

# 1000MW Ultra-Supercritical Power Plant

1000MW ultra-supercritical power plants are designed for efficient electricity generation. These plants leverage advanced technology to achieve high performance and reduced emissions.

| 1000MW ultra-supercritical power plants |          |           |
|---|----------|-----------|
| Guoxin Xinhai power plant               | 2x1000MW | Completed |
| Shoude Hengsheng power plant            | 2x1000MW | Completed |
| Huaineng Hefeng power plant             | 2x1000MW | Completed |
| Huaineng Nanfeng power plant            | 2x1000MW | Completed |



**Guoxin Xinhai power plant**  
Main steam Parameter: 3000t/h - 27MPa - 600°C, tower boiler.  
Coal Consumption Rate: 268g/kWh, Dust Emissions: 30mg/Nm3  
Total investment of US\$ 1.05 billion



## Overview

### Ultra-Supercritical Power Generation

This 1000MW ultra-supercritical power plant represents a high-efficiency solution for large-scale energy production. Designed to optimize thermal performance, the system utilizes advanced steam parameters to maximize output while maintaining stringent emission standards. It is a robust, completed infrastructure solution suitable for utility-scale power generation.

## Technical Specifications

### Capacity

**1000 MW**  
Unit Capacity

**2000 MW**  
Total Plant Capacity

### Main Steam Parameters

| Parameter   | Value    |
|-------------|----------|
| Flow Rate   | 3000 t/h |
| Pressure    | 27 MPa   |
| Temperature | 600 °C   |

## Performance & Efficiency

|                       |                       |
|-----------------------|-----------------------|
| Coal Consumption Rate | 268 g/kWh             |
| Dust Emissions        | 30 mg/Nm <sup>3</sup> |

## Project Details

### Project Status

Completed

### Boiler Configuration

Tower Boiler

### Total Investment

US\$ 1.05 billion