

Title (en)
LIFTING DEVICE

Title (de)
HUBVORRICHTUNG

Title (fr)
DISPOSITIF DE LEVAGE

Publication
EP 3319901 A1 20180516 (DE)

Application
EP 16762756 A 20160831

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Abstract (en)
[origin: WO2017037085A1] The invention relates to a lifting apparatus suitable for an industrial processing station, in particular a lifting table suitable for conveying a body shell in the series production of motor vehicles, wherein the lifting apparatus is designed to convey a workpiece on a top frame (8) moved in a purely vertical direction. In this case, the lifting apparatus has, as first vertical guide, at least one isosceles slider-crank mechanism (1, 2, 3, 4, 5) actuated by a motorized drive element (13+6, 7, 9, 12) In this case, the isosceles slider-crank mechanism, which consists of a fixed-bearing swing arm (6) with the swing-arm bearing (4) thereof, a control arm (3) with the control-arm guide (5) thereof, a control-arm central joint (2) and a fixed-bearing joint (1) connected to the top frame (8), is configured such that it is moved by the actuation of the tie rod (9) acting on the fixed-bearing swing arm (6). In particular the use of an isosceles slider-crank mechanism, which is also known in the literature as a "Scott-Russel mechanism", provides a simple and effective variant of a vertical guide system which allows low overall heights with minimum production outlay.

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