

Title (en)

CLEANING DEVICE FOR REMOVING POWDER ADHERING TO COMPONENTS OR MODELS

Title (de)

REINIGUNGSVORRICHTUNG ZUM ENTFERNEN VON AN BAUTEILEN ODER MODELEN ANHAFTENDEM PULVER

Title (fr)

DISPOSITIF DE NETTOYAGE POUR ÉLIMINER LA POUDRE QUI ADHÈRE À DES PIÈCES OU MODÈLES

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Application

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Priority

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Abstract (en)

[origin: WO2014090207A1] The invention relates to a cleaning device (100) for removing powder adhering to components (14) which have been produced from solidified powder in a layered manufacturing method. The cleaning device (100) includes the following: • a) a casing (10); • b) a cellular wheel sluice (25) arranged in the casing (10), which comprises a cellular wheel (5) rotatable relative to the casing (10); • c) at least one screen (7, 8) rotatable with the cellular wheel (5) and delimiting the cells (18) of the cellular wheel sluice (25) and having screen openings; • d) means (9) for rotating the cellular wheel (5) of the cellular wheel sluice (25) together with the screen (7, 8) into various rotational positions relative to the casing (10), by means of which cells (18) of the cellular wheel (5) • d1) according to one rotation position (A) can be brought into connection both with a component feed opening (1) designed as a component passage opening in the casing (10) and also with a first powder discharge opening (3) designed as a powder passage opening in the casing (10), and • d2) according to a further rotation position (C) can be brought into connection with a further component discharge opening (2) designed as a component passage opening in the casing (10) for discharging the component (14) cleaned of adherent powder from the casing (10); and • e) means for generating at least one suction or compressed air flow, by means of which means in the one rotation position (A) of the cellular wheel (5) at least one component (14) with adherent powder is introduced through the component feed opening (1) into a cell (18) of the cellular wheel sluice (25) and at least one portion of the powder adhering to the component (14) is removed from the component (14) and can be transported through the screen openings in the screen (7, 8) into the first powder discharge opening (3).

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