



Motor Maintenance Tip

Maintaining the cleanliness of the exterior of the motor, the fan and the fan cover grill/screen is critical to getting the most life out of your motors.

Keeping the exterior of motor frames free of debris and buildup is necessary to achieve the normal lifespan of the winding. On a TEFC motor, the fins on exterior of motor are made to direct the air flow over the motor frame for heat dissipation. When they become restricted or filled with foreign material, it may cause the motor to run at an elevated temperature creating a thermal deterioration of the winding insulation. For every 10 degrees C that you increase the temperature of the motor, it cuts the insulation life in half.

Of course the air will originate with the air being drawn into the fan cover by the cooling fan. The grill/screen of the fan cover is critical to keep clean too. In areas that are oily, the cover can become blocked do to dirt being caught in the oil. That same air stream that is cooling the motor frame is sometimes directed onto the bearings, providing cooling for them as well.

A word of caution is to never attempt to clean the motor while it is in operation. The cooling fans are commonly plastic, and will break if they hit something hard. It is not generally recommended to use steam cleaning or water hoses to clean them either. Running or not, remember the old adage that water and electricity do not mix? Get the interior of the motor wet and you have a bigger problem than just a dirty motor!

We can assist you with this cleanliness issue, performing “cryogenic” or dry ice blasting on the motor. [Ask your Horner representative for more details on this.](#)