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## **Safety and health protection in milking process**

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The modern milking equipment is a complicated agricultural machine, in which there comes to interaction man – machine – animal – milk. In the past, the milking equipments were assessed from the view of safety, efficiency, technical characteristics, durability, quality, hygiene, price, etc. The equipment had to fulfil mandatory technical regulations and mandatory standards. After the Slovak Republic became a member state of EU, most of requirements were transformed into relation producer – customer. As a public interest, there remained only the safety of equipment.

The milking equipment consists of mechanical parts, electrical parts and control parts (often antens), therefore it has to fulfil the requirements of EU directives now – Machinery Directive, Low voltage Directive, Directive about Electromagnetic compatibility, Sound power level Directive. These directives have their equivalents in the Slovak Government Orders. Producer, which brings milking equipment to Slovak market (which is part of UE market), has to issue, in written form, the Conformity declaration before. Conformity declaration is a legal document, by which the producer confirms that the product fulfils requirements of mentioned directives and standards. If the producer is not from UE countries, than the distributor, which brings the product to the UE market, has to issue the Conformity declaration.

Having declared the conformity, producer takes responsibility for equipment's safety in the moment of its bringing to the market. After installation of the milking equipment, customer has to do the tests in accordance with regulations of the Slovak Republic, before it starts to opetare. Inspections and revisions shall take place in regular intervals during equipment's operation. The milking equipment usually works in humid environment with a high corrosion activity. From our experiences, it results that besides some damages of protective parts there can be also increasing of transfere resistance of conected lifeless parts, or conection breaks. When there is accidentaly created voltage on lifeless parts or when there are some floating currents, there the operators and animals are endangered, therefore it is necessary to make regular

measurements and remove the breaks. The operators have the complete instruction handbook in their state language, what also contributes to maintaining on the reached level of safety. Operators are regularly trained. There is also regular control of fulfilling the safety regulations and of the use of protection means. These requirements come out from the Laws and regulations about the work protection in SR.

It is only up to the customer – farmer to choose the proper milking equipment from the market. Today there are no state mandatory recommendations and restrictions. The customer has to choose himself the suitable equipment according to its efficiency, quality, price, services, etc. When he decides between comparative equipments, he has to rely on company materials, or published results of independent organizations. Certainly, he should not to make decision only on the base of purchasing price. The milking equipment contains many parts that have to be regularly removed and changed and the price of these parts and the work in its changing can expressive influence the total costs on operation. As to the influence of milking equipment on the milk quality, on the health of milk cow, etc., he can be oriented only according to referencies. The aim is to buy such milking equipment that enable gaining the milk in the suitable quality.

Our Institute provides the experts services to producers or distributors in elaborating of the technical documentation necessary to Conformity declaration in accordance with the Directives mentioned above. We provide detailed information about regulations and about the Conformity declaration at our Institute.