

BELT CONVEYERS



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ISO 9001 (TÜV)
SLV , EBA

ISO14001
ISO18001

MODE OF OPERATION

These belt conveyors covered by this documentation, form a transport system that works in the flow transport of grains to the barges.

Conveyor operation fully complies with all the classic-work of this type of equipment. Drum driven by a gear motor drive, moves the transport belt conveyor carrying grain to the discharge head, which is discharged through funnels, the downstream conveyor.

Conveyors are equipped with safety devices and control their function within the prescribed parameters.

The proximity detector located on the free drum oversees that the transport belt will be maintained between some predetermined limits. If from accidental reasons (breakdown of the belt, blocking of the driven side, etc...) the speed of the belt is no longer within the limits

prescribed, the stopping detector will stop the transport of grains.

The same thing is done also by the misalignment detector in case when the belt conveyor running above the permissible limits.

If the supervisor of the transport system or any other member of staff worker noticed an abnormal situation in the operation of a conveyor or they see the possibility of dangerous situations due to the operation of the conveyor, the conveyor can be stopped from any point on the route by pressing the cable connected to damage switch.

TECHNICAL CHARACTERISTICS

Characteristic	M.U	Conveyor BALAIA	Conveyor BLASOVA
Operating mode		de durată	de durată
Transport capacity	t/h	100	100
Belt Width	mm	650	650
Conveyor Length	m	51	56
Belt speed (variable)	m/s	1.5÷2	1.5÷2
Drive power	kw	11	11



CHARACTERISTICS DRIVE UNIT

Gear motor TC 140B 16H55 160B5 OB3 AW 11 KW N2=88

with BACK STOP - TRAMEC

TRANSPORT CHARACTERISTICS

Conveyor "BALAIA"

650EP 400/3(4+2) ; L=108m; DIN 22102

Conveyor "BLASOVA"

650EP 400/3(4+2) ; L=118m; DIN 22102

CONSUMPTION OF POWER AND LUBRICANTS

a) Specific consumption of energy

- installed power 25 kw

b) Specific consumption of lubricants for commissioning (start)

The Gera motor is delivered with lubrication for life by the producer

0,2 kg/roll grease UM 175 LiCa₂Pb₃ STAS 8789-91 – rolls

2 kg grease UM 175 LiCa₂Pb₃ STAS 8789-91 – bearings of the drum

0,2 kg grease – tensioning screw

NORMAL WORKING PERIOD

12 years according HG 964/1998

PARAMETERS OF RELIABILITY

- Conveyor estimated reliability.....	$R_{7100} = 0,85 \times 10^{-3}$
- Average faults.....	$\lambda_{med} = 6 \times 10^{-3} \text{ def/h}$
- Average repair times.....	MTR = 48 h
- Average good time operating.....	MTBF = 1000 h
- Availability.....	D = 0,954

CONVEYOR COMPONENTS

Belt conveyor includes the following main parts:

- Metallic construction
- Mechanical equipment
- Electrical equipment
- Protection and safety equipment
- Special equipment
- Traction body and transport

