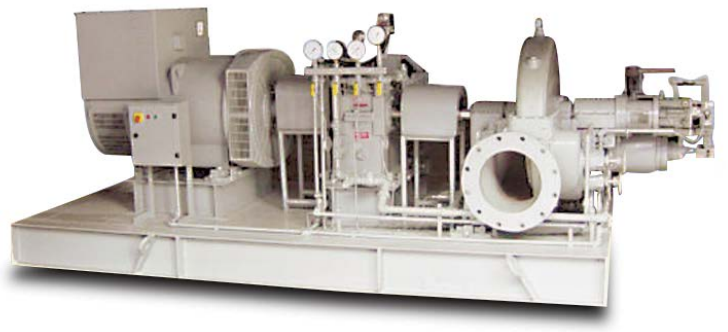
FORMSPRAG CLUTCH™
A REGAL REXNORD BRAND

Application Success Story



FWW Overrunning Clutch Couplings

Dual-Drive Steam Turbine Generator Set

HIGHLIGHTS

- Comprised of an FSO clutch with a disc coupling
- Torque capacity of 2,066 lb.ft. (2800 Nm)
- Formsprag exclusive PCE® sprag design

PROBLEM

A manufacturer of turbine generator sets required overrunning clutch couplings for use on in-line mounting of dual-drive fan systems to provide a smooth transfer of power from one drive/power system to another (electric motor to steam turbine and gear reducer).

The clutch coupling, mounted between the output of a steam turbine reducer and the fan, allows the fan to be initially started with an electric motor without back driving the steam turbine. When steam becomes available, the clutch coupling allows the steam turbine drive to come up to speed (over any amount of time) and automatically transfers power. When the speeds are matched, the starting electric motor can be turned off to save its utility cost.

SOLUTION

Formsprag Model FWW 640 clutch couplings were selected with a torque capacity of 2,066 lb.ft. (2800 Nm). FWW clutch couplings are comprised of an FSO clutch with a disc coupling. Since the FSO clutch does not accommodate any misalignment, a coupling is incorporated for shaft-to-shaft, in-line mounting.

The FWW 640 features PCE® sprags that are designed to overcome the effects of severe torsional and linear vibrations as well as high transient torque overloads. This Formsprag exclusive sprag design provides built-in protection from otherwise damaging overloads.

The low-maintenance FWW clutch coupling is torsionally rigid with no backlash. Units are designed for applications where the torque requirement is low in comparison to the shaft diameters. Both bore diameters in the coupling hubs are larger than the clutch bores.

US (Application Assistance)
1-800-348-0880 Press #2
formsprag.com

P-7461-FC 8/23