

FLEX-AUGER™

User's Guide



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GENERAL INFORMATION

1. OBEY THE LEGAL REGULATIONS AND THE APPLICABLE RULES!

This concerns, among other things, the European directives transposed into national legislation and/or the laws, safety and accident prevention regulations that apply in the user's country.

During assembly, operation and maintenance of the installation the legal regulations concerned and the applicable technical rules must be obeyed.

2. INTENDED USE

The installation has been designed solely for intensive livestock use and has been developed according to the applicable rules of good workmanship. Extra loading of the product is therefore prohibited. Any other use is considered to be improper use. The manufacturer is not responsible for damage resulting there from. The user bears sole responsibility.

3. NOT-INTENDED USE

All use different than described in point 2" intended use" is at the responsibility of the end user.

4. LIABILITY

Any claim under guarantee is void for damage that has resulted from improper use and unauthorised actions not provided for in the instructions for use. ROXELL NV cannot be held responsible for this damage.

This declaration relates exclusively to the machinery in the state in which it was placed on the market, and excludes components which are added and/or operations carried out subsequently by the final user.

The liability of Roxell ends in case the end user changes or adapts the installation himself.

5. PERSONNEL QUALIFICATIONS

USER:

The person who uses a function or operation of a product for their work or who works on the product. The user must be able to read the instructions for use and fully understand them. The user has knowledge of the functioning and construction of the installation.

TECHNICALLY TRAINED PERSON:

An expert who can assemble and maintain the installation (**mechanically/electrically**), and resolve malfunctions. On the basis of his/her technical training and experience, he/she has sufficient knowledge to be able to assess activities, recognise possible dangers and rectify dangerous situations.

6. INFORMATION ABOUT THE RESIDUAL RISKS - USED SAFETY SIGNS





There are three levels of danger, which you can recognize from the signal word

* **DANGER**

* **WARNING**

* **CAUTION**

The nature and source of the imminent danger and possible consequences of not obeying warnings is stated here!

 <p>DANGER</p>	<p>DANGER indicates a direct imminent danger that can result in a serious or even fatal accident if the safety measures are not respected.</p>
 <p>WARNING</p>	<p>WARNING indicates a possible imminent danger that can result in a serious accident or damage to the product if the safety measures are not respected.</p>
 <p>CAUTION</p>	<p>CAUTION indicates possible, dangerous situations that can result in minor physical injury or material damage if the safety measures are not respected.</p>
	<p>This symbol refers to supporting information.</p>

GENERAL INFORMATION

7. DISMANTLING, STORAGE, TRANSPORT

Dismantle the installation and its components in accordance with the environmental legislation of the country or the local authorities applicable at that time. All functioning products and exchange parts must be stored and disposed of in accordance with the applicable environmental regulations.

Environmental information for customers in the European Union



European directive 2002/96/EC amended by the Directive 2008/34/EC requires that equipment that bears this symbol on the product or packaging must not be disposed of with unsorted household waste. This symbol indicates that the product must be disposed of separately. You are yourself responsible for the destruction of this and other electrical and electronic equipment via the disposal channels designated for that purpose by the national or local government. The correct destruction and recycling of this equipment prevents any negative consequences for the environment and health. For more information about destroying your old equipment, contact your local authorities or waste disposal service.

Information about waste disposal - electrical/electronic material for companies

1. In the European Union

If you have used the product for commercial purposes and you want to dispose of it, contact Roxell N.V. who will give you information about the return of the product. It is possible that you will have to pay a disposal charge for the return and recycling. Small products (and small quantities) can be processed by the local collection agencies.

2. In other countries outside the European Union

If you want to dispose of this product, contact the local authorities for information concerning the correct disposal procedure.

8. THE LEVEL OF NOISE EMISSION

The noise level of the installation in operation does not exceed 70dB.

9. MAIN SWITCH

Before you do any repair, or maintenance works, always disconnect the electricity supply **by switching off the main switch.**

10. PROTECTION

Ensure you wear personal protection equipment (gloves, dust masks...).

THESE INSTRUCTIONS MUST BE READ, UNDERSTOOD AND ALL POINTS OBSERVED BY THE USER, THE RESPONSIBLE AND OPERATING PERSONNEL.

DISCLAIMER : The original, authoritative version of this manual is the Dutch version produced by Roxell NV. Subsequent changes to any manual made by any third party have not been reviewed nor authenticated by Roxell. Such changes may include, but are not limited to, translation into languages other than Dutch, and additions to or deletions from the original content. Roxell disclaims responsibility for any and all damages, injuries, warranty claims and/or any other claims associated with such changes, inasmuch as such changes result in content that is different from the authoritative Roxell-published Dutch version of the manual. For current product installation and operation information, please contact the customer service and/or technical service departments of Roxell. Should you observe any questionable content in any manual, please notify Roxell immediately in writing to: Roxell NV - Industrielaan 13, 9990 Maldegem - Belgium.

GENERAL SAFETY RULES

Flex Auger Nr. : 031...

Transportsysteem voor droogvoeder van dieren

Transport system of dry feed for animals



DANGER

IMPORTANT

Carefully read the following instructions before
USING the system

1. Before you do any **repair**, or **maintenance works**, always **disconnect the electricity supply**.
2. Ensure you wear **personal protection equipment** (gloves, dust masks).
3. The system **starts automatically**.
Never use your **hands** at **dangerous locations** (feed intake boots, drive units, control units or outlet holes in the tubes) before you have **completely switched off** the transport system and made sure that **nobody** can **switch it on** without your knowledge.
4. Take care that neither strangers nor children can **open the bin boot**.
5. **Never** allow **unauthorized persons** to **enter the house** in your absence.
6. If the auger stalls : **immediately** switch **off** the system. Carefully read the trouble shooting guide and strictly follow instructions. Contact a **technically trained person**.
An auger **under tension** can **cause very serious injuries** when released.
7. Regularly check the **elbow/trough and/or tube connections**. Tighten if necessary.
8. Ensure that the **hopper cover (grill)** or **cover** on the 100 kg hopper **closes properly**.
9. Regularly check that the **control unit** and/or the **motor handy box** are properly closed.





This **SYMBOL** will be used to draw your attention to matters that are of **GREAT IMPORTANCE** for your **SAFETY**.

It means : **WARNING** - follow the safety instructions :
disconnect the current - re-read the safety rules.

In short : **BE ALERT**. **IGNORING** these instructions can cause **SE-RIOUS INJURIES** or even **DEATH**.

OPERATOR'S GUIDE

1. The auger easily conveys meal, crumbs and soft pellets.
2. With an extension boot and an extra power unit you can make turns of 360° or double the length.
3. **Never let the Flex-Auger run without feed. When the Flex-Auger runs empty, the life time of the system is reduced considerably.**
4. Open the slide valve under the bin completely when the system runs with mash or pellets. Always use a thumper when feeding mash. Always use pellet guides when feeding pellets (close the flow regulator).
5. **INSTALL THE LEVEL SWITCH LOW INSIDE THE LAST FEEDING TROUGH OR HOPPER.**
See that there are enough animals in the last pen : they empty the trough completely, so that fresh feed will be supplied at all times.
6. The restrictor on the boot anchor adjusts the amount of feed flowing into the auger.
Start any new system with the restrictor in minimum position. Let the system run a while before you adjust the feed flow. You obtain minimum feed flow by moving the restrictor as far as possible away from the anchor.
In a Flex-Auger system with **EXTENSION BOOT**, the second part must convey more feed than the first part.
Adjust the restrictor if necessary.
7. If the Flex-Auger starts from a tandem system : empty one bin after another. **Never** feed from both bins at the same time. When one of the bins is empty, remove the thumper (if used).
8. **Maximum running time per day : 4 hours** (system without elbows) / **2 hours** (system with elbows). **For layer feed and any feed other than commercial feed or poultry and pigs, the maximum running times are considerably shorter !**





ATTENTION : Contact ROXELL for professional advice when using following feeds:

CCM (Corn Cob Mix).
Feed mixed with CCM.
Soya.
Soya lumps.
Wet feed.

Without explicite authorization, all our warranties will expire and no claims will be accepted.
Also contact Roxell if you want to use strongly grating feeds like hen feed etc...

MAINTENANCE INSTRUCTIONS

	3-monthly	6-monthly	Yearly
 DANGER Switch off the current first. Use protection.			
ACTIONS IN GREY BACKGROUND MUST BE DONE BY A TECHNICALLY TRAINED PERSON.			
1. Power unit			
- Make fan dust-free			X
- Check possible damages to electrical wiring			X
2. Suspension			
- Check suspension of tubes and motors	X		
3. Sensors/switches			
- Check operation of safety switch		X	
- Check electrical wiring			X
4. Lines			
- Check screws and bolts in the system after the first month and after each batch. Tighten if necessary.	X		
- Keep tubes level.	X		
- Remove all feed from the system when the system will be out of use for a period.			

TROUBLE SHOOTING GUIDE



DANGER

Switch off the current first. Use protection

ACTIONS IN GREY BACKGROUND MUST BE DONE BY A TECHNICALLY TRAINED PERSON.

PROBLEM	CAUSE	CORRECTIVE ACTION
1. Transport system does not run.	No supply voltage.	Check fuses and/or reset circuit breakers. Check cut-off-switches and current lead to the house. Repair if necessary.
	Defective level switch.	Check correct installation of the level switch. Find cause of possible feed bridging in control unit. Check level switch and replace if necessary.
	Defective safety switch in control unit.	Check operation of safety switch. Replace if necessary.
	Defective motor.	Replace motor.
2. Motor overloads after running for a short while.	Wrong motor.	Check motor power. Replace motor if necessary. Reset thermal protection.
	Voltage too low (motor runs too slowly and overheats).	Check current supply to motor. Use wires with correct diameter for the connection.
	Foreign object in auger. Motor runs, then stalls.	ATTENTION ! Disconnect the auger carefully and pull it out of the tubes. Remove the object. Clean auger and tubes. Check fat content, percentage of moisture etc... of the feed.
	Motor runs in reverse (runs, then stalls : no feed is conveyed).	Disconnect power. Change wires. Motor shaft on the back of the motor must turn clockwise. Check the auger for damages.
	Motor overheats.	Replace motor.

NOTE : NEVER SET THERMICAL PROTECTION HIGHER THAN THE VALUE MENTIONED ON THE MOTOR LABEL !

3. Motor runs, but auger does not turn.	Broken bolt or worn-out set screw in drive shaft.	Replace bolt or set screw.
4. Auger wears holes in straight tubes.	Auger kinked or poorly brazed.	See instructions.
5. Elbows wear out.	Auger too short or too long.	Adjust auger length. Install an extension boot if necessary.
6. Auger runs erratically.	Boot bearing jammed or worn out.	Replace bearing.
	Auger too long.	Shorten auger. Close all outlets. Remove bearing and anchor. Disconnect auger. Let system run for a short while. Cut auger at rear end of boot. Reinstall.
	Poor suspension of the tubes or too many elbows.	Provide more suspension points. Adjust height. Decrease number of elbows.
	Kinked and/or poorly brazed auger scrapes along the tubes.	See auger brazing.
7. Transport system short cycles continually.	- Level switch not installed on the right spot in 100kg hopper.	- Adjust level switch position.
	- Sensor in tube.	- Use a sensor VC11 or VC12 if necessary.
8. Feed bridging in extension boot.	Not enough feed drop from last outlet before the extension boot.	Provide 100 % feed drop.
	Time set too short on relay.	See instructions.
9. Second part (past the extension boot) does not start.	Defective level switch on first part.	Check operation of level switch. Replace if necessary.



Inbouwverklaring betreffende niet voltooide machines (*Richtlijn 2006/42/EG, Bijlage II.1.B*)
Declaration of incorporation of partly completed machinery (*Directive 2006/42/EC, Annex II.1.B*)

Fabrikant/Manufacturer:
Roxell, Industrielaan 13, 9990 Maldegem
Tel: +32 50 72 91 72
Fax: +32 50 71 67 21

Verklaart geheel onder eigen verantwoordelijkheid dat het product:
Declares on its own responsibility that the product:

FLEX-AUGER Nr: 031...
Transportsysteem voor droogvoeder van dieren.
Transport system of dry feed for animals.

Waarop deze verklaring betrekking heeft, in overeenstemming is met:

- de volgende richtlijnen: 2006/42/EG (Machinerichtlijn); 2004/108/EG (Elektromagnetische Compatibiliteit).
- de geharmoniseerde Europese Normen: EN ISO 13857:2008; EN 349:1993 + A1:2008; EN ISO 12100:2010; EN 60204-1:2006

Het is verboden bovengenoemd product in gebruik te stellen voordat de machine waarin het wordt ingebouwd in overeenstemming met de bepalingen van de Machinerichtlijn is verklaard.

Tevens verbindt de fabrikant (of zijn gemachtigde) zich om op met redenen omkleed verzoek van de nationale autoriteiten de relevante informatie over deze niet voltooide machine door te geven. De wijze van doorgifte is digitaal. De wijze van informatieverschaffing laat de intellectueel-eigendomsrechten van de fabrikant van de niet voltooide machine onverlet
(NL)

Relating to this declaration, is conform

- The following directives 2006/42/EC (Machinery Directive); 2004/108/EC (Electromagnetic Compatibility).
- The harmonised European standards: EN ISO 13857:2008; EN 349:1993 + A1:2008; EN ISO 12100:2010; EN 60204-1:2006

This product must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the Machinery Directive.

The manufacturer (or its agent) also undertakes, at the duly reasoned request of the national authorities, to provide the relevant information concerning this partly completed machinery. The method of transmission will be digital. The manner in which the information is provided does not prejudice the manufacturer's intellectual property rights concerning the partly completed machinery.

(EN)

03000601

Plaats, Datum / Place, Date : Maldegem, 01/01/2012

.....
Dhr. Gino Van Landuyt
Managing Director

“This part may only be filled out if all built-in subparts are delivered by Roxell”

EG-verklaring van overeenstemming (*Richtlijn 2006/42/EG, Bijlage II.1.A*)
EC-declaration of conformity (*Directive 2006/42/EC, Annex II.1.A*)

Wij/We _____
(naam installateur/name fitter)

(volledig adres en land/complete address)

Verklaren geheel onder eigen verantwoording de
Declare completely on own justification that

(naam machine/name machinery)

(nummer CE-label/number CE-label)

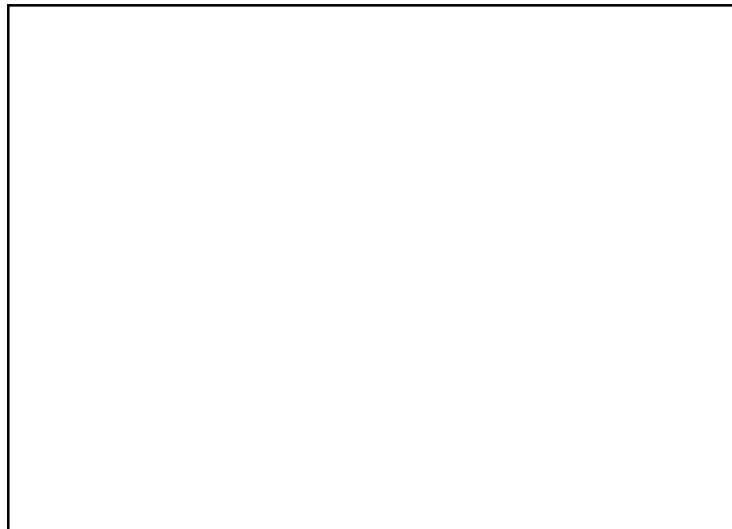
In een installatie te hebben ingebouwd geheel volgens de Roxell-voorschriften en in overeenstemming met de bepalingen van de Machinerichtlijn.
Has been incorporated in conformity with the provisions of the Machinery Directive and the prescriptions of Roxell NV

(plaats, datum/place, date)

(naam, handtekening/name, signature)

Deze verklaring betreft uitsluitend de machine in de toestand waarin zij in de handel is gebracht, met uitsluiting van de later door de eindgebruiker toegevoegde componenten en/of verrichte bewerkingen.

This declaration concerns solely the machinery in the condition in which it has been brought onto the market, excluding components added and/or modifications made later by the end user.



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