

# **AIR/CO2 NUCLEATION UNIT FOR Discontinuous lines**

## **NUCLEATOR**

#### Description:

This machine consists of a steel framework holding all the components needed for its operations, such as motor pipes, pumps, valves, tanks, control panel and instruments. It is a fully autonomous system, controlled via a tactile colour screen. The touch screen control system provides start-up, production and weekend modes as well as constant display of the measured values, faults and help.

A set of static mixers allows uniform dissolution of the gas in the polyol.

A hydrometer measure permanently and Polyol adjusts the amount of air required.

Polyol is taken in the vessel, transferred to the mixing through a gear pump and delivered in the tank.

The nucleation rate is constantly monitored and adjusted by a controller.

The nucleator can be easily adapted to an existing installation.

The air nucleation is taken directly into the vessel to avoid pressure variations.

### Machine data:

The gas load generates a very large production of gas bubbles, such as are required, for example, for "rigid foam" applications. In this case, a gas load of over 25% is normal.

The gas particles are injected into a secondary circuit and distributed evenly throughout the raw material (Polyol). A density measuring system is used to maintain and regulate the preselected gas load automatically.

#### **Technical characteristics:**

Max. rate: 26 l/min

Viscosity: Polyol 100—2500 mPas at 20° C
Gas supply: 10 bar minimum—60 bar maximum
Power supply: 400 V—3 phase—50 Hz—20 A

Control voltage: 24 V

Dimensions: approx. length 1570 x width 900 x height 160 0





