Francis Water Turbine for Hydroelectric Power Generation

This water turbine combines radial and axial flow concepts. It is designed for medium head and flow rates, with a runner and curved blades that efficiently convert water energy into rotational mechanical energy.

Overview

Francis Turbine for Hydroelectric Power

The Francis turbine is a versatile water turbine designed for medium head and flow rates, combining radial and axial flow concepts. It features a runner with curved blades that efficiently convert water energy into rotational mechanical energy. This turbine system integrates a spiral casing, adjustable guide vanes, and a draft tube to ensure optimal energy recovery and efficiency in hydroelectric power generation applications.

Technical Specifications

Power Rating (Pr)

600 MW
Max Power Output

Maximum Head (Hmax)	600 m
Runner Diameter (D1)	8 m

Components

System Components

- Runner with curved blades
- Spiral casing
- Adjustable guide vanes
- Draft tube