

## Basic description of the production plant

The Sugar factory was founded in 1979 by German company BMA. The beginning capacity was 4000 t/beet per day, and during the years there was a lot of investment in sense of increasing capacity and reduction of energy.

From 2010 the capacity was 6500 t/beet per day and 1450 t/raw sugar per day, the factory was closed in 2020 after professional cleaning and protection of systems technology. This catalog contain a list of available equipment, also detailed specifications of equipment are available on request.

### Beet pumps:

Quantity	2
Producer	Warmann
Ser.number	WP 37118
Capacity	2200 m <sup>3</sup> /h
Nominal size	500 mm
Year production	2005
Motor	350 kw
Motor producer	Rade Končar



### Grass catcher:

Quantity	3
Instalation capacity (beet)	4000 t/d
Type	elevator-chain
Producer	Bammann and Schreiber
Lenght	5000 mm
High	5700 mm
Width	1850 mm
Motor-reduk.	P=5 KS, n=26 min <sup>-1</sup>
Year of production	1978



## Stone catcher

Quantity	2
Capacity	4000 t/d
Type	Elevator
Producer	Bammann and Schreiber
High	5213 mm
Width	1090 mm
Year of production	1978
Motor	2,2 kW
Capacity (catching stone)	12 m <sup>3</sup> /h



## Washing machine with stone catcher

Quantity	1
Capacity	16000 t/d
DN	3000 mm
Length	10000 mm
Year	1978
Producer	BMA
Permeable max.	670 t/h
Motor	37 kW



### Beet washing machine

Quantity	1
Capacity	6000 t/d
year	1978
Washing time	6,5 min
Lenght	10 000 mm
High	3000 mm
Diametar	3000 mm
Water valve (DN 300)	5 pcs.
Motor	90 kw
Producer	BMA



### Drum Stone catcher

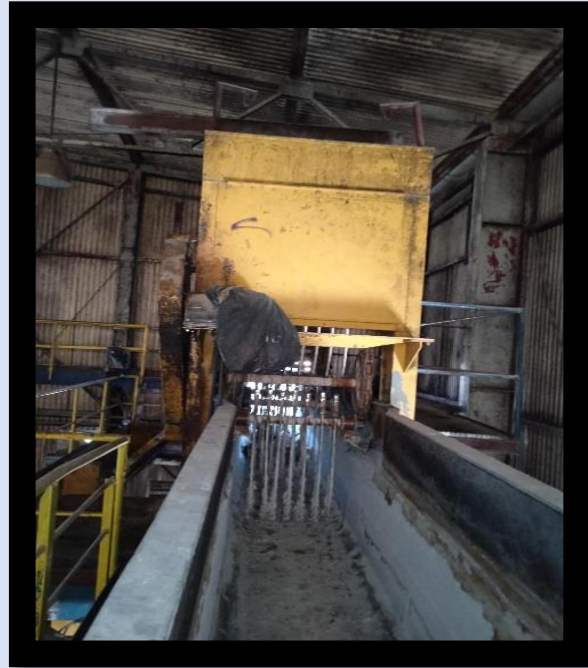
Quantity	1
Capacity	4000 t/d
DN	2995 mm
Lenght	3950 mm
Motor	4 kw
Producer	Bma
Year	1978





### Grass catcher

Quantity	1
Capacity	4000 t/d
High	3550 mm
Lenght	4610 mm
Wide	850 mm
Producer	Bamman and Schreiber
Year	1978



### Sand catcher

Quantity	2
Diametar	2500 mm
High	1800 mm
Producer	BMA
Year	1978
Operating pressure	2,5 bar



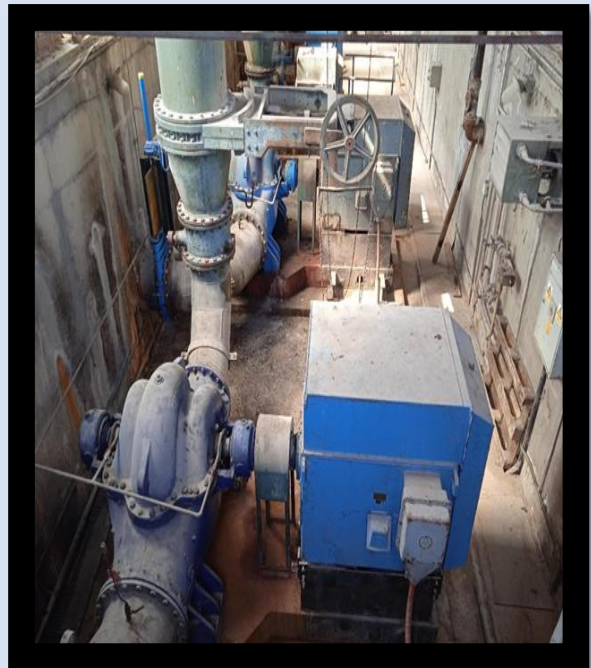
## Rollenrost

Quantity	2
Capacity	4000
Producer	BMA
Year of production	1978
Length	2248 mm
Width	2165 mm
Motor	3,7 kW



## Water pumps:

Quantity	2
Capacity	3000 m <sup>3</sup> /h
High msv	45
Producer	Litostroj
Suction side	600 mm
Pressure side	500 mm
Motor power	560 kw
Motor producer	Rade Končar



Quantity	2
Capacity	3300 m <sup>3</sup> /h
High msv	30
Producer	Jugoturbina
Suction side	600 mm
Pressure side	600 mm
Motor power	400 kw
Motor producer	Rade Končar

## COUNTERCURRENT COSSETTE MIXER

Quantity	1
Mass flow rate	6000 t/d
Producer	BMA
Length	8000 mm
Diameter	5200 mm
Year of production	2003
Volume	145 m <sup>3</sup>
Motor	45 kw
Reduktor	Flednder P3KA19



## EXTRACTION TOWER

Quantity	1
Capacity /beet/	6500-7000 t/d
Producer	BMA
Length	21 600 mm
Diameter	7 200 mm
Year	2003





## PULP PRESSES

Quantity	10
Capacity	800 t/d
Producer	STORD
Type	RS 64 S
Dry substance	26-28 %



## Elevator press cossets

Quantity	1
Producer	AMF
Typ	belt bucket elevator - press pulp
Lenght	14 500 mm
Width	1000 mm
Capacity	81 t/h
Conveying speed	1,37 m/s
Drive	P=15 KW, n=21 rpm





## Tank for press cossets

Quantity	1
Capacity	45 m <sup>3</sup>
Producer	BMA
Lenght	3300 mm
Width	1800/2600 mm
High	6500 mm
Year of production	1978
Motor	18,5 kw



### Slicing machine

Quantity	2
Capacity	10000 t/d
Producer	Putsch
Type	TSM 2200-22-600 S
Year of production	2002
High	2610 mm
Lenght	2775 mm
Width	2600 mm
Nr. of knife box	22
Motor	132 kw



### Kahl press

Quantity	1
Capacity	4 t/h
Producer	Kahl
Type	KAHL 39-1000
Year	2002



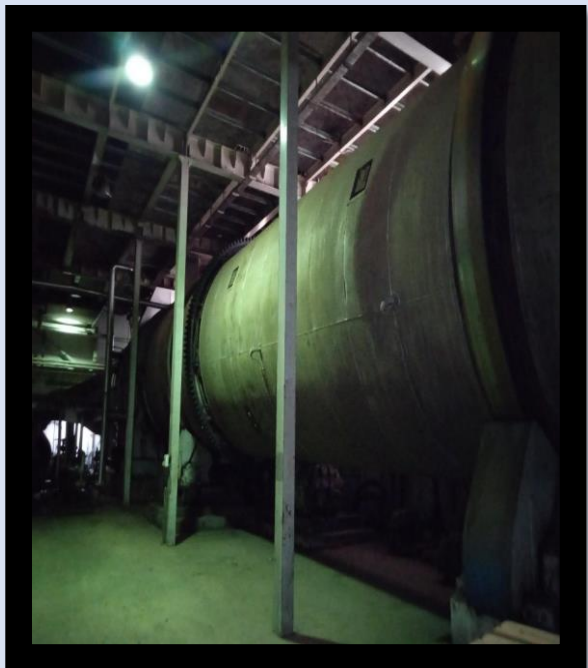
## Dust collectors

Quantity	22
Diametar	1100 mm
High	1100 mm
Producer	BMA
Type	1979
Dust conveyor	2 pcs.
Diametar of conveyor	315 mm
Lengh of conveyor	16500 mm
Motor	5,5 kw



## Drum for drying cossets

Quantity	1
Producer	BMA
Year of production	1978
Diametar	4000 mm
Lenght	20000 mm
Motor	45 kw



## Pellet cooler

Quantity	2
Capacity	6-7 t/h
Producer	Kahl
Type	KAHL 39-1000





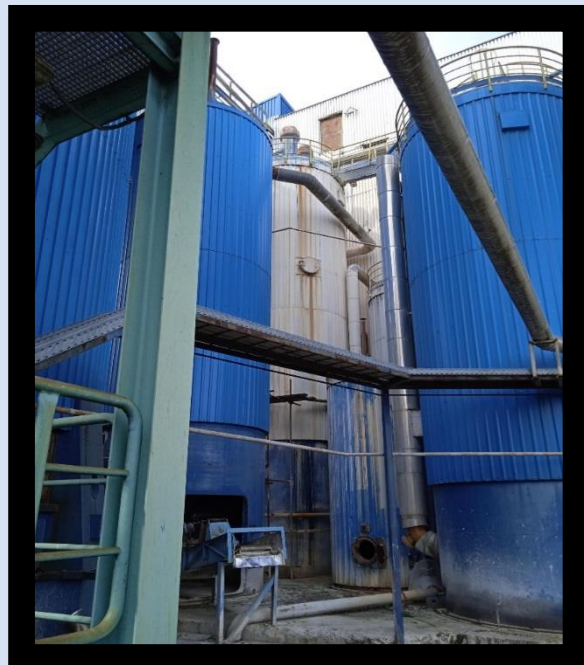
### Roto - screen

Quantity	2
Capacity	
Producer	Veolia -water technologies
Type	screen- self cleaning
Capacity	350 m <sup>3</sup> /h
Screen opening	0,75 mm
Operation speed	5- 15 rpm



### Purification station

Vesel for purification station	Hot main Liming
Storage liquid	Extracted juice
Volume	130 m <sup>3</sup>
Weigh /empty/	21 200 kg
High	17200 mm
Diametar	4000 mm
Year	2007
Producer	Đuro-đaković
Type of cleaning	Putsch



Vesel for purification station	First carbonation
Storage liquid	Alk. juice
Volume	120 m <sup>3</sup>
Weigh /empty/	26 900 kg
High	19000 mm
Diametar	4000 mm
Year	2007
Producer	Đuro-đaković
Type of cleaning	Putsch

Vesel for purification station	First carbonation
Storage liquid	Juice 1. Carbonation
Weigh /empty/	26 900 kg
High	4000 mm
Diametar	3150 mm
Year	2007
Producer	Đuro-đaković
Type of cleaning	Putsch

Vesel for purification station	Reaction vessel tank after second carbonation
Storage liquid	Juice 2. Carbonation
Volume	110 m <sup>3</sup>
Weigh /empty/	18650 kg
High	11 700 mm
Diametar	4000 mm
Year	2007
Producer	Đuro-đaković
Type of cleaning	Putsch



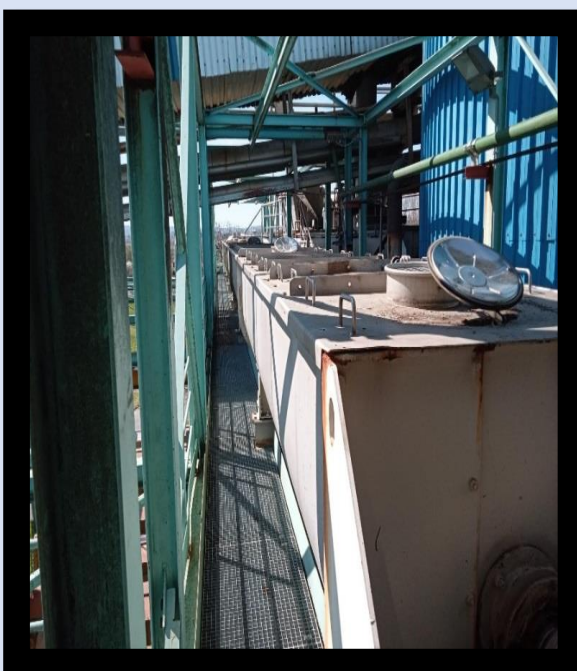
### AMF -Screw conveyor

Quantity	1
Capacity	162 t/h
Producer	AMF
Type	TSF 1000 X 14,7 -wet pulp
Drive	37 kW
Rottation speed	35 r/Min
Year	2008



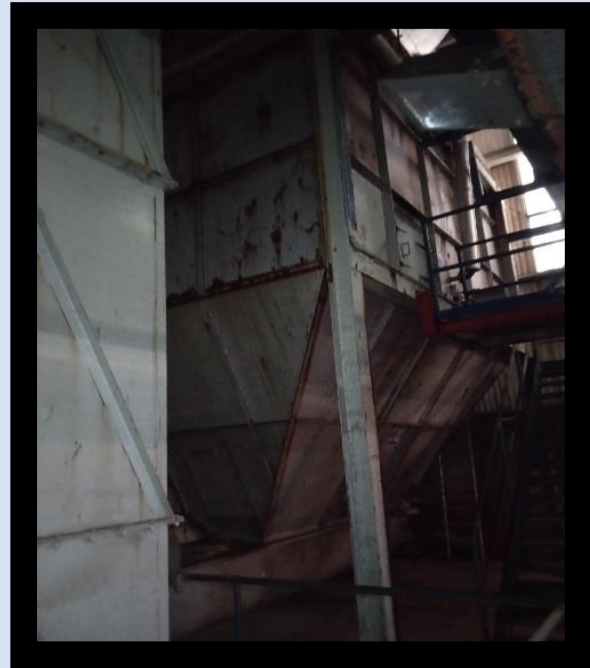
### Amf screw conveyor

Quantity	1
Capacity	162 t/h
Producer	AMF
Type	TSF 1000 X 27 -wet pulp
Absorbed power	45 kW
Rottation speed	35 r/Min
Drive Motor	75 kw
Year	2008



## Vesel for drying cossets

Quantity	1
High	6700 mm
Producer	BMA
Year of production	1978
Length	5500 mm
Width	2500 mm
Motor	0,37 kw



## Screw conveyer

Quantity	1
Producer	AMF
Typ	TSF 800X2000 mm
Material handled	Press pulp
Capacity	81 t/h
Moisture content	28 %
Conveyng speed	0,46 m/s
Motor	18 kw



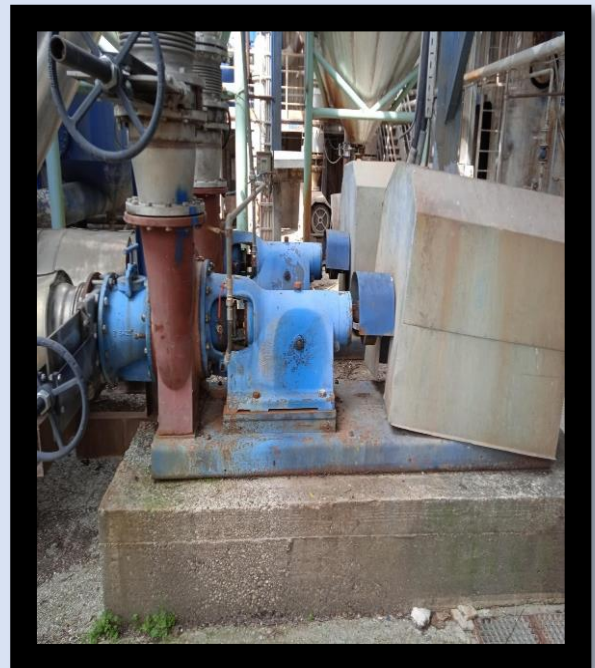


## Pumps

Quantity	2
Producer	Sultzer
Capacity	360 m3/h
Typ	APP 40-150
Suctions side	200 mm
Pressure side	150 mm
Motor	75 kw
Producer	Lenze
Installation place	Extraction juice



Quantity	2
Producer	BMA
Capacity	500 m3/h
Typ	SK 8250 aK
Suctions side	300 mm
Pressure side	250 mm
Motor	75 kw
Producer	Simens
Installation pl.	Counter.mixer



Quantity	2
Producer	Sultzer
Capacity	360 m <sup>3</sup> /h
Typ	APP 42-150
Suctions side	200 mm
Pressure side	150 mm
Motor	55 kw
Producer	Rade Končar
Instal.Place	2.carb



Quantity	2
Producer	Sultzer
Capacity	300 m <sup>3</sup> /h
Typ	APP 44-150
Suctions side	200 mm
Pressure side	150 mm
Motor	55 kw
Producer	Lenze
Install. Place	Press water



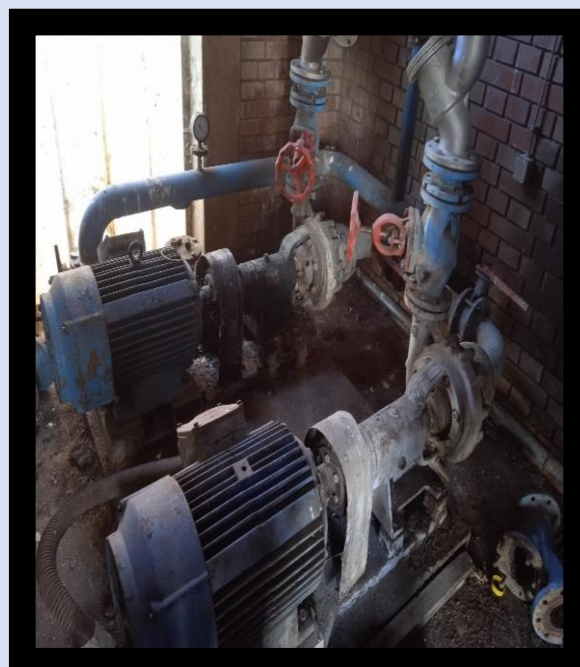
## Brieghel-Müller

Quantity	1
Producer	Čelik Križevci
High	5210 mm
Length	13 000 mm
nr. Chamber	
Place	Purification station -B.M
Width	3000 mm
Year of production	2002.
Motor red.	30 kw, n= 13 rpm



## Pumps

Quantity	2
Producer	Venema - automation
Part of.	Venema
Capacity	30 m <sup>3</sup> /h
Producer	Jugoturbina
Model	KK 27-8/2
Suction side	100
Pressure side	80
power	37,0kw
Motor Producer	Rade Končar





Quantity	1
Producer	Venema - automation
Part of. venema - dirty part	Beet reciver
	Washing maschine for beet samples
	Vesel for clean water
	Beet sample preparation





Quantity	1
Producer	Venema - automation
Parto of.	Analyzer
Capacity	120 samples/hour
Lenght	215 cm
Width	120 cm
Height	135 cm
Weight	400 kg
Power	220 V, 1,5 KW
Air	4 bar-10 bar max.
Air cosumption	1 l/min
Determination	K, NA, NN, polarization



### Plate evaporator

Quantity	1
Producer	GEA -process equipment division
Parto of.	Evaporation station
Year	2003
Process step	4
Surface	4000 m <sup>2</sup>
Process parametar-inlet	39,2 bx
Process parametar-outlet	54,60 bx



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**Pumps for Gea -  
evaporator**

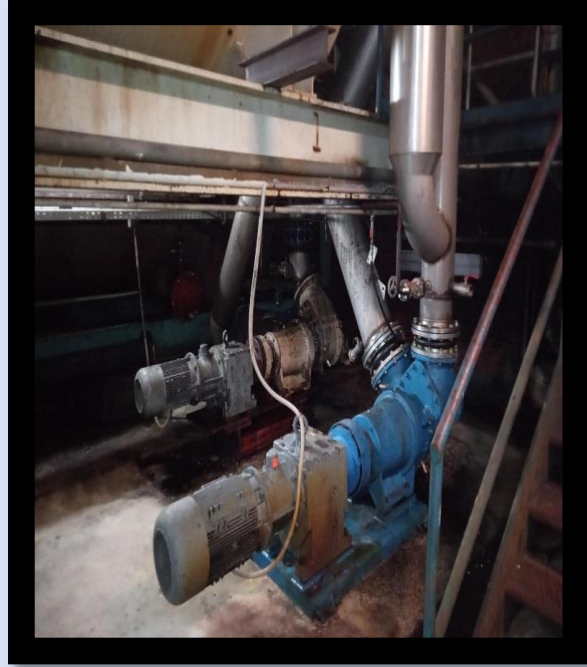
TYP. of pumps	Sulzer
Quantity pump	2
Capacity	560m <sup>3</sup> /h
Pump typ.	APP 53-250
Motor producer	Weg
Motor Power	75 kw



**List of equipment witch is involved in processing raw cane sugar**

**Magma pumps**

Quantity	4
Producer	Bma
Typ.	F 500F
Capacity	30 m <sup>3</sup> /h
Parto of.	Sugar house
Density	1,5 kg/dm <sup>3</sup>
Suction side	DN 250
Pressure side	DN 250
Motor producer	SEW
Motor power	15 KW



**Molasses pumps**

Quantity	2
Producer	Zagrebprodukt
Typ.	VEP-8-1
Capacity	12
Parto of.	Sugar house
Density	1,35 kg/dm <sup>3</sup>
Suction side	DN 100
Pressure side	DN 100
Motor producer	Bauer
Motor power	11



## Condensate pumps

Quantity	4
Producer	Litostroj
Typ.	2 CN 7A
Capacity	30
Part of.	Sugar house
Density	1,00 kg/dm <sup>3</sup>
Suction side	DN 80
Pressure side	DN 65
Motor producer	Rade Končar
Motor power	5,5



## Magma pumps

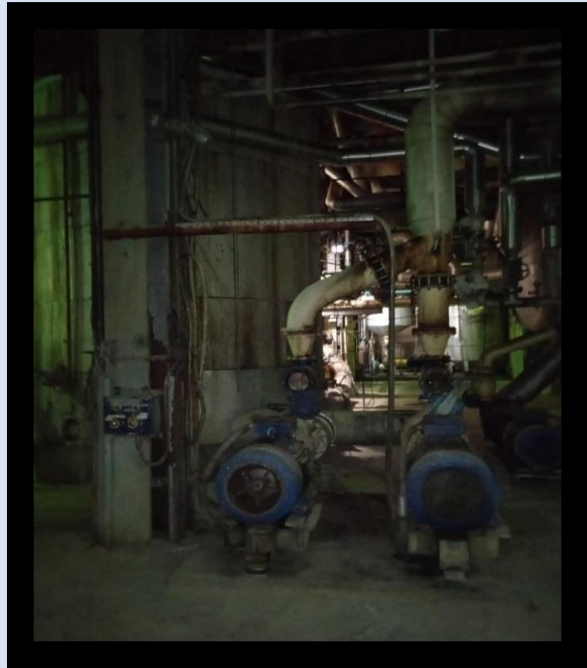
Quantity	2
Producer	BMA
Typ.	F500F
Capacity	30
Part of.	Sugar house
Density	1,35 kg/dm <sup>3</sup>
Suction side	DN 300
Pressure side	DN 250
Motor producer	SEW
Motor power	20





### Pumps for thin juice

Quantity	2
Producer	Sultzer/Litostroj
Capacity	360 m <sup>3</sup> /h -250 m <sup>3</sup> /h
Parto of.	Evaporation station
Density	1,1 kg/dm <sup>3</sup>
Suction side	200
Pressure side	150
Motor producer	Rade Končar
Motor power	37/45 kw



### Pumps sugar house

Quantity	
Producer	Sultzer
Capacity	
Parto of.	Sugar House
Density	1,1 kg/dm <sup>3</sup>
Suction side	
Pressure side	
Motor producer	
Motor power	



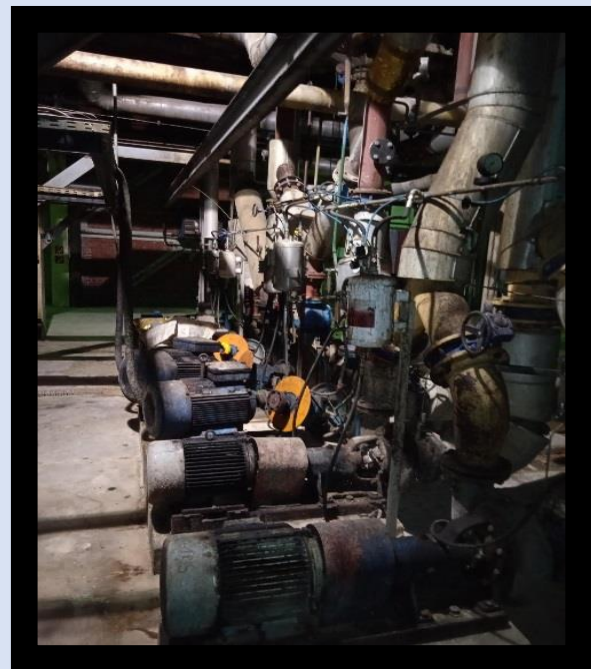
### Pumps for condensate

Quantity	2
Producer	Litostroj
Capacity	15 m <sup>3</sup> /h
Part of.	Evaporation station
Density	1,1 kg/dm <sup>3</sup>
Suction side	DN 50
Pressure side	DN 40
Motor producer	Rade končar
Motor power	3 kw



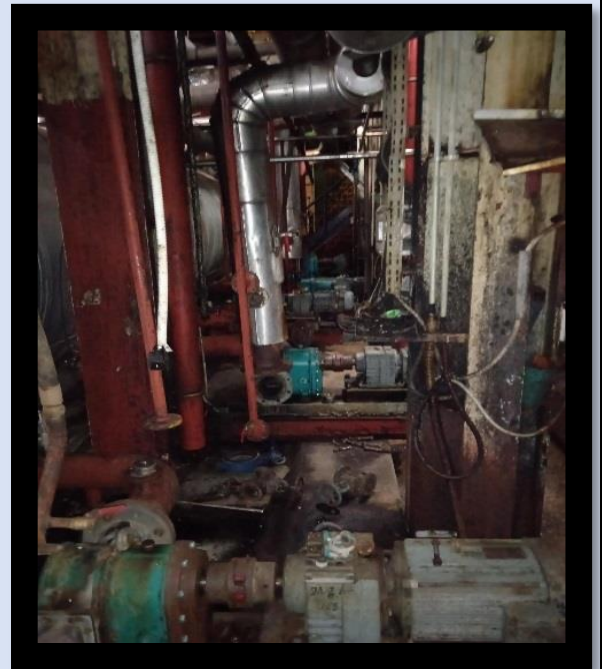
### Circulation pumps for falling film evaporator

Quantity	4
Producer	Jugoturbina
Capacity	115 m <sup>3</sup> /h
Part of.	Evaporation station
Density	1,3 kg/dm <sup>3</sup>
Suction side	DN 200
Pressure side	DN 150
Motor producer	Rade Končar
Motor power	18,5 KW



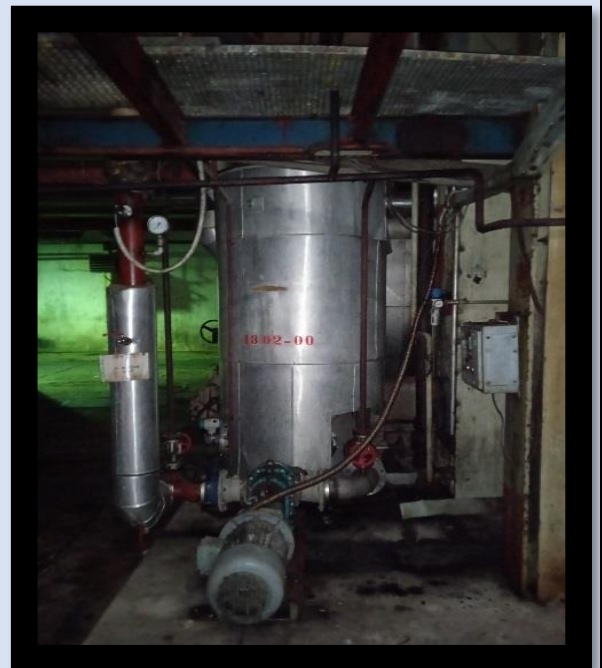
## Pumps for juice in sugar house

Quantity	3
Producer	Börger
TYP	Rotary lobe pump typ.pl 200
Capacity	20 m <sup>3</sup> /h
Parto of.	Sugar house
Density	1,38 kg/dm <sup>3</sup>
Required power at pumpshaft	6,0 kw



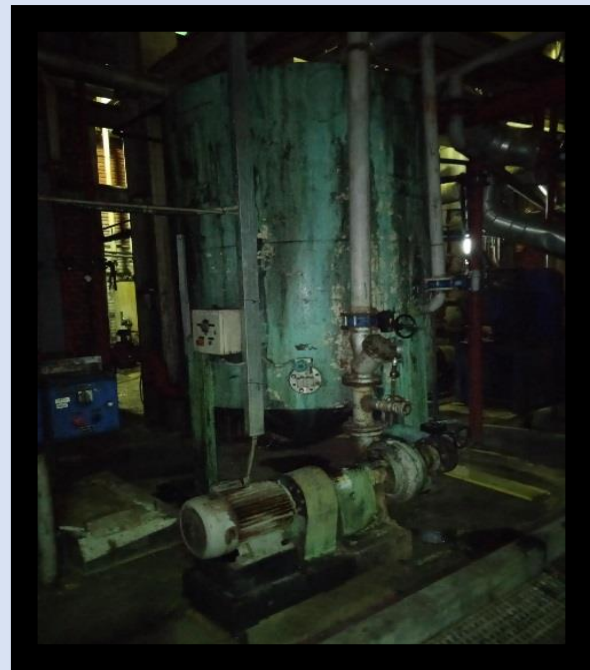
Quantity	2
Producer	Börger
TYP	Rotary lobe pump typ.pl 200
Capacity	40 m <sup>3</sup> /h
Parto of.	Sugar house
Density	1,38 kg/dm <sup>3</sup>
Required power at pumpshaft	11 KW

Quantity	1
Producer	Börger
TYP	Rotary lobe pump typ.pl 200
Capacity	20 m <sup>3</sup> /h
Parto of.	Sugar house
Density	1,38 kg/dm <sup>3</sup>
Required power at pumpshaft	6,0 kw



### Water pump for cooling seed magma 1

Quantity	1
Producer	Litostroj
TYP	5 CN3A
Capacity	110 m <sup>3</sup> /h
Parto of.	Sugar house
Density	1,0
Suction side	DN 125
Pressure side	DN 100
Motor producer	Sever
Motor power	11 kw



### Pumps for seed magma

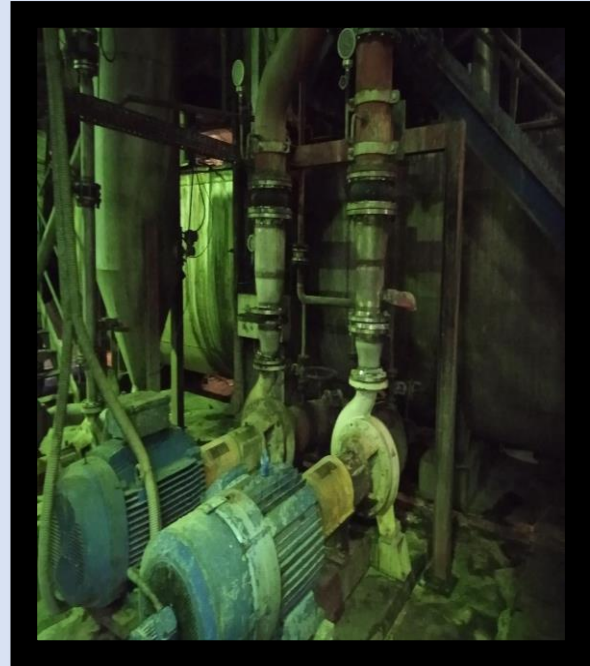
Quantity	1
Producer	VOGEL
TYP	104 W 31 UVV 5504
Capacity	100 m <sup>3</sup> /h
Parto of.	Sugar house
Density	1,3 kg/dm <sup>3</sup>
Suction side	DN 100
Pressure side	DN 100
Motor producer	ABB
Motor power	5,5 KW





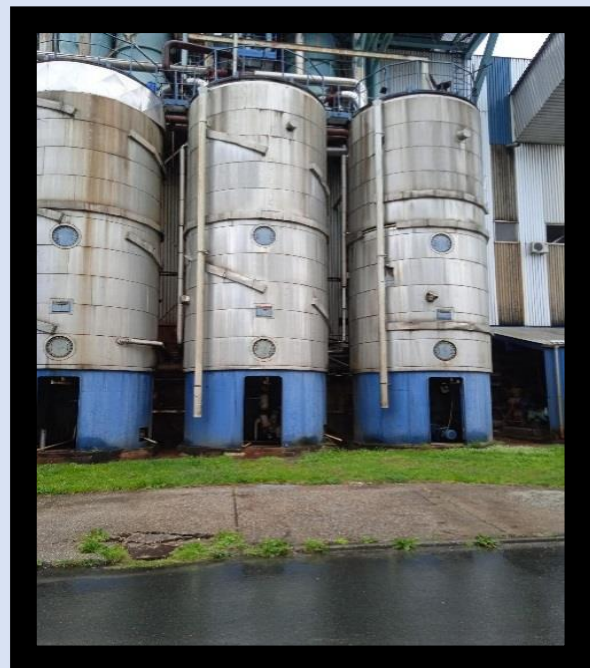
### Pumps for difussion juice

Quantity	2
Producer	Sultzer
Parto f	Purification
Typ	APP 40-150
Capacity	360 m <sup>3</sup> /h
Motor producer	Lenze /rade Končar
Motor power	75 kw



### Vertical cooling crystalizers

Quantity	3
Producer	BMA
Purpose	Cooling magma
Volumen	132 m <sup>3</sup>
High	10000 mm
Diametar	4100 mm
Year of.	1978
Cooling surface	250 m <sup>2</sup>



## Magma pumps

Quantity	2
Producer	BMA
Typ.	F350F
Part of	Sugar house
Density	1,2 kg/dm <sup>3</sup>
Capacity	15 m <sup>3</sup> /h
Suction side	DN 250
Pressure side	Dn 250
Motor producer	AEG
Motor power	15 kw



## Magma pumps

Quantity	3
Producer	BMA
TYP	M 250-R-2
Parto of.	Sugar house
Density	1,5 kg/dm <sup>3</sup>
Suction side	DN 250
Pressure side	Dn 250
Motor producer	AEG/SEW
Motor power	15 kw



## Vacuum pumps

Quantity	9
Producer	Simens
Typ.	2BA5524-4B- 2BA5374-4A
Capacity	3500 m <sup>3</sup> /h
Suction side	DN 150
Pressure side	Dn 200
Motor producer	Simens
Motor power	50/60 kw



### Mono-pumps for carbonatation mud

Quantity	3
Producer	Netzh/Zagreb produkt
Typ.	4NE 80 A
Capacity	20 m <sup>3</sup> /h
Suction side	DN 150
Pressure side	DN 150
Motor producer	Rade Končar
Motor power	37 KW



### Magma pumps

Quantity	2
Producer	BMA
TYP	M250-R-2
Capacity	15 m <sup>3</sup> /h
Suction side	DN 250
Pressure side	DN 250
Motor producer	Rade Končar /AEG
Motor power	15 KW





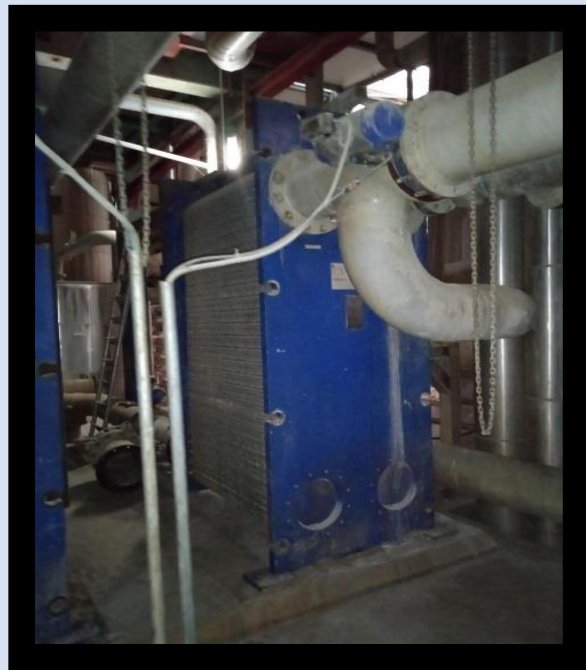
### Pumps for juice after first carbonatation

Quantity	2
Producer	Sultzer
Typ	APP 42-150
Capacity	360 m <sup>3</sup> /h
Part of	Purification station
Suction side	DN 200
Pressure side	DN 150
Motor producer	Rade Končar
Motor power	37 kw



### Heat-exchanger for diffusion juice

Quantity	1
Producer	IPROS
TYP	FA 192-104/B-6
Heating surface	104 m <sup>2</sup>
Part of	Extraction station
Year of	2008



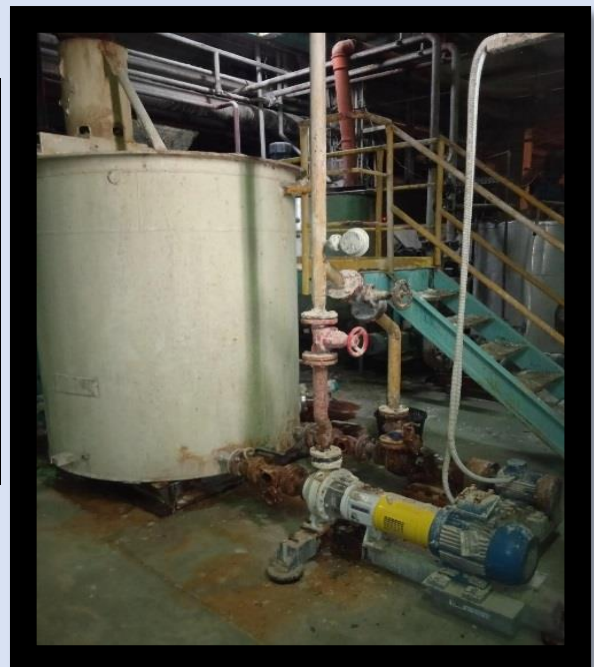
## Magma pump

Quantity	1
Producer	Bma
TYP	F500F
Part	Sugar house
Density	1,5 kg/dm <sup>3</sup>
Capacity	30 m <sup>3</sup> /h
Suction side	DN 300
Pressure side	DN 250
Motor producer	SEW
Motor power	20 kw



## Pumps for soda addition

Quantity	4
Producer	Sultzer/Jugoturbina
Part of.	Purification station
Capacity	8 m <sup>3</sup> /h
Suction side	DN 50
Pressure	DN 40
Motor producer	Rade Končar
Motor power	2 kw
Vesel	3,5 m <sup>3</sup>
Dim	1600*1900 mm



## Sand catcher

Quantity	1
volumen	1,2 m <sup>3</sup>
Lenght	1228 mm
Hight	1000 mm
Weide	1028 mm
Producer	bma
Purpose	Sand catcher
Part of	Main liming



## Seed magma pumpa -KO2

Quantity	1
Producer	Bma
Typ	F350F
Parto f.	Sugar house
Capacity	15 m <sup>3</sup> /h
Suction side	DN 250
Pressure side	DN 250
Motor producer	Rade Končar
Motor power	15 kw

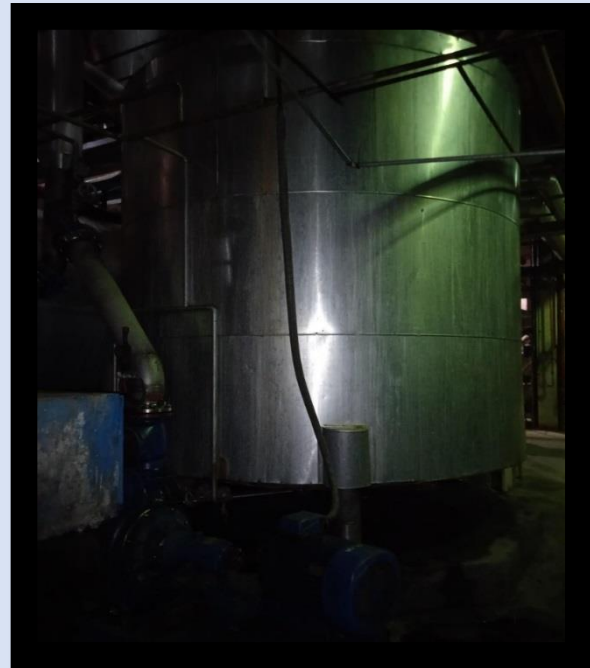


## Magma reciver

Quantity	1
Parto f.	Sugar house
Purpose	Seed magma reciver
Capacity	80 T
Weide	2800 mm
Lenght	9000 mm
Heigh	3500 mm
Capacity	80 t
Motor power	7,5 kw

### Pumps for standard liquor

Quantity	2
Producer	Vogel
Capacity	90 m <sup>3</sup> /h
Part of	Sugar House
Density	1,3 kg/dm <sup>3</sup>
Suction side	DN 150
Pressure side	DN 125
Motor producer	ABB - MOTORS
Motor power	30 kw
Vesel	14 m <sup>3</sup>



### Heat exchanger for diffusion juice

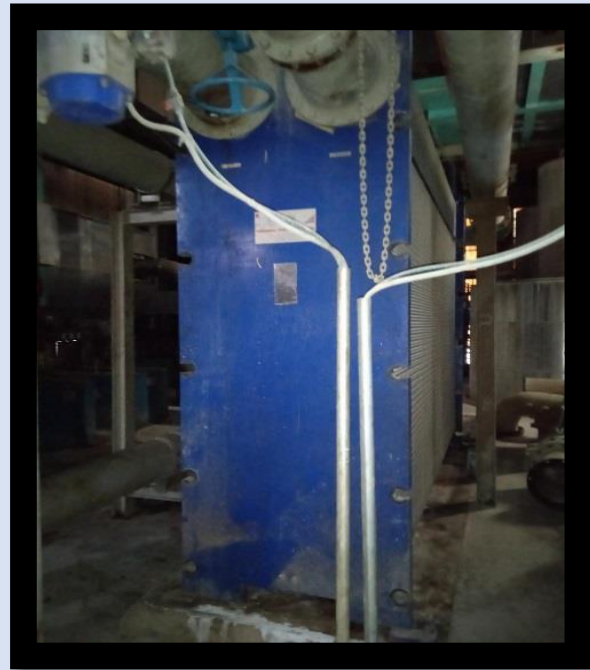
Quantity	1
Producer	Ipros
Typ	FA 192 B-6
Year of production	2008
Heating surface	166 m <sup>2</sup>
Part of	Extraction station
Net weight	4743 kg





### Heat exchanger for diffusion juice

Quantity	1
Producer	Ipros
Typ	NF 350-310/B6
Year of production	2008
Heating surface	601 m <sup>2</sup>
Part of	Extraction station
Net weight	11703 kg



### Water pumps for preparation water (diffusion)

Quantity	2
Producer	Pump
Capacity	170 m <sup>3</sup> /h
Density	1,0 kg/dm <sup>3</sup>
Motor power	30 kw



## A-PRODUCT CENTRIFUGES

Quantity	6
Producer	BWS
Typ	BWS 1500 S
Year of production	2002
Part of	Sugar house
Net weight	7615 kg inc.motor
Max speed	1210 rpm
Basket diameter	1350
Basket height	1100 mm
Basket volume	1500 kg
Model	Flatt -bottom



## Affination centrifuges

Quantity	2
Producer	BWS
Typ	BWS 1500 S
Year of production	2011
Part of	Affination
Net weight	6400 kg inc.motor
Max speed	1210 rpm
Basket diameter	1350
Basket height	1100 mm
Basket volume	1500 kg
Model	Flatt -bottom



### B-product centrifuges

Quantity	3
Producer	BWS
Typ	BWS K1350
Year of production	2001
Part of	Sugar house
Capacity	21 t/h
Model	Continuous



### C-product centrifuges

Quantity	2
Producer	BMA
Typ	BMA K 2400
Year of production	2002
Part of	Sugar house
Ser.nr	ZK 12899/12898
Net weight	3600-4000 in motor, kg
Capacity	12 t/h
Max speed	1880 rpm
Dimension	3290*2364*13 70



### C-product centrifuges

Quantity	2
Producer	BMA
Typ	BMA K 3300
Year of production	2014
Part of	Sugar house
Ser.nr	ZK 15291/15290
Net weight	3020 kg
Capacity	19 t/h
Max speed	1900 rpm
Dimension	2800*1900*1280



### B-cascade boiling

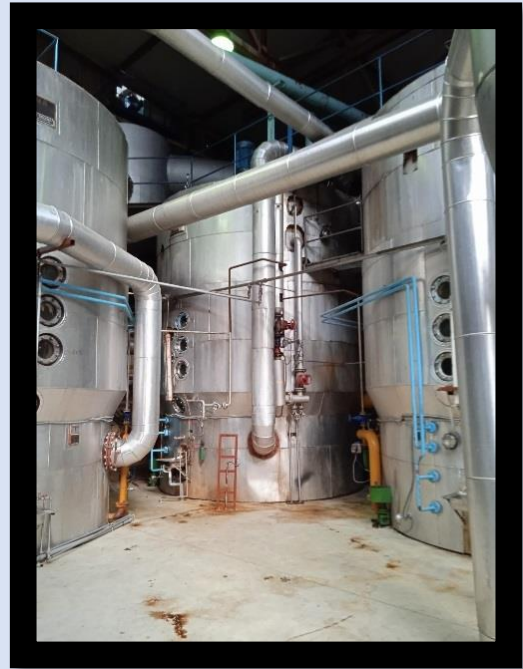
Quantity	3
Producer	BMA
Typ	B-CASCADE
Year of reconstruction	2010
Part of	Sugar house
Heating chamber	300 m <sup>2</sup>
Type of heating chamber	Honey
Capacity	60 t
Diameter	4600 mm
Height	6900 mm





### A-product vacum pans

Quantity	7
Producer	BMA
Typ	A-Vaccum pans
Year of reconstruction	2010
Part of	Sugar house
Heating chamber	300 m <sup>2</sup>
Type of heating chamber	Honey
Capacity	60 t
Diametar	4600 mm
Height	6900 mm



### C-product cascade boiling

Quantity	4
Producer	BMA
Typ	C-cascade
Year of reconstruction	2010
Part of	Sugar house
Heating chamber	230 m <sup>2</sup>
Type of heating chamber	Honey
Capacity	60 t
Diametar	4600 mm
Height	6200 mm



### Heater purification station

Quantity	1
Producer	Ipros
Typ	FA 192-242/B-6
Year of production	2008
Heating surface	334,6 m <sup>2</sup>
Part of	Purification station
Net weight	8258 kg



### Heater purification station

Quantity	1
Producer	Ipros
Typ	FA 192-104/B-6
Year of production	2008
Heating surface	141,4 m <sup>2</sup>
Part of	purification station
Net weight	



Quantity	1
Producer	Ipros
Typ	FA 192-238/B6
Year of production	2008
Heating surface	
Part of	Purification station
Net weight	8258 kg

### Thin juice -heaters

Quantity	2
Producer	GEA
Typ	NT 250 L B-10
Year of production	2008
Heating surface	143,55 m <sup>2</sup>
Part of	Evaporation station
Weight	2998 kg



### Heaters in purification and evaporation station

Quantity	15
Producer	BMA/JEDINSTVO
Typ	Pipes
Year of production	1978/1979
Heating surface	110 m <sup>2</sup>
Part of	Purification /Evaporation station
Weight	



### First evaporator

Quantity	1
Producer	Jedinstvo
Typ	Robert evaporator
Diametar	3700 mm
Year of production	1979
Heating surface	2050 m <sup>2</sup>
Part of	Evaporating station
Nr. of Pipes	5000
Lenght of pipe	4200



### Second evaporator

Quantity	1
Producer	Jedinstvo
Typ	Robert evaporator
Year of production	1978
Heating surface	2570 m <sup>2</sup>
Part of	Evaporatin station
Diametar	4900 mm
Nr.of pipe	8250
Lenght	4900 mm





### Third evaporator

Quantity	1
Producer	Jedinstvo
Typ	Robert Evaporator
Year of production	1978
Heating surface	2820 m <sup>2</sup>
Part of	Evaporating station
Diametar	5500 mm
Lenght of pipe	2700 mm
Nr.of pipes	10750



### Fifth evaporator

Quantity	2
Producer	Jedinstvo
Typ	Falling film evaporator
Year of production	1978
Heating surface	550 m <sup>2</sup>
Part of	Evaporatin station
Diametar	2100 mm
Lenght of pipes	6000 mm
Nr. of pipes	720



### Safety filters

Quantity	2
Producer	Eaton
Typ	VMBF-1602-AC10-300D-11SEN-M
Year of production	2007
Volumen	1054 L
Number of filter candles	16
Purpose of.	Safety filtration



Quantity	
Producer	Hayward filtration
Typ	VMBF-042-BB06
Year of production	2005
Volumen	65 L
Number of filter candles	4
Purpose of.	Safety filtration

## Sugar house -heaters

Quantity	6
Producer	GEA -IPROS
Typ.	VT80-B6
Typ.	VT 80 CDL6
Typ.	VT 40CDL10
Typ.	N40CDL10
Typ.	VT20CDS10
Typ.	FA192-B6
Year of production	2008
Type	Plate
Parto f	Sugar house



## Standard syrup heater



### Pumps for standard syrup

Quantity	2
Producer	Litostroj/sultzer
Typ	5CN5-SS
Capacity	90 m <sup>3</sup> /h
Density	1,32 kg/dm <sup>3</sup>
Part of	Filtration station
Suction side	150
Pressure side	125
Motor producer	Rade Končar
Motor Power	45 kw



### Pumps for standard syrup

Quantity	4
Producer	Jugoturbina
Capacity	136 m <sup>3</sup> /h
Density	1,32 kg/dm <sup>3</sup>
Suction side	dn 150
Part of	dn 100
Motor producer	Rade Končar
Motor power	15 KW





Quantity	2
Producer	Vogel
Capacity	90 m3/h
typ.	IC 150-125-250 C2VL3-3004
Suction side	DN150
Pressure side	DN125
Motor producer	ABB Motors
Motor power	30 KW





**View of sugar house**

### Chemical preparation of water -for boilers

Quantity	2
Producer	Energo Invest-Jajce
Typ	Water preparation
Year of production	1978
Part of	Boilerhouse
Capacity	50 m <sup>3</sup> /h



### Turbine

Quantity	1
Producer	Rade Končar
Typ	turbine
Year of production	1978
Capacity	45/3 bar
Steam	70 t/h
Power	8,8 MW
Rotation speed	7500 rpm

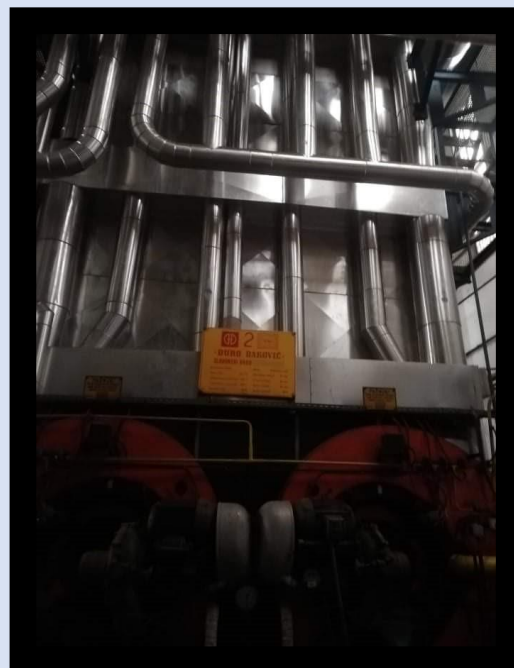


Quantity	1
Producer	Rade Končar
Typ	S1334-2
Voltage	10 MVA
Rotation speed	3000 rpm
static excitation	115 V, 342 A

ELECTRICAL SYSTEM	
Low voltage	400 V
Hight voltage	35/6 KV
Year of production	1978

### Boilers

Quantity	2
Producer	Đuro Daković
Typ	Steam -Boiler
Year of production	1978
Capacity	50 t/h
Part of	Boilerhouse
Pressure	46 bar
Temperature	450 C
Fuel	gas/fuel-oil





## Compressor

Quantity		5	
Number	Year	BOGE	Capacity max.
1	2013	Kopresor boge s50-2	324 m <sup>3</sup> /h
2	2001	Kopresor boge s101	684 m <sup>3</sup> /h
3	2007	Kopresor boge s151	1020 m <sup>3</sup> /h
4	2011	Kopresor boge s150	978 m <sup>3</sup> /h
5	2015	Kopresor boge 150-3	978 m <sup>3</sup> /h



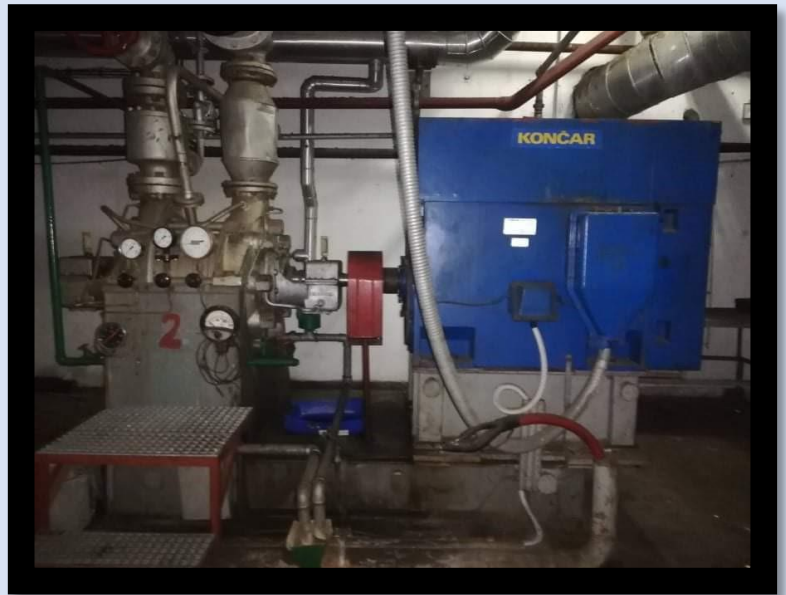
## Boiler

Quantity	1
Producer	Đuro Đaković
Typ	Optimal 1500
Year of production	1978
Capacity	15 t/h
Pressure	11 bar
Steam temperature	184 C
Fuel	Gas/fuel oil



### Water pumps for boiler house

Quantity	2
Producer	JUGOTURBINA
Q	125 m <sup>3</sup> /h
Year of production	1979
Motor producer	Rade Končar
Power	355 KW



### Boiler fan

Quantity	2
Producer	
Q	
Year of production	
Motor producer	
Power	160 KW

### Lime milk preparation

Quantity	1
Producer	BMA
Purpose	Lime kiln drum
Year of production	1978
Diameter	2000 mm
Length	9000 mm
Weight empty	14,5 t



### Pumps for lime milk

Quantity	3
Producer	Warman
Type	2/1,5 AH
Capacity	30 m <sup>3</sup> /h
Suction side	DN 50
Pressure side	DN 40
Motor Producer	Simens
Motor power	7,5 kw
Part of	Lime milk preparation



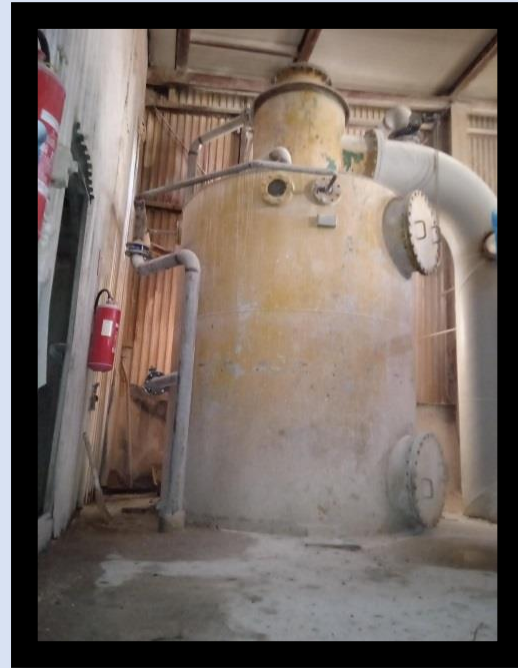
### Compressors for CO2

Quantity	3
Producer	Simens
Type	2BA7682-3E
Capacity	5900 m <sup>3</sup> /h
Suction side	DN 250
Pressure side	DN 250
Motor Producer	Simens
Motor power	320 kw



## Vesel for washing gas -C02

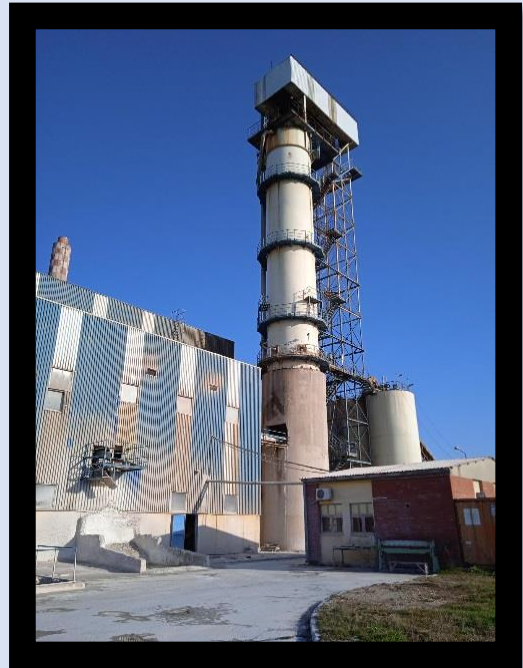
Quantity	1
Producer	Vesel for gas washing
Diametar	2200 mm
Hight	4100 mm
Material	ST.37,0
Filled with	Raschig rings





### Lime kiln

Quantity	1
Producer	Kosik
Capacity	260 m <sup>3</sup>
Power	7,5 mw
Hight	52 m



### Cooling towers

Quantity	3
Producer	Spx-cooling technology
Capacity	1050 m <sup>3</sup> /h
Power	
Hight	



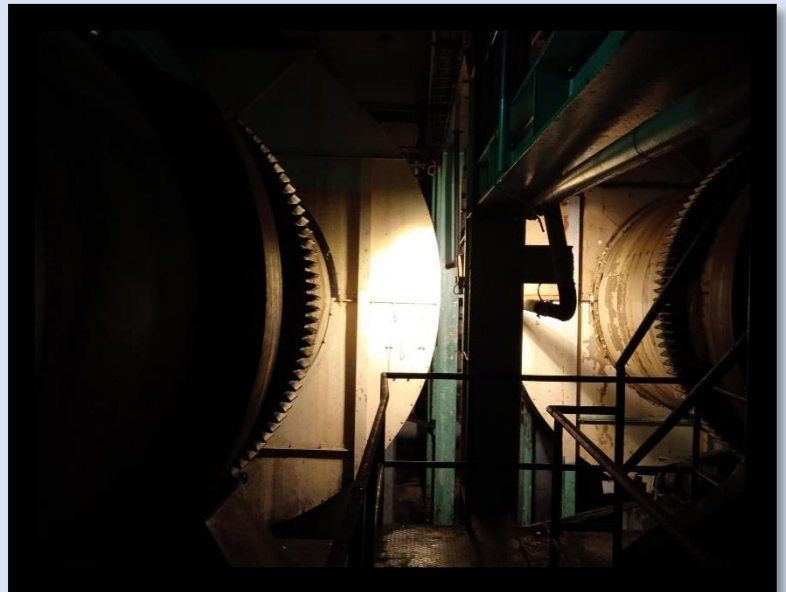
## DDS-FILTERS

Quantity	9
Producer	DDS
Capacity	8 m <sup>3</sup> /pcs.
Filtration surface	50 m <sup>2</sup>
Work pressure	3,5 bar
Nr.of fil.elem.	32 pcs.



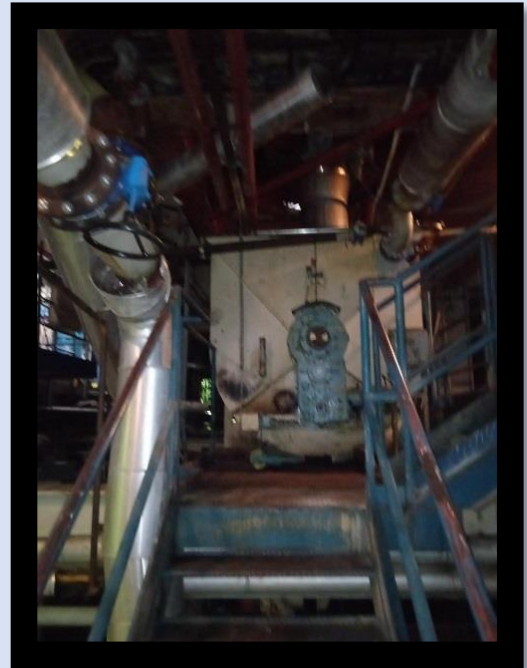
## Rotary drum sugar dryers

Quantity	2
Producer	bma
Capacity	35 t/h and 29 t/h
Lenght	12000 mm
Diametar	2400 mm
Parto f	Sugar dryer



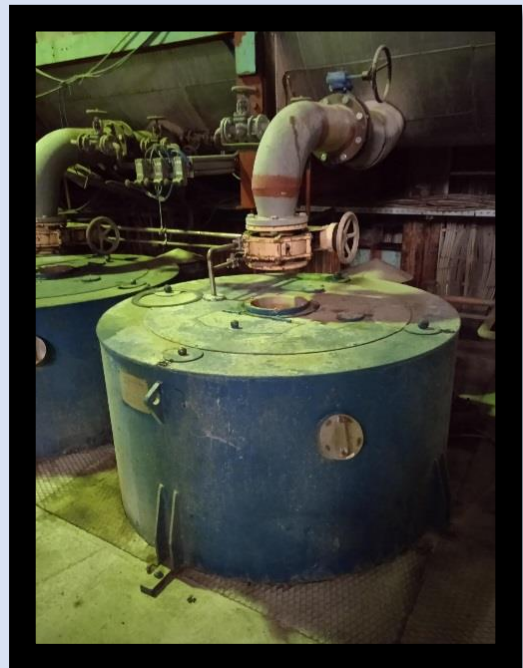
### Magma reciver

Quantity	1
Producer	bma
Lenght	20000 mm
Hight	2200 mm
Parto f	Sugar house
Volumen	75,40 m <sup>3</sup>
Purpose	C magma reciver



### Affination centrifuges

Quantity	3
Producer	Silwer Weibul
Typ	3630 continuous
Year	1984
Capacity	8-10 t/h depend on quality of magma



### Amf -screw conveyor for wet sugar

Quantity	1
Producer	AMF
Typ	TSF 1000*15,8 m
Year	2008
Capacity	114 t/h
Speed	0,40 m/s
Motor	32 kw
RPM	43 r/min
Mat.	1.4301.
Quantity	6
Typ	WSK 1350*1500
Producer	Amf
Purpose	Conection between screw and centrifuges



### Elevator for wet sugar

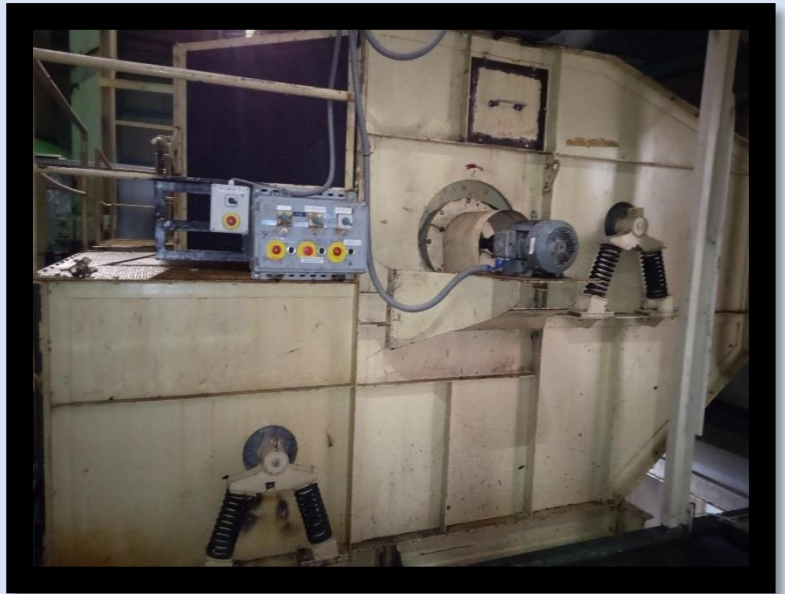
Quantity	1
Producer	AMF
Typ	KBW500*9300 chain
Year	2008
Motor	7,5 kw
Weight	5980 kg
Mat.	1.4301





### Sugar screens

Quantity	4
Producer	ROBERG Frambs freidemberg
Capacity	15 t/h (each)



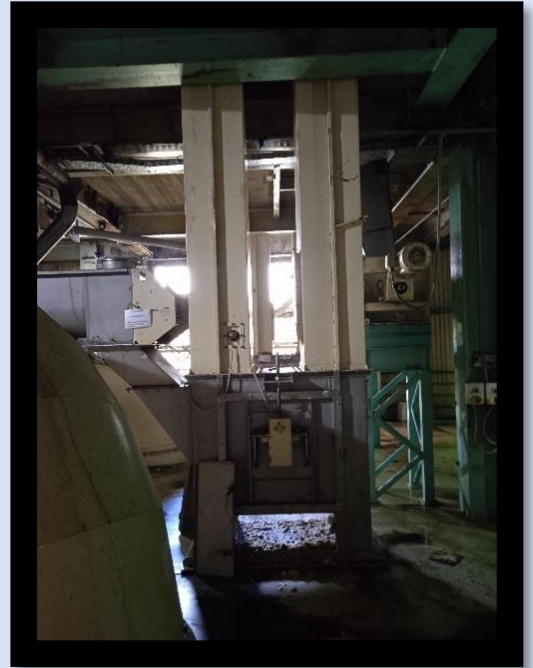
### Ventilator for beth filters

Quantity	2
Capacity	400 m <sup>3</sup> /min
Power	22 kw



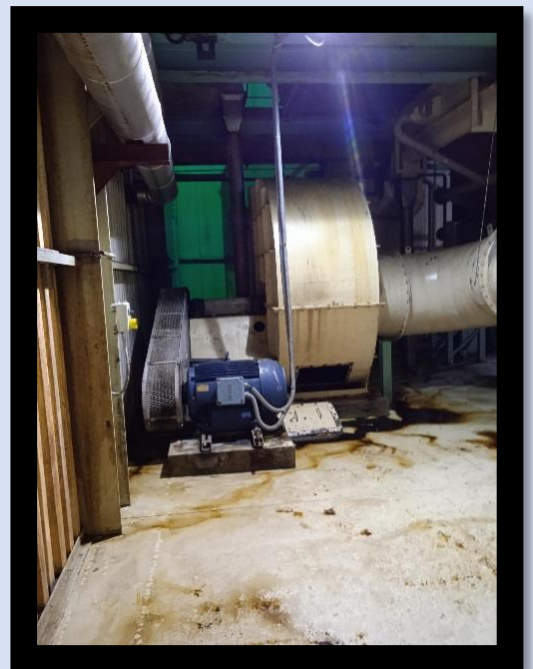
### Elevator for dry sugar

Quantity	1
Producer	AMF
TYP	GBW400*9,7
Purpose	Dry sugar transportation
Power	5,5 kw
Weight	4900 kg
Mat.	1.4301



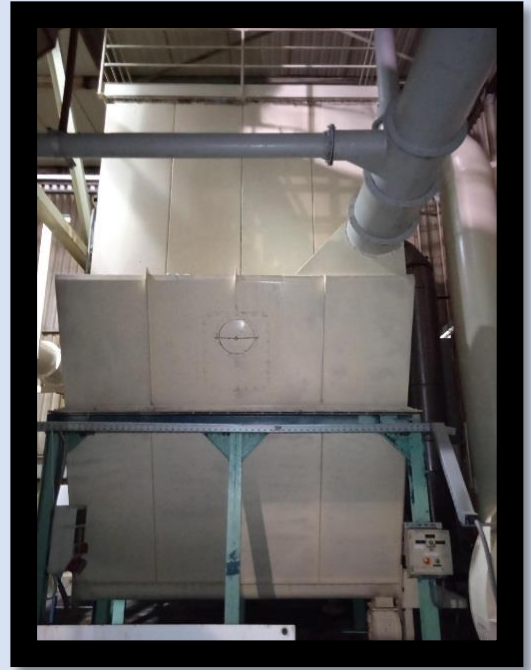
### Ventilators for sugar drum dryers

Quantity	1	1
Producer	Ventilator Zgb	Ormož
TYP	NXVR-14P-270	
Purpose		
Power	90 KW	30 kw
Weight	5000 KG	2000 kg
Capacity	108 000 m <sup>3</sup> /h	65000 m <sup>3</sup> /h



### Beth filters for sugar dust

Quantity	2
Producer	Wiener grupa
Year	2012
Purpose	Dedusting of sugar dryer
Part of	Sugar dryer
nr of bags	128 km /each/



### Door-Oliver filter

Quantity	2
Producer	Door Oliver filter
Year	1978
Purpose	Filtration of mud
Part of	Purification station
Diameter	3000 mm
Length	6000 mm
Surface filtration	56 m <sup>2</sup>





## Volumen of vessels in Sugar house

Name of vessel	Volumen (m3)	Lenght (mm)	Hight (mm)
Preparation of standard liquor	8,6	1600	2600
Magma reciver for seed magma B	40	7000	2700
Magma reciver for seed magma C	103	18000	2700
Magma B1	126	22000	2700
Magma B2	63	11000	2700
Magma A1	80	14000	2700
Magma A2	109	19000	2700
Seed magma A	49	8500	2700

