

Use & Maintenance Manual

GENERAL CHARACTERISTICS

General technical characteristics

Horizontal length	487	m
Difference in height	-4	m
Track rope diameter	4 x 36	mm
Material	Earth (ROM)	
Maximum capacity	400	ton/h
Grain size	70	mm
Moisture content	< 15	%
Min. density	1120	kg/m ³
Surcharge angle	17	°
Repose angle	38	°
Belt type	Metaltrans	M500
Belt width	800	mm
Belt tensile strength	500	N/mm
Thickness of covers of belt	4 + 4	mm
Belt speed at nominal capacity	3.2	m/a
Start-up time	15	s
Spontaneous at nominal capacity	max 13	s
Factor filling at nominal capacity (for 1.12 t/m ³)	41	%

General technical characteristics

Operating temperature min	-10	° C
Operating temperature max	+ 40	° C
Rollers diameter	108	mm
Pins diameter	20	mm
Dell angle upper garlands Valmec 6 rollers	70	°
Dell angle lower garlands Valmec 6 rollers	20	°
Upper garlands pitch	2,5	m
Lower garlands pitch	7,5	m
Rollers speed	566	rpm
Maximum sag between carrying idlers	2	%
Maximum sag between return idlers	3	%
Estimated life of upper rollers	60000	h
Estimated life of lower rollers	60000	h
Installed power on tail belt	90	kW
Tension to the belt tensioner	7500	kg
Belt counterweight position	Tail station (loading)	
Belt safety factor	6,67	
Maximum wind pressure in operation	300	Pa
Maximum wind pressure out of operation	1200	Pa
Number of towers	2	n

General technical characteristics

Number of maintenance vehicles	1	n
Track ropes safety factor - In operation	2,5	
Track ropes safety factor - Out of operation	2	
Track ropes mass	7,13	kg/m
Track ropes section	847	mm ²
Min breaking force	1418	kN
Power of maintenance vehicle winch	30	kW
Speed of maintenance vehicle	2	m/s
Hauling rope diameter	20	mm
Drive drum, lagging	Rubber	- 15 mm
Drive drum, diameter	605	mm
Free drum, lagging	60 Sh rubber	10 mm
Free drum, diameter	400	mm
Tensioning drum, diameter	605	mm