

## KORING 312-5 and KORING 312-6 *Anti-corrosive Welding Machine Coolants*

### **General:**

KORING 312-5 and KORING 312-6 anti-corrosive liquids are special heat exchange coolants designed especially as a cooling medium for high power, current and long load welding machines. The liquids serve as a medium for heat exchange, but at the same time guarantee protection against corrosion of the inner walls of closed cooling circuits. The liquids are designed not to damage non-ferrous or ferrous metals or polymer seals. On the contrary, they effectively protect them against corrosion. They contain not only corrosion inhibitors but also metal passivating components. The liquids also have the ability to clean older circuits and exchangers of corrosion and deposits.

KORING 312-5 is designed for operating temperatures down to -10°C, KORING 312-6 can withstand temperatures down to -20°C.

### **Methods of Application:**

After pouring into the welding machine and after circulation through the circuit, the liquid changes colour to light green within 24 hours. This is an indication that liquid is present in the welding apparatus circuit and that the passivation reaction is running. At the same time, the greenish colour allows to check the level and amount of liquid in the reservoir.

Although the coolant has cleaning properties, it is designed to hold loose contaminants over the long term so that they do not contaminate the cooling circuit. However, these impurities can manifest themselves in the cloudiness of the liquid. In the event that loose contaminants at the bottom of the reservoir begin to form gel sediments, the liquid should be changed to prevent the circuit from clogging.

For welding machines that run in 24-hour operation, it is recommended to change the liquid once a year, if the welding machines are used only for 1 shift, it is sufficient to change the liquid once every 2 years.

### **Warning:**

Before filling the circuit, it is necessary to check its tightness.

When mixing with a previously used heat exchange liquid, it is necessary to check in advance that the mixing does not cause an undesirable reaction. If 30% of the older KORING 312 liquid remains in the circuit and 70% of the new liquid is added, the corrosion protection will be reduced. When mixed in a 1:1 ratio (new/old), the corrosion protection will be negligible.

At temperatures of -10°C or -20°C, the liquid can freeze.

### **Advantages:**

High efficiency and biodegradability. It actively protects the exchange circuits against corrosion, even when energized. It contains both corrosion inhibitors and metal passivators. The liquid simultaneously cleans older cold or hot water circuits. It is fully compatible with other coolants based on glycols and other more saturated alcohols (without additives). If liquids with additives (e.g. corrosion inhibitors) have previously been used in the circuit, it is necessary to check in advance whether mixing the two types of liquids causes an undesirable reaction.

### **Storage Life:**

Storage life of the products is 2 years in a sealed container at a temperature of up to 30°C and excluding the influence of direct sunlight.