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**Geothermal Submersible Pump Best Practices for Europe , A Technical Guide for Selecting Geothermal Submersible Pumping Systems**

*Geothermische Tauchpumpen Best Practices für Europa - Ein technischer Leitfaden für die Auswahl geothermischer Tauchpumpensysteme*

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Geothermal submersible pumping systems are being widely used in binary cycle power plants in Turkey in conditions not well suited for line shaft pumps and other pumping systems. This lecture will start with a summary of the well types and conditions where geothermal submersible pumping (GSP) systems are advantageous. The goal is to offer a focused GSP selection guide based on technical and economic factors.

This lecture and paper discuss the technical considerations for metallurgy selection, equipment sizing, and equipment performance characteristics for all downhole components required for applicable geothermal well types and conditions throughout Europe. The paper compares permanent magnet motor and induction motor performance, both in terms of reliability and efficiency, and highlights recent advances made in heat resistance. It also discusses pump selection, the effect of geothermal fluid on downhole equipment, and component selection and alteration suggested for adding reliability in high-temperature, corrosive geothermal conditions.