

INSTRUCTIONS FOR PROPER USE OF THE CHAINS AND CHAIN WHEELS/SPROCKETS MADE BY ŘETĚZY VAMBERK spol. s r.o.

To guarantee correct use, functionality and appropriate service life of the chains and chain wheels/ sprockets delivered by the ŘETĚZY VAMBERK spol. s r.o. company, it is recommended to follow the manufacturer's instructions stated below:

I. General Instructions

When choosing chains and chain wheels/sprockets made by the ŘETĚZY VAMBERK company, please follow the instructions available at www.retezy-vam.com in the section "Technical Support" and all the relevant technical norms and legal regulations as well as the service conditions under which the chains or chain wheels/sprockets are to be used. The chain must not be loaded with tension higher than 1/7 of the force needed to break it (the breaking force in kN). The chain may not operate at lower temperatures than -10 °C or at higher temperatures than 180 °C. An offset chain link reduces the overall chain breaking load by at least 20%. The chain and the chain transmission must not be exposed to any sideward forces, pressures and impacts. The chain may be loaded by tensile force only, free of any impacts! The chain transmission shafts must be positioned at such distances to avoid any chain oscillation. When designing the chain transmission, it is necessary to ensure that the upper chain strand is loaded and the lower one is free. The lower chain strand must have a moderate chain slack. In order to achieve an even wear-and-tear of the chain transmission, it is necessary to apply chain wheels/sprockets with an odd number of teeth. During the manufacturing process, each chain and chain wheel/sprocket is lubricated, unless otherwise stated in the order confirmation/contract. During the service time, it is necessary to lubricate both the chain and the chain wheels/sprockets regularly (also under normal operational conditions, if possible) in the manner and under the conditions as prescribed by the device manufacturer. Insufficient lubrication is the most common cause of an excessive wear-and-tear and of the chain elongation and thus the reason for shortening the service life of the chain transmission. Do not use oils tending to congeal and/or to evaporate.

II. Storage

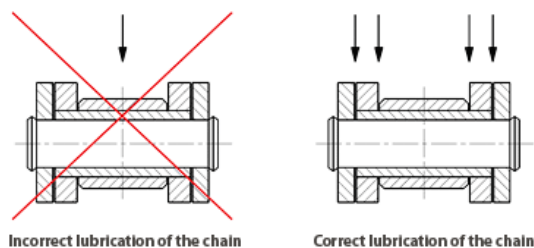
New chains and chain wheels/sprockets should be stored wrapped in the original packaging at a dry and well-aired place. Avoid any direct contact with the floor. When the storage time exceeds 12 months, additional lubrication of the chains and chain wheels/sprockets should be carried out to avoid corrosion. While doing such additional lubrication, make sure that the new preserving agent is chemically compatible with the originally supplied preserving agent and lubrication. Protect the chains and chain wheels/sprockets against dirt and humidity.

III. Assembly, Disassembly and Maintenance

Before starting any work (assembly, disassembly, maintenance), the equipment must be safely stopped and switched off. The assembly, disassembly and maintenance must be carried out by the appropriately qualified personnel. For any work/job on and with the chain transmission only professional and suitable tools and preparations may be used. Protective clothing and other protective means should be used during the entire duration of assembly, disassembly and maintenance. Having finished all work/jobs, make sure that all covers, protective devices and other associated components have been installed completely and correctly, are closed and work correctly. Before starting the ordinary operation of the chain transmission, always perform the test operation first. Pay special attention to the trouble-free operation of the entire chain transmission, in particular to the trouble-free operation of the sprockets, chains and chain transmission accessories. In each case, assembly, disassembly, operation and maintenance must be adjusted to the actual service conditions of the equipment while all safety regulations and instructions prescribed by the standards and by the device manufacturer must be followed unconditionally. The chain may be mounted only on the chain wheels/sprockets specified for this purpose. A new chain must never be mounted on any used or worn-out chain wheels/sprockets. Chain wheels/sprockets must be mounted in an exact alignment and the chain wheel/sprocket axes must be coaxial. If assembled improperly, the chain will not be loaded with tensile force only but it will be exposed to sideward forces, too. This will reduce the chain service life significantly. Never use / repair / process any disassembled components from any used-up/damaged chain transmission. Any and all surface impurities should be removed from the chain transmission immediately. Never use pressure cleaning devices to clean the chain transmission and do not use dissolved acids or other aggressive solutions, either. They might cause corrosion! All contact surfaces of the chain transmission must be clean, even, smooth and undamaged. During assembly or disassembly only new connecting elements delivered by the ŘETĚZY VAMBERK company should be applied. Never use in the device an old and a new chain or chains from more manufacturers. This is also valid for the connecting links. Before assembly, be sure that the connecting elements, countersinks and holes for the pins in the chain are undamaged. After assembly of a new chain, it is necessary to run it in accordance with the instructions delivered by the device manufacturer – in order to stabilize the chain length and to set the correct dimensions. The same applies to situations when a Client has mounted other elements onto a delivered chain. During the running-in, the elements mounted by the Client must not be tightened to the chain with maximum force.

IV. Lubrication and Checking

Proper cleaning and lubrication is essential for good function and service of the chain transmission.



Follow all instructions and hints provided by the device manufacturer in order to use the equipment in the correct manner, to respect the necessary service intervals and to carry out the proper maintenance. Check the chain transmission regularly, mainly the chain elongation and the wear-and-tear of the chain and the chain wheels/sprockets. Replace every chain which becomes longer by more than 2 % of its length as a result of the chain having been used. When shortening a chain, pay attention to the pressfit between the outer plate and the pin. During disassembly/assembly, push the pins from / into, using professional tools and jigs which correspond to the relevant safety / service regulations and standards. First, remove the riveted pin heads if it is necessary to do so because of the chain design.

In Vamberk, on 1th March 2015

Team of ŘETĚZY VAMBERK, spol. s r.o.

