# enertork®

Company Brochure









31 October - 3 November 2022 Abu Dhabi, United Arab Emirates

















## Ever-Reliable

Enertork Ltd. will always be at your service. We are totally ready for the full support of the needs and satisfaction of our customers. This is our fundamental.

Enertork's 3Q Policy

Quick Delivery
Quick Service
Quick Response





04-07 Company Insight



Markets and references

- Waterworks - Power Plant - Oil & Gas - Steel Mill & Etc





16-19

- Products
- Certificate and Quality Control



## enerrork®

## WE PROMISE SATISFACTION AND COMPLETE TRUST.

ENERTORK LTD. was founded in 1987, with confidence in 'the best quality' and 'customer satisfaction with trust'. Since then, we have been steadily growing and leading the Korean domestic market as an expert in developing, manufacturing, sales, and distributing the top-quality actuators in valve automation field.

Our actuators are used as widely as in waterworks and drainage system, petrochemical, refinery plants, energy plants, oil & gas industries, power plants, and many other industrial fields.

We are rapidly expanding our sales into Middle East, South East
Asia, USA, Russia and other global market with the knowledge and
reputation which gained from our customers indomestic market.

We aim to be one of the best in electric actuators by overcoming the competition with top brands with our on-going technological development and high quality of products.

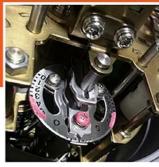
In doing so, we promise we will continuously supply our valued customers with the products that can deliver the maximum satisfaction and complete trust.





### ESTABLISHMENT 1987-1990

- '87 Company founded
- '88 Conducted a trial run of KEPEC Pyeongtaek LNG plant
- '90 KEPEC registered as a localization supplier



## TECHNOLOGY ACQUISITION 1991-2003

- '91 Forged an technology alliance with SEIBU, Japan
- '93 Acquired 'NT' mark from Korean Government
- '97 Acquired ISO-9001 Quality Management System certificate
- '98 Launched a newly developed actuator (co-developed with SEIBU)
- '01 Acquired 'Excellent product' certificate from Korean Government
- '03 Acquired' Class IE' Nuclear power plant certificate from NTS in USA



## DOMESTIC MARKET SHARE AS NO.1 2004 - 2009

- '04 Mozed to a newly built factory in Yeoju
- '06 Listed into the public stock market 'KOSDAO'
- '07 KHNP registered as an official supplier
- '07 Acquired 'Exd IIB T4' explosion proof certificate (KOSHA)
- '08 Built up the 2nd Yeoju factory
- '08 Acquired CE Marking
- '08 KEPEC registered as an approved vendor



ESTABLISHMENT OF BASE FOR OVERSEAS BUSINESS DRIVE 2010 - 2016

- '10 Registered and acquired Foundation Fieldbus certificate
- 10 Chosen as one of Asia 200 promising medium/small company (FORBES)
- '11 Awarded the Korean President prize
- •'11 Renamed the company name to Enertork (from Morgan)
- '12 Built up the 3rd Yeoju factory
- '16 Open Dubai Branch Office

## Waterworks



- Waterworks
- Sewage treatment
- Desalination
- Irrigation water
- Reservoir control
- Penstock
- Pumping station



Enertork has hands-on experience in water control industries such as water works, sewage treatment and desalination, and many more.

TM Series and TQ Series can be used for various types of valves and LEC Series are specialized for penstocks which perform emergency self-descending function.

Not only electric actuator, we also supply pneumatic and heavy duty actuators to meet the customers demands.





- Seoul Amsa Water treatment: 1.6 mil. tor/day (Korea / Seoul City)
- Busan Hwamyeong Water Treatment: 2.8 mil. ton/day (Korea / Busan City)
- Seoul Seonam Sewage Treatment:
   2 mil. ton/day (Korea / Seoul City)
- Seoul Joongrang Sewage Treatment: 1.7 mil. tor/day (Korea/ Seoul City)
- Libya Great Man-made River (Libya / Al Nahr)
- Ras Al Khair Desalination Plant(Saudi Arabia / SWCC)
- A seeb Sewage Treatment(Oman / Haya)
- Thailand Province Waterworks Authority
- Sri Lanka Water Works
- Turkey ISKIWater Works and Sewage Treatment Plant
- Modunaghat Water Treatment Plant (Bangladesh / Chittagong WSS)



## Power Plant



- Thermal Power Plant Combined Cycle Power Plant



Power generation industries requires high torque actuators and various types of control system. Enertork actuator meets any types of customer demands in power plant industry. LTMD Q Series can be used in nuclear power plant which has Q Class certification.

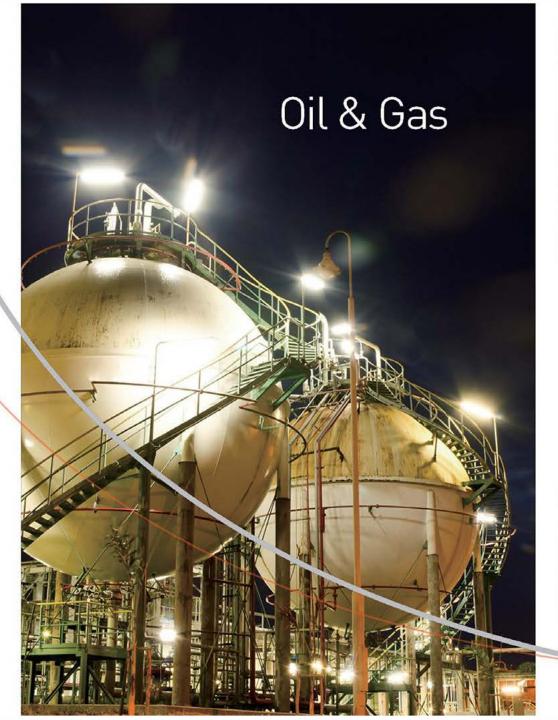






- Boryeong Power Plant 7500MW (Korea / KOMIPO)
- Fadhili CHP (Saudi Arabia/Aramco, SEC)
- Samchuk Power Plant 2400MW (Korea / KOSPO)
- Kori Nuclear Power Plant (Korea / KHNP)
- Chungpyeong Pumped Storage Power Plant (Korea / KHNP)
- Dangjin Tidal Power Plant(Korea / EWP)
- Hwasung Fuel-Cell Power Plant (Korea / IPP)
- Mapna 4 boiler 42 HRSG (Iran / Mapna Boiler)

- Riyadh PP11 (Saudi Arabia / SEC)
- Braka Nuclear PP(UAE/KEPCO)
- Mongduong TPP (Vietnam / EVN)
- Cebu TPP (Philippines / KEPC0) ■ Cirebon TPP (Indonesia / PLN)
- Ain Sokna PP(Egypt / EEHC)
- BHEL (India)
- Singori Nuclear Power Plant (Korea / KHNP)
- SAFI IPP (Morocco / Daewoo)
- Mor upule A TPP (Botswana / BPC)







Oil and gas industries require higher level of reliability and special functions such as explosion proof and fire retarding. Enertork products have FM and ATEX explosion proof certification and certified technology of field bus communications.

- Stockpiling (Korea / KNOC)
- Oil Tanking (Korea / KNOC)
- LNG Terminal (Korea / KOGAS)
- Residue Upgrading Complex (Korea / S-oil)
- BTX, Crude Oil Tank (Korea / SK energy)
- Osan Crude Oil Tank (Korea / S-oil)
- Residue Upgrading Complex (Korea / S-oil)
- City Gas Supply (Korea / District Gas Company)
- Sinopec Oil Storage (China / Sinopec)
- Tehran Refinery (Iran / National Iranian Oil E&C)





## Steel Mill & ETC

- Steel Mill
  Cement plant
  Garbage collection
  Food and drink packing
  Automation line

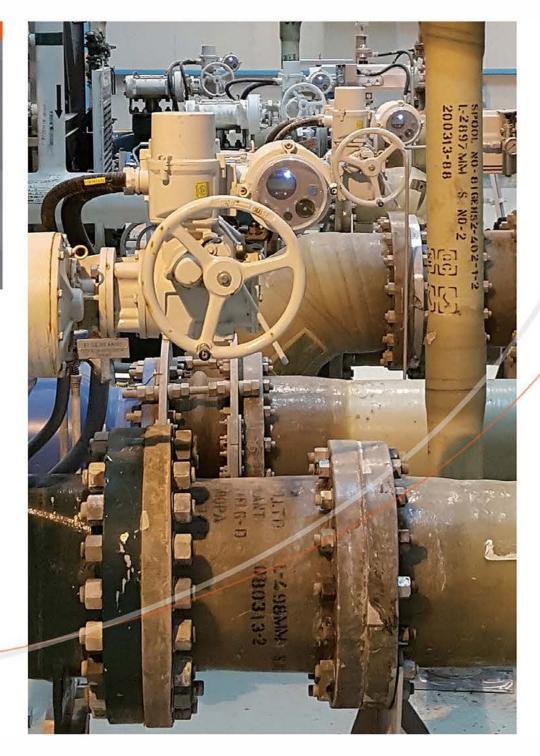


Enertork's wide versatility allows smooth integration into a diverse array of industries and control systems.

- Ara Waterway (Korea / K Water)
- Songdo Garbage Collection Facility (Korea / IFEZ)
- Hanil Cement Danyang Plant (Korea / Hanil Cement)
- DSME RD-4 Floating Dock (Korea / DSME)
- CSP Steel Plant (Brazil / Dongkuk Steel)
- Kobe Steel mill (Bahrain / Kobe Steel)
- Al Khaleej Sugar Factory (UAE / Al Khaleej Sugar)







## **Products**



## TQ Series Quarter-turn Actuator

Actuator for small sized ball valves, butterfly valves and dampers

- Light weight and compact size
- Easy to set

Torque range : 100 - 3,000 Nm



### TX-Series Intelligent Multi-turn Actuator

Multi-functional smart type actuator

- Non-intrusive settings
- Local operation with wireless device (Remote controller, Bluetooth device)
- Wide LCD display
- Data logging and Diagnostics

Torque range: 30 – 3000Nm



#### LEC Series

Emergency Shutdown Actuator

Actuator for penstock with rack and pinion structure

- Emergency self descending close function included
- Easy to control



### TM-Series Multi-turn Actuator

Actuator for any type of valves and dampers

- Easy to assemble and disassemble
- Simple maintenance
- Large torque range

Torque range : 30 – 15,000 Nm



#### **ED** Series

Pneumatic & Heavy Duty Actuator

- Single acting type Pneumatic Actuator
- Double acting type Pneumatic Actuator
- Single acting type Heavy Duty Actuator
- Double acting type Heavy Duty Actuator



#### LTMD Series

Multi-turn Actuator

Actuator for nuclear power plant

- Cast iron body
- Simple and strong structure
- Q class certified

Torque range : 40 - 11,760 Nm



### MW Series Worm gear reducer

Worm gearbox for manual or actuator mounting operation

- Robust cast iron body
- Simple and strong structure
- 90/180/270 degree action

Torque range: 500 - 550,000 Nm



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### Quality control

All processes from designing through to the delivering of actuators, including preinspection of individual parts or modules, proceeds with strict accordance with the Quality Assurance Procedures certified by ISO9001. Before delivery, each actuator is tested and a Final test report is issued. Customised torque values, sleeve rotational speed, motor current, voltage, performance of position limit and torque limit switches, and manual/automatic switch-over are checked at the specially developed test console and test report is recorded.



ISO9001 Certified by DNV



**CE** Certification



FM/ATEX Certification

### Bill of materials (TM Series)

| Parts                     |   | Material   | KS/JISINO.                                | ASTM NO.            |
|---------------------------|---|--|---|---------------------|
|                           | TM-01,04,07,1                                   | Alloy die casting (ALDC)   | D60D6/H5302                               | 885                 |
| Case & Cover              | TM-3,6,12                                       | Geer case: Cast iron(GC) Integral case: Alloy die casting(ALDC) etc.: Ductile cast iron(GCD) | D4301/G5501<br>D6006/H5302<br>D4302/G5502 | A126<br>B85<br>A536 |
| Thru                      | st Unit   | Ductitle cast iron(GCD)  | D4302/G5502                               | A536                |
| Worm                      |   | Chromium molybdenum(SCM)   | D3711/G4105                               | A322                |
| Worm                      | n wheel   | High strength Brees casting(HBsC)  | D6007/H5102                               | B584                |
| Key<br>Stem bush<br>Screw | Key   | Cerbon steel(SM4SC)  | D3752/G4051                               | 1050                |
|                           |   | TM-01, 04, 07, 1 : Copper alloy(C6782BE)   | D5101/H3250                               | B16                 |
|                           | TM-3, 6, 12: High strength Brass casting(AL9C3) | D6007/H5102  | B584                                      |                     |
| Grease                    |   | Lithium grease(EP 0)   | M2130/K2220                               | ISO. KXBCA (MULIS)  |

### **Customer Service**

- SIZING: The performance of motor operated valve (MOV), water gate, and damper depends on the proper sizing of actuator in terms of rotation speed and torque. Also, economic feasibility is another crucial element for sizing property. We are ready to assist our customers with torque/thrust calculation, method of mounting, selection of options, and other enquiries at all times for achieving proper sizing.
- SUPPLYING SPARES: Prompt response as an individual part and/or as modules, with immediate action.
- MOV SUPPLY: Basically, we supply actuators to customers. However, if customer requests, Enertork may supply valves, dampers, and water gates along with our actuators under our quality guarantees.
- RETROFIT/ATTACHMENT SUPPLY: In case of retrofitting or site installation of actuators, customers often need various attachments in relation with actuator such as mounting flanges, iron stands, levers, rods, metal fittings, and many others. We are ready to attend and help out from designing stages to supplying the product, until the customer satisfaction is reached.







Automatic warehouse



Design

#### Head Office & Factory

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