

## Hanwha Techwin explosion-proof cameras, taking the lead in building safe environments for chemical facilities



Customer : Hanwha Chemical Ulsan 1 Production Site  
 Location : Ulsan, Korea  
 Vertical : Industrial facility

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- Joon Yung Nho, Public Affairs Team, Hanwha Chemical Ulsan 1 Production Site

### Challenge

Since its establishment in 1965, Hanwha Chemical has been Korea's leading petrochemical company starting with Korea's first production of PVC (Polyvinyl Chloride) and has been producing basic petrochemical products that form the foundation of a wide range of industries.

Hanwha Chemical employs over 2,400 employees in multiple business locations including Ulsan 1, 2, and 3 Production Sites, Yeosu Production Site, Daejeon R&D Center, and many global offices.

Among these locations, production sites that handle hazardous chemical substances are constantly exposed to the potential of industrial incidents such as fires, explosions, or leakages of toxic chemicals and are vulnerable to accidents during facility operations or maintenance and repair. Therefore, creating safe working environment is of paramount importance. In this regard, Hanwha Chemical Ulsan Production Site decided to adopt video monitoring solutions tailored to ensuring the safety of employees and nearby community and protecting assets within the facility.

### Solution

Hanwha Techwin Wisenet T Series explosion-free TNU-6320E cameras were installed both indoor and outdoor of the facility such as factory periphery, laboratories, and chemical warehouses. Certified with ATEX II, a European certification of explosion-proof products, the TNU-6320E explosion-free

cameras accommodate stainless steel SUS316L housing which can prevent cameras from exploding due to factors within or outside cameras, ensuring safe operations in chemical and industrial facilities.

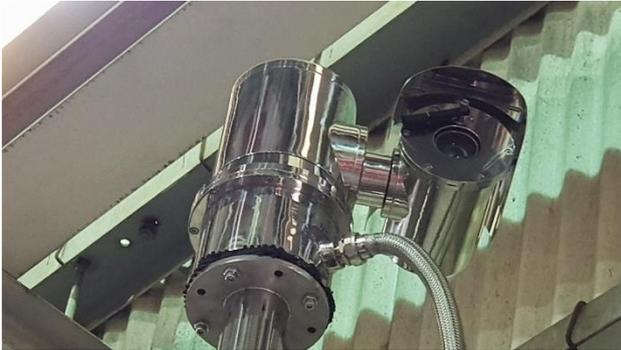
The cameras offer Max. 2 Megapixel resolutions with 32x optical zoom which allows identification of objects from a great distance, making them an excellent choice for monitoring factory periphery. The built-in wiper is used to remove any snow, rain, dust, or dirt on the lens to clear the view and capture crisp and detailed images. The 360° endless pan and 180° tilt feature can be remotely controlled, enabling users to monitor inside and outside of factories from distant locations. A wealth of Intelligent Video Analytics such as motion detection, face detection, and tampering can trigger an alarm if someone enters restricted areas, allowing users to react early.

### Result

Thanks to Hanwha Techwin explosion-free cameras, Ulsan 1 Production Site can now securely monitor hazardous industrial environments where they deal with gas, petroleum, and chemicals. A source at Hanwha Chemical is quoted as saying, “We have high levels of trust in Hanwha Techwin cameras as they have received rigorous European certifications for explosion-free cameras. Above all, remote monitoring feature that allows real-time surveillance of every corner of our facility is most satisfying.”

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#### **Stainless camera, highly resistant to corrosion and acid**

Along with explosion-free cameras, the Stainless Cameras XNP-6320HS were also installed at Hanwha Chemical Ulsan 1 Production Site. They are constructed of SUS316L stainless steel enclosure, which is robust and highly resistant to corrosion and acid, providing better protection against corrosive chemicals.

The cameras are water-proof and vandal-proof and have won IP67, IP66, NEMA4X, and IK10 certifications, offering stable operations under the harsh environments of extremely low or high temperature. They are also designed for easy cleaning and maintenance, making them ideal for places that require strict hygiene standards such as chemical plants, medical facilities, or food manufacturing facilities.

Related video:

[Hanwha Techwin 32x Explosion-proof Camera Demo TNU-6320E,TNO-6320E](#)