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## New ATEX directive and „Wireless Ex“

Electrical dust explosion protection: a red-hot topic at the Powtech

Dust explosion protection will be a concern of many visitors to this year's Powtech. And rightly so, since this topic is currently very much in focus.



*At the Powtech, steute will be exhibiting its new Ex position switches and Ex sensors in „Wireless Ex sWave“ technology.*

One definite point of discussion will be the changeover from ATEX directive 94/9/EG, which has been in existence for 20 years, to the „New Legislative Framework“ (NLF), valid throughout the EU. The new ATEX directive 2014/34/EU will replace the previous 94/9/EG and come into force on 20.4.2016 without any transitional arrangement. It affects all machine and plant manufacturers who work in the field of mechanical process engineering and whose machines perform tasks such as

crushing, mixing, grinding, sieving, extracting, charging and pelletising – as well as, ultimately, all users of such machines.

As far as its content is concerned, the new directive is straightforward: nobody has to redesign their machines to conform to ATEX or update existing machines. However, the lack of a transitional period has been cause for irritation. Strictly speaking, mechanical engineers will have to change all their EC declarations of

conformity at the stroke of midnight between 19.4. and 20.4.2016.

Since this is just not possible, a pragmatic solution has been found - partly thanks to the commitment of the ZVEI. In their EC declarations of conformity, manufacturers can now declare compliance of a product with both ATEX directives – 94/9/EG and 2014/34/EU – in the period leading up to 20.4.2016, provided that they clearly state that the „old“ 94/9/EG is only valid until 19.4.2016, and that validity of the „new“ 2014/34/EU starts on 20.4.2016. Within the year, these „double“ declarations of conformity with their transitional validity can then be replaced by ones which refer only to the new ATEX directive.

The products we shall be showing in Nuremberg will include our new Ex RF 96 series of wireless position switches, as well as our new Ex RF IS series of wireless inductive sensors, which are suitable for radio transmission in conjunction with our Ex RF 96 ST universal transmitter (Fig. 1). This means that engineers wishing to use

Ex wireless switchgear can still exploit the advantages of non-contact detection.

An additional focus of our fair presentation is machine safety in Ex zones, a topic currently important for many processes, e.g. crushing and grinding. Many machine manufacturers exhibiting at the Powtech use our Ex safety switchgear, and we are now working on new developments which we are keen to discuss with visitors to the fair.

And finally, a look at the future of Ex switchgear: in the mid-term we believe that, here too, integrated solutions will become standard. This is a development which we are currently driving forward with our sWave.NET technology for non-Ex products, and one which makes particular sense for applications where many wireless switching devices are installed in an industrial plant or production area.

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