

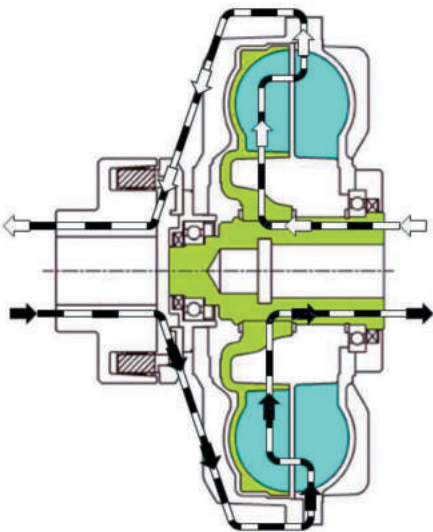


FEATURE

Here is the feature of the fluid coupling.

1. There are no mechanical connections, it can protect the motor and driven machine from impact loads.
2. It can replace general motor instead of special motors with soft starter devices.
3. Especially for Chamber type, the smooth application of fluid coupling torque provides a smooth start-up of belt conveyor to protect the belt from damaging stresses.

STRUCTURE



The fluid coupling is a hydrodynamic transmission. As shown in figure 1, both blades (impellers) are assembled to face each other. When the input blade moves, a certain amount of oil is extruded outwards, and the kinetic energy hits the output blade and the power is transferred. The fluid coupling generates slip (difference between input and output speed) in normal operation conditions and the value is within 1.5% to 6%. The formula for slip, from which the power loss can be deduced is as follows:

$$\text{Slip (\%)} = \frac{\text{Input speed} - \text{Output speed}}{\text{Input speed}} \times 100$$