



December 2008

Hazardous Area Precautions



12th December 1982

Chris Evert defeats Martina Navratilova 6-3,2-6,6-3 to win the 57th Australian Women's Tennis Open.



16th December 1944

The Battle of the Bulge: German forces launch a huge counter offensive in the Ardennes region of Belgium. It would be last major German effort to turn the tide of World War II.

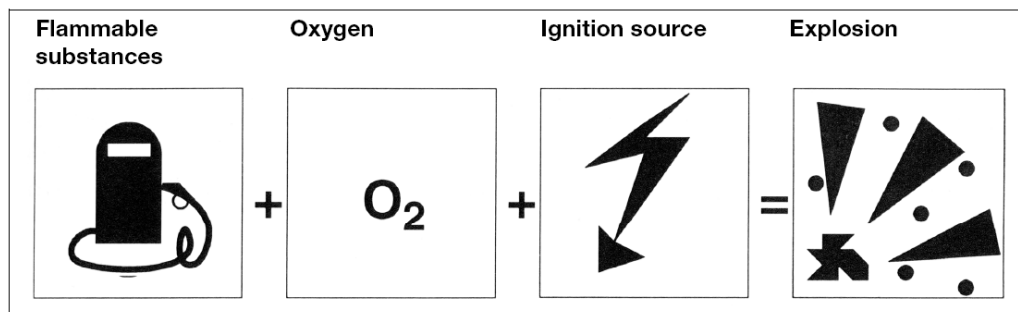


31st December 1980

Richard Hugh 'Richie' McCaw born in Kurow, North Otago.

In many production & process plants throughout the world conditions may arise where the risk of an explosion is heightened. Such areas are known as hazardous areas.

For an explosion to occur, three factors must be fulfilled at the same time:-



Two measures that can be employed to avoid the possibility of an explosion:-

- **Primary protection:** Eliminate the potential for an explosive atmosphere to occur in the first place.
- **Secondary protection:** In the event of a hazardous atmosphere being present, eliminate the source of ignition.

Assuming that an electrical device is required to operate in a hazardous area we must rely on secondary protection measures. We have two further choices. You either provide explosion protection through design (EEx d) and/or by negating the ignition possibility (EEx ia ib).



JUMO P33 Ex

JUMO's P33 Pressure transducer (left) is intrinsically safe. It carries the European ATEX certification:-



Such tight specifications can prevent tragic factory & process plant disasters from ever occurring.



Intrinsic safety

An intrinsically safe (IS) device is designed so that energy created in the electrical circuitry either as heating, sparks during contact closure or fault conditions is not sufficient to cause the ignition of hazardous gas or dust substances that may be present.

For Further details on Explosion Proof Directives Click on this box

Nivelco Level Control

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Claus: One of our annual December clients.

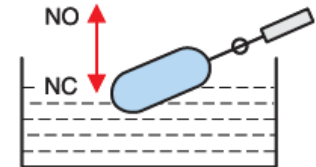


One of the most popular products supplied by NIVELCO, the MKA-210 units (right) are used extensively in a variety of industries.

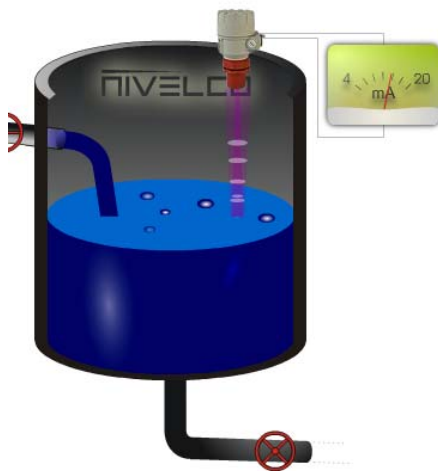
Applications:

- Alarm & Shutdown Duties
- Pump Control
- High & Low Level Alarms
- Oil Tank Farms
- Bilge Level Alarms

* Ex Versions Available



If a contact float level solution doesn't cut the mustard, the NIVELCO ultrasonic units provide a perfect solution.



- * Non contact level control
- * Fully temperature compensated
- * Narrow 5° beam
- * Level, volume or weight calculation
- * Optional field indicator and plug-in programmer/display
- * Power relay output
- * IP 67, ATEX II 1/2 D IP 65 T130°C

JUMO eTRON M 100 Refrigeration Controller

The 'Rolls Royce' (ok, BMW or Mercedes if you will) of refrigeration controllers, JUMO's eTRON M 100 is beginning to make sense to those who know better.

A very well specified & capable product. At \$180 you won't find a device to match the JUMO's eTRON M 100.



We wish you the compliments of the season would like to thank you all for your support during the past year.

From all of us at Intech Instruments.

- ◆ 16A Cooling Relays
- ◆ 8A Fan / Defrost Relays
- ◆ Customised Linearization
- ◆ Real Time Clock
- ◆ Data Logger
- ◆ Alarm Generation
- ◆ 2 Analogue Inputs (Temp)
- ◆ Operating Hours Counter
- ◆ Service Counter
- ◆ RS 485 Interface Capability
- ◆ Meets EN12830 & EN13485