Customer test 1: 30% increase in cutting speed results in 20% longer tool life

**Tool:**
PM-HSS hob (S390)
D = 90 mm

**Workpiece:**
Steel 1.7131 (AISI 5115)

**Cutting data:**
\( v_c = 200 \) \( \rightarrow \) \( v_c = 260 \) m/min
\( m_n = 1.62 \)
\( f_a = 6.0 \) mm
dry
Gearbox for passenger car

**Benefit:**
+30% cutting speed and >20% longer tool life

**Source:**
Oerlikon Balzers/Automotive Enduser