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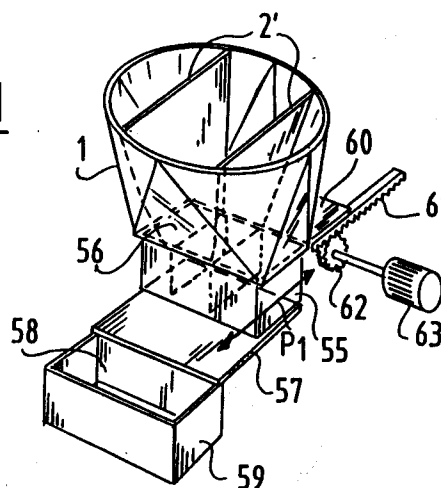
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(54) **Device for dosing and mixing fractions for a specific mortar.**

(57) A device for dosing, mixing and applying a mortar suitable for pointing, bricklaying and/or floors and consisting of at least an adhering or binding agent such as a cement and a sand fraction in addition to water, said device consisting of a housing (55) slidable relative to the outlet of the silo (1) and provided with a number of dosing chambers (56) and with a valve (60) closing the outlet opening of a silo, wherein beneath the slidable housing is arranged a fixed base plate having a passage opening moved relative to the outlet opening of the silo for discharging the fractions out of the dosing housing.

FIG.1**EP 0 657 261 A1**

The invention relates to a device for dosing and mixing fractions for a mortar suitable for pointing, bricklaying and/or floors and consisting of at least a bonding agent or binder such as a cement and a sand fraction provided with a silo having compartments for each fraction, a dosing unit arranged under the silo with a chamber of predetermined volume arranged for each fraction.

The invention has for its object to simplify the structure of a device as stated above.

The device according to the invention is distinguished in that the dosing unit consists of a housing slidable relative to the outlet of the silo and provided with a number of dosing chambers and with a valve closing the outlet opening of a silo, wherein beneath the slidable housing is arranged a fixed base plate having a passage opening moved relative to the outlet opening of the silo for discharging the fractions out of the dosing housing.

Owing to a dosing unit having a number of dosing chambers, the mass to be mixed is always in the correct ratio for the specific application of the mortar. In order to fill up the different dosing chambers with the fraction from the silo the invention further suggests to provide the dosing unit with a shaking or vibrating means, for example an electric massage motor.

Further the invention recommends a measuring means attached to the base plate in order to measure the zero weight and the maximum weight of the dosing unit, so determining in a simple manner the correct ratio for the mixture.

Mentioned and other features will be further elucidated in the figure description hereinbelow of a number of embodiments. In the drawing:

Fig. 1 is a perspective top view of the underside of the silo with dosing unit according to the invention,

fig. 2 is a side view of the embodiment of fig. 1, which is provided here, however, with a weight measuring means.

Fig. 1 shows an embodiment of the silo 1 and dosing unit, wherein the dosing unit consists of a dosing housing 55 provided with three dosing chambers 56. The latter connect onto the compartment silo 1 which is provided here with two partitions P'. Because the partitions are arranged at a determined position in the dosing housing 55, the content of the dosing chamber 56 in the dosing housing 55 will differ depending on the desired volumetric mixing of the fractions for the mortar. The dosing housing 55 is closed on the underside by a fixed base plate 57 which leads to a passage opening 58 of a downward oriented funnel 59. The funnel 59 connects for instance onto a mixing device.

The dosing housing 55 is also provided with a closing plate 60 fixed thereto, the breadth of which

corresponds with the breadth of the outlet opening of the silo 1 and the length of which corresponds with the length of travel of the dosing housing 55 when this can slide reciprocally in the direction of arrow P1 from the position drawn in fig. 1 to the position above the passage opening 58. The sliding of the housing 55 can be carried out in random manner and is depicted here as a gear rack and gear wheel drive, wherein the gear rack 61 is fixed to the valve 60 and the gear wheel 62 is driven by a reversible motor 63.

Fig. 2 shows an embodiment which corresponds substantially with that of fig. 1, with the understanding that in the base plate 57 is arranged a measuring device 64 which can generate a signal to the central control unit 8 such that only when a determined filling weight is reached in the dosing housing 55 is the displacing of the housing 55 started by the starting signal for the motor 63 from the central control unit 8. Mixing and applying will otherwise take place in the manner as known in the art.

The central control unit 8 can also be provided with a protection during the zero measuring of the dosing unit 55 such that, after reaching the zero weight, the valve 60 is returned to the closed position. Thus ensured is that the dosing unit 55 is completely emptied.

Proposed in fig. 1 is to embody the dosing unit 55 with a vibrating or eccentric mass motor (not shown), which is preferably arranged on the side of the cement dosing chamber. Thus is ensured that the dosing unit 55 is set into vibration and a correct quantity of cement can be carried out of the silo into the dosing unit in order to reach the desired weight in volumetric measured cement fraction.

The invention is not limited to the above described embodiments.

Claims

1. Device for dosing and mixing fractions for a mortar suitable for pointing, bricklaying and/or floors and consisting of at least a bonding agent or binder such as a cement and a sand fraction provided with a silo having compartments for each fraction, a dosing unit arranged under the silo with a chamber of predetermined volume arranged for each fraction, **characterized in that** the dosing unit consists of a housing slidable relative to the outlet of the silo and provided with a number of dosing chambers and with a valve closing the outlet opening of a silo, wherein beneath the slidable housing is arranged a fixed base plate having a passage opening moved relative to the outlet opening of the silo for discharging the fractions out of the dosing housing.

2. Device as claimed in claim 1, **characterized in that** the dosing unit is provided with a shaking or vibrating means, for example an eccentric masses motor.

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3. Device as claimed in claim 1, **characterized in that** a measuring means is arranged in the base plate for determining the total filling weight and the zero weight of the dosing unit.

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FIG.1

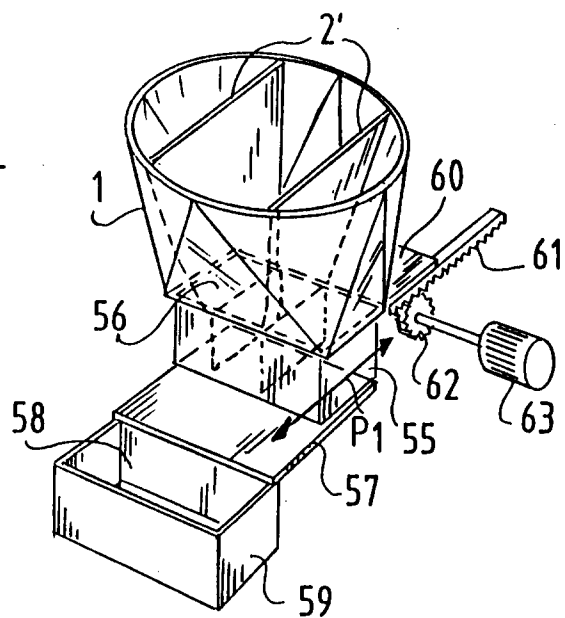
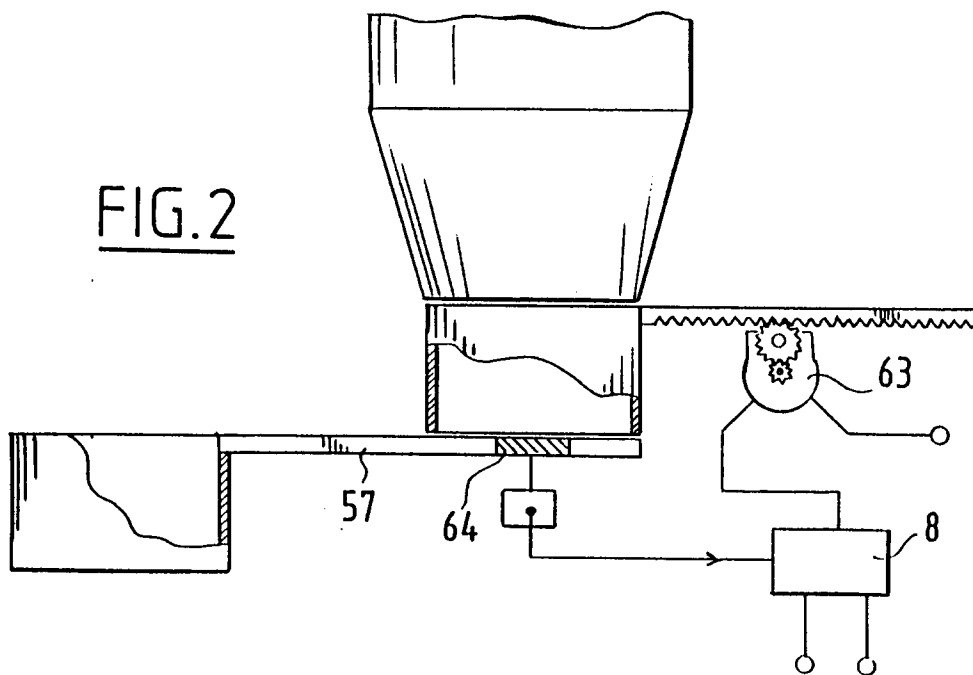


FIG.2





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EUROPEAN SEARCH REPORT

Application Number
EP 95 20 0067

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
X	US-A-1 378 572 (STEVENS) ---	1	B28C7/04
X	US-A-3 746 313 (WEEKS) ---	1	
X	FR-A-2 221 087 (GEFFE) ---	1	
X	GB-A-1 317 412 (ANCHOR) ---	1	
X	DE-C-364 942 (STOLL) ---	1	
A	US-A-1 914 713 (GILSON) ---	2	
A	DE-A-14 24 604 (PREMIER PORTLAND) * claim 1 *	3	
A	US-A-4 556 323 (ELKIN) ---		
A	GB-A-392 007 (FAIRWEATHER) -----		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			B28C B01F
Place of search		Date of completion of the search	Examiner
THE HAGUE		13 March 1995	Peeters, S
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