NPS07268-UNIT	SPRING WASHER 6MM	4
15		NPS07555-UNIT	SCREW M6 X 20MM	4
16	PT300115	NPS07541-UNIT	SHAFT	1
17		NPS07542-UNIT	SHAFT RETAINING RING	2



Item No	BT CODE	Product Code	Description	Qty
1		NPS07515-UNIT	SCREW M6 X 12MM	4
2		NPS07543-UNIT	ADAPTOR HUB	1
3	PT300121	NPS07544-UNIT	RETAINING RING	1
4	PT300122	NPS07545-UNIT	BEARING HOLDER	1
5	PT300123	NPS07546-UNIT	BEARING	1
6	PT300124	NPS07547-UNIT	PRESSURE PLATE	1
7	PT300125	NPS07548-UNIT	SPIDER PLATE	1
8		NPS07549-UNIT	SPIDER PLATE ARM BUSH	4
9		See Remarks	TROWEL ARM ASSY	4
10		NPS07550-UNIT	SCREW M6 X 16MM	4
11		NPS07279-UNIT	NUT M6	1
12		NPS07551-UNIT	RETAINING WASHER	1
13	PT300127	NPS07268-UNIT	SPRING WASHER 6MM	1
14	PT300128	NPS07552-UNIT	SCREW M6 X 45MM	1



Item No	BT CODE	Product Code	Description	Qty
1	BT300129	NPS07553-UNIT	DOME HEAD BOLT M6 X 20MM	4
2		NPS07279-UNIT	NUT M6	4
3	BT300130	NPS07554-UNIT	PITCH ARM	4
4		NPS07555-UNIT	SCREW M6 X 20MM	8
5		NPS07268-UNIT	SPRING WASHER 6MM	8
6		NPS07267-UNIT	FLAT WASHER 6MM	8
7	PT300131	NPS00346-UNIT	TROWEL ARM	4
8		SEE REMARKS	SCREW M8 X 30MM	8
9		SEE REMARKS	SPRING WASHER 8MM	8
10		SEE REMARKS	FLAT WASHER 8MM	8
11		FT201533-UNIT	TROWEL BLADE FINISHING	4

Declaration of Conformity / Certificat de conformite / Gelijkvormigheidscertificaat / Declaracion de Conformidad / Declaracao de Concormidade / Dichiarazione Di Conformita

Model : BTPT75H

We Beton Trowel BV

Declare under our sole responsibility that the product to which this declaration relates is in conformity with the following standards or other normative documents.

Declarons sous notre responsabilite que le produit cette declaration est conforme aux norms suivantes ou d'autres documents habituels.

Verklaren onder onze verantwoordelijkheid dat het product naar welke de verklaring verwijst conform de volgende standards of anders gebruikelijke documenten is.

Declaramos bajo nuestra unica responsabilidad que el producto en lo que esta declaracion concierne, es conforme con la siguiente normative u otros documentos.

Declara sob sua responsabilidade que o produto a quem esta declaracao interessar, esta em conformidade com os seguintes documentos legais ou normas directivas.

Dichiariamo sotto la ns. Unica responsibilita che il prodotto al quale questa dichiarazione si riferisce, e fabbricato in conformita ai seguenti standard e documenti di normative.

EN 349:2008+A1:2008 EN 12100:2010 EN12649:2008+A1:2011 EN ISO 5349-2:2001 +A1:2015

Following the provisions of Directives:

Suivant les directives determinees:

Volgens de vastgestelde richtlijnen:

Siguiendo las directivas:

No sequimento das clausulas da Directivas

Seguendo quanto indicato dalla Direttivas:

2006/42/EC Machinery Directive

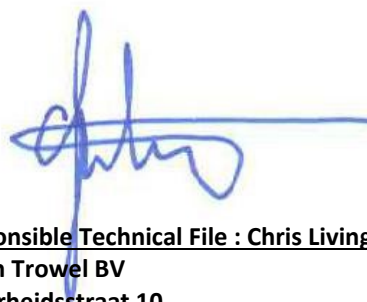
2000/14/EC Noise Directive

2001/95/EC General Product Safety Directive

2002/95/EC Reduction of Hazardous Waste Directive

LVD2014/35/EU Low Voltage Directive

2004/30/EU Electromagnetic Compatibility



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25th August 2024