



Month Year

CAME - GT

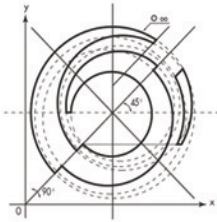
Workshop Brussel Feb 2001

EvGT

Karl-Johan Nilsson

16 February 2001

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EvGT - Wet Cycle

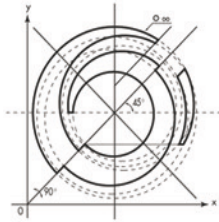
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Swedish Project Financed by

- Utilities
- Industri
- STEM (Swedish National Energy Administration)

Objective

**Confirm Commercial feasibility of
Wet Cycle Plant and
Prepare for a Demonstration Plant**

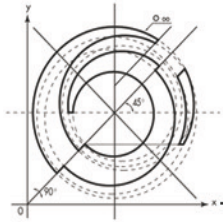


EvGT - Wet Cycle

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Partners in the project:

- Utilities
 - Vattenfall
 - Sydkraft
 - ELFORSK (Power producers Sweden & Denmark)
- Industri
 - ALSTOM (England and Sweden)
 - *Volvo Aero Group (not active since 1999)*
- Universities
 - LTH in Lund (operates a 600 kW Pilot plant)
 - KTH in Stockholm

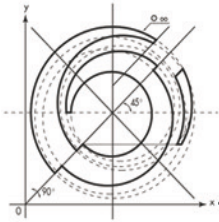


EvGT - Wet Cycle

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Milestones

- **1993, Started with a Pre Study**
- **1995 - 97, Phase 1, Pilot Plant was built in Lund**
- **1998 - 99, Phase 2, Plant Studies (5 - 10 MW and 70 - 80 MW)**
- **1999 - 00, Phase 3, Study of different concepts and components**
- **2000 - 03, Phase 4, Choice of wet concept, Dynamics, Preparation for Demo Plant. Ongoing.**

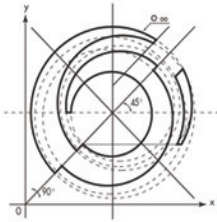


EvGT - Wet Cycle

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Approach CC Performance with SC Cost by:

- Humidification of air with use of exhaust heat
- Steam turbine is not needed
- Optimisation of GT design
- Simplification of Cycle



EvGT - Wet Cycle



Cycle Schematic Example "HAT"

