

The invention relates to equipment for sugar production and can be used at purification of sugar solution by lime-carbon-dioxide method. A saturator for sugar industry is made as a cylindrical housing with expanded upper part and cone bottom, sockets for supply of solution in the upper part of saturator, for removing of waste solution from the bottom part of saturator and socket for supply of saturation gas to the cone part of saturator through the bubbler and its removing from overhead, wherein bubbler of saturator represents a set of elastic fluted tubes with holes for out flowing of saturation gas. The invention allows to increase the performance reliability of saturator at the expense of forming of scale-less saturator operating regime, to reduce power consumption for purification of bubbler holes from scale, to improve the gas distribution of saturation gas along the apparatus section, enabling to produce juices of highest purification rate, and as a result, to increase the yield of saleable sugar at plant as a result of more complete removing of non-sugars with adsorption on developed surface of crystalline calcium carbonate.