

Title (en)
Charging apparatus for a shaft furnace.

Title (de)
Vorrichtung zur Beschickung eines Schachtofens.

Title (fr)
Installation de chargement d'un four à cuve.

Publication
EP 0196486 A1 19861008 (FR)

Application
EP 86102912 A 19860305

Priority
LU 85811 A 19850315

Abstract (en)
[origin: US4728240A] An apparatus for distributing charge material to a shaft furnace is presented which effectively reduces the segregation of the particles in a storage housing positioned above the shaft furnace. In the present invention, the storage hopper and the distribution device are movable about the vertical axis of the shaft furnace and are mounted inside a sealed chamber. Above the chamber are arranged at least two locks which are each provided with upper and lower sealing flaps. Preferably, the storage hopper and the bottom of each of the locks are in the configuration of tapered funnels, the conical wall of which forms an angle of less than or equal to about 30 DEG with respect to the vertical axis of the furnace. The storage hopper is preferably supported by support and guide rollers which move on a circular rail integral with the wall of the sealed chamber and is subjected to the action of a drive mechanism for rotation about the vertical axis of the furnace. Anti-segregation boxes are preferably provided both in the locks and in the hopper, to ensure better filling and guarantee a more uniform distribution of the particles of differing granulometry.

Abstract (fr)
L'installation comprend un dispositif de distribution à goulotte rotative ou oscillante, une trémie de stockage montée sur l'axe vertical du four et dont l'orifice d'écoulement vers la goulotte est contrôlé par un organe de dosage conçu de façon à agrandir et réduire la section d'écoulement symétriquement autour dudit axe vertical. Pour réduire la ségrégation des particules, la trémie de stockage (16) et l'organe de dosage (30) sont mobiles autour de l'axe vertical (0) et sont montés à l'intérieur d'une chambre étanche (20) qui est surmontée d'au moins deux sas pourvus chacun de clapets d'étanchéité supérieurs (52) et inférieurs (50), et la trémie (16) et le fond de chacun des sas sont en forme d'entonnoir effilé dont la paroi conique fait un angle inférieur à 30° avec l'axe vertical (0) du four.

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C21B 7/18; **F27B 1/20**

IPC 8 full level
C21B 7/18 (2006.01); **C21B 7/20** (2006.01); **F27B 1/20** (2006.01)

CPC (source: EP KR US)
C21B 7/18 (2013.01 - EP KR US); **C21B 7/20** (2013.01 - EP US); **F27B 1/20** (2013.01 - EP US)

Citation (search report)
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