Press Release	
Subject:	**Unique 'Y' Rubber Compound**
Date:	March 2016

Reich-Kupplungen has developed a dynamically highly stress-resistant 'Y' rubber compound for the manufacture of highly flexible power transmission components.

Right on time for the bauma fair 2016 in Munich and its 70th company anniversary, Reich-Kupplungen is presenting the newly developed 'Y' rubber compound which is unique to the world. The new elastomer comes with comparable dynamic properties to natural/synthetic rubber compound and offers the same high degree of stress resistance while it is suitable for use at ambient temperatures up to 120°C. Thanks to this 'Y' compound, highly flexible and flexible power transmission components can now be employed in a wider range of applications. The products from Reich-Kupplungen thus step into a new dimension because the elastomer can be used in all types of couplings.

The new 'Y' compound not only incorporates all the positive properties of the existing rubber compounds, but also eliminates the undesired side effects at the same time.

Elastomers from natural/synthetic rubber compounds which are used as a standard and named 'N' compounds by Reich-Kupplungen can be used in a temperature range of -40°C to +80°C.

Where higher ambient temperatures are encountered, silicone rubber which is suitable for use up to +120°C, or sometimes up to +130°C, is usually employed. This product is listed by Reich-Kupplungen as 'X' compound. Silicone, however, exhibits substantially inferior mechanical properties so that a correspondingly large service factor has to be incorporated into the coupling design for the case under consideration. A larger coupling version is often chosen as a result. Adding to this is the fact that silicone material is relatively expensive compared to natural rubber.

For applications like these, Reich-Kupplungen has been successfully using its thermally stabilized natural/synthetic rubber compound, the so-called 'T' compound, for more than 20 years now. It offers almost identical mechanical properties compared to the standard but its service temperature ranges from -25°C to +100°C. In this way many applications where couplings are poorly ventilated in confined mounting spaces can be successfully equipped with this low-cost special solution.

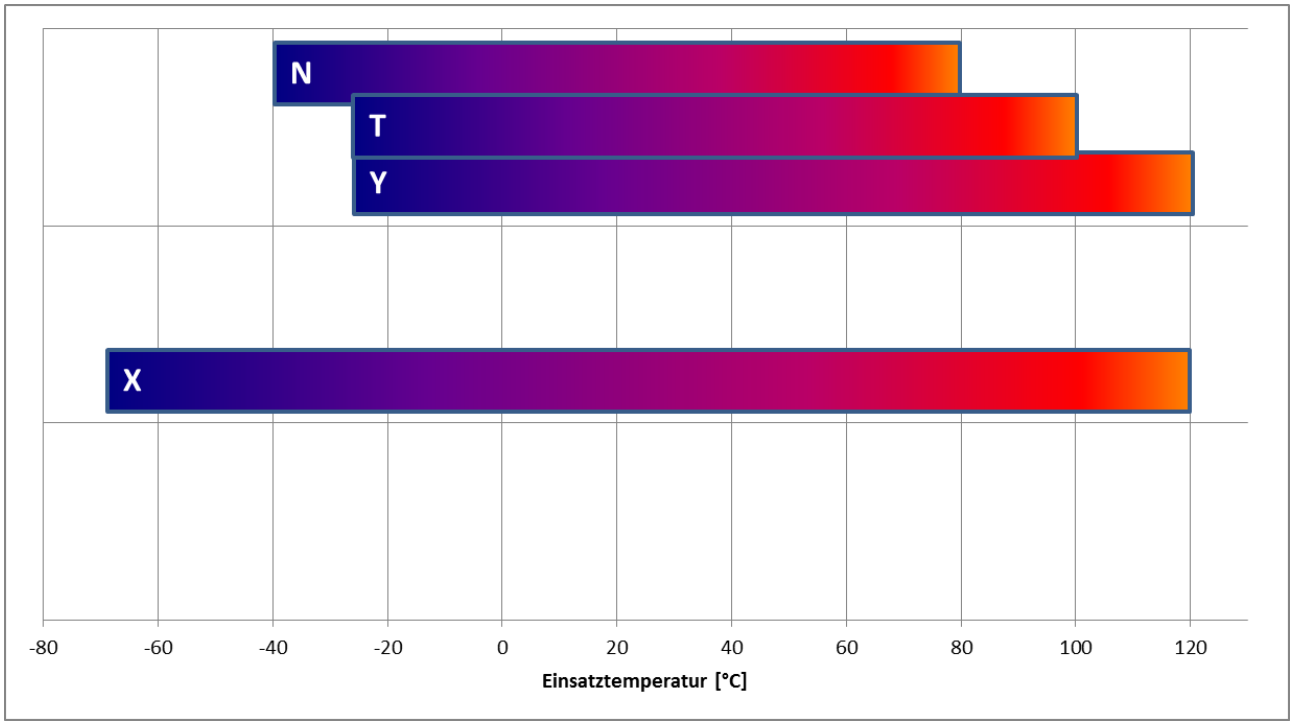


Fig.: Service temperature range of the different elastomers of Reich-Kupplungen

With the new 'Y' compound, the thermal stability could be enhanced again over the already proven 'T' compound without compromising the high material strength as is the case, for example, with silicone. The 'Y' compound features a particularly high thermal stability under operating conditions from -25°C to +120°C. The material offers an excellent resistance to UV light and ozone, to aggressive media such as chemicals, and to hot water and water vapour. Its resistance to oils and fuels is comparable to that of the known natural/synthetic rubber compounds.

In the first step, the 'Y' compound was developed under the designation NY with a Shore hardness of 65 ShA in order to cover a wide field of applications which are regarded as critical in the market. While doing so, the developers also laid their focus on complying with the most stringent, current environmental requirements which is a common feature to all elastomers from Reich-Kupplungen. Over and above the applicable environmental regulations, Reich-Kupplungen is pursuing its self-set goals within the framework of the ISO 14001 environmental management certification. Utmost importance is attached to a gentle handling of the existing resources during development and production. The NY compound, having undergone comprehensive qualification measures and testing of the technical specification on the in-house test benches, is now available at Reich-Kupplungen for the most diverse types of couplings. Thanks to its good

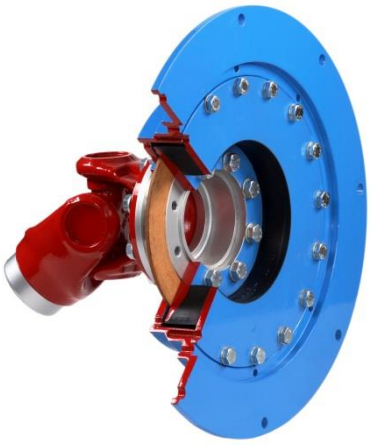
strength properties, this material can also be used for pressure- and shear-stressed types.

The NY compound is thus an excellent addition to the existing elastomers for the highly flexible, pluggable ARCUSAFLEX rubber disc coupling, the highly flexible ARCUSAFLEX-VSK cardan shaft coupling, and the highly flexible, torsion-optimized TOK coupling. It goes without saying that the NY compound can also be used for any customized solution according to our motto D2C – Designed to Customer.

Some hundred couplings have already been successfully installed in the field in the most diverse applications where they are exposed to the most severe conditions – whether in compressors in the desert, crushers with extreme shock loads, generator sets with a minimum mounting length, CHP plants with many start/stop cycles or distributor gearboxes with an insufficiently ventilated coupling mounting space. With the use of NY, the service life could be improved many times over in these thermally critical applications.

Since its foundation in the year 1946, Reich-Kupplungen has been one of the companies who are highly specialized in power transmission technology. Everything has been revolving around rubber technology, elastomers, and bonding with all types of metals right from the start. Development and production have been performed in-house since these early years so that high competence in the design and manufacture of couplings for the respective power transmission application is ensured.

Reich-Kupplungen, as a manufacturer of highly flexible power transmission elements who is running its own in-house rubber production facility, is a global supplier to companies operating in the fields of:



- **Combined heat and power plants and biogas plants**
- **Marine applications**
- **Construction machinery**
- **Agriculture and forest engineering**
- **Test benches**
- **Pumps and compressors**
- **Railroad and traffic engineering**
- **General mechanical engineering/conveying engineering**

Continuous innovation, customer proximity and service, quality, and a personnel policy aiming at equal opportunities and consistent further development are the basis for sustainable company success.

Visit us at the bauma in Munich from 11 to 17 April 2016 in Hall A4, Stand 511.