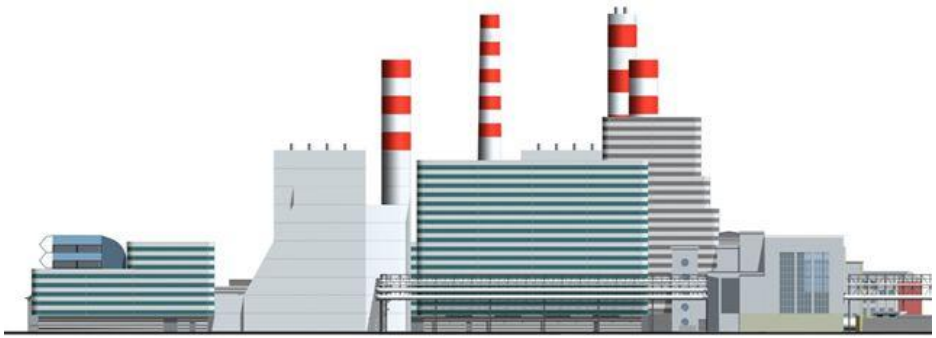
Combine Cycle Power Plant
Moncalieri Torino Italy

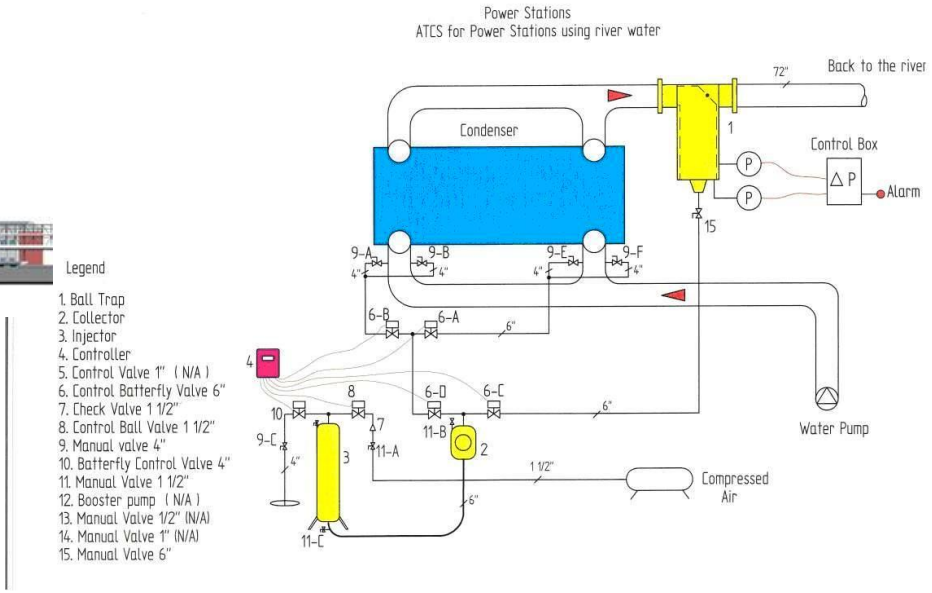
Install on main condenser 72”

AEM AZIENDA ENERGETICA METROPOLITANA TORINO S.p.A.

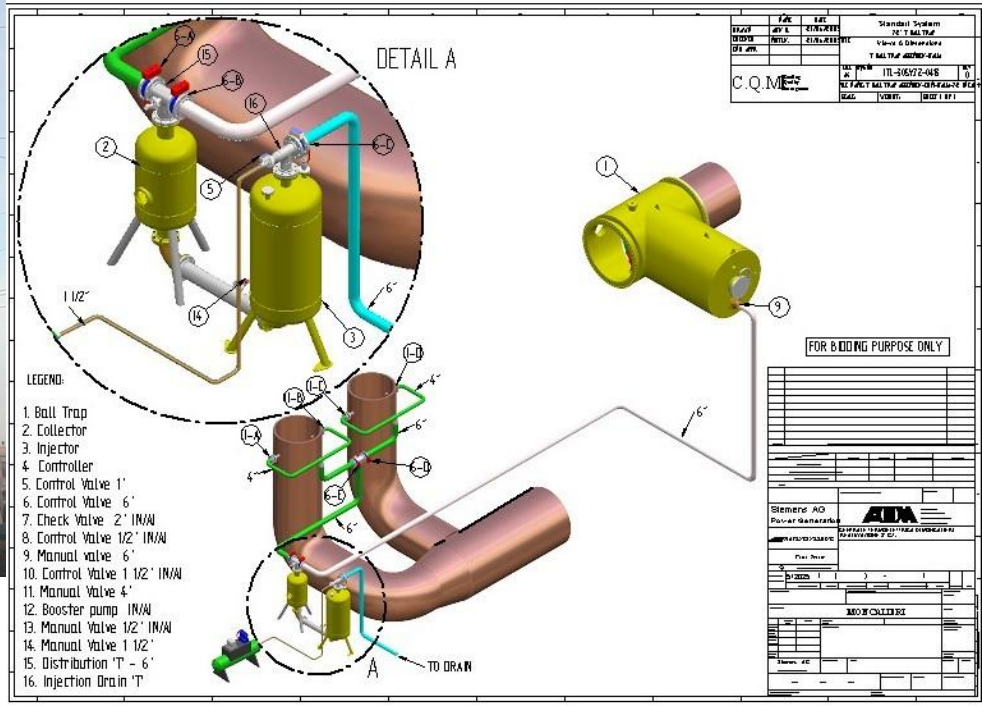
Siemens AG
Power Generation

FIATENGINEERING





Following a tender held in 2003 which we won over many able competitors, C.Q.M. has designing according to ASMA standards a 72" caliber ATCS system to the AEM Power Station in Torino Italia



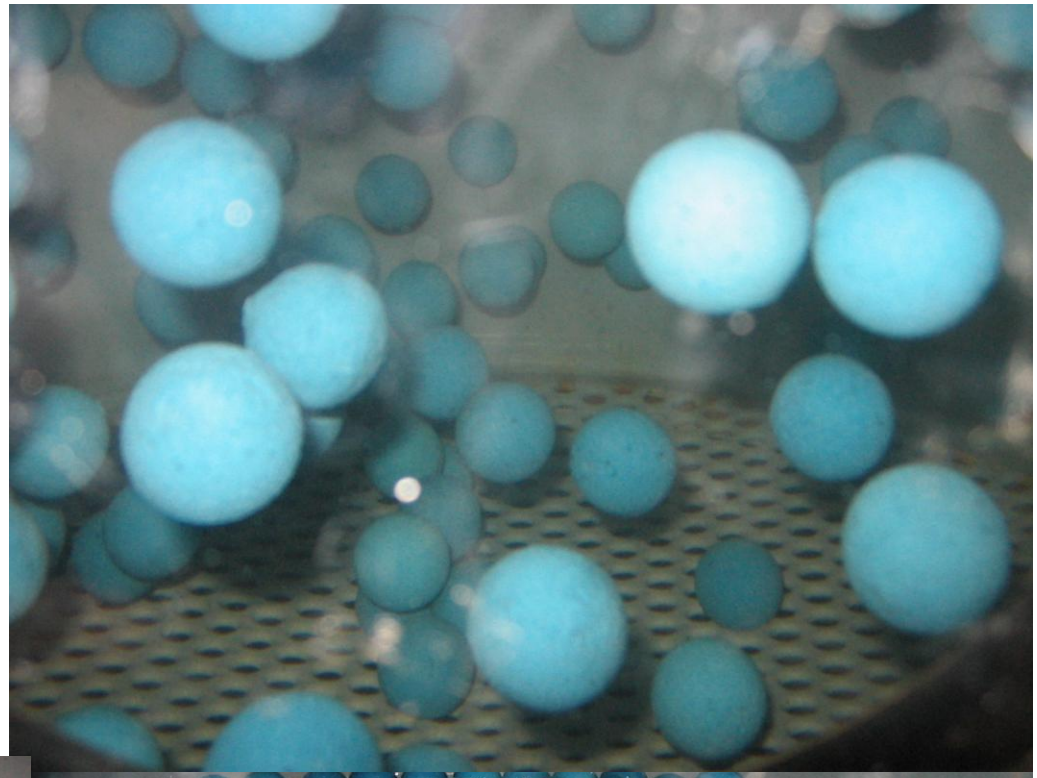
Our ATCS goes to the main condenser of the power station, whose turbine is produced by **Siemens AG**. The general contractor for the whole power station is **FiatEngineering**. Commissioning of the station is planned for 2005.

The design is unique in its solution of the problem of scale build up in heat exchangers, condensers, etc. All work was in accordance with ASME standards for pressure vessels and other standards as required.

The cooling water supply to the power station are river water, with plenty of sludge algae and dirt.

The cooling river water flow capacity is around - 22,000 m^3/h .

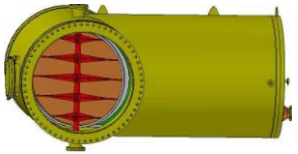
The condenser has 7,000 tubes.
Tubes inside diameter are 31 mm.
The ATCS system use 2000 32 mm sponge balls.

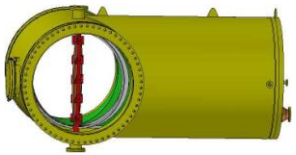


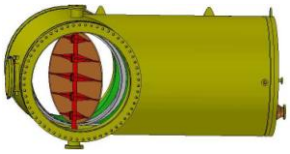
The ball trap size is 72”

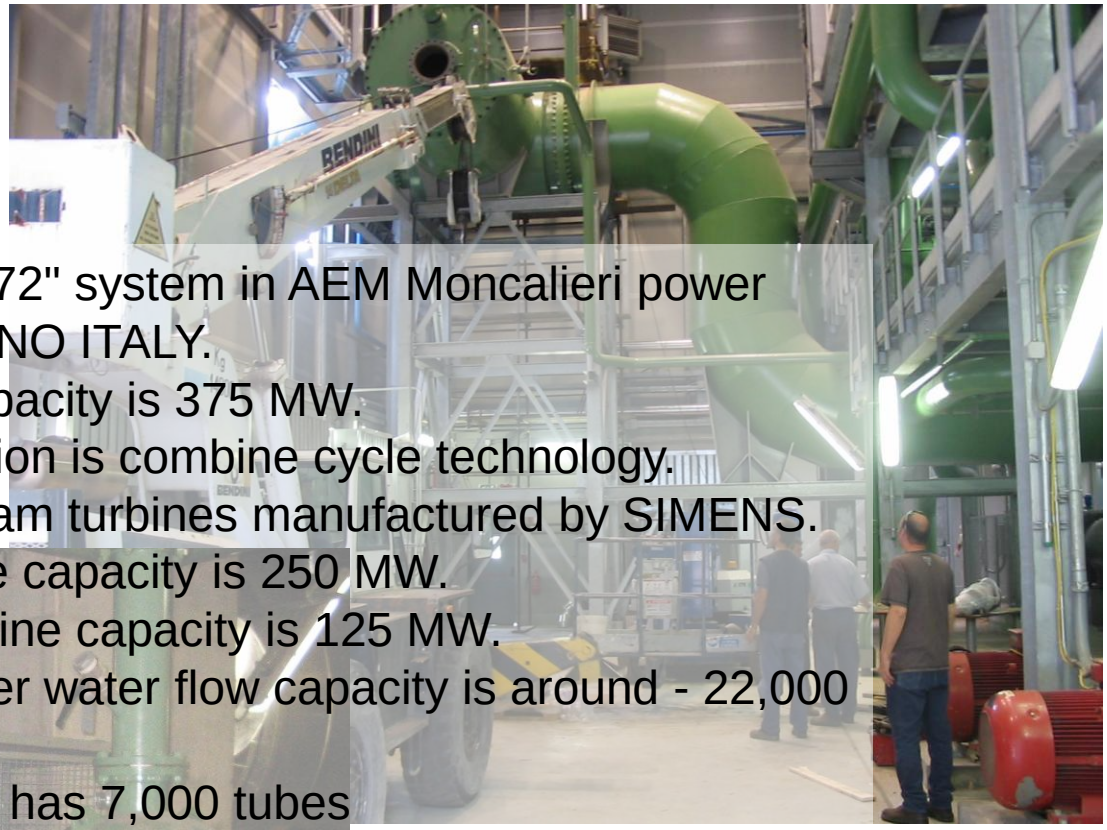
C.Q.M ATCS large systems has a special solution for odd dirt that bypass all the filter systems (like Debris filter)

This unique C.Q.M ball trap has special backwash disk that enable self washing by turning the disk 180°.

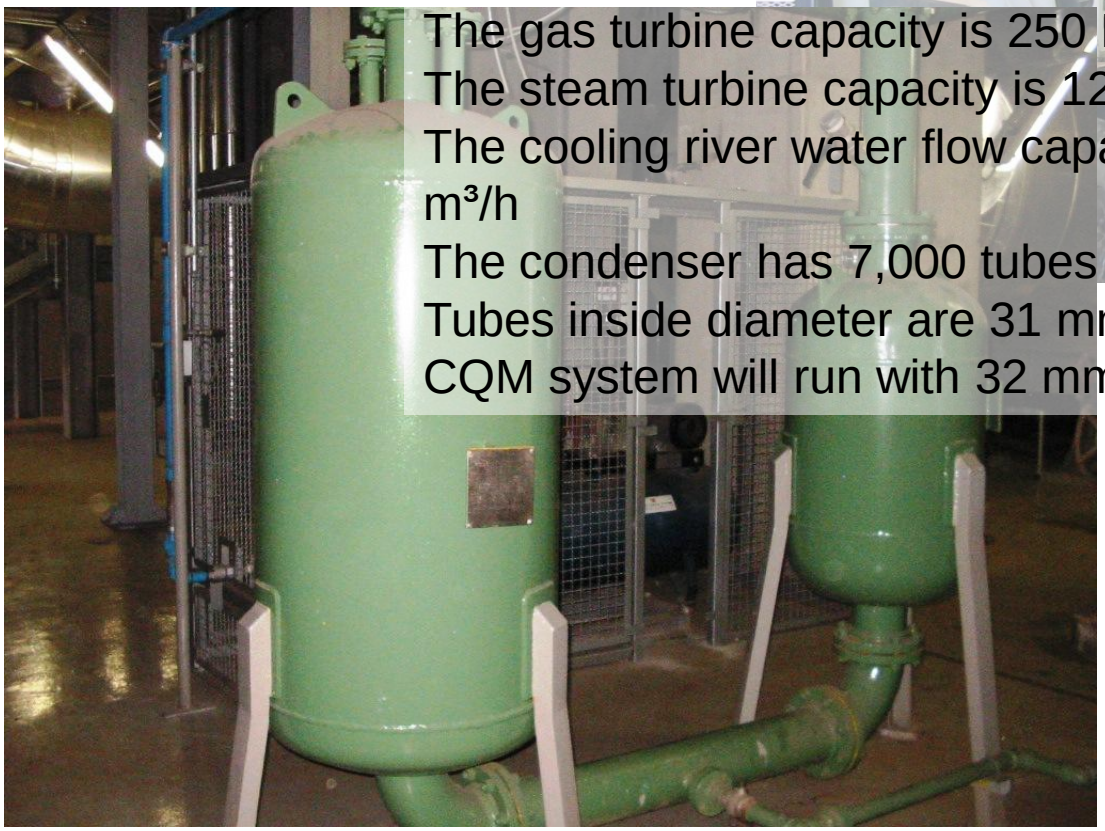






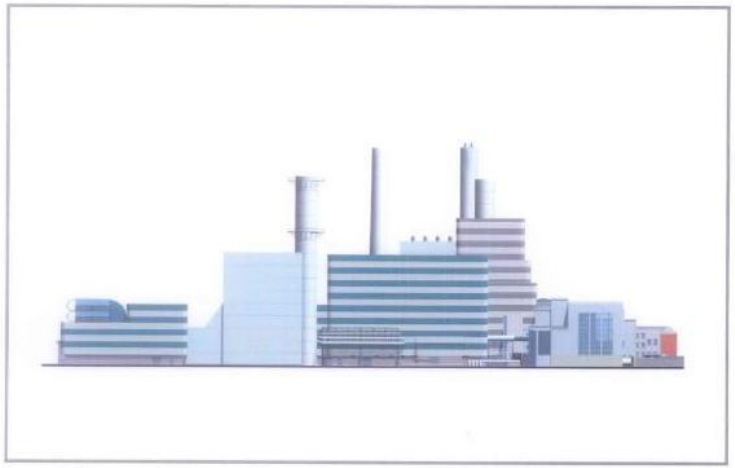


CQM installed 72" system in AEM Moncalieri power station in TORINO ITALY.
The electric capacity is 375 MW.
The power station is combine cycle technology.
Both gas & steam turbines manufactured by SIMENS.
The gas turbine capacity is 250 MW.
The steam turbine capacity is 125 MW.
The cooling river water flow capacity is around - 22,000 m^3/h
The condenser has 7,000 tubes
Tubes inside diameter are 31 mm.
CQM system will run with 32 mm balls



CENTRALE TERMOELETTRICA MONCALIERI

REALIZZAZIONE 3° GRUPPO TERMOELETTRICO A CICLO COMBINATO IN COGENERAZIONE (3° GT)



ATI SIEMENS AG – MAIRE ENGINEERING S.p.A.
ANNO 2005

MAIRE ENGINEERING
gA FIAT ENGINEERING

MAIRE ENGINEERING

Messrs.
C.Q. M. Cooling Quality Management
Moshav Tirat Yehuda 51
D.N. Hamerkaz
Israel 73175

Subject: Automatic Condenser Tubes Cleaning System (ACTCS) for AEM - Moncalieri 400 MW Combined Cycle Power Plant

Reference is made to the 72"ACTC System manufactured by C.Q.M. Cooling Quality Management for the aforementioned Power Plant, built by us acting as EPC Contractor on behalf of AEM of Torino

The Steam Plant is cooled by river water.

We are pleased to hereby confirm the following for whom it may be concerned:

The ACTC System was successfully commissioned in February 2005 and Taken Over by the Owner on May 2005; since that time the System performed properly, ensuring cleaning of the Condenser Tubes even under the most severe water characteristics and conditions: fine silt and algae. When condenser was opened for inspection, all tubes were found perfectly clean. After taking over loss of balls well within design parameters were reported.

Whenever we required C.Q.M. timely provided full technical assistance and services upon a simple phone call; we do highly appreciate the cooperative approach of C.Q.M. considering the long distance between Torino (Italy) and Israel.

Yours Truly

Marco Pattacini
POWER PLANTS ENGINEERING