

Abstract

Displacement machine for compressible media

The displacement machine for compressible media, in particular a dry-running vacuum pump, having at least two shafts (3) with rotors (4) which are designed as helical profile bodies (4) and whose profiles intermesh like gears during the rotation and run free of contact relative to one another, the lead of the helical profile bodies decreasing from the inlet to the outlet, is characterized in that the helical profile bodies (4) are of double-start design, and the leads (S_1 , S_3) at the inlet end and outlet end of the helical profile bodies (4) are constant, and in between the lead (S_2) decreases continuously from the larger lead (S_1) at the inlet end to the smaller lead (S_3) at the outlet end.

Fig. 2