Product Information Report

All-Metal Lock Nut Torque

All-Metal Grade C Lock Nut

All-Metal Grade G Flange Lock Nut

Pneumatic Impact Wrench

Overview

Proper Torque is Essential when Installing All-Metal Lock Nuts

Because of their design and supplemental coatings, Lawson's All-Metal Grade C Lock Nuts and Grade G Flange Lock Nuts require less torque to install than standard hex nuts.

Grade C and Grade G all-metal lock nuts engage other fasteners by forcing an interference fit between mating threads. Therefore a supplemental coating is needed to overcome the friction generated by the locking element. This polymer coating is so highly lubricous that up to a 60% reduction in standard installation torque is necessary to avoid damaging the assembly.

If torque is not reduced, the fastener assembly can seize, threads can strip and fasteners can fail. This effect is amplified when using impact wrenches. With the speed of an impact wrench and the friction caused by the locking element of the lock nut, a significant amount of heat is generated and transferred to the fasteners during assembly. This heat can cause seizing between the mating fasteners and cause a false sense of proper installation.

The only safe and acceptable way of installing an all-metal lock nut is by reducing and limiting torque by using of a torque wrench. Please refer to Lawson's Fastener Torque Book (E546) for the recommended torque values for all-metal lock nuts with the corresponding grade of fasteners.