

# **OPERATING INSTRUCTIONS**

## **ELE Concrete Mixer**

34-3540

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In the interests of improving and updating its equipment, ELE reserves the right to alter specifications to equipment at any time			

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## 1 Introduction

- 1.1 The making of cubes and beams etc. for compression testing requires relatively small quantities of fresh concrete and it is essential that this concrete be thoroughly mixed. The concrete mixer is mobile and is designed for laboratory use to give efficient mixing of both wet and dry materials.
- 1.2 The mixer head lifts clear to give maximum access to the machine and holds the mixing blades at a constant depth during the mixing operation. The blades are easy to adjust to suit different types and volumes of material to be mixed.
- 1.3 The mixing pan, which can be removed, is rotated by a turntable driven by an electric motor via a reduction gearbox.



## 2 Installation

## Mechanical noise

The mixer is such that the noise levels generated during operation may be considered excessive.

It is the user's responsibility to ensure that adequate safeguards to protect the workforce are available, e.g. ear defenders, and that the machine is located in a suitable position relative to the health and safety of operatives.

Connect mains cable to a suitable starter rated at 20A minimum for 240V or 30A minimum for 110V.

#### Safety

Whilst mixing is in operation do not remove any covers or attempt to adjust any part of the machine.

Ensure all moving parts are thoroughly secured before attempting any maintenance.

Ensure all appropriate measures are taken to protect the operator from excessive noise.

See noise certificate (when supplied).



## Electrical safety

**Warning:** Before removing any covers or performing maintenance repair and service, isolate from electrical supply. Where mains supply is required during these activities, only competent persons should perform the work.

2.1 Check that the power supply is compatible with the requirements stated on the label and connect in accordance with IEE regulations or to local requirements.

Local isolation of machine required.

It is advised that this machine be connected via a residual current device (not supplied), and it should operate if earth leakage current exceeds 0.03 amps.

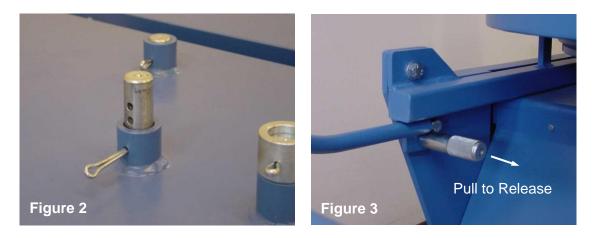
The power cable is coded as follows:

Brown wire	L	Live or Power
Blue wire	Ν	Neutral
Green/Yellow wire	Е	Earth or Ground

**Note:** exercise extreme caution when using the machine with wet hands. Dry hands before operating machine.

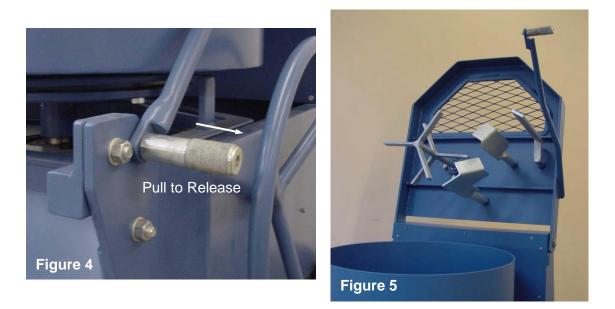
## 3 Operation

- 3.1 The shaft of the rotating paddle is secured in position by a collar and split pin. The height of the paddle is preset during manufacture and cannot be adjusted.
- 3.2 The height of each lifting paddle is adjusted by removing the split pin, raising or lowering the shaft according to requirements, and re-inserting the split pin when the hole in the shaft aligns with the location hole in the mixer head. Four holes in each shaft provide different working heights for each paddle (Figure 2).



- 3.3 The side scraper is retained by a collar and split pin. The height is fixed on assembly and is not adjustable.
- 3.4 In very cold weather the oil in the gear unit will thicken and it is advisable to run the mixer empty for a few minutes before starting the first mix of the day.
- 3.5 The manoeuvering handle locks in the raised position and must be lowered before mixing. It is lowered by disengaging the spring loaded locating plunger on the left hand side of the frame (Figure 3).
- 3.6 Raise the mixer head after disengaging the spring loaded handle situated on the right hand side of the frame (Figures 4 & 5).





Important: switch the machine off and allow pan to stop before lifting cover.

Do not move the machine with mixer head raised.

- 3.7 Load the pan with materials. To prevent over loading, the maximum depth of mix should be about 220 mm even though the pan is 330 mm deep, i.e. two thirds full.
- 3.8 Lower the mixing head and push the paddles down into the mix. Switch on the motor and with the spring loaded handle withdrawn maintain a downward pressure until the plunger can be located into its hole.
- 3.9 When mixing is completed, switch off the motor. When pan is stationary, the mixer head can be raised.
- 3.10 Turn the handwheel on the side of the mixer to tilt the pan to empty the mixed materials (Figure 6).





- 3.11 When returning the pan to its operational position and before re-loading ensure that the driving dogs on the turntable are correctly located in the holes in the underside of the pan (Figure 7).
- 3.12 When all mixing is completed, wash the mixer down with plenty of water to remove all traces of mix residue especially from the pan and paddles. As the motor is to IP55 standards, (dust and water jet protected), a **low pressure** hose spray may be used for washing the mixer, where conditions allow this. Disconnect from the mains before washing down. Leave machine to dry before reconnecting to mains.

## 4 Maintenance

- 4.1 Gear units are sealed for life and require no further maintenance.
- 4.2 Daily (when in use)
- 4.2.1 Grease vertical shafts and all pivots after washing down.
- 4.2.2 Where the mixer is only used intermittently, ensure all moving parts and bright steel parts are adequately greased to inhibit corrosion.
- 4.3 Every three months.
- 4.3.1 Check tightness of all nuts, screws etc.
- 4.3.2 Clean and grease the pan tilting rack and pinion mechanism.
- 4.3.3 Some discolouring of the bright parts is expected and will not affect the action of the mixer.

## DIRECTIVE ON WASTE ELECTRICAL & ELECTRONIC EQUIPMENT (WEEE)



Electrical equipment marked with this symbol may not be disposed of in European public disposal systems after 12 August of 2005. In conformity with European local and national regulations (EU Directive 2002/96/EC), European electrical equipment users must now return old or end-of life equipment to the Producer for disposal at no charge to the user.

**Note:** For return for recycling, please contact the equipment producer or supplier for instructions on how to return end-of-life equipment for proper disposal.

Important document. Retain with product records.

#### GERMAN

Elektrogeräte, die mit diesem Symbol gekennzeichnet sind, dürfen in Europa nach dem 12. August 2005 nicht mehr über die öffentliche Abfallentsorgung entsorgt werden. In Übereinstimmung mit lokalen und nationalen europäischen Bestimmungen (EU-Richtlinie 2002/96/EC), müssen Benutzer von Elektrogeräten in Europa ab diesem Zeitpunkt alte bzw. zu verschrottende Geräte zur Entsorgung kostenfrei an den Hersteller zurückgeben.

*Hinweis:* Bitte wenden Sie sich an den Hersteller bzw. an den Händler, von dem Sie das Gerät bezogen haben, um Informationen zur Rückgabe des Altgeräts zur ordnungsgemäßen Entsorgung zu erhalten.

Wichtige Informationen. Bitte zusammen mit den Produktinformationen aufbewahren.

### FRENCH

A partir du 12 août 2005, il est interdit de mettre au rebut le matériel électrique marqué de ce symbole par les voies habituelles de déchetterie publique. Conformément à la réglementation européenne (directive UE 2002/96/EC), les utilisateurs de matériel électrique en Europe doivent désormais retourner le matériel usé ou périmé au fabricant pour élimination, sans frais pour l'utilisateur.

**Remarque :** Veuillez vous adresser au fabricant ou au fournisseur du matériel pour les instructions de retour du matériel usé ou périmé aux fins d'élimination conforme. Ce document est important. Conservez-le dans le dossier du produit.

## ITALIAN

Le apparecchiature elettriche con apposto questo simbolo non possono essere smaltite nelle discariche pubbliche europee successivamente al 12 agosto 2005. In conformità alle normative europee locali e nazionali (Direttiva UE 2002/96/EC), gli utilizzatori europei di apparecchiature elettriche devono restituire al produttore le apparecchiature vecchie o a fine vita per lo smaltimento senza alcun costo a carico dell'utilizzatore.

**Nota:** Per conoscere le modalità di restituzione delle apparecchiature a fine vita da riciclare, contattare il produttore o il fornitore dell'apparecchiatura per un corretto smaltimento.

Documento importante. Conservare con la documentazione del prodotto.

#### DANISH

Elektriske apparater, der er mærket med dette symbol, må ikke bortskaffes i europæiske offentlige affaldssystemer efter den 12. august 2005. I henhold til europæiske lokale og nationale regler (EU-direktiv 2002/96/EF) skal europæiske brugere af elektriske apparater nu returnere gamle eller udtjente apparater til producenten med henblik på bortskaffelse uden omkostninger for brugeren.

**Bemærk:** I forbindelse med returnering til genbrug skal du kontakte producenten eller leverandøren af apparatet for at få instruktioner om, hvordan udtjente apparater bortskaffes korrekt.

Vigtigt dokument. Opbevares sammen med produktdokumenterne.

#### SWEDISH

Elektronikutrustning som är märkt med denna symbol kanske inte kan lämnas in på europeiska offentliga sopstationer efter 2005-08-12. Enligt europeiska lokala och nationella föreskrifter (EU-direktiv 2002/96/EC) måste användare av elektronikutrustning i Europa nu återlämna gammal eller utrangerad utrustning till tillverkaren för kassering utan kostnad för användaren. **Obs!** Om du ska återlämna utrustning för återvinning ska du kontakta tillverkaren av utrustningen eller återförsäljaren för att få anvisningar om hur du återlämnar kasserad utrustning för att den ska bortskaffas på rätt sätt.

Viktigt dokument. Spara tillsammans med dina produktbeskrivningar.

#### SPANISH

A partir del 12 de agosto de 2005, los equipos eléctricos que lleven este símbolo no deberán ser desechados en los puntos limpios europeos. De conformidad con las normativas europeas locales y nacionales (Directiva de la UE 2002/96/EC), a partir de esa fecha, los usuarios europeos de equipos eléctricos deberán devolver los equipos usados u obsoletos al fabricante de los mismos para su reciclado, sin coste alguno para el usuario.

**Nota:** Sírvase ponerse en contacto con el fabricante o proveedor de los equipos para solicitar instrucciones sobre cómo devolver los equipos obsoletos para su correcto reciclado.

Documento importante. Guardar junto con los registros de los equipos.

#### DUTCH

Elektrische apparatuur die is voorzien van dit symbool mag na 12 augustus 2005 niet meer worden afgevoerd naar Europese openbare afvalsystemen. Conform Europese lokale en nationale wetgegeving (EU-richtlijn 2002/96/EC) dienen gebruikers van elektrische apparaten voortaan hun oude of afgedankte apparatuur kosteloos voor recycling of vernietiging naar de producent terug te brengen.

**Nota:** Als u apparatuur voor recycling terugbrengt, moet u contact opnemen met de producent of leverancier voor instructies voor het terugbrengen van de afgedankte apparatuur voor een juiste verwerking.

Belangrijk document. Bewaar het bij de productpapieren.

#### POLISH

Sprzęt elektryczny oznaczony takim symbolem nie może być likwidowany w europejskich systemach utylizacji po dniu 12 sierpnia 2005. Zgodnie z europejskimi, lokalnymi i państwowymi przepisami prawa (Dyrektywa Unii Europejskiej 2002/96/EC), użytkownicy sprzętu elektrycznego w Europie muszą obecnie przekazywać Producentowi stary sprzęt lub sprzęt po okresie użytkowania do bezpłatnej utylizacji.

**Uwaga:** Aby przekazać sprzęt do recyklingu, należy zwrócić się do producenta lub dostawcy sprzętu w celu uzyskania instrukcji dotyczących procedur przekazywania do utylizacji sprzętu po okresie użytkowania.

Ważny dokument. Zachować z dokumentacją produktu.

#### PORTUGESE

Qualquer equipamento eléctrico que ostente este símbolo não poderá ser eliminado através dos sistemas públicos europeus de tratamento de resíduos sólidos a partir de 12 de Agosto de 2005. De acordo com as normas locais e europeias (Directiva Europeia 2002/96/EC), os utilizadores europeus de equipamentos eléctricos deverão agora devolver os seus equipamentos velhos ou em fim de vida ao produtor para o respectivo tratamento sem quaisquer custos para o utilizador.

**Nota:** No que toca à devolução para reciclagem, por favor, contacte o produtor ou fornecedor do equipamento para instruções de devolução de equipamento em fim de vida para a sua correcta eliminação.

Documento importante. Mantenha junto dos registos do produto.