**Qinshan**

Nuclear Power Plant

**Zhejiang Province, China**

Qinshan, the first Chinese nuclear power plant that was domestically designed and constructed, has been operated since 1991. It is located about 100 km away from Shanghai in the Zhejiang Province.

**Customer:**
Qinshan Nuclear Power Corporation

**Application:**
300 MW PWR

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**Safety and reliability**

KSB’s reactor coolant pump RER, equipped with three mechanical seals (double-redundant) plus two standstill seals and thus making for absolute operational safety and reliability, constitutes the core of the plant. Our 23-stage RVM pump makes its contribution by supplying sealing water to the RER’s mechanical seal and water to the control rod drive mechanism. Furthermore, it reliably keeps the pressure in the chemical and volume control system constant. And alongside the pumps, our stop valves of the type NUCA ensure perfect operation in the high-pressure circuit. Our scope of supply was rounded off by KSB Service supervising the erection, commissioning as well as the instructing and training.

Highest-quality state-of-the-art technology and KSB’s excellent references were the decisive arguments for the customer to place the order with KSB.
Qinshan, China – Scope of supply and technical data

**KSB AG:**
- Two reactor coolant pumps of type RER
- Two centrifugal charging pumps of type RVM
- Four stop valves of type NUCA-A320 for the high-pressure circuit of the reactor coolant pump

**KSB Shanghai Pump Co. Ltd.:**
- Four high-pressure safety injection pumps of type HPSI
- Two residual heat removal pumps of type RHR
- Two safety containment spray pumps of type SCS
- More than thirty-five auxiliary pumps

### Technical Data

**RER Reactor coolant pump**
- Flow rate: 16,100 m³/h
- Head: 75 m
- Temperature: 100 °C
- Pressure: 172 bar
- Speed: 1,488 min⁻¹

**RVM Centrifugal charging pump**
- Flow rate: 25 m³/h
- Head: 1,770 m
- Temperature: 100 °C
- Pressure: 206 bar
- Speed: 2,955 min⁻¹

**HPSI High-pressure safety injection pump**
- Flow rate: 75 m³/h
- Head: 832 m
- Temperature: 135 °C
- Pressure: 135 bar
- Speed: 2,960 min⁻¹

**RHR Residual heat removal pump**
- Flow rate: 450 m³/h
- Head: 83 m
- Temperature: 200 °C
- Pressure: 50 bar
- Speed: 1,475 min⁻¹

**SCS Safety containment spray pump**
- Flow rate: 360 m³/h
- Head: 130 m
- Temperature: 135 °C
- Pressure: 50 bar
- Speed: 2,975 min⁻¹

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**Should you need more information, please do not hesitate to contact us:**

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