Lab tests: convincing results at high-speed cutting

Tool:
PM-HSS hob (S390)

Workpiece:
Steel 1.7131 (AISI 5115)

Cutting data:
\( v_c = 260 \, \text{m/min} \)
\( m_n = 2.56 \)
\( f_a = 4.8 \, \text{mm} \)
\( H_{cu,\text{max}} = 0.25 \, \text{mm} \)
dry

Benefit:
+60% tool life at high cutting speed

Source:
Oerlikon Balzers
WZL Aachen