Fluorine Chemical Plant within the HEC Group, situated in Shaoguang, Guangdong province China, has successfully installed hundreds of ABB pressure transmitters and Vortex flowmeters in their fluorine production facilities.

**Measurement made easy**

**Introduction**

HEC Group is a joint R & D enterprise, headquartered in Shenzhen. The main branches of chemical business administration, research and development, sales and financial management are based in Dongguan, Guangdong. The Group has six production sites with over 15,000 employees.

**For more information**

Further details of ABB Measurement & Analytics products are available for free download from: [www.abb.com/measurement](http://www.abb.com/measurement) or by scanning this code:
HEC Group – company profile

Eastern Sunshine Fluorine (HEC) Co. Ltd. was founded in 2005. It is one of the key subdivisions of HEC Group. Its business covers integrated coal-aluminium-silicon, fluorine fine chemicals, new materials research and development, investment in biomedical companies. HEC is the largest manufacturer in China of hydrophilic foil, brazing foil, electric light foil and etched foil. HEC is also the largest fine chemical manufacturer of CFCs (ChloroFluoroCarbons) in the Guangdong province, including refrigerants, fluorine resins and fluorine fine chemicals.
What are the main benefits with ABB measurement products pressure meters and Vortex flowmeters?

We ask Mr Xinneng Wen, Workshop Director and Mr Hu, Zhen, Director of instrumentation & control at HEC Fluorine Chemical Plant:

“In this new fluorine chemical plant, dedicated in 2013, we have 500 pressure meters installed from ABB Measurement Products (MP) and they are working very well.”

“How to choose the sensor material in the pressure transmitters is very critical for us. ABB has an all-welded sensor construction of tantalum, which is working excellent in our process.”

“ABB has the best balance between price and quality.” The HEC Company is scoring technology and quality with all suppliers and ABB is doing fine in the scoring process.” HEC has recently placed an order for 30 Vortex flowmeters from ABB and the biggest Vortex flowmeter has a diameter of 200 mm. Since ABB is almost unique in offering 300 mm diameter Vortex flowmeters, then ABB got the entire order of 30 Vortex meters in different sizes, from small to big. ABB is a good single source supplier”

Summarizing comments on ABB’s good service solutions and also the good co-operation between HEC & ABB

“Lately HEC has had problems with corrosive brackets together with the pressure transmitters. ABB has solved the corrosion problem for us and it was fixed in a professional way by ABB service.”

“We really appreciate ABB’s ability to solve problems in a professional way.”

“There is a tight co-operation between HEC and ABB and by this good cooperation we receive the best possible service from ABB.”

“Once again, we are very happy and satisfied with ABB’s service solving the corrosion problems with the pressure transmitters.”
Absolute pressure transmitter (model 266ARH)

Model 266ARH is an absolute pressure transmitter suitable for measuring liquid, gas or steam characterized by the remote seal construction. Thanks to Taylor’s “All-Welded” technology in remote seal manufacturing as well as to the long-standing expertise, 266ARH can offer unmatched total performances and a wide selection of options such as fill fluid, diaphragm material, capillary protection and mounting connections. ABB, leader in severe process measurements, is able to provide the right solution for the most critical process media at extreme ambient and process conditions. The long-term stability and its proven reliability make of 266ARH the best application solution for absolute pressure measurements.

In addition to the plug-in terminal block, this transmitter features in-field replaceable electronics module that, thanks to the auto-configuration functionality, dramatically improves plant productivity. Its intuitive plug-and-play display with easy setup procedure really helps users by saving time and lowering maintenance and inventory costs. Moreover, the innovative TTG (Through-The-Glass) technology allows users to configure the instruments in the field without removing the windowed front cover and consequently to save a lot of time. Thanks to the IEC61508 certification (SIL2/SIL3 loops) and the hardware/software redundancy with MTBF of over 100 years, the 266ARH represents the smartest solution in Safety loop applications.
ABB Vortex flowmeters

ABB’s Vortex flowmeters offer most reliable and stable flow measurement for liquids, gases and steam. Principle of measurement for Vortex flowmeter The operating principle of the Vortex flowmeter is based on the Karman street. As the fluid flows over and under the solid body, vortices are shed alternately above and below. The shedding of these vortices due to the flow forms a vortex trail (Karman street).

TRIO-WIRL V flow meters are based on the principle of the Karman’ Vortex street. The system has a freely configurable, two-line LC display for the actual flow rate and totalization. Settings can be changed directly via 3 push buttons or via magnet sensors with closed housing.

Additional to the 4 to 20mA analog signal a freely configurable switching output is already available. This can be used universally as pulse output, high-low alarms or for system supervision. TRIO-WIRL Vortex-meter are available as compact or remote design with 10 m cable length.

"ABB is a good single source supplier of Vortex flowmeters"
Chlorine gas (Cl₂) pressure measurement

Martin Ottosson, ABB Measurement Products and Mr Hu, Zhen, Director of Instrumentation & control at HEC Fluoride Chemical Plant in Shaoguang
HEC fluoride chemical plant in Shaoguang

Keyshawn Liang (left), ABB Guangzhou (the contact person for HEC Eastern Sunshine Fluorine) ensures the customer receives genuine ABB Measurement Products items all the time as well as the best possible service. Robert Mapleston (centre), ABB Warminster, USA and Paddy-Jundong Huang (right) ABB Shanghai complete the picture.