

Title (en)
Shell molding apparatus

Title (de)
Formmaschine

Title (fr)
Machine à mouler

Publication
EP 0819486 B1 20010613 (EN)

Application
EP 96111598 A 19960718

Priority
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Abstract (en)
[origin: EP0819486A1] A shell molding apparatus includes a lower die and an upper die. The lower die includes a plurality of shell molding inserts, each having the shape of a halved cylinder, spiny insert receiving recesses which are formed in undercut portions formed by curved surfaces of adjacent shell molding inserts, and spiny inserts (22) retractably provided in the spiny insert receiving recesses, each spiny insert having a curved surface of the same curvature as the curved surface of the shell molding insert and provided with many protrusions on the curved surface. The upper die has a plurality of continuously formed recesses corresponding to the plurality of shell molding inserts of the lower die. The shell molding apparatus further includes a spiny insert actuating mechanism for projecting/retracting spiny inserts by operating withdrawal pins connected to the spiny inserts, a stopper mechanism for positioning the withdrawal pins at a position where the withdrawal pins exhibit the same thermal expansion, and a thermal expansion absorbing mechanism for the withdrawal pins. The shell molding apparatus further includes a sand releasing mechanism for preventing shell sand from stagnating between spiny insert receiving recesses and the spiny inserts, resulting in smooth performance of the spiny inserts. <IMAGE>

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