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LINEAR GUIDE

Title (de)
LINEARFÜHRUNG

Title (fr)
GUIDE LINEAIRE

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Abstract (en)
[origin: WO9611345A1] The invention concerns a linear guide for clearance-free lifting movements which are secured against twisting. The linear guide comprises: at least one guide sleeve (FB) with a cylindrical inner bearing surface; a guide shaft (FW) with at least three outer bearing surfaces (AL) which extend in the longitudinal direction and are preferably formed by grooves; and a plurality of spheres (K) disposed under pretension between the inner bearing surface (IL) of the guide sleeve (FB) and the outer bearing surfaces (AL) of the guide shaft (FW). The outer bearing surfaces (AL) are formed such that when a relative rotation of the guide sleeve (FB) and guide shaft (FW) is attempted, the pretension increases and the desired securing against twisting is brought about as a result of a simultaneous increase in friction. It is thus possible to secure the components against twisting with an extremely simple design. The linear guides described are suitable for use in the placement head of an automatic SMD-placement device, the suction pipette being mounted on the guide sleeve, and the guide shaft (FW) being constructed such that it can be connected as a hollow shaft to a vacuum source.

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