

The apparatus for saturation relates to the technological equipment intended for the saturation of the limed juice and may be used in sugar industry. The apparatus for saturation of the limed juice consists of the cylindrical-conical body, the bubbler, the cylindrical diffuser, the inlet and outlet pipe-unions, and the draft tube with the gate. The apparatus is equipped with the recirculation loop of the waste carbon dioxide consisting of the pipe, the compressor, and the part of the annular bubbler system mounted on the bottom of the annular volume between the diffuser and the body for combining the volumes of gas and liquid phases. The technical result of the invention ensures the intensification of the mass exchange, the reduction in energy and saturation gas consumption, and the improvement of the product quality.