

Title (en)

Apparatus for compacting compressible waste.

Title (de)

Vorrichtung zum Verdichten von pressbaren Abfällen.

Title (fr)

Dispositif pour le compactage de déchets compressibles.

Publication

EP 0453870 A2 19911030 (DE)

Application

EP 91105651 A 19910410

Priority

DE 4013134 A 19900425

Abstract (en)

[origin: CA2041139A1] An apparatus for compacting compressible waste such as cardboard, cartons, wood refuse, domestic garbage or the like should be designed in such a way that the garbage is reliably conveyed at specific uniform intervals into a receiving container or the like and that during the conveying process odour problems due to the conveyed waste cannot occur. According to the invention, this is made possible by providing a rotatably driven cylindrical drum which is mounted in a housing having a substantially vertical material feed and a material discharge channel and having a chute of square or rectangular cross-section, symmetrical to the drum, which penetrates into the drum from its casing and which serves to mount a cross-sectionally fitting compacting piston, which has two partially cylindrical surfaces, opposite one another, the radii of which correspond to the radius of the drum and the distance between the cylindrical surfaces being smaller than the diameter of the drum, two flat surfaces which are opposite one another are provided between the surfaces, the distance between the two flat surfaces being likewise smaller than the diameter of the drum wherein the compacting piston has, in a plane which is vertical to the axis of the drum, an elongated hole like guide which is inclined with respect to the chute and of which the ends point, in the direction of rotation of the drum, toward the trailing connecting edges between the partially cylindrical and the flat surfaces of the drum, wherein a fixed pivot engages the guide, the axis of the guide being in the vertical median plane through the drum and the exterior diameter corresponds to the distance between the two straight surfaces of the guide, wherein the pivot is offset in downward direction below the horizontal median plane through the drum, and is thereby directed toward the discharge channel.

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Abstract (de)

Eine Vorrichtung zum Verdichten von preßbaren Abfällen, wie Pappe, Karton, Holzabfälle, Hausmüll oder dergleichen soll so ausgebildet werden, daß der Müll mit Sicherheit in bestimmten gleichmäßigen Abständen in einen Aufnahmebehälter oder dergleichen gefördert wird und daß während des Fördervorganges Geruchsbelästigungen durch den geförderten Müll nicht auftreten können. Hierzu ist erfindungsgemäß vorgesehen, daß eine in einem Gehäuse mit je einem etwa senkrecht liegenden Materialzufuhr- und Materialausgabekanal angeordnete, drehbare und angetriebene zylindrische Trommel vorgesehen ist, die einen im Querschnitt quadratischen oder rechteckigen zur Trommel symmetrischen Schacht aufweist, der die Trommel von deren Mantel aus durchdringt und der der Aufnahme eines im Querschnitt angepaßten Verdichtungskolbens dient, welcher zwei teilzylindrische, einander gegenüberliegende Mantelflächen hat, deren Radien dem Radius der Trommel entsprechen, und deren Abstand kleiner als der Durchmesser der Trommel ist, wobei zwischen den Mantelflächen zwei einander gegenüberliegende ebene Flächen angeordnet sind, deren Abstand ebenfalls kleiner als der Durchmesser der Trommel ist und wobei der Verdichtungskolben in einer sich senkrecht zur Trommelachse erstreckenden Ebene eine gegenüber dem Schacht geneigt angeordnete langlochartige Führung aufweist, deren Enden auf die in Drehrichtung der Trommel rückwärtigen Verbindungskanten zwischen den teilzylindrischen und den ebenen Mantelflächen der Trommel weisen, wobei in die Führung ein ortsfester Zapfen eingreift, dessen Achse in der senkrechten Mittelebene durch die Trommel liegt und dessen Außendurchmesser dem Abstand der beiden geraden Flächen der Führung entspricht, wobei der Zapfen unterhalb der horizontalen Mittelebene durch die Trommel nach unten, also in Richtung des Ausgabekanal versetzt angeordnet ist. <IMAGE>

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