

WITH ENERGY-EFFICIENT HIGH-TORQUE MOTION MECHANISM AND WITH PISTON, INTERNAL/EXTERNAL COMBUSTION ROTARY ENGINE

Abstract

In the designs where the linear motion is turned to circular motion, when the pressure is highest, the angle between the piston axis and the output shaft axis is about 10-15 degrees. Therefore, the overall efficiency is reduced as the friction force increases too much. In this invention, the main shaft (8) used to accommodate the inner rail (10) and the cylinders (14) rotating in the same direction with 1/1 ratio. The pistons (7), which are positioned on the main shaft (8), continue the cycle by passing the inner rail (10) to the outer rail (9) and then again to the inner rail (10). When the pistons (7) rotate by acting on the circumference of these rails (9 and 10), the engine starts by the pressure generated by the combustion of the fuel mixed with the air. At the time of peak pressure at the time of work, the angle between the axis of the piston (7) and the axis of the rear output gear (3) is 90 degrees. Thus, higher torque values can be obtained than traditional internal combustion engines. In addition, during the work and exhaust times and the constant volume at which constant combustion occurs, the piston (7) always acts on the rails at an angle of 90 degrees. At the time of suction and compression, there is an effect of close to 90 degrees. Thus, the piston-cylinder mechanism is only subjected to axial pressure. Each piston (7) forms a work time of 360 degrees in which the main shaft (8) is connected. Thus, for all main shafts (8) and cylinders (14), a total of 32 worktimes are generated in 360 degrees. The main shafts (8) can also be used in more than 1 number in a row.