

Title (en)  
Counterbalanced metallurgical furnace

Title (de)  
Metallurgischer Ofen mit Gegengewicht

Title (fr)  
Four métallurgique avec contrepoids

Publication  
**EP 2299222 A1 20110323 (EN)**

Application  
**EP 09170919 A 20090922**

Priority  
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Abstract (en)  
The invention relates to a metallurgical furnace for melting and refining nonferrous metals. The furnace (10) comprises an outer shell (11) of steel material surrounding the interior of the furnace (10) and being at its both ends in the longitudinal direction closed by end walls. Means (17) are arranged for providing process media such as gas, liquid or solid powder into the interior of the furnace (10). The furnace is provided with at least one burner (16) opening into the interior of the furnace (10), for combustion of fuels with air or oxygen enriched air in the interior of the furnace (10). The furnace is further provided with openings (18, 19, 20) for mass transfer of materials in solid and/or liquid and/or gaseous form into and/or out of the interior of the furnace (10). The furnace (10) is mounted for rotation about a longitudinal, substantially horizontal axis of rotation (A). In accordance with the invention the interior of the furnace is divided into at least two separate chambers (14, 15), namely a primary chamber (14) and a secondary chamber (15), by a partition wall (13) substantially parallel to the longitudinal axis of rotation (A) of the furnace (10). The primary chamber (14) is a processing chamber in which the processing of metals takes place and the inner surface of which processing chamber (14) is covered by a refractory lining (12). The secondary chamber (15) consists of at least one counter weight chamber in which a counter weight (22, 32) for the furnace (10) is arranged.

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