



Company Profile

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We've built an impressive track record providing specialist design, construction and plant services to a range of industries throughout the country.

Today main product lines solve challenges and provide solutions in many new markets relating to Seismic, Vibration and Plant components.



Location



**Seoul Office
Overseas Business**

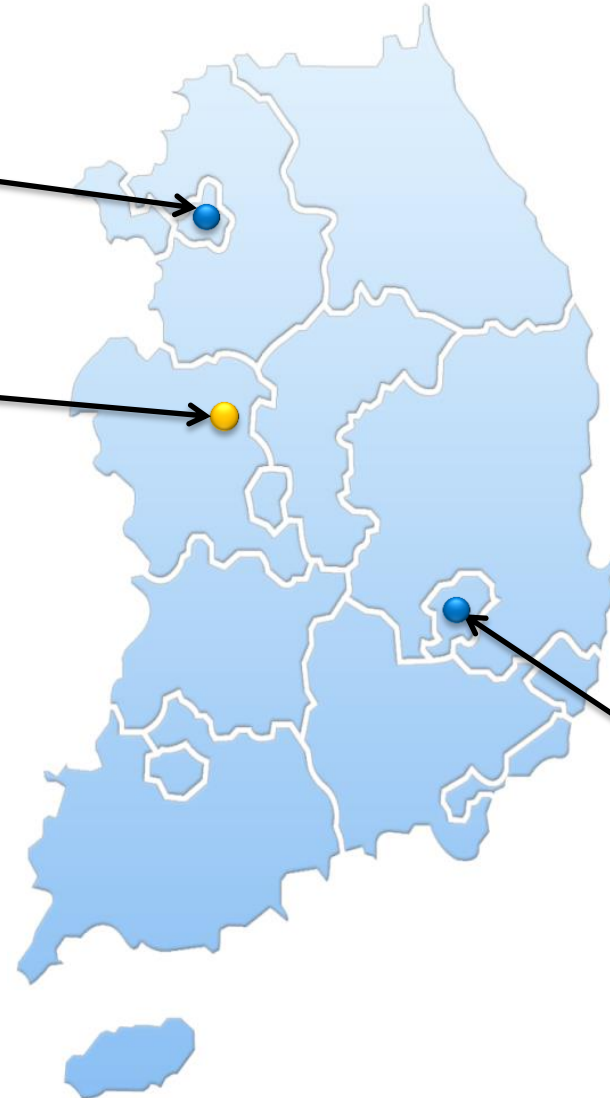
**Cheonan Head Office
(UET & HKR)**



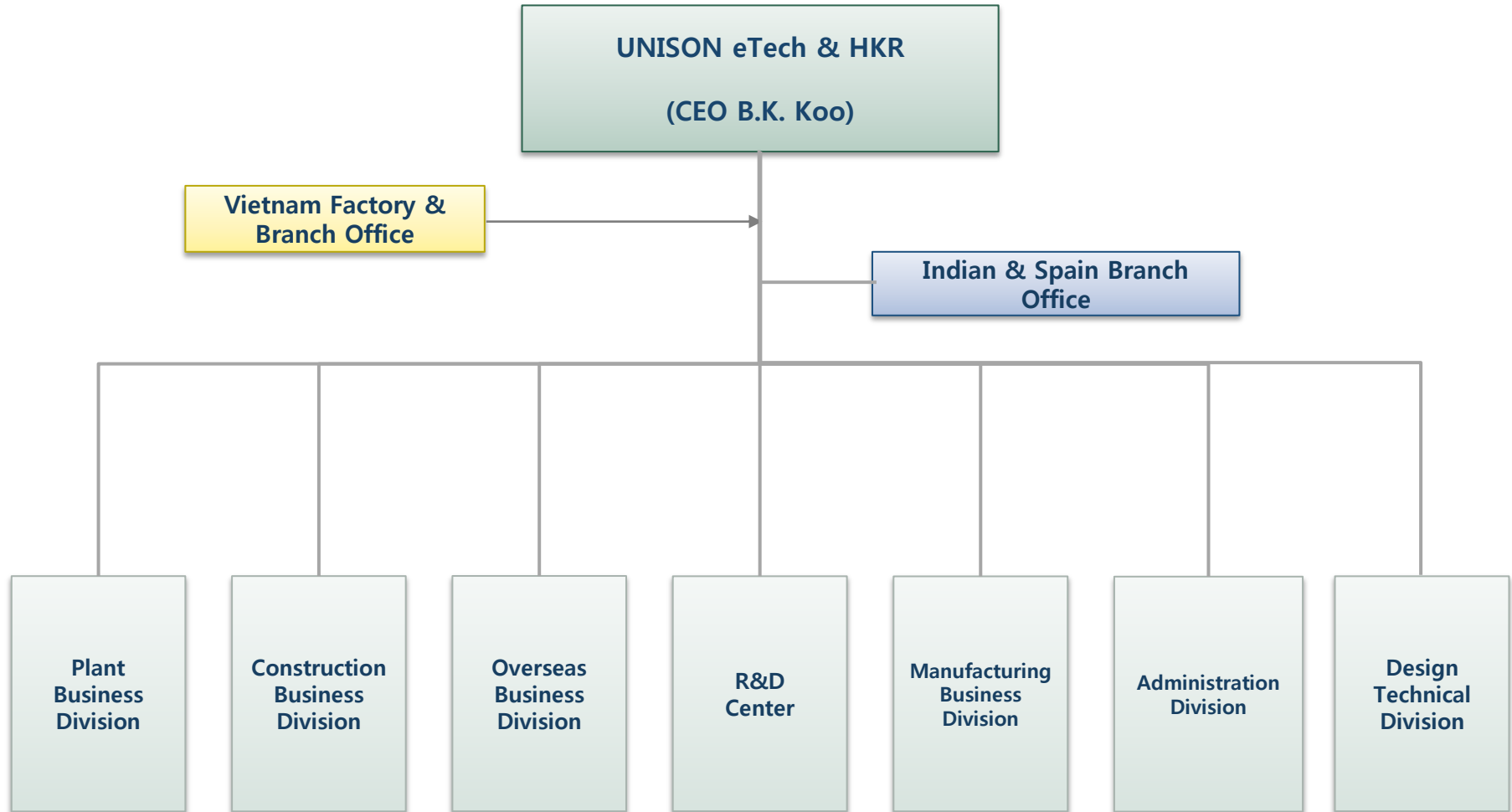
Vietnam Branch Office



Daegu Office



Organization



Company History



2018	Opening of the Global offices in India to cater to Indian& Middle East markets & in Spain to cater to Europe and African markets
2017	Signed an Global Partnership Agreement with Samsung C&T Corporation Qualified to supply parts for power plants to Russian nuclear power plants ROSATOM
2016	Obtaining OHSAS 18001:2007 Occupation Health & Safety Management
2015	Awarded of Sheik Jaber Al-Ahmad Al-Sabah Causeway Project(Main link and Doha link) in Kuwait (Bridge length: 36km and 12.43km each)
2013	Awarded Presidential prize for National Quality Control Circle competition
2011	Founded UNISON eTech Co., Ltd / Acquire share HKR Co.,LTD
2006	Obtained ISO14001 Certificate for all items
2003	Grand Prize for Korea Quality Award by Ministry of commerce, industry and Energy
2002	Obtained Reliability Mark for pot bearing, elastomeric bearing by Korean Agency for Technology and Standards
1997	NA, NPT STAMP certification by American Society of Mechanical Engineers KEPIC-MIN(Nuclear Energy Equipment) Quality Assurance Certification
1994	ISO9001 Certification (KSA-QA, All Categories)
1992	Best Small and Medium-Sized Company Presidential Award for Excellent K.S Company
1984	Founded UNISON Co., Ltd.

Plant Main Products



Variable Spring Hanger

Prevents thermal expansion of the pipe from the general operating load & pipe movement



Constant Spring Hanger

A device not only sustaining the static load, but also absorbing the thermal movements



Cold Support

Utilized on pipe work that requires thermal insulation to minimize loss of process energy



Damper

Thermal expansion and blade deflection should be considered first for preventing deformation by high temperature



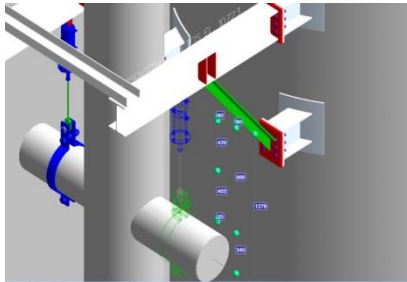
Metallic Expansion Joint

According to operated pressure of a device, this model is manufactured with or without the shrink ring.



Cross Over Pipe

Suitable flexibility to work in different thermal Movement condition between turbine and casing



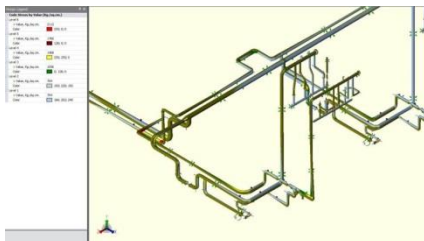
Engineering

Provide differentiated service in CAE analysis of machinery, piping and design manufacturing for many years



Field Inspection Service

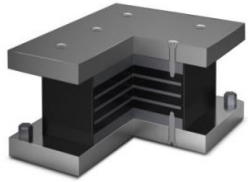
Offer a wide range of service relate to plant facilities as routine maintenance, technical support through technical standard and regular plan



Repair & Installation

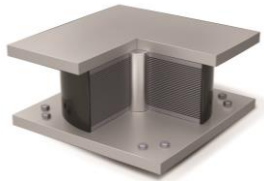
Support reverse engineering, product fabrication and field repair

Seismic Products



Rubber Bearing

A bearing carries vertical load by contact stresses and accommodates rotation by deformation of the elastomer



LRB (Lead Rubber Bearing)

Device can decrease seismic wave themselves and move with direction of earthquake



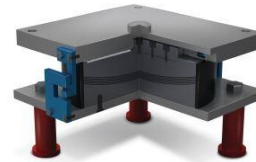
High Damping Rubber Bearing

Dissipate energy up to 16% damping due to high damping rubber compound



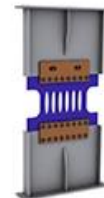
Pot Bearing

Device for resisting horizontal and vertical load caused by the earthquake



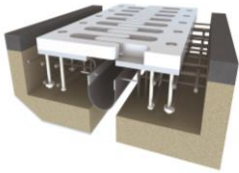
Spherical Elastomeric Bearing

A spherical laminated steel & rubber plate which accommodate rotation and provide vibration & noise reduction.



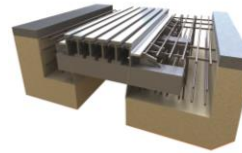
Safe Damper

hybrid type energy absorbing device that dissipates energy through plastic deformation of shear type friction damper



Finger Type Expansion Joint

Consists of thick steel finger plates which are bolted to a steel edge profile using conventional anchoring



Rail Type Expansion Joint

Device can accept creep and shrinkage displacement caused by temperature change



Waterproof Finger Joint

Improved durability of bridges by completely eliminating the problem of waterproofing material damage caused by accumulated foreign matter



Spherical Elastomeric Bearing

Minimizes internal structure change or thick increase to have high Sound Absorption of over 85%



Mold Production

Mold is a frame to produce segment and PC products

Test Equipment I



2,000kN Tester



	Load	Stroke	Speed
Vertical	2,000kN	±100mm	±100mm/sec
Horizontal	500kN	±200mm	±200mm/sec

30,000kN Tester



	Load	Stroke	Speed
Vertical	30,000kN	±200 mm	±100mm/sec
Horizontal	5,000kN	±1000mm	±20mm/sec

Thermal Chamber



Max Capacity	
Control Range	-30 °C ~ +70 °C
Size	5 × 4 × 3.7 m ³

Test Equipment II



Modal Testing Tower



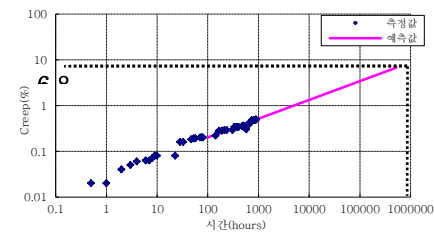
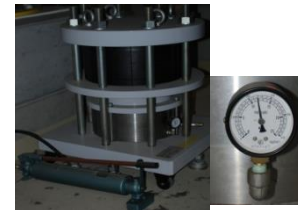
Specification	Application
5th Floor 30 m (= 5th x 6 m) 6m X 6m	Research on the vibration control method of high rise building caused by various loads like wind and seismic load

DMTS(Material Dynamic Property Tester)



Force Range	±150N(Dynamic) ±1500N(Static)
Freq. Range	0.0001~100Hz
Temperature	-150 °C ~ +500 °C

Creep Tester



Test Equipment III



Plant Component Quality Test



Paint Thickness Test



Standard Test



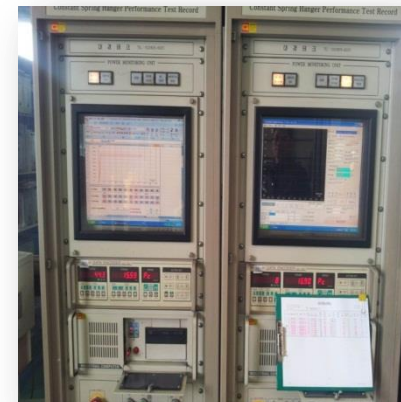
Load Setting Test



Variable Spring Hanger
Performance Test

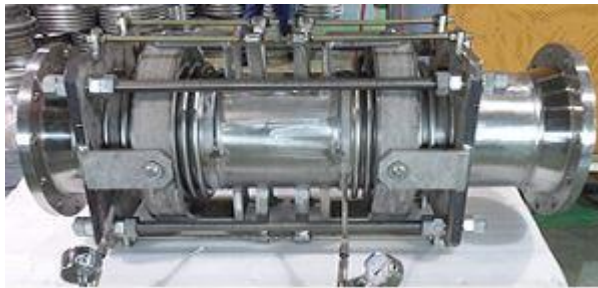


Constant Spring Hanger
Performance Test



Constant Spring Hanger
Monitoring

Taketoyo Thermal Power Plant unit5 Project



Type of Vessel: LNG FSRU

Client : DSME

Name of the Vessel: MOL FSRU Challenger

Item : Expansion Bellows for LNG Carrier

Taketoyo Thermal Power Plant unit5 Project



Country : Japan

Client : MHPS

Project : Taketoyo Thermal Power Plant unit5

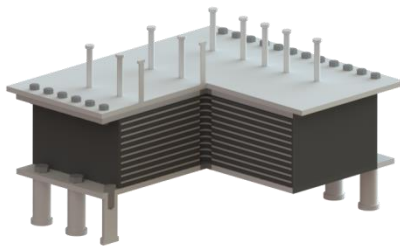
Period: 2018. Aug

Item : Reinforced Rubber Expansion joint

Major Experiences III

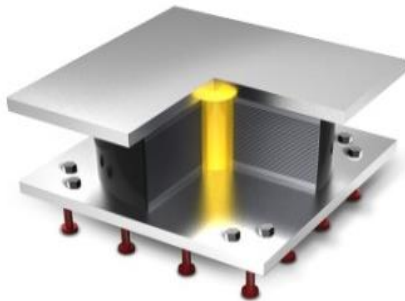


Sheikh Jaber-Al Ahmad-Al Sabah Causeway project (Main & Doha link) RA140, RA214



Country : Kuwait
Client : MPW(Ministry of Public Works)
Contractor : Hyundai E&C, CGCC & GS E&C
Period: 2015 - Present
Item : Elastomeric Bearing

Banegas Bridge Construction Project



Country : Bolivia
Client : Bolivia government
Contractor : Hyundai E&C
Buyer : BNG Consultant
Period: 2014 - 2015
Item: LRB

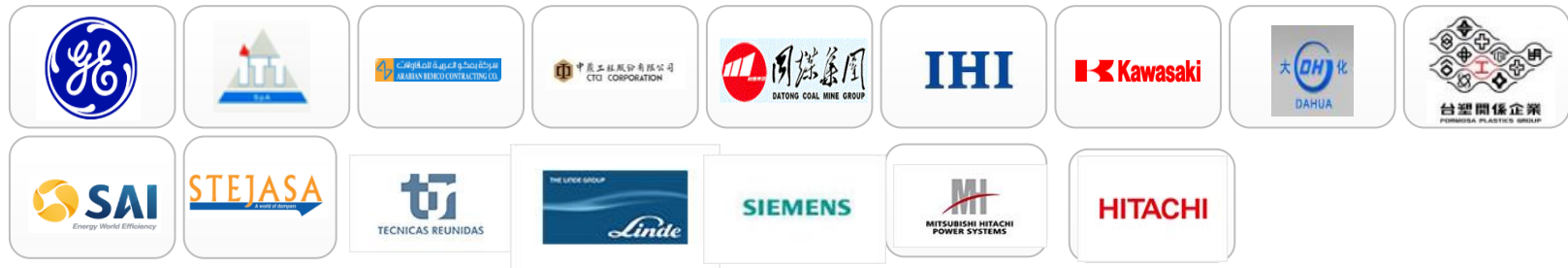
Major Customer



Domestic



Overseas



End-User



Contact Point



Plant Pipe Support



plant@uet.co.kr



+82 41 620 3374

Construction



ucon@uet.co.kr



+82 2 6947 5487

Plant Expansion Joint



sales@uet-hkr.co.kr



+82 2 6947 5513