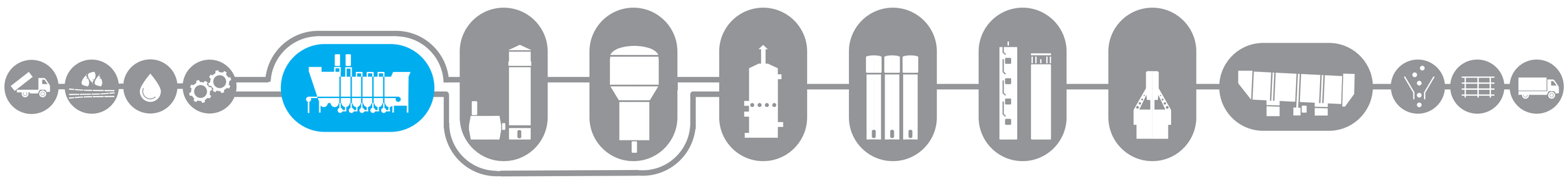
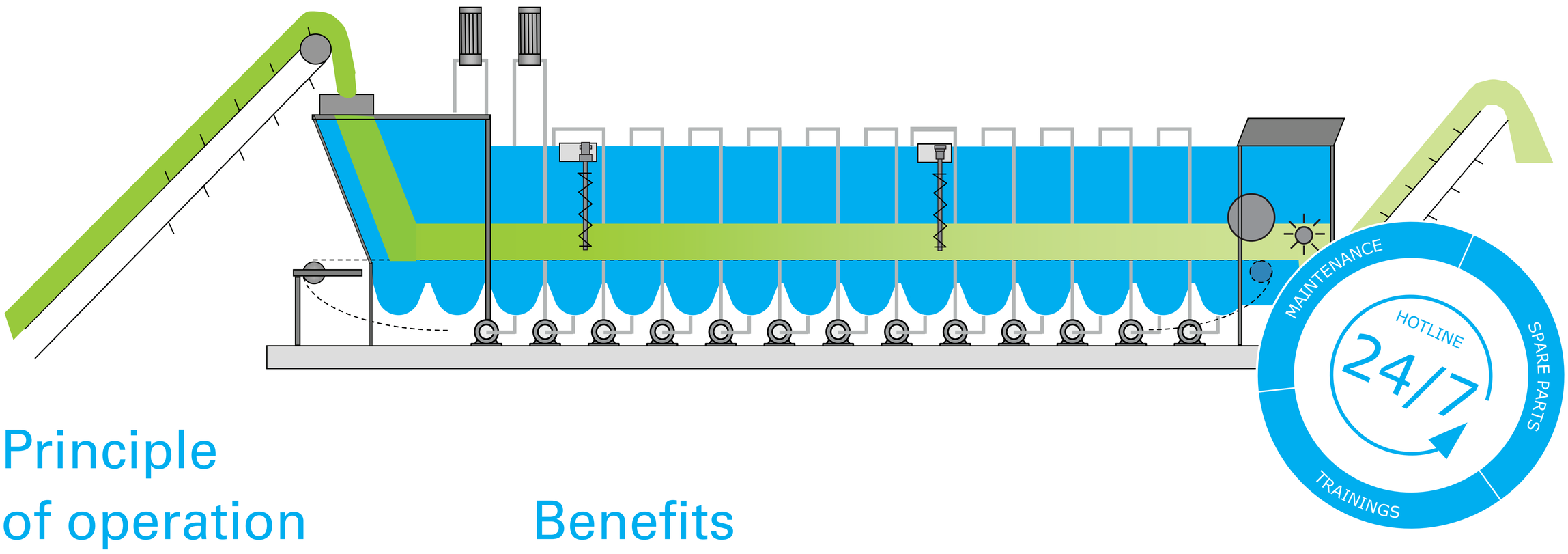
Area of application

BMA

Diffuser for cane and bagasse



Intake > storage > cleaning > crushing/slicing | **Cane diffusion** | Beet extraction | Pulp dewatering | Juice purification | Evaporation | Crystalli-sation | Centrifu-gation | Sugar drying/cooling | Packaging > storage > transportation



Principle of operation

Diffusers are used for the continuous extraction of sugar from sugar cane or bagasse. Sugar cane is crushed and the sugar is then washed out in a cross-countercurrent process using water. The aim is to obtain low-temperature, high purity raw juice with a high dry substance content. The diffuser from BMA achieves this with the formation of a layer of crushed sugar cane or bagasse from the first mill on a chain conveyor.

At the conveyor outlet, water is added and percolated through the bagasse bed and the screen bottom of the diffuser. The water washes out the sugar from the bagasse and this juice is collected in a trough. A pump transports it to the next step, where the process is repeated until the juice reaches its maximum sugar content at the diffuser inlet.

Benefits

Co-generation potential
Steam consumption is about 50 % lower than with a mill tandem.

Sugar losses
Sugar losses are reduced by 25 % compared to cane mills.

Juice quality
Juice contains fewer solids and is less cloudy because of the filtration effect in the megasse bed.

Opex
Considerably lower operating and maintenance costs than for a mill tandem.

up to **98,5 %** EXTRACTION WITH THE DIFFUSER CONCEPT FROM BMA.

Technical data

Width [m]	5 to 28
Length [m]	52 or 59
Nominal capacity [TCD]	4,100- 24,000 (cane)
Nominal capacity [TCD]	3,500- 40,000 (bagasse)

Reference extract

Customer	Year	Country	Type	TCD	Dimensions width x length
Guangxi	2014	Thailand	Bagasse	12,000/15,000	12.0 x 52.0
ICPL	2014	India	Cane	12,000	14.0 x 59.0
Metec	2013	Ethiopia	Cane	12,000	14.0 x 59.0
CAMC	2012	China	Cane	7,700	8.0 x 59.0

More information

https://www.bma-worldwide.com/sugar-cane-extraction.html

Sales sales@bma-de.com
Automation sales@bma-automation.com
After sales after-sales@bma-de.com

Diffuser technews range
Technical survey
Diffuser advertisement