

1 BASIC DATA

1.1 DATA FOR COMPONENT TRACEABILITY

ORDER CONFIRMATION OF STEEL BELT SYSTEMS	RP 2 177 12 5	dtd	16/11/2012
SERIAL NUMBER	RP2177125		

1.2 MACHINE LIMIT CONDITIONS FOR OPERATION, STORAGE AND HANDLING

MAXIMUM AMBIENT TEMPERATURE ON SERVICE	40 °C
MINIMUM AMBIENT TEMPERATURE ON SERVICE	5 °C
MAXIMUM STORAGE TEMPERATURE	40 °C
MINIMUM STORAGE TEMPERATURE	5 °C

Use suitable lifting lugs when handling the machine.
The machine is designed for indoor operation.

1.3 LIMIT CONDITIONS OF THE PRODUCT TO BE PROCESSED

The product feeding temperature must never exceed 120 °C, it should normally range between 100 °C and 110 °C.

1.4 PUTTING OUT OF SERVICE AND DISMANTLING THE MACHINE

To put out of service the machine it is necessary:

- to disconnect it from the mains.
- release the hydraulic circuit pressure and let the mobile equipment to reach the lower position (out of service condition).

Should the machine remain out of service for a long time, it is recommended to :

- protect cylinder stems with ESSO MULTIPURPOSE GREASE "E" or similar product; make them to stroke back and forth when greasing, to spread the grease on the stem
- protect guides of take-up supports of the tension terminal with ESSO MULTIPURPOSE GREASE "E" or similar product
- cover the machine with a plastic foil
- disconnect it from mains

Should the machine be dismantled, scrap separately cables and electrical motors, not to pollute steel scraps.

Lubricants and thermal oil must be disposed off according to the regulation in force for the environment protection.

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2 DATA SHEETS

A - COOLER

Cooler C-C distance		19250	mm
Steel belt width		1500	mm
Cooling length		18000	mm
Free height under discharging hopper		700	mm
Height of feeding point over the floor		2260	mm
Overall dimension (more o less):	Length	20600	mm
	Width	2650	mm
	Height	2150	mm
Steel belt speed	from 30 to 47		m/min
Steel belt developed length (overlength for endless junction not included)		38500	mm
Steel belt thickness		1	mm
Steel belt grade		NICRO 12.1	
Construction material of intermediate part	Galvanized carbon steel		
Construction material of terminals	Galvanized carbon steel		
Construction material of scraping blade	Bakelized fiber		

TENSION TERMINAL

Number of Drum		1	
Sheave / Drum rim material		AISI 304	
Sheave / Drum diameter		800	mm
Recommended steel belt tensile stress		0.6	kg/mm ²

DRIVING TERMINAL

Number of Drum		1	
Sheave / Drum rim material		AISI 304	
Sheave / Drum diameter		800	mm

STEEL BELT DRIVING GROUP

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motor maker	power	poles	tension	frequency	protect. class	insul. class
NORD	5.5 KW	4	400 Vac	50 Hz	IP55	F

Motor ventilation	Self-ventilated
Transmission to driving shaft	Hollow shaft speed reducer

B - PASTILLATOR

Useful width	1400 mm
Nominal diameter	120 mm

Toothed rotor pitch :	8 mm	type 3 x 1 mm	material : AISI 304 s/s
Comb material :	TEKAPEEK		
Body material :	AISI 304 stainless steel		

ROTOR DRIVING GROUP

motor maker	power	poles	tension	frequency	protect. class	insul. class
NORD	2.2 kW	4	230/400 V	50 Hz	IP 55	F

Motor ventilation :	Self-ventilated
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LIFTING GROUP OF PASTILLATOR

2 Pneumatic cylinders

TEMPERATURE CONTROL

Heating medium	Hot water
Maximum heating medium temperature	105°C

C - COOLING SYSTEM (refer to the water flow diagram)

Number of independent cooling zones :	3
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Cooling water supply	from mains	from chiller	capacity
1 st zone :		X	17
2 nd zone :		X	21.4
3 rd zone :		X	21.4

Cooling water Conditions	inlet temp.	outlet temp.	inlet pressure
	°C	°C	bar
1 st zone :	5	9	3
2 nd zone :	5	9	3
3 rd zone :	5	9	3

COOLING ZONE

Nozzle number	179
Nozzle type	empty cone jet cod. 302.686.51 -90°
Nozzle material	plastic material

WATER COLLECTING TANKS

Side channel material	stainless steel
Material of water collecting tank	stainless steel
material of water collecting basins	stainless steel
Material of internal piping	PVC

FOR BETTER UNDERSTANDING OF DATA AND INSTALLED INSTRUMENTS SEE ATTACHED SCHEMATICS AND DRAWINGS AS WELL AS SPARE PART LIST.

3 PLANT DESCRIPTION

The plant described in this manual is a belt cooling conveyor.

The product is supply in liquid form in a pastillator feeder and put it out in drop form. Those drop are solidified with water sprayed under the belt through nozzles line.

The machine consists of :

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