

# INSTRUCTION MANUAL

Conveyor/ Elevator type TPG/TPM5



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## Contents

1.0	Purpose and scope of operations	2
2.0	Installation	2
3.0	Operation	2
4.0	Pictograms	2
5.0	Lubrication and maintenance	2
5.1	Cleaning	3
6.0	Packing and transport information	4
7.0	Transport and lifting instructions	4
8.0	Spare parts	5
9.0	EU Declaration of Conformity	8

## 1.0 Purpose and scope of operations

The conveyor/ elevator is designed to be used for transport and dosing of potatoes, onions and similar products.

## 2.0 Installation

The conveyor/ elevator must stand firmly on all four legs on a level floor. Adjust the legs so that the machine stands level.

Connect the electricity supply in accordance with local regulations. Electricity supply should be connected through a motor protection relay which corresponds to the size of the motor. If the conveyor/ elevator is supplied with a motor relay, connect the power supply to this.

## 3.0 Operation

When the conveyor/ elevator has been correctly placed in relation to other machines in the production sequence, start the machine by activating the motor relay.

If the conveyor/ elevator is supplied with a variable speed regulator, the speed regulator is regulated by turning the handle with the indicator on the variator. Ratio 5:1

Never turn the handle when the machine is not in operation.

## 4.0 Pictograms

Danger! Keep hands away from rollers. Keep a safe distance.

## 5.0 Lubrication and maintenance

All bearings, cylinder motors and cylinders are lubricated for life and require no further maintenance.

The worm drive type NMRV40/50 is lubricated for life with IP TELIUM VSF, a synthetic grease suitable for a normal temperature range of -15°C to + 40°C.

Grease quantity:

NMRV40	0,08 L.
NMRV50	0,15 L..

	<b>Syntetisk</b>	<b>Mineralsk</b>
IP	Telium VSF	Mellena oil 220
Shell	Tivela oil SC320	Omala oil 220
Agib	Blasia S320	Blasia 220
Mobil	Glygoyle 30	Mobilgear 220
Castrol	Alphasyn PG 320	Alpha 220

Change oil after 5,000 production hours.

The variator is mounted between the worm drive and the motor. It must always be kept filled with long life oil and should be topped up to the middle of the observation glass.

Change the oil every 8 years.

It is imperative that there is always the correct amount and type of oil in the variator.

Recommended oils:

IP	Transmission V. E.
IP	A.T.F. Dexron Fluid
AGIP	A.T.F. Dexron
BP	Autran DX
Chevron	A.T.F. Dexron
ESSO	A.T.F. Dexron
Fina	A.T.F. Dexron
Mobil	A.T.F. 220
Shell	A.T.F. Dexron
Castrol	TQ Dexron II.

Cylinders that are not driven directly by the motor are lubricated for life and require no maintenance.

In the case of a fault, the cylinder must be removed and returned to the factory for repair.

The conveyor must be kept taut and straight by adjusting the tension bolts on the conveyor.

## 5.1 Cleaning

With reference to the Danish Plant Directorate's Order No. 965 of 13 December 1993 (p. 6).

- 2.3.3 Seed potato growers with contained propagation must clean and disinfect all sorting and ancillary equipment after each new variety. Disinfecting should be carried out using a product approved by The Danish Institute of Plant and Soil Science.
- 2.3.4 Companies authorised to sort potatoes and who also have the authorisation to propagate potatoes, must clean and disinfect sorting machinery etc. which is under the control of The Danish Plant Directorate before the sorting of own propagation is commenced. Disinfecting should be carried out using a product approved by The Danish Institute of Plant and Soil Science.
- 2.3.5 Premises and machinery etc. must be cleaned and disinfected each year before 30 June. Disinfecting must be carried out using a product approved by The Danish Institute of Plant and Soil Science.

In other countries, customers must conform to relevant, local food and hygiene regulations.

**When cleaning with high pressure equipment**, the following parts must be securely covered: Motor, variator, worm gear, conveyor cylinders, and all bearings.

In order to maintain effective production and keep maintenance costs at a minimum, regular lubrication, maintenance and cleaning are very important.

## 6.0 Packing and transport information

### Packing:

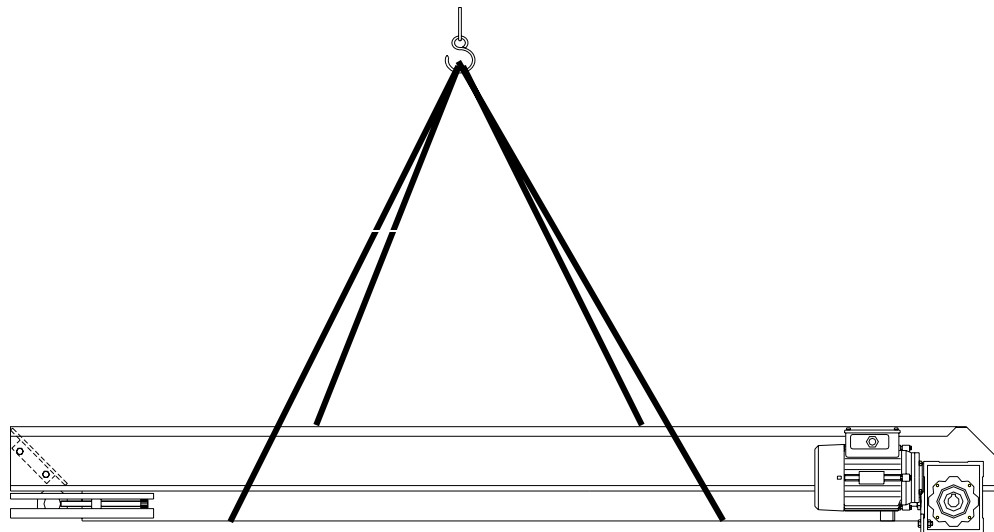
All machine types are shrink wrapped when despatched from the factory.

### Number of units:

The machine is normally packed complete as one unit.

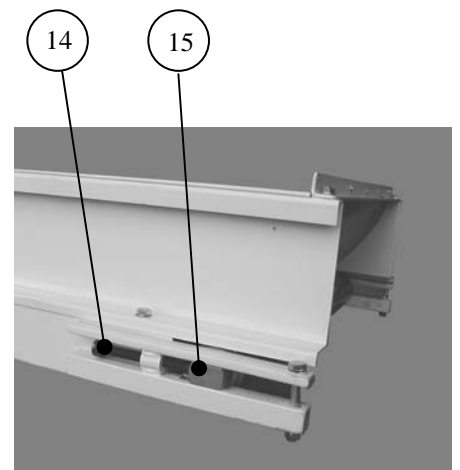
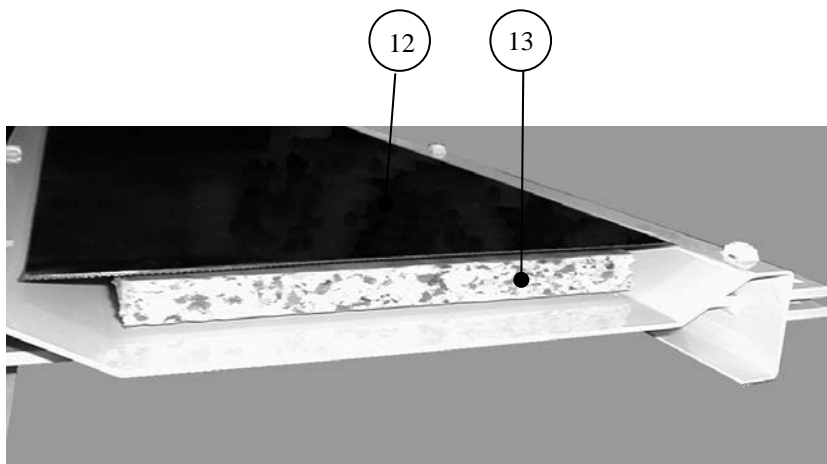
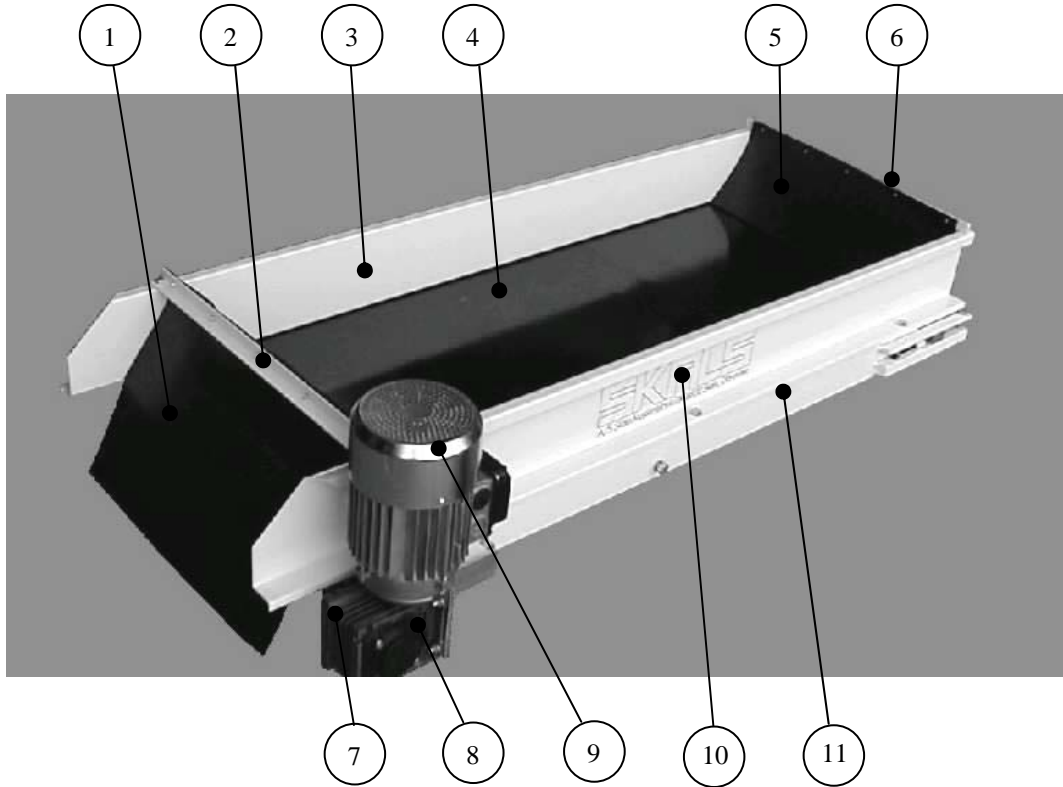
## 7.0 Transport and lifting instructions

Should it be necessary to lift the conveyor/ elevator, this must be carried out by using nylon straps fitted , as shown in the illustration below (fig. 1).



## 8.0 Spare parts

When ordering spares, state machine type, serial no. and, if possible, position no.



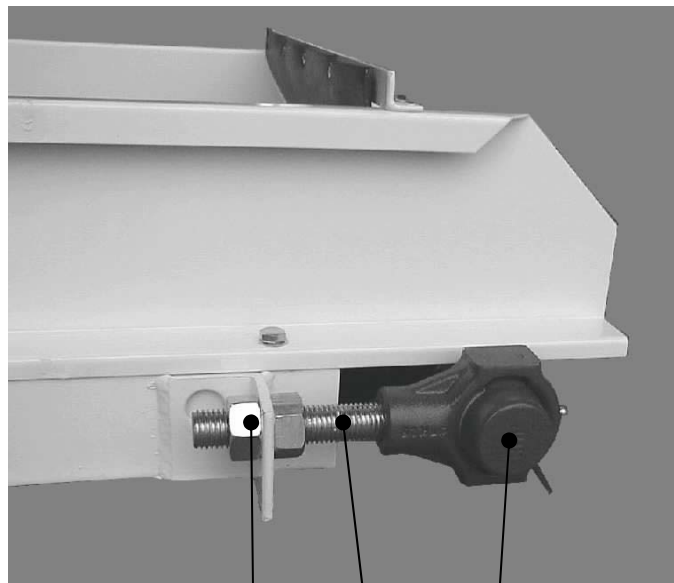


16



17

18



19

20

21

Page	Fig. no.	Pos. no.	Description
5	6	1	Outlet rubber sheet
5	6	2	Mountings
5	6	3	Side plate (right)
5	6	4	Belt
5	6	5	Inlet rubber sheet
5	6	6	Mountings
5	7	7	Gear
5	7	8	Cover
5	7	9	Motor
5	7	10	Side plate (left)
5	7	11	Frame
5	8	12	PVC
5	8	13	Foam rubber
5	8	14	Adjustable screw
5	9	15	Roller
6	9	16	Mountings
6	10	17	Shielding
6	10	18	Drive roller
6	11	19	Nut
6	11	20	Thread
6	11	21	Bearing





**9.0 Declaration of conformity with EU.**

<b>Manufacturer</b>	
Firm:	A/S Skals Maskinfabrik
Address:	Hovedgaden 56 8832 Skals, Denmark
Telephone:	87 25 62 00

declares herewith, that

<b>Machine:</b>	<b>Conveyer</b>
Brand:	<b>TPG/TPM5</b>
Type, serial no., year:	

Is manufactured in accordance with the decisions of the Councils Directives:

- 1 Machinery Safety – Directive 98/37/EC
- 2 Low Voltage Equipment Directive (LVD) 2006/95/EEC
- 3 Electromagnetic Compatibility (EMC) Directive 89/336/EEC and 93/68/EEC as amended.

<b>Title:</b>	Productions Manager
Name:	Søren Lund Madsen
Firm:	A/S Skals Maskinfabrik

Date: \_\_\_\_\_

Signed:  \_\_\_\_\_

<b>Manufacturer</b>	
Firm:	A/S Skals Maskinfabrik
Address:	Hovedgaden 56 8832 Skals, Denmark
Telephone:	87 25 62 00

**Representative:** (should only be filled out if the representative is established in EU)

Firm:
Address:
Telephone:

declares herewith, that

<b>Machine:</b>	<b>Conveyer type TPG/TPM5</b>
Brand:	
Type, serial no., year:	

- A:** is manufactured in accordance with the decisions of the Councils Directive of 14. June 1989 about the mutual rapprochement of the laws of Member States about machinery (98/37/EF) with special regard to the directives appendix 1 which deals with essential aspects of health and safety in connection with the construction and manufacture of machinery.
- B:** is manufactured in accordance with the following national standards and technical specifications.

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- Must be filled out, if C is not*
- must be filled out only if it is considered important in connection with documentation regarding the correct application of essential health and safety demands.*

- C:** is manufactured in accordance with the following national standards which implement a harmonised standard with regard to article 5, stk. 2:f

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- The filling out of C means that the demands set out in A are considered to have been met.*

**Must only be filled out if the machine is mentioned in Appendix IV of the aforementioned Directive.**

**Controlling body:**

Name:

Address:

Telephone:

- A:** has tested the aforementioned machine in accordance with type certificate no. \_\_\_\_\_
- B:** has received a technical dossier for safe-keeping. The enclosed signed receipt is proof of receipt.
- C:** has checked the application of the standards mentioned in Article 5, part 2 and hereby certifies their correct application in accordance with certificate no. \_\_\_\_\_

<b>Title:</b>	General manager
<b>Name:</b>	Søren Lund Madsen
<b>Firm:</b>	A/S Skals Maskinfabrik

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

