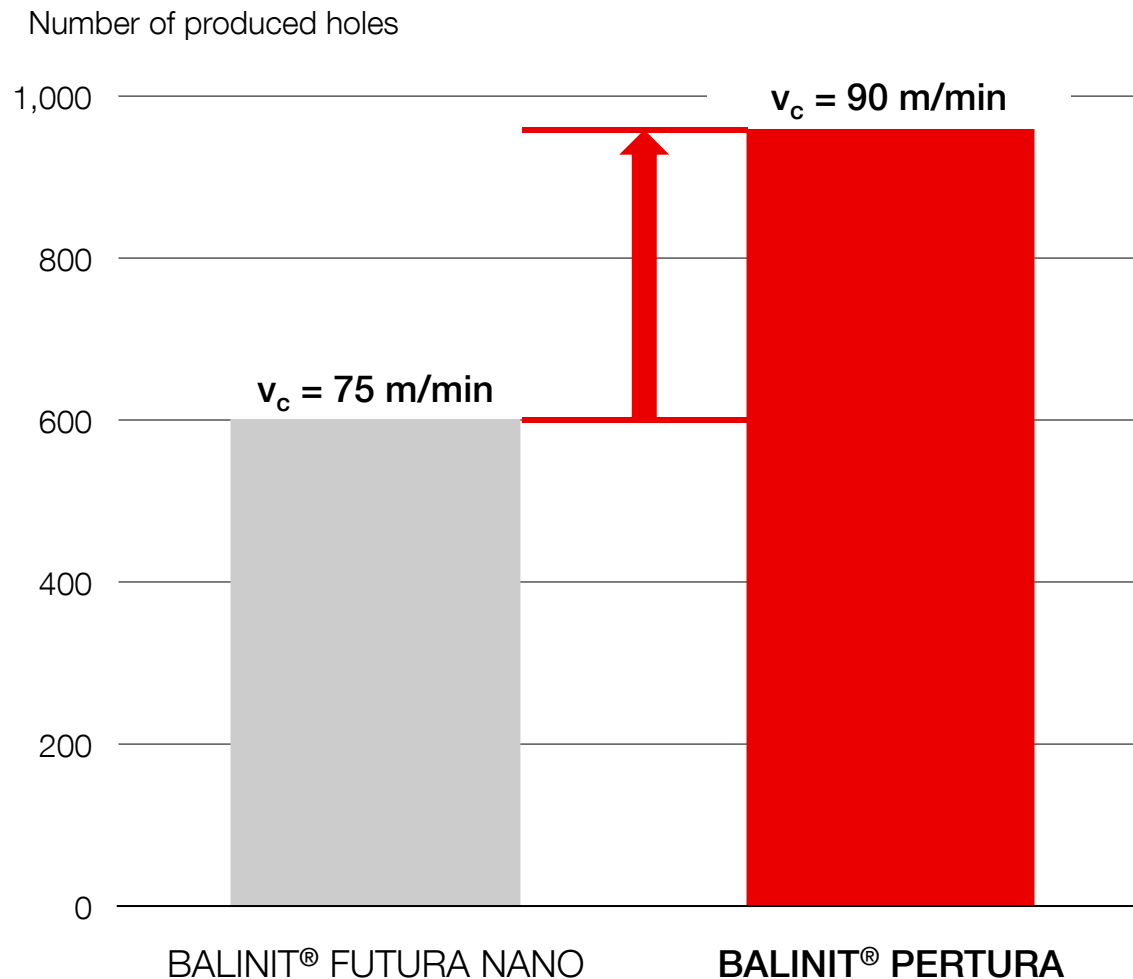


Drilling in unalloyed steel (forged): 20% increased cutting speed, 60% tool life increase



Tool

Solid carbide drill (reground)
Ø12,07x (Ø14) x 95 mm

Workpiece

Steel ~1.0570 (ST52, SN400)
forged (Hardness: 180HB)

Cutting parameter

FUTURA NANO: $v_c = 75$ m/min
PERTURA: $v_c = 90$ m/min
 $f = 0.25$ mm / rev
 $L_D = 25$ mm
Emulsion (internal cooling)

Criteria for end of tool life

Tolerance of hole diameter

Source

Enduser Europe