

Radio-Tel

Combining the latest wireless technology with Elfab's magnetic burst detection system Flo-Tel™+, the advanced Radio-Tel system wirelessly communicates the state and temperature of a process.

Radio-Tel offers intelligent, real time process monitoring. The ATEX-approved state-of-the-art communication system is suitable for sites of all sizes, providing immediate process change alerts without time consuming and expensive wiring.

Radio-Tel Components

Radio-Tel has been designed to offer the customer maximum flexibility and ease of installation. Irrespective of the site size or process complexity there are three main elements involved. All Radio-Tel components feature "plug and play" features to ease installation and maintenance. The image below demonstrates the Radio-Tel components.



A

Located at bursting disc
Flo-Tel™+
Radio-Tel Transmitter

B

Located for maximum range
Radio-Tel Repeater

C

Located in control room
Radio-Tel Receiver
Radio-Tel Software
Beacon / Signalling System

Radio-Tel Components

A



Flo-Tel™+

Integral Flo-Tel™+ provides an excellent technical solution for identifying when a bursting disc has functioned within arduous operating conditions. Flo-Tel™+ is a non-invasive burst detector with IP65 rating and ATEX approval. When used with Radio-Tel it has the added capability of monitoring process temperature from -55°C to +250°C.



Radio-Tel Transmitter

The pre-wired data transmitters are easily connected to the Flo-Tel™+ reducing time consuming and expensive wiring. Sending a health message to the receiver every minute the failsafe data transmitters wirelessly feed information to the receiver indicating the state and temperature of the process. At a frequency of 434MHz a change in disc status is alerted within 5 seconds. Located around the site in close proximity of the Flo-Tel™+ the data transmitters are fully ATEX approved with an IP67 rating.

B



Radio-Tel Repeater

The IP65 rated repeater aerials are designed to receive and forward messages from the data transmitters to the receiver or to boost signals in areas where obstructions may affect the signal. The mains powered repeater aerial covers a range of up to 200m. The repeater should be mounted (in a non-Atex zone) with the supplied bracket.

C



Radio-Tel Receiver

Receiving health signals from the data transmitters the receiver modules are pre-set to allow for both hardware and software monitoring. Receiving signals from a distance of up to 0.5km (for larger sites repeater aerial should be in place) the receiver can support the automatic control of up to 16 transmitters. By hardwiring the receiver into the process control relays, Radio-Tel can indicate the status of a process through the software and/or by triggering an alarm. The receiver module is IP65 rated and can be supplied with a battery back-up (recommended).



Radio-Tel Software

Monitoring up to 16 transmitters on one screen the Radio-Tel software indicates an error in the process or a change in temperature within 5 seconds. Updates are sent from the transmitters to the receiver every minute displaying outputs on a PC. Status icons change to indicate an error state offering a simple visual indication that a problem has occurred within the process. For non-manned control rooms Elfab recommend that hardwiring or alarm signals are in place.



Beacon / Signalling System

To indicate and warn of a process problem Elfab can provide a choice of signalling systems that can easily be wired to Radio-Tel. Both internal and external alarm systems are available, with a voice activated alarm. All alarm systems are IP65 rated. ATEX approved options available on request.

Test-Tel



The Test-Tel installation aid is a low-cost portable tool designed to confirm disc and Flo-Tel™+ operation during mechanical and electrical installations. Test-Tel is used to synchronise the data transmitters with the receiver.

For more information on Radio-Tel please email sales@elfab.com or alternatively call +44 (0) 191 293 1234 to speak to one of our sales representatives.

t: +44 (0) 191 293 1234 f: +44 (0) 191 293 1200
e: sales@elfab.com w: www.elfab.com