

Title (en)
DEVICE AND METHOD FOR CLEANING WORKPIECES

Title (de)
VORRICHTUNG UND VERFAHREN ZUM REINIGEN VON WERKSTÜCKEN

Title (fr)
DISPOSITIF ET PROCÉDÉ DE NETTOYAGE DE PIÈCES DE FABRICATION

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Abstract (en)

[origin: WO2022106886A1] The invention relates to a device (1) and a method for cleaning contaminated workpieces. The device contains a processing chamber (PK1, PK2, PK3), into which a workpiece to be cleaned can be introduced and which can be filled with water, which is in particular deionised, and a surfactant-containing cleaning liquid; a closure unit (VE) for opening and closing the processing chamber (PK1, PK2, PK3); and a vacuum pump (VP) which can be brought into fluidic connection with the processing chamber in order to evacuate the processing chamber (PK1, PK2, PK3). A vacuum tank (VT) is located in the fluidic connection between the vacuum pump (VP) and the processing chamber (PK1, PK2, PK3), and a first valve (V1) is located in the fluidic connection between the vacuum tank (VT) and the processing chamber (PK1, PK2, PK3). This allows a cleaning effect on the workpiece to be cleaned, both by means of the action of the cleaning liquid as a solvent and by means of the action of the cleaning liquid as a medium that transmits a pressure surge. The pressure surge is achieved by the vacuum tank (VT) first being evacuated by means of the vacuum pump (VP) and the cleaning liquid subsequently experiencing an abrupt drop in pressure as a result of the first valve (V1) being opened abruptly. An ultrasound source (US, US1, US2, US3) is preferably associated with a processing chamber (PK1, PK2, PK3). The action of the cleaning liquid as an ultrasound-transmitting medium supports the cleaning effect on the workpiece to be cleaned.

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