

A low-pressure turbine of a turbomachine, the turbomachine comprising a high-pressure turbine disposed upstream from the low-pressure turbine, and an exhaust casing disposed downstream from the low-pressure turbine, the low-pressure turbine comprising a rotor secured on a low-pressure trunnion, a low-pressure shaft, a first rolling bearing disposed on said low-pressure shaft and supporting a high-pressure trunnion having fastened thereon a rotor of the high-pressure turbine, a second rolling bearing disposed on said low-pressure trunnion downstream from said first rolling bearing and enabling said low-pressure trunnion to be centered relative to said exhaust casing, and a system of fluting for enabling said low-pressure trunnion to drive said low-pressure shaft, said system of fluting being disposed between said first and second rolling bearings.