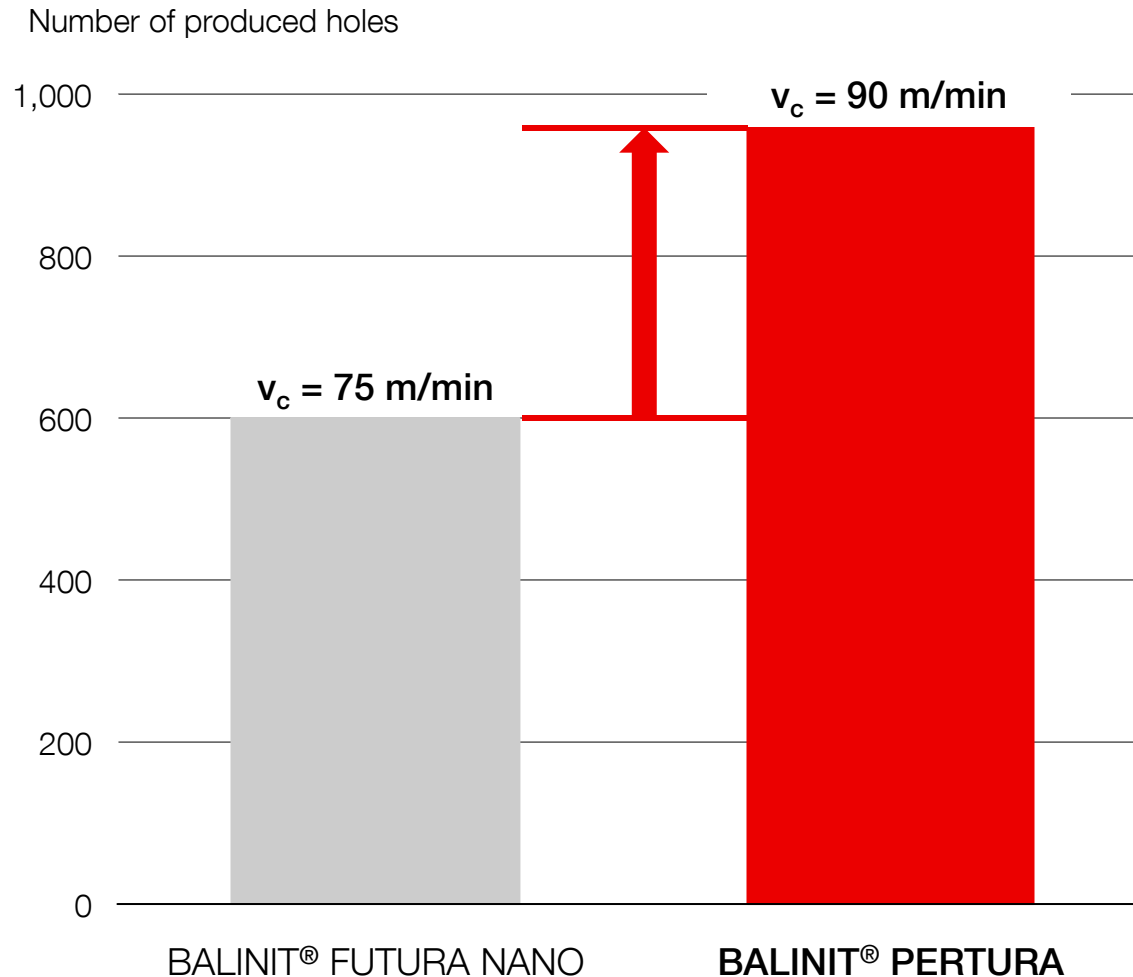


# Drilling in unalloyed steel (forged): 20% increased cutting speed, 60% tool life increase



## 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