Drilling of steel at moderate cutting conditions

Tool
Carbide drill, $\varnothing = 8.5$ mm

Workpiece
Steel 1.7225 (AISI4140, SCM440)
900 N/mm²

Cutting parameters
$v_c = 80$ m/min
$f = 0.284$ mm/rev
$L_0 = 5xD$ (through hole)
$VB = 0.3$ mm
Emulsion

Source
Oerlikon Balzers
Cutting Laboratory