

## Explosion in the millhouse »CORDERO«



### Interview to an expert

**Ferruccio Cerruti, MD of Etea Sicurezza and explosion protection expert in the International contest, was interviewed in order to understand what really happened.**

**RTJ:** „Mr. Cerruti, explosions like the one occurred in the millhouse can happen in this industry only or in other sectors?“

**Dr. Cerruti:** „All the activities where combustible dusts, flammable liquids, gases and vapours are handled always have the risk of explosions. The millhouses are strongly affected because of the cereals, flour, starch and co-products. They're not included in the range of the so called 'High Risk Activities' nevertheless the fire and explosion hazard is very high. I have written a book for the Italian Union of the Food Industry about a practical approach to such a risk. But the consciousness is still really low.“

**RTJ:** „What are the possible measures to contain such big damages?“

**Dr. Cerruti:** „The absolute priority must be given to the prevention, through proper training to the workers and good work procedures in order to avoid hazardous atmospheres and effective ignition sources. In case the preventive measures are not enough to reduce the risk to an acceptable level, protective measures must be taken for the limitation of the entity. The real problem is that such protective measures are not to-

tally known and always seen as an 'unfruitful' investment.“

**RTJ:** „We know that there's a law in force about this topic: is it complied with?“

**Dr. Cerruti:** „The ATEX Directives are in force in Europe from 2003 on, the ATEX 95 (EU Dir. 94/9) for equipment intended for use in hazardous atmospheres and the ATEX 137 (EU Dir. 1999/92) for the complete Zoning and Explosion Risk Analysis by the owner of the enterprise. The risk Analysis should be carried out by competent people because of the high technical level. Such skills are not usually part of the internal knowledge of the enterprise and in many cases the owner needs to ask for the competency of external consultants. Today in Italy all the industrial sectors need to comply with the law.

While the big industries are working for the compliance, the medium and small enterprises are still so far from the problem and I think that we have to work very hard to create the consciousness first.“

**RTJ:** „What are the best jobs you did in this field?“

**Dr. Cerruti:** „We do every job with the same enthusiasm and commitment as we know what could be the effect of an explosion. When such events occur, like the one in Fossano, I always ask myself if we could have done more in order to avoid it and to

convince our customers about the real need to protect themselves from explosions.“

**RTJ:** „Why your company, very competent in this field, is located in Saluzzo, Piemonte? Just a case?“

**Dr. Cerruti:** „Our competence is totally related to our people, all engineers and technicians who built their great experience abroad, where the consciousness and the knowledge of the hazard is much higher. We've been working closely with big Industries in our area as well.“

**RTJ:** „Where do you work abroad?“

**Dr. Cerruti:** „Our know-how is very much appreciated and required in different countries of the world. We're actually active in South America (Chile, Brasil, Argentina), in the Middle East (Egypt, Qatar, Emirates) and in Eastern Europe (Romania, Bulgaria)“.

**RTJ:** „What is the real competence of Etea Sicurezza?“

**Dr. Cerruti:** „We're process risk analysts, with reference to the fire and explosion risk. We can simulate these two events with very sophisticated software (DESC and Fire Safety Engineering), giving to our customers a complete 'Safety Concept', including the project engineering and the 'tailor made' Fire and Explosion Protection System“.

**RTJ:** „What do you think about the explosion in the millhouse?“

**Dr. Cerruti:** „We were asked by the owner to assess the risk in the late 2005. We wrote the 'Explosion Protection Document' highlighting some big issues related to the protection of bucket elevators and silos. Unfortunately, the owner took time and didn't plan to implement the suggested measures, assuming (as usual) that no events occurred in more than twenty years of activity. Today it's very frustrating to admit that he didn't take into proper consideration such a risk.“

