

Title (en)

PROCESS FOR HARDENING MOULDING SAND ARTICLES

Publication

EP 0313830 B1 19910424 (DE)

Application

EP 88115750 A 19880924

Priority

DE 3736775 A 19871030

Abstract (en)

[origin: US4886105A] A process is described for curing sand moldings, in particular casting cores, by the cold box process. In this process a catalyst containing gas mixture escaping from the mold is passed over a mixture feed side of a semipermeable membrane while a pressure is maintained on the permeate side of the membrane which is less than the pressure on the mixture feed side, whereby the catalyst vapors preferentially permeate through the membrane, and a permeate carrier gas stream which is, in particular, 50 to 300 liters greater than the permeate stream passing through the membrane per m² and per hour is passed over the permeate side of the membrane. The catalyst, in particular a tertiary amine, is greatly concentrated in the permeate carrier gas stream and can simply and inexpensively be removed from the latter by condensation. Inexpensive, virtually complete recovery of the expensive catalyst is possible using the process.

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