

Title (en)
UNIVERSAL ROLLING MILL STAND WITH ADJUSTABLE HORIZONTAL AND VERTICAL ROLLS

Publication
EP 0291719 A3 19900110 (DE)

Application
EP 88106436 A 19880422

Priority
DE 3716501 A 19870516

Abstract (en)
[origin: US4944175A] A universal rolling mill stand with adjustable sets of horizontal rolls and vertical rolls guided in window-type recesses of the roll housings. Each roll housing is formed by a pair of housing posts with cross-members connected by means of transverse supports. The bearing chocks of the set of horizontal rolls are vertically movable between the housing posts of the respective pair of housing posts and the bearing chocks of the set of vertical rolls are moved horizontally between outwardly cantilevering attachments of the pairs of housing posts. The upper cross-members connecting the pairs of housing posts can be raised and swung horizontally. A frame-type cage having plate-like wall members is connectible to lifting devices. The outer surfaces of the wall members of the cage are guided on guide surfaces of the housing posts of pairs of housing posts which face each other. The cage is vertically and horizontally movable with the mill stand and can be installed and removed from the rolling mill stand. The inner surfaces of the wall members of the cage form guide surfaces for adjustment movements of the bearing chucks of one or more of the rolls. The bearing chocks are supported by the cage and/or can be coupled to each other so that one is suspended from the other.

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B21B 2013/106 (2013.01 - EP US); **B21B 2273/22** (2013.01 - EP US)

Citation (search report)
• [Y] DE 1602134 A1 19700409 - SIEMAG SIEGENER MASCH BAU
• [Y] DE 471156 C 19290207 - DEMAG AG
• [A] DE 919528 C 19541025 - SIEMAG VERTRIEBSGESELLSCHAFT
• [A] AT 339853 B 19771110 - NEUMANN KLAUS DIPL ING [DE]
• [A] DE 1916806 A1 19700305 - ISHIKAWAJIMA HARIMA HEAVY IND
• [A] DE 1752581 A1 19710812 - BWG BERGWERK WALZWERK

Cited by
CN102189115A; AU613283B1; EP0557874A1; US5327761A; DE3834587A1; EP0363731A3; US5050415A; EP0531676A1; US5457979A; EP0408281B1

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