

Wet Grinding and Wheel Balance

On applications that require wet grinding there is a simple safety requirement that, if not followed, could lead to a wheel breakage. ANSI B7.1-2000 section 9.12 Wet Grinding states, "When shutting down a wet grinding operation, the coolant should first be shut off and the wheel should be allowed to rotate until coolant has been spun out."

ANSI B7.1-2000 section E9.12 Wet Grinding states, "Uneven accumulation of coolant can cause excessive out-of-balance in a wheel."

The thing to remember is always spin the coolant out of the grinding wheel before turning off your grinder. Failure to perform this simple task could result in wheel breakage.

The following is an actual reported example of a wheel breakage caused by an accumulation of coolant on one side of a grinding wheel. An operator turned off the coolant and spun the coolant out of the wheel before shutting the machine down for the evening. During the overnight period, the shut off valve developed a leak. The coolant dripped onto the wheel all night causing an out-of-balance condition. In the morning, the machine was started up and the wheel broke just as it was reaching operational speed. Fortunately, no one was injured.

How can this type of breakage be prevented? In addition to spinning out excessive coolant, make certain that the wheel is not sitting in coolant or coolant is not dripping on the wheel before starting again.

When starting the machine after it has been shut down, always stand aside and away from the front (not in line with) the wheel during start up. Beware of this potential hazard and grind with safety! Always play it safe at the wheel.