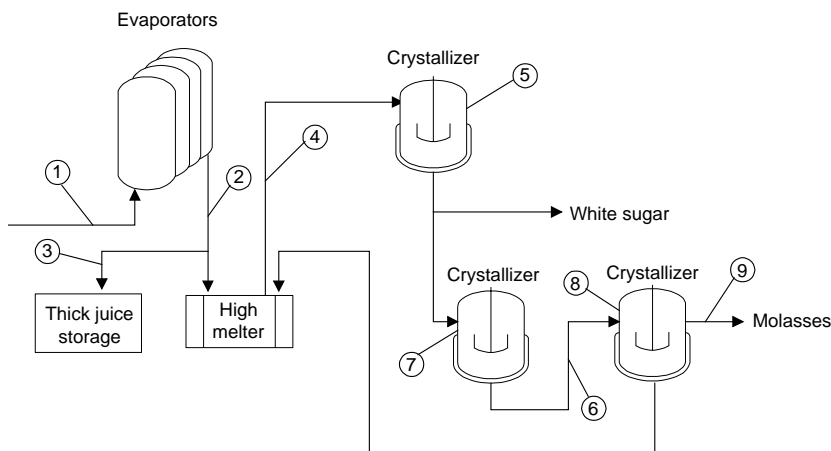


Beet Sugar Green Syrup and Molasses



Positions where K-Patents PR-01-S is used:

- ① Thin juice
- ② Evaporator control
- ③ Thick juice to storage
- ④ Standard liquor
- ⑤ White pan
- ⑥ Green syrup
- ⑦ Intermediate pan
- ⑧ Raw pan
- ⑨ Molasses

Beet Sugar

See also

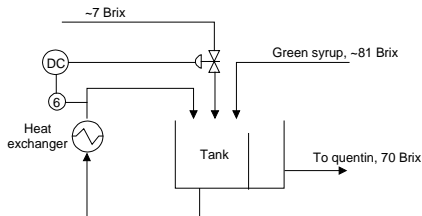
- Beet Sugar Production 1.01.00*
- Beet Sugar Extraction 1.01.01*
- Beet Sugar Evaporator Control 1.01.02*
- Beet Sugar Crystallization Control 1.01.03*
- Beet Sugar Crystallization 1.01.04*
- Desugarisation of Molasses by Chromatographic Separation 1.01.06*

Green Syrup control to Quentin

Quentin is an ion exchange column. Alkaline ions (potassium/sodium) are exchanged with magnesium to reduce the solubility of sugar in water. The green syrup from the Quentin goes to the C-pan.

K-Patents Process Refractometer, PR-01-S is used to control the feed to the columns. A constant load means that the ion-exchange resins will operate longer.

Typical range is 60 to 80 Brix and typical temperature 85°C (185°F). Flow velocity of at least 1,5 m/s (5 feet/s) is recommended.



Molasses concentration control

Molasses is a by-product from sugar production and can be sold as a raw material.

K-Patents PR-01-S is used to check that the concentration is above the lowest limit specified by the buyer. It can also be used for dilution control to avoid uneconomically high concentrations.

Typical concentration range is 70-85 Brix and typical process temperature is 80°C (176°F).

