

NORRES food hoses meet new food regulations effective from May 2009

Consumer protection a top priority

NORRES has already implemented the latest amending Directive 2007/19/EC of EU Directive 2002/72/EC. As of May 2009, plastic materials and articles that could come into contact with food must be produced in all member states with virtually no phthalate softeners. All food hoses and hose systems supplied by NORRES, the Gelsenkirchen based hose manufacturer, have been officially approved by an independent testing laboratory and the complete hose meets the requirements laid down in EU Directive 2002/72/EC, including the latest amending Directive 2007/19/EC.

The tendency of softeners to migrate into food has been demonstrated in numerous studies (for instance, by the German Federal Institute for Risk Assessment). This migration can be attributable to agricultural processes as well as to production, processing, storage, packaging and transport. If phthalates migrate, the product may be modified and / or the health of the consumer endangered.

However, there are several other reasons why softeners are nowadays considered undesirable. Material embrittlement due to migration can result in premature failure and hence additional safety problems. Softeners can also be problematic in case of fire, leading to high clean-up costs. Disposal problems can likewise arise in certain areas.

Social responsibility

NORRES Schlauchtechnik has a long tradition of responsible behaviour towards consumers. Food hoses and hose systems manufactured by NORRES are absolutely free of softeners. All hoses and hose systems destined for food applications meet the requirements of EU Directive 2002/72/EC, including the latest amending Directive 2007/19/EC. These hoses are only permitted to be marked with the glass / fork symbol – the EU's official food logo – following comprehensive tests by an independent laboratory to verify their conformity with the Directive's requirements. The fact that the complete hose is always tested as a finished product – rather than separate tests for its individual components – is extremely important in this connection. Since March 2007, all softener-free hoses

have been identified with a special "Free of softener" icon to help NORRES' customers find the type that best meets their specification quickly and easily.

CONNECT Safety Clamp System 230

The example set by NORRES clearly shows that contamination in food is avoidable. However, not only the hoses themselves but also the connecting elements that clamp them in place in the production line have to comply with food regulations. NORRES has a broad portfolio of connection technology that includes special food-quality products, such as the CONNECT Safety Clamp System 230. In the past, most free-flowing solids had to be loaded in and unloaded from silo vehicles using rubber hoses due to the lack of a suitable connection system. Amongst other things, these hose types are much heavier, less flexible and less resistant to abrasion than their modern polyurethane counterparts and they do not permit the process to be observed. For this reason, the NORRES Schlauchtechnik R&D department has developed a system that, for the first time, allows a plastic spiral hose to be combined with a safety clamp system with clamp shells. The CONNECT Safety Clamp System 230 is absolutely free of softeners. This innovative system was initially intended for the AIRDUC® PUR 356 MHF reinforced – a food-quality hose that is free of softeners, FDA-compliant and bears the glass / fork symbol. The pre-assembled hose system can be supplied in two different stainless steel versions and is thus ideal for applications in the food industry. The CONNECT Safety Clamp System 230 can be assembled simply and fast and is suitable for reuse. Finally, many popular coupling and connection solutions, such as Kamlok, Storz or tank truck couplings, can be connected to the Safety Clamp System quickly, easily and securely at any time. Practical experience has confirmed that the compatible AIRDUC® PUR 356 MHF reinforced hose offers up to five times better durability than conventional rubber materials. The longer the hose service life, the lower the risk of failure and the lower the maintenance costs for the owner.

CONNECT Safety Clamp System 231

The recently launched CONNECT Safety Clamp System 231 for heavy and super-heavy, externally

corrugated spiral hoses is also absolutely free of softeners. This system is offered in two stainless steel qualities and is therefore universally suited for food industry applications. It features a special, threaded sealing insert that is adapted to the outer hose contour and fitted between the hose and the shell. The connection formed when the shells are clamped is remarkably tight. It is consequently explosion proof and the clamp shells are suitable for reuse. The system is designed with a form-locking groove and a form-locking bar. The resulting high tensile strength ensures that the adapter is securely held in the spiral hose even under considerable pressure. Furthermore, the hose's metallic insert is exposed and contacted with the adapter when the system is assembled. Clamping the shells creates a secure connection capable of electrostatic discharge. The shells are made of aluminium, which means they can be assembled simply and fast. The polyurethane employed for the sealing insert is food-quality and complies with the regulations of the American Food and Drug Administration (FDA 21 CFR 177.2600 and 178.20) plus the equivalent European Directives (2002/72/EC and 2007/19/EC). Finally, many popular coupling and connection solutions, such as milk tube, aseptic, TRI-Clamp, Kamlok, Storz or tank truck couplings and fixed or loose flanges, can be connected quickly, easily and securely.

The batch number, the article number and the manufacturer's name are printed on the hose to help users keep a check on the recommended maintenance intervals and avoid confusion or delays when ordering spare parts.