

## AUMA India products - an integral part of India's largest sea water desalination plant at Nemmeli, Chennai

Nemmeli sea water desalination plant is the largest desalination plant in India with the capacity to treat 100 MLD sea water a day. The project has been executed by the water treatment company, VA Tech Wabag in partnership with IDE Technologies (Wabag - IDE consortium) for the Chennai Metropolitan Water Supply and Sewerage Board (Chennai Metrowater). The plant is constructed at a cost of Rs. 1033 crore on a Design, Build, Operate basis and is spread across 81,000 sq.m of land allocated by the government on the East Coast Road. It uses Reverse Osmosis Membranes to treat the sea water into potable water, to be supplied to Southern Chennai. It is also the first desalination plant in India to use electric actuators in redundant line topology for the automation of valves.

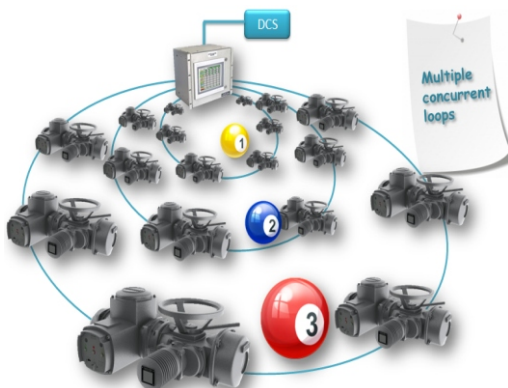
AUMA India's scope of work included supplying and commissioning assistance for actuators with integral starter (274 nos.) with MODBUS communication protocol, using redundant line topology resulting in high process availability and faster response time. These actuators are connected to the DCS supplied by ABB.



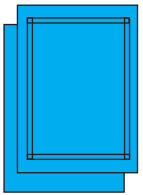
## AUMA India bags order of explosion - proof actuators for various IOCL Marketing Terminals

AUMA India has bagged orders of explosion - proof actuators with MODBUS communication protocol and redundant AUMA India master stations (AIMS) for Terminal Automation System (TAS) of Indian Oil Corporation Limited marketing terminal at Rajahmundry and Gonda. This Terminal automation system will efficiently manage and operate the product distributions in a safe, secure & accurate manner with high reliability and improved efficiency.

AUMA India's scope of work consists of supplying and commissioning of actuators with MODBUS communication protocol and redundant master station (AIMS) for the automation of existing manual valves. AUMA India has provided similar terminal automation solutions to a large number of oil marketing terminals in last few years.



Concurrent loop topology representation



## AUMA India to provide explosion - proof actuators with MODBUS for BPCL Oil terminal, Vizag

AUMA India has bagged the order for supplying explosion - proof actuators with MODBUS Protocol for the automation of Bharat Petroleum Corporation Limited (BPCL) terminal at Visakhapatnam. AUMA India's scope of work consists of replacing the existing actuators of other make for the automation of existing valves.



Site study by AUMA India Engineer

## AUMA India to supply actuators for 3 x 67.5 MW Thermal Power Plant, Kalingnagar

AUMA India has bagged the order of actuators with integral controls suitable for DC supply for 3 x 67.5 MW gas based thermal power plant, Kalingnagar. Industrial Energy Limited, a subsidiary of Tata Power is setting up this power plant at Kalingnagar, Odisha. Tata Consulting Engineers Limited are the consultant for this power project.

## AUMA India - looking after end-user assets with comprehensive maintenance services for Auma products

AUMA India offers annual maintenance contract (AMC) consisting of regular check-ups and routine maintenance work to ensure improved reliability and prevention of unscheduled breakdown.

### AUMA India's AMC service includes:



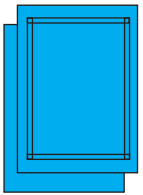
- Specific number of service engineers visit every year depending on the customers shutdown schedule
- Supply of Spare Parts (on optional basis)

### Customer's Benefit

- Regular preventive maintenance
- Repairs when necessary
- Availability of service personnel at short notice
- Authenticity of spare parts

AUMA India has over 12000 actuators covered under AMC for various end-users of different sectors. Some of the customers under AMC contract are as follows:

- ❖ NTPC - Angul, Unchahar, Faridabad, Dadri, Ramagundam
- ❖ Chamundeswari Sugars Limited
- ❖ Oil India Limited
- ❖ DVC, Mejia
- ❖ GIPCL, Mangrol
- ❖ Hindustan Zinc Limited, Dariba
- ❖ Adani Power Limited
- ❖ HPCL Black Oil and White Oil Terminals, Visakhapatnam
- ❖ BPCL, Rajbandh
- ❖ NSPCL, Bhilai
- ❖ HMEL, Bhatinda
- ❖ IFFCO - Paradeep, Phulpur
- ❖ Tata Power Limited, Trombay
- ❖ Tamilnadu Newsprint Limited
- ❖ West Coast Paper Mills Limited, Dandeli
- ❖ CPCL, Chennai



## Functional Safety – SIL

- Mr. M N Balachandra, Vice-President, Marketing

### What does functional safety mean?

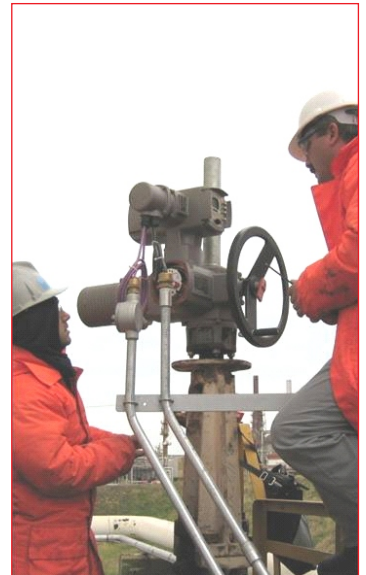
According to IEC 61508, functional safety related to systems used to carry out safety functions whose failure has a considerable impact on the safety of both persons and the environment.

In order to achieve functional safety, a safety function in the event of a failure must ensure that a technical plant is led to or maintained in a safe state.

Functional safety does not deal with basic dangers of a product or a plant such as rotating parts for example, but with hazards, which might be caused by a plant due to the failure of a safety function.

A major objective of functional safety is to reduce the probability of dangerous failures and consequently to minimize the risk for people and environment to a tolerable level.

Altogether, functional safety – in combination with further actions such as fire protection, electrical safety or explosion protection – significantly contributes to the overall safety of a plant.



### What is SIL?

SIL is a term closely linked to functional safety. SIL is the abbreviation for Safety Integrity Level and a measuring unit for risk reduction with safety functions.

The higher the potential hazards from processes or plants, the more demanding the requirements for reliability of safety functions.

IEC 61508 defines four different safety integrity levels, SIL 1 through SIL 4.

SIL 4 has the highest level of safety integrity and SIL 1 the lowest. For each level, various target failure probability measures are specified which may not be exceeded by the safety function.

Risk assessment is used to determine the required SIL.

#### Standards Applicable.

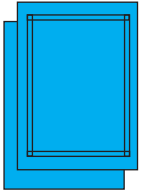
IEC 61508 is an international standard applicable for the complete safety lifecycle of safety –related systems containing electrical, electronic or programmable electronic components (E/E/PE). The requirements by the standards are transplanted to other e.g. mechanical components where appropriate.

The standard is applicable for plant designers and operators as well as device manufacturers.

It is complemented by further standards such as IEC 61511 for the process sector.

**Functional Safety @ AUMA!!! - continued in next issue**





## Customer Training Programme

A 3-day customer training programme was organised by AUMA India in its premises during 8th - 10th Jan 2013, which was attended by delegates from Isgec Heavy Engineering Limited-Delhi, Orbinox Private Limited, Tarapur Atomic power station, Khumbu Bijuli Company - Solukhumbhu Nepal, BHEL Limited-Trichy, Jayashree Engineering Company, Elomatic Intervale India Private Limited, Damper technology India Private Limited-Coimbatore, Thermax Limited-Pune.



**Next Training Programme : 23 - 04 - 2013 to 25 - 04 - 2013**

## Safety day celebration @ AUMA India

AUMA India celebrated National Safety day on 4th March to highlight the importance of safety in all spheres of life so as to prevent accidents and mishaps resulting out of neglect or lack of awareness. An event to award the certificate of appreciation for "Best Safety Slogan" was organized by the Safety committee lead by Mr. R.G Krishna Murthy, Safety Manager, AUMA India.

### SAFETY SLOGAN Award

1st prize in English - Mr. Vinu. N

*Mother is the first guard and Safety is the life guard*

2nd prize in English - Mr. PRASAD.V

*Alert Today, Alive Tomorrow*

1st prize in Kannada - Mr. Anil Kumar.M.B

*ಕೆಲಸದ ಒತ್ತಡಕ್ಕೆ ಮಣಿಯದಿರಿ , ಸುರಕ್ಷೆ ಪಾಲಿಸಲು ಮರೆಯದಿರಿ*

2nd prize in Kannada - Mr. SUJAY.G

*ನಾವು ಪಾಲಿಸಿದರೆ ಸುರಕ್ಷೆ , ಅದು ನಮಗೆ ಶ್ರೀರಕ್ಷೆ*



## Auma India Private Limited

**Head Office and Works**  
38 A & 39 B, II Phase, Peenya Industrial Area, Bangalore 560 058  
Ph: 080 - 3041 2222/ 2839 4365 Fax: 080 - 2839 2809  
E-mail: info@auma.co.in Website: www.auma.co.in

### Branch Offices

**Noida:**  
#1310, Tower A,  
Corenthum Complex, Sector 62,  
Noida - 201 301, Ph: 0120-3060522.  
E-mail: VeereshS@auma.co.in

**Pune:**  
712, 713, Building No.1,  
'Siddharth Towers', Kothrud,  
Pune - 411 038, Ph: 020-2541 0465.  
E-mail: NCPatil@aumaindia.com

**Kolkatta:**  
Ph: 09883029170.  
E-mail: arnab@auma.co.in

**Chennai:**  
Ph: 09884119795.  
E-mail: vramanan@aumaindia.com

You Tube links for AUMA India videos:

<http://www.auma.com/cms/AUMA/india>

<http://www.auma.com/cms/AUMA/india/service>

For feedback & extra copies, mail us at [sandhya@auma.co.in](mailto:sandhya@auma.co.in)

### Editorial Team:

**Design & Theme** by Sandhya Sengar

**News Bulletin Icons** - M N Balachandra  
Umesh Krishnamurthy  
Vinayak Deshpande

Nilesh C Patil  
Sridhar. R  
R G Krishna Murthy  
Subramanya

**Template Design** by Nandakumar C