

# **STR701-1**

## **Operating Manual**

This manual is provided to persons purchasing an SPE machine and may not be reproduced in part or full without written permission of SPE International Ltd.

This manual provides the basic information required and is only to be used as a guideline.  
The SPE machines are manufactured and covered by SPE design registrations granted and pending.  
SPE International Ltd reserves the right to alter the equipment design and specification as required without notice.

The SPE product range is subject to amendment and improvement as a result of on going research



Honeyholes Lane, Dunholme, Lincoln LN2 3SU, England  
Tel: +44 (0) 1673 860709 Fax: +44 (0) 1673 861119  
Email: [sales@spe-int.com](mailto:sales@spe-int.com)



**STR701-1**  
Operating Manual  
V1.01

# **STR 701**

## **OPERATING MANUAL**

This manual covers to the best of our knowledge, the operation and maintenance of the **STR 701**. Before operation of the equipment the manual should be read and understood by the operator. The safety regulations must be followed at all times. Service of electrical components should be carried out by authorised personnel. Failure to follow these instructions could result in damage to the machine and/or serious personal injury or death.

### **WARNING**

Failure to follow these instructions may result in serious personal injury or death. SPE disclaims all responsibility for damage to persons or objects arising as a consequence of incorrect handling of the machine and failure to inspect the machine for damage or other faults that may influence the operation prior to starting work.

## OPERATING INSTRUCTIONS

- 1) Connection to power supply** - for connection to the mains the machine is supplied with the appropriate plug. On construction sites the machine may be connected to the mains via the work site distribution board with the R.C.D. system.
- 2) Adjusting the handle** - the desired angle of the handle can be set to suit the operator. Apply foot pressure to the pedal (1 turn) located at the handle bearing to release the handle. Set the handle to the desired angle. Apply foot pressure to pedal to re-tighten and lock handle in new position.
- 3) Switching on the machine** - the trigger switch casing is equipped with a safety device, such that the machine can only be switched on with the handle at an angle. Moreover, the on-off triggers located on the left and right of the casing are designed to prevent unintentional switching on. To switch on, the on-off trigger must be moved slightly outwards with the index finger before it can be operated. The machine can be switched on using the right or left triggers singly or simultaneously. The machine switches off automatically as soon as the trigger(s) is (are) released.
- 4) Fitting the tools - Tip** the machine backwards over its wheels, and then position the machine over the tool head placed on the ground. Briefly operate the on-off trigger to seat the tool on the catch. To prevent brush deformation they should be removed from the machine after work is completed.
- 5) Steering the machine - Grip** the handle gently with both hands and switch on. As the motor is off-centre, the weight acting on the accessories is so well balanced that the machine turns the accessories without motion in any direction. Press the handle gently downwards to move the machine to the left. Raise the handle slightly to steer to the right.
- 6) Removing smaller accessories** - Put handle in upright position and tip the machine over on its wheels. Switch on briefly. The accessory drops off on its own.
- 7) Connecting the tank - When** using liquids, the tank must be fitted to the mounting on the handle and fastened with a wing nut. Push the upper tank clamp down firmly until it is properly seated. Connect the chain to the special liquid lever located on the left-hand side of the trigger casing. Connect the liquid delivery hose to the port on the middle of the machine. Pulling the liquid lever allows accurate dosing of the liquid.

## **IMPORTANT INSTRUCTIONS**

- The machine may only be operated by persons trained in the operation and service and who have been expressly authorised to do so.
- The machine may only be operated with the power supply cable in proper working order. The power supply cable must be checked regularly for signs of damage and may only be replaced by qualified technicians.
- When the machine is in use the operator must ensure that nobody is in the danger area of the rotating tools.
- Service and repair work and rectification of faults may only be carried out with the mains plug disconnected.
- Repairs may only be carried out by qualified technicians acquainted with the safety regulations. No modifications to the machine are allowed.

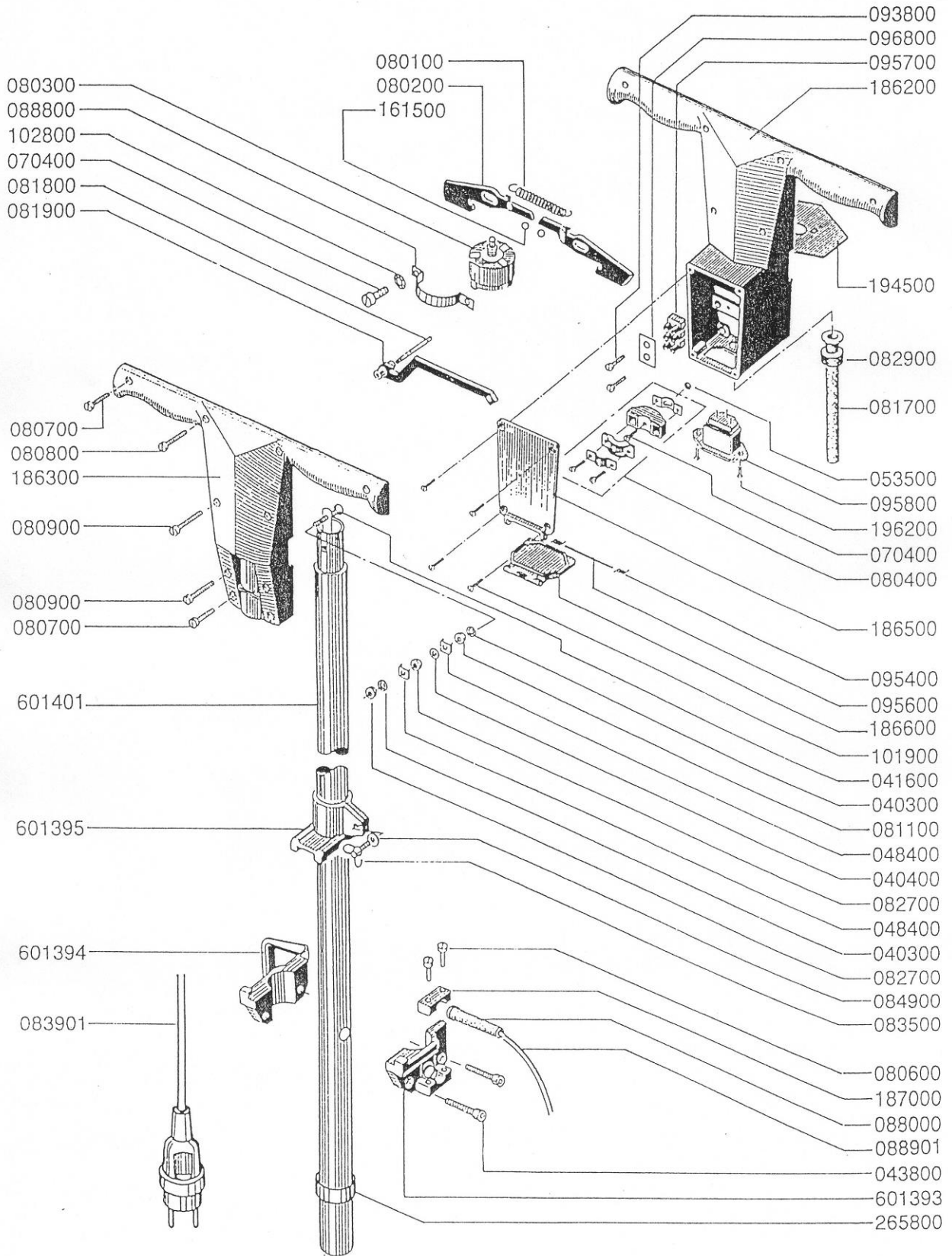
Vibration will occur at various levels dependent on the attachments and work being completed. It is recommended that tests are taken upon operation to provide the operator with information on using the equipment within the guidelines laid down by the Health & Safety Executive.

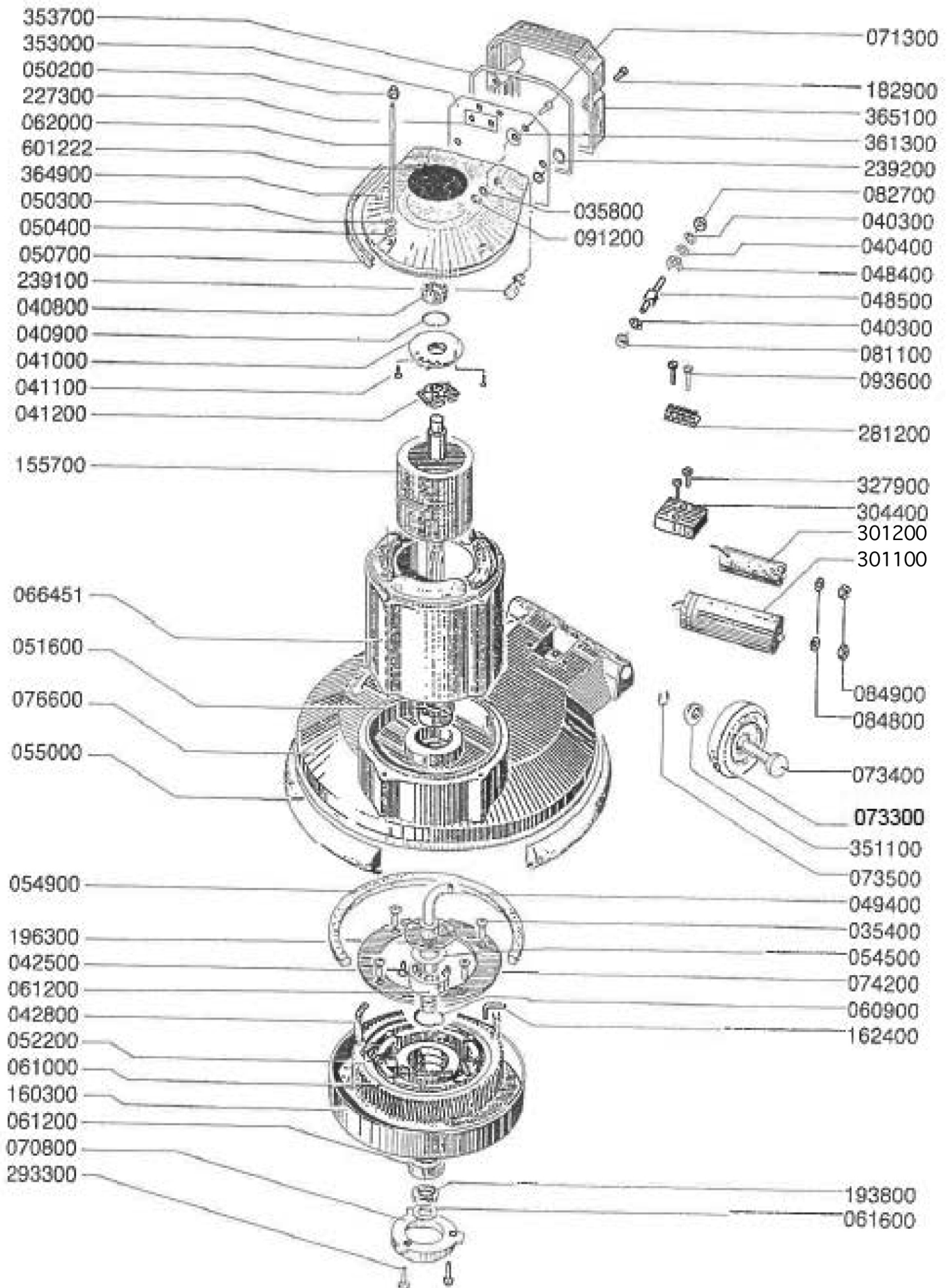
**SEE SPECIFICATION SHEETS FOR ACCESSORIES**

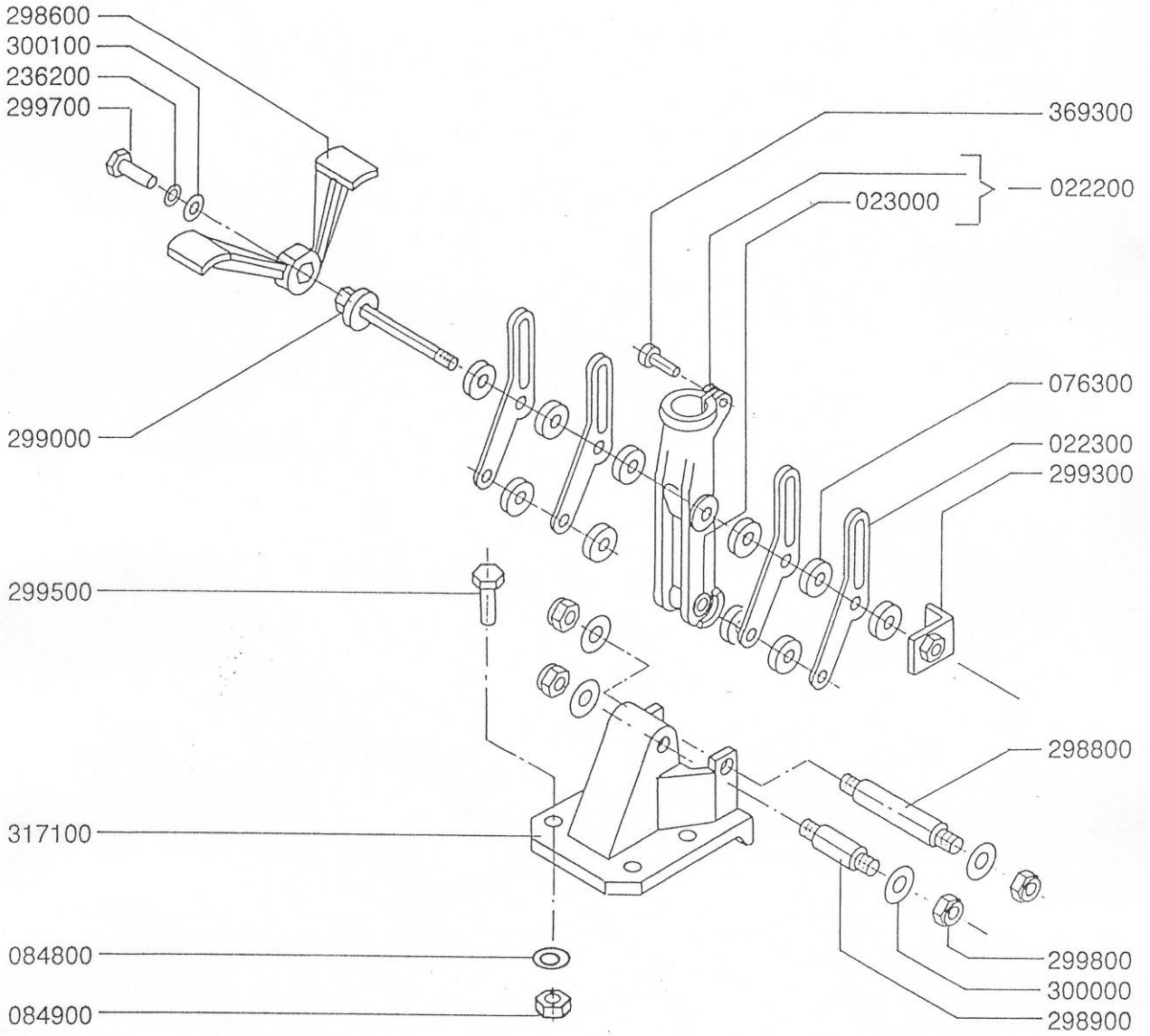


**STR701-1**  
Operating Manual  
V1.01

# **Spare Parts Breakdown**









## SPECIFICATION SHEET



The STR701 is a rotary preparation system. Simple, safe, comfortable to operate and highly effective. Low noise levels (64dB) along with the complete absence of fumes, vibration and dust make the STR701 the ideal machine for refurbishment and renovation.

The maintenance free STR701 offers total reliability and is the result of over 15 years constant development and improvement.

An exclusive range of cleaning and grinding heads have been developed to solve the many problems faced on site. This range includes tungsten carbide, diamond and silicon carbide attachments together with a comprehensive range of brushes.

The STR701 can be operated dust free when connected to the SPE 316 vacuum.

### Features:

- Multi-purpose
- Dust free
- Thermal overload protection
- Maintenance free
- Low noise
- Low vibration
- Safety start mechanism.

### Applications:

- Cleaning block paving
- Grinding down joints
- Remedial work to rain and frost damaged slabs
- Texturing concrete to remove laitence
- Removal of oil, bitumen and adhesive contaminants
- Clean and prepare surface prior to coating
- Brush finish green concrete to remove laitence
- Removal of plaster, cement and ice build up
- Key existing coatings.
- Removal of non slip aggregates
- Clean and texture wood
- Clean and maintain all types of formwork

## SPECIFICATION SHEET

Specifications			
Type	110v	220v	380/415v
Part Number	STR701-1	STR701-2	STR701-3
Power Output	2hp	2hp	2hp
Voltage	110	220	380/415
Cycles	50hz	50hz	50hz
Head Speed (rpm)	145	145	72/145
Machine Dimensions (mm)			
Length	580	580	580
Width	470	470	470
Height	1250	1250	1250
Weight (kg)	61	61	61
Working width (mm)	460	460	460
Working distance from wall (mm)	10	10	10

Machine	Volts	Plug Size	Cable Size	Norm Cable Length	Transformer	Generator
STR701-1	110	32 Amp 3 Pin	4.0 - 3 Core	30 metres	5 kva	7 kva
STR701-2	220	16 Amp 3 Pin	2.5 - 3 Core	30 metres	-	7 kva
STR701-3	380/415	16 Amp 5 Pin	2.5 - 3 Core	70 metres	-	7 kva

**RECORD OF NOISE AND VIBRATION ASSESSMENT**

Manufacturer:	SPE
Type:	Rotary preparation system
Model No.	STR701-1 Electric
Operation :	Concrete floor surface
Inserted Tool:	Silicon carbide brush
Running Conditions:	145 rpm
HAV Note:	Operc

**HAND-ARM VIBRATION**

**Frequency Weighted Energy Equivalent Accelerations (a<sub>h,w</sub>)**

Measurement Position	Acceleration (m/s <sup>2</sup> )
	Vector Sum
Handle	1

**NOISE LEVELS**

**Sound Power Level (L<sub>WA</sub>)**

L <sub>WA</sub> at Octave Band Centre Frequency (Hz)								Sound Power Level L <sub>WA</sub>
63	125	250	500	1000	2000	4000	8000	
52.6	62.3	78.6	78.1	82.3	86.7	87.8	86.2	<b>92.7</b>

**Operator's Ear**

L <sub>Aeq,T</sub> at Octave Band Centre Frequency (Hz)								Overall Level (L <sub>Aeq,T</sub> )	L <sub>Peak</sub> dB(C)
63	125	250	500	1000	2000	4000	8000		
34.2	40.3	62.1	66.6	69.7	71.7	75.6	73.7	<b>79.6</b>	<b>100.6</b>



**RECORD OF NOISE AND VIBRATION ASSESSMENT**

Manufacturer:	SPE
Type:	Rotary preparation system
Model No.	STR701-1 Electric
Operation :	Concrete floor surface
Inserted Tool:	Silicon carbide disc
Running Conditions:	145 rpm
HAV Note:	Operc

**HAND-ARM VIBRATION**

**Frequency Weighted Energy Equivalent Accelerations (a<sub>h,w</sub>)**

Measurement Position	Acceleration (m/s <sup>2</sup> )
	Vector Sum
Handle	1.3

**NOISE LEVELS**

**Sound Power Level (L<sub>WA</sub>)**

L <sub>WA</sub> at Octave Band Centre Frequency (Hz)								Sound Power Level L <sub>WA</sub>
63	125	250	500	1000	2000	4000	8000	
52.6	62.3	78.6	78.1	82.3	86.7	87.8	86.2	<b>92.7</b>

**Operator's Ear**

L <sub>Aeq,T</sub> at Octave Band Centre Frequency (Hz)								Overall Level (L <sub>Aeq,T</sub> )	L <sub>Peak</sub> dB(C)
63	125	250	500	1000	2000	4000	8000		
34.2	40.3	62.1	66.6	69.7	71.7	75.6	73.7	<b>79.6</b>	<b>100.6</b>



**RECORD OF NOISE AND VIBRATION ASSESSMENT**

Manufacturer:	SPE
Type:	Rotary preparation system
Model No.	STR701-1 Electric
Operation:	Concrete floor surface
Inserted Tool:	TCT disc
Running Conditions:	145 rpm
HAV Note:	Operc

**HAND-ARM VIBRATION**

**Frequency Weighted Energy Equivalent Accelerations (a<sub>h,w</sub>)**

Measurement Position	Acceleration (m/s <sup>2</sup> )
	Vector Sum
Handle	1.2

**NOISE LEVELS**

**Sound Power Level (L<sub>WA</sub>)**

L <sub>WA</sub> at Octave Band Centre Frequency (Hz)								Sound Power Level L <sub>WA</sub>
63	125	250	500	1000	2000	4000	8000	
52.6	62.3	78.6	78.1	82.3	86.7	87.8	86.2	<b>92.7</b>

**Operator's Ear**

L <sub>Aeq,T</sub> at Octave Band Centre Frequency (Hz)								Overall Level (L <sub>Aeq,T</sub> )	L <sub>Peak</sub> dB(C)
63	125	250	500	1000	2000	4000	8000		
34.2	40.3	62.1	66.6	69.7	71.7	75.6	73.7	<b>79.6</b>	<b>100.6</b>



## WARRANTY

The standard warranty period of this equipment is **12 months** from the despatch date in accordance with the company Conditions of Sale (copy attached).

<i>Warranty start date:</i>	<b>As despatch date</b>
<i>Model:</i>	<b>STR701</b>
<i>Serial no:</i>	
<i>Customer name:</i>	
<i>Customer Address:</i>	

<i>Manufacturer:</i>	<b>SPE International Ltd</b>
	<b>Honeyholes Lane</b>
	<b>Dunholme</b>
	<b>Lincoln</b>
	<b>LN2 3SU</b>
	<b>England</b>
<i>telephone:</i>	<b>+44 (0) 1673 860709</b>
<i>fax:</i>	<b>+44 (0) 1673 861119</b>
<i>Email:</i>	<b>sales@spe-int.com</b>
<i>Web site:</i>	<b>www.spe-int.com</b>



**STR701-1**  
Operating Manual  
V1.01

# DECLARATION OF CONFORMITY

WE  
**SPE INTERNATIONAL LTD**

OF  
Honeyholes Lane  
Dunholme  
Lincoln  
LN2 3SU

**DECLARE** that under our sole responsibility for the supply/manufacture of the product

(Description/name)                    **STR701 Multi-purpose Preparation System**

(Model/type)                            **STR701**

to which this declaration relates is in conformity with the following standards and other normative documents following the provisions of Directive 2006/42/EC.

A handwritten signature in black ink, appearing to read 'B. Jacklin', is positioned above the printed name.

.....  
Brian Jacklin – Technical Manager  
SPE INTERNATIONAL LTD

## **CONDITIONS OF SALE**

The quotation overleaf and any order placed following such quotation are subject to the following conditions of sale in which SPE International Limited is referred to as the "Company".

**1. Validity of quotation**

No order received from a customer by the Company shall constitute a contract until accepted in writing by the Company.

**2. Prices**

Prices quoted by the Company are firm for 30 days only or until previously withdrawn. Unless otherwise stated all prices are exclusive of any applicable Value Added Tax for which the customer shall be additionally liable to the Company.

**3. Delivery**

Delivery periods and dates are given in good faith but are not the subject of any warranty or condition and time shall not be of the essence of the contract in these respects. No liability will attach to the Company if delivery periods or dates are not met for any reason whatsoever.

**4. Payment**

Save as may otherwise be agreed in writing the customer shall pay the price in full on or before the estimated delivery date whereupon the Company shall raise a receipted invoice. Each invoice includes an Overdue Account Levy of 5% of the total invoice value inclusive of VAT. Subject to payment in full being made on or before the due date a sum equal to the Overdue Account Levy shall be credited to the customers account with the Company. Until such time as payment in full has been made the Company shall be under no obligation to allow or effect of any goods to the customer.

**5. Warranty**

The Company warrants that all goods supplied by it will correspond to their specifications and will be free from defects in materials or workmanship for a period of 12 months from the date of delivery. The Company's obligation in the event of a breach of this warranty is limited to the repair or replacement of any defective goods which shall be returned at the cost and expense of the customer to the Company. This warranty is given in lieu of all the other warranty or conditions expressed or implied (whether by statute or otherwise) and is subject to the following conditions:-

**5.1** Claims must be notified in writing to the Company within seven days from the date of delivery or (where the defect is not apparent on reasonable inspection) as soon as practicable after discovery of the defect.

**5.2** The Company shall be under no liability in respect of any defect in the goods arising from any drawing, design or specification supplied by the customer.

**5.3** The Company shall be under no liability if the defect or failure in the reasonable opinion of the Company arises from wilful damage or misuse, negligence by the customer or any third party. Failure to follow the Company instructions, usage of non-recommended parts and materials, alteration or repair of the goods without the prior approval of the Company or non-recommended maintenance.

**5.4** The Company shall be under no liability if the price for the goods has not been paid by the due date for payment.

**5.5** The above warranty does not extend to:-

**5.5.1** Parts, materials or equipment not manufactured by the company in respect of which the customer shall be entitled only to the benefit of any such warranty or guarantee as is given by the manufacturer to the Company.

**5.5.2** Any component part of the goods or associated parts coming into contact with abrasive elements or dust within surface Preparation equipment.

**5.5.3** Fair wear and tear of moving parts within the goods.

**5.6** Except in the case of death or personal injury caused by the Company negligence, the Company shall not be liable for any consequential loss or damage (whether for loss of profit or otherwise) or other claims for consequential compensation.

**6. Carriage**

Packing, carriage and insurance charges in respect of delivery of the goods to the customer will be charged to the customer at cost to the company.

**7. Damage in Transit**

The company does not accept any liability for loss or damage to the goods while in transit to the customer.

**8. Risk**

The risk in the goods shall pass to the customer on delivery to the customer or (if earlier) when possession of the goods is taken by a carrier for delivery to the customer.

**9. Force Majeure**

The Company shall not be liable to the customer or be deemed to be in breach of any contract with the customer by reason of any delay in performing or any failure to perform any obligation of the Company obligation in relation to the goods if the delay or failure was due to force majeure or to any other cause beyond the Company's reasonable control.

**10. Reservation of Title**

The goods sold under these conditions shall remain the absolute property of the Company and legal title in the goods shall remain vested in the Company until payment in full of all amounts invoiced or due to the Company in respect of the goods. If the customer shall enter into liquidation have a winding up order made against it or have a Liquidator, receiver, administrator or administrator receiver shall be appointed over its assets, income or any part thereof before the property in the goods has passed in accordance





**STR701-1**  
**Operating Manual**  
V1.01

with this condition the Company shall be entitled immediately after giving notice of its intention to repossess any goods to enter upon the premises of the customer with such transport as may be necessary and to repossess any goods to which it has title under this condition. No liquidator, receiver, administrator or administrative receiver of the customer shall have authority to sell goods to which the Company has title without the prior written consent of the Company.

**11 Insolvency of Customer**

If the customer being a body corporate, shall pass a resolution or suffer an order of the Court to be made for winding – up, or if a Receiver, Administrator or Administrative Receiver shall be appointed or, being an individual or partnership, shall suspend payment, propose or enter into any composition or arrangement with his or their creditors, or have a bankruptcy order made against him or them, then the Company shall have the right, without prejudice to any other contract with the customer, not to proceed further with the contract and shall be entitled to charge for work already carried out ( whether completed or not) and for goods and materials already purchased for the customer such charge to be an immediate debt due from the customer.

**12. Patent Rights, etc**

The acceptance of a quotation includes the recognition by the customer of the Company under any patents, trademarks, registered designs or other intellectual property rights relating to the goods and the customer undertakes that patent numbers, trademarks or other trade markings on goods supplied shall not be obliterated, altered or defaced.

**13. Applicable Law**

These conditions shall be governed by and construed in accordance with English law and parties acknowledge and accept the exclusive jurisdiction of the English Courts.