Siemens Steam Turbines

Large Scale Product Line (90 – 1,900 MW)

Answers for energy.

SIEMENS

Highly efficient product line for state of the art CCPP and SPP

- Top performance
- Maximum flexibility
- Long life
- Large reference base

SST-6000 series sub/supercritical
H-I-L-(L)-(L) (former: HMN)

- Output: 300–1,200 MW (SPP)
- Main Steam:
  - Temperature: up to 600 °C
  - Pressure: up to 300 bar
- Reheat Steam: up to 620 °C
- Exhaust Areas:
  - 50 Hz: 5 m^2 to 16 m^2
  - 60 Hz: 4.4 m^2 to 11.1 m^2
- Installed Fleet: 175 units

SST-5000 series subcritical
HI-L-(L) (former: KN)

- Output: 120–750 MW (SPP/CCPP)
- Main Steam:
  - Temperature: up to 565 °C/600 °C
  - Pressure: up to 177/190 bar
- Reheat Steam: up to 565 °C/600 °C
- Exhaust Areas:
  - 50 Hz: 5 m^2 to 16 m^2
  - 60 Hz: 4.4 m^2 to 11.1 m^2
- Installed Fleet: 55 units

SST-3000 series subcritical
H-IL (former: HE)

- Output: 90–250 MW (CCPP)
- Main Steam:
  - Temperature: up to 565 °C
  - Pressure: up to 177 bar
- Reheat Steam: up to 565 °C
- Exhaust Areas:
  - 50 Hz: 5 m^2 to 16 m^2
  - 60 Hz: 4.4 m^2 to 11.1 m^2
- Installed Fleet: 66 units

Naming
SST = Siemens Steam Turbine
SST5 = 50 Hz
SST6 = 60 Hz

References

Wai Gao Qiao, Phase 3 – Units 7+8, China

- Output: 2x 1,000 MW
- SST5-6000 (H75 + I60 + L4x12.5)
- Main Steam:
  - Temperature: 600 °C
  - Pressure: 270 bar
- Reheat Steam: 600 °C
- Start of Operation: 2009

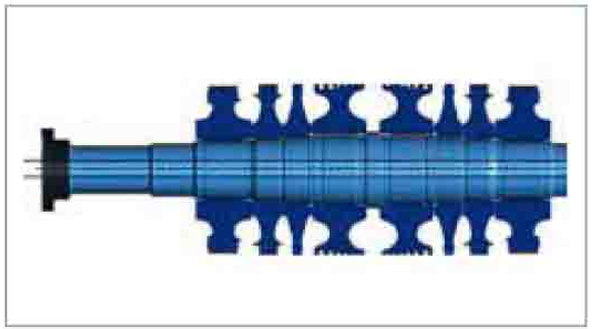
Isogo New #1, Japan

- Output: 600 MW
- SST5-6000 (H70 + I60 + L2x12.5)
- Main Steam:
  - Temperature: 600 °C
  - Pressure: 251 bar
- Reheat Steam: 610 °C
- Start of Operation: 2001

Wujing #11, China

- Output: 2x 300 MW
- SST5-5000
- Main Steam:
  - Temperature: 538 °C
  - Pressure: 167 bar
- Reheat Steam: 538 °C
- Start of Operation: 1992

Nuclear Products Range



- SST-9000 series – modular steam turbine platform for 50 Hz Nuclear Power Plant applications (PWR / BWR).
- Half speed design for highest output.
- Shrunk on disc design for the low pressure rotor has highest resistance against stress corrosion cracking.

SST-9000 series S-L-L-(L)

- Output: 1,000 – 1,900 MW
- Steam temperature: up to > 300 °C
- Steam pressure: up to 80 bar
- L turbine: 4-flow to 6-flow
- Exhaust Areas for half speed design:
  – 20 m² to 30 m²

Reactor Type, e.g.	Power Rating
CPR1000 (Reference: Yangjiang CPR, China)	1,100 MW
VVER	1,200 MW
AP1000	1,200 MW
EPR (Reference: Olkiluoto 3, Finland)	1,700 MW

- Highest availability and reliability
- Maximum flexibility
- Long life up to 60 years

Published by and copyright © 2010:
Siemens AG
Energy Sector
Freyeslebenstrasse 1
91058 Erlangen, Germany

Siemens Energy, Inc.
4400 Alafaya Trail
Orlando, FL 32826-2399, USA

For more information, please contact
our Customer Support Center.
Phone: +49 180/524 70 00
Fax: +49 180/524 24 71
(Charges depending on provider)
E-mail: support.energy@siemens.com

Fossil Power Generation Division
Order No. E50001-G210-A137-X-4A00
Printed in Germany
Dispo 34802, c4bs No. 7478
TH 214-091260 430167 DA 02102.0

Printed on elementary chlorine-free bleached paper.

All rights reserved.
Trademarks mentioned in this document
are the property of Siemens AG, its affiliates,
or their respective owners.

Subject to change without prior notice.
The information in this document contains general
descriptions of the technical options available, which
may not apply in all cases. The required technical
options should therefore be specified in the contract.

www.siemens.com/energy