



Enabling Your Ideas

Service Bulletin

Number: 0016

Date: May 29, 2007

Title: Oil & Coolant Suggestions

Product Identification: PCNC 1100 Milling Machine, All Machines

Background:

The PCNC 1100 comes with a printed manual, but you may also want to check for updates and notices on our website at: <http://tormach.com/documents.htm>

Oil & Coolant Suggestions:

Oil

When you need oil for your PCNC 1100, any type of oil will work – even motor oil. However, the best oil to use would be oil designed specifically for lubricating machine ways. This type of oil has an additive that helps the oil stick to the surface. The machinists at Tormach use Waylube 68 Way Oil 300-350 SUS at 100F SAE 20, primarily because it is easy to find.

Coolant

When you need to replace coolant in your PCNC 1100, you should look for a coolant that contains biocide but does not contain oil. Ideally, the coolant you use should be something you can dispose of easily, which means that you will most likely be using a biodegradable synthetic coolant. Some coolants are designed for certain materials and some are designed for a large variety of materials. What you plan to machine ultimately determines which coolant is best for you.

Regardless of coolant type, it is important to maintain the correct concentration level of coolant and water in order to maintain the corrosion protection properties of the coolant. Typically, a refractometer is used to check the concentration level. The concentration level can change in a very short time even when the coolant is not in use, because the water evaporates and the coolant does not. Most times, simply adding water to the coolant tank can maintain the concentration level.

Note: Water soluble coolant will leave a residue when it dries. Don't worry about cleaning this residue up – it helps protect the machine parts from corrosion and will eventually wash away with the new coolant!