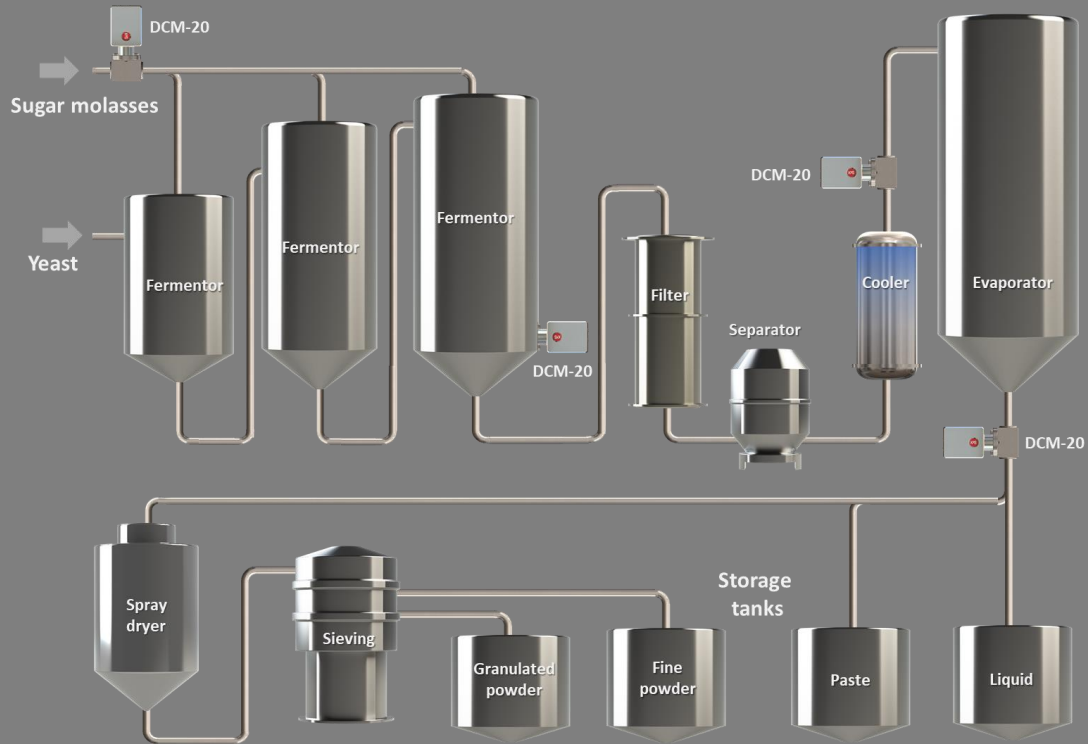


Yeast extract production is provided continuous control by Inline optical Brix monitors installed in fermenters and evaporators



Application: Yeast used for food ingredients, flavorings, or as nutrients for bacterial culture media

Process

Yeast is a natural food ingredient consisting of protein, amino acids, vitamins and minerals. A preserved yeast culture is fed to a fermenter and a sugar molasses syrup added in order to grow the yeast culture in a controlled manner. Therefore, the inline Brix monitor DCM-20 is instrumental in defining the incoming sugar feed.

Subsequently a heat treatment at 40°C with natural enzymes breaks down the yeast proteins and cell walls to give its savory taste. After the heat treatment and separation of liquid and solids where the valuable proteins and vitamins are preserved, water is evaporated from the liquid yeast. The inline Brix monitor drives the steam feed to the evaporator and ensures a stable product quality in the outlet.

An optical sensor technology has a reputation of providing most precise and reliable Brix measurements in sugar and dissolved solutions since the refractive index technology does not entail magnitude conversion tables nor process flow limitations.

Installation notes

DCM-20 inline Brix monitor with its unique instrument optics yields a **unique hygienic integration concept on the market** with test reports presenting proof of cleanability of the entire mechanics as integrated in the process equipment.

The design meets 3-A design standards, is EHEDG certified and offers scalable integration configurations enabled by its proprietary single-piece (no weld joints) flow cell housing for a wide range of process pipe sizes, while also CIP clean compatible.

Compared to a u-tube densitometer, the compact optical Brix monitor is easily mounted without restrictions by pipe orientation. The DCM-20 is mounted in either vertical or horizontal pipe sections. Retrofits in existing pipe bend connections are also accommodated for, while not being the optimal mounting location with flow profile and dead space issues.

Product recommendation

The entire combination of the compact Inline Brix monitor DCM-20-H15 and single-piece flow cell housing SFC-H15-HPF is EHEDG certified and meets 3-A design standards with 3-A symbol authorization for scalable 1"..."4" pipe size integration.

Measurement range: 0-100 Brix
Precision: +/-0.025 Brix
CIP compatible
Analog or digital signal communication protocols

Optional Modular Connection Unit MCU with electrical connections to the stand-alone DCM-20 Brix monitor.

