



# COUNT ON OUR EXPLOSION PROOF SOLUTIONS IN EVERY HAZARDOUS AREA YOU HAVE

## APPLICATIONS AVAILABLE FOR THE FOLLOWING

- Offshore & Marine Vessels
- Dangerous Goods Warehouses
- Petrochemical and Power Plants



## COMPLETE EQUIPMENT RANGE

- AHUs, FCUs, Chillers, Condensing Units
- Split Units
- Packaged Units
- Ventilation Fans



## ZONES

**Dangerous explosive atmosphere**

Ignitable concentrations of flammable gases, vapour are likely to exist during normal operations or frequently because of repair, maintenance operations or leakage. This can be defined as 10-1000 hours a year.

Ignitable concentrations of flammable gases or vapors is not likely in normal operation, occur only for short period of time or become hazardous only in case of an accident or some unusual operating condition. This can be defined as under 10 hours per year.

Gas CENELEC/IEC/ NEC 505                      Zone 1                      Zone 2

Dust CENELEC/IEC/ NEC 506                      Zone 21                      Zone 22

## TEMPERATURE CLASSIFICATION

Maximum equipment surface temperature

Gas Temperature Classes

Equipment marking according to CENELEC/IEC/NEC 505  
For dust it is an indication of max surface

450°C	T1
300°C	T2
200°C	T3
135°C	T4
100°C	T5
85°C	T6

## GROUP

IEC / CENELEC / NEC 505 / NEC 506

Group I                      Mines susceptible to firedamp  
Methane

Group II                      Explosive gas atmosphere

Subdivisions                      Typical gas

- IIA                      Propane
- IIB                      Ethylene
- IIC                      Hydrogen
- Acetylene

Group III\*                      Explosive dust atmosphere

Subdivisions                      Typical of dust

- IIIA                      combustible flyings
- IIIB                      non-conductive dust
- IIIC                      conductive dust

\* According to IEC 2007, CENELEC 2009

## EXPLOSION PROOF HVAC&R IN SOUTH KOREA FOR ITALIAN BARGE FLOATING PRODUCTION UNIT DEPLOYED IN INDONESIA



Customer	Hyundai Heavy Industries Co Ltd, South Korea
Owner / Deployment	Saipem of Italy / Kutei Basin, the Makassar Strait, East Kalimantan, Indonesia
VA Project Ref	VAT1843
Vessel Name and Type	Barge Floating Production Unit (BFPU) for The Jangkrak Complex Development
Commencement and Completion	13 November 2014 -18 March 2017
Class Notation / Regulations	BKI/DNV-GL
Viking Airtech Scope	10 AHUs Zone 2 Group IIA Temperature Classification T3, 10 Fans Ex-proof Motor Zone 1 Group IIA Temperature Classification T3, 30 Fans Ex-proof Motor Zone 2 Group IIA Temperature Classification T3 for Living Quarters, Provision Refrigerant Plant with 2 Condensing Units, 3 Fan Coil Units and PLC Electric Control Panel
Vessel Size	83,000 barrels of oil equivalent per day produced

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