

Description

DI-SUGAR-T™ is a unit for the production of sugar solutions using the batch procedure.

The size of the dissolving tank depends on the possibilities for adding granulated sugar.

Large-capacity dissolvers are sufficiently dimensioned to empty a complete silo truck.

If BigBags or bags are processed, the tank size will be adapted to the feeding possibilities of granulated sugar or the desired quantity of liquid sugar.

After the start of the process, water is carried into the dissolving tank.

As soon as the preset water quantity is reached, granulated sugar starts being conveyed (e.g. by a screw conveyor) into the dissolving tank. During the sugar addition, a dosed quantity of water goes on being added through the spray head for bonding the sugar dust.

Combined with a special mixing nozzle, the pump generates heavy turbulences in the dissolving tank, thus enabling a quick dissolution of the sugar crystals in the water.

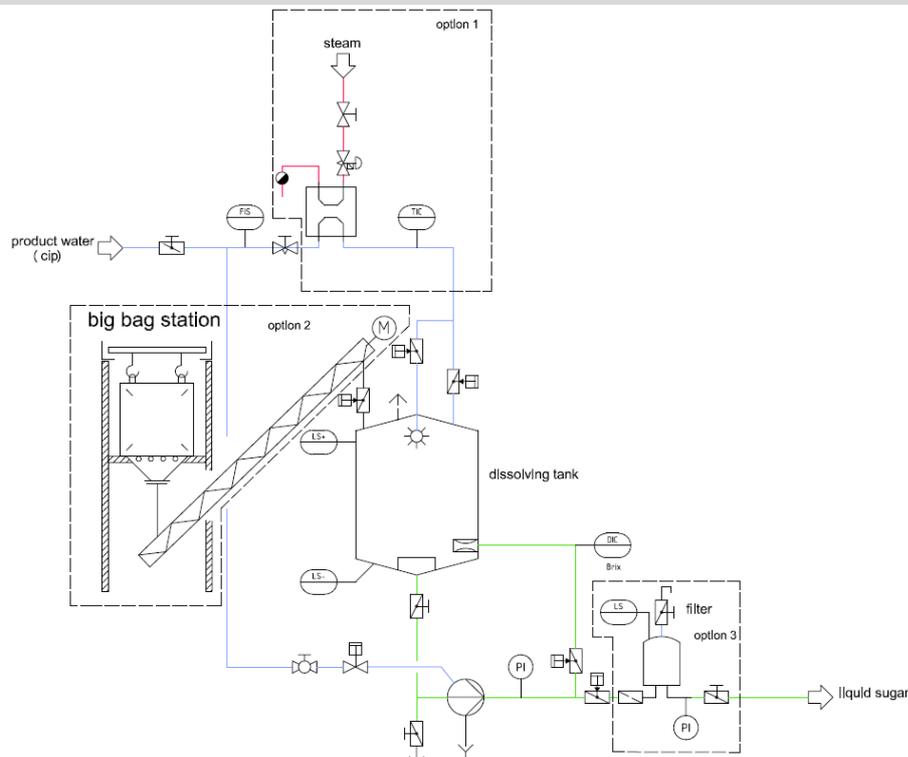
The total water quantity is calculated so that at the end of the dissolving process the Brix value will be about 1°Bx higher than the setpoint.

The Brix value is calculated from the density and the temperature and the sugar solution is set to the desired value by the addition of finely dosed water.

Features

- Fully automatic process
- Highly effective dissolving procedure
- Low operation costs
- High-quality, low-maintenance components
- Factory-tested unit
- Flow rates from 2,500 up to 6,000 l/h / 10,000 l/h (large-capacity dissolver)
(higher flow rate on request)

Flow diagram (example)



DI-SUGAR-T™ is available with the following options:

1. BigBag and/or bag feeding station
2. Heating equipment for dissolving water
3. Filter unit

Further options are possible

Technical data

Materials	1.4301/EPDM other materials on request					
Dimensions	Qmax.	Length*	Width*	Height*	Installed power*	Weight approx.*
	l/h	mm	mm	mm	kW	kg
	2,500	3,000	1,600	2,400	40	8
	4,500	3,600	1,600	4,000	50	12
	6,000	3,800	1,800	4,800	65	20
	Large-capacity dissolver					
10,000	3,200**	3,000	7,500**	80	32	1,600
		*without options		** in horizontal position L=H/H=L		
Granulated sugar	Refined sugar EC I/II Temperature > 20°C			BigBag feeding station	Option 1	
				Sack feeding station	Option 1	
Nominal flow rate	2,500 l/h...10,000 l/h					
Concentration	60° Brix up to 65° Brix			± 0.1°Brix		
Water	Beverage water quality			Temperature > 20° - 35°C*	Option 2	
				*depending on flow rate and concentration		
				Pressure 2 - 3 bar, fluctuation range ± 0.5 bar		
Sugar solution	Output, unfiltered			Temperature > 18° - 32°C*	Option 3	
				*depending on flow rate and concentration		
				Pressure 2 bar		

Example: Sugar dissolver 4,000 l/h DI-SUGAR-T™
with heating equipment for dissolving water, BigBag station and UV treatment

