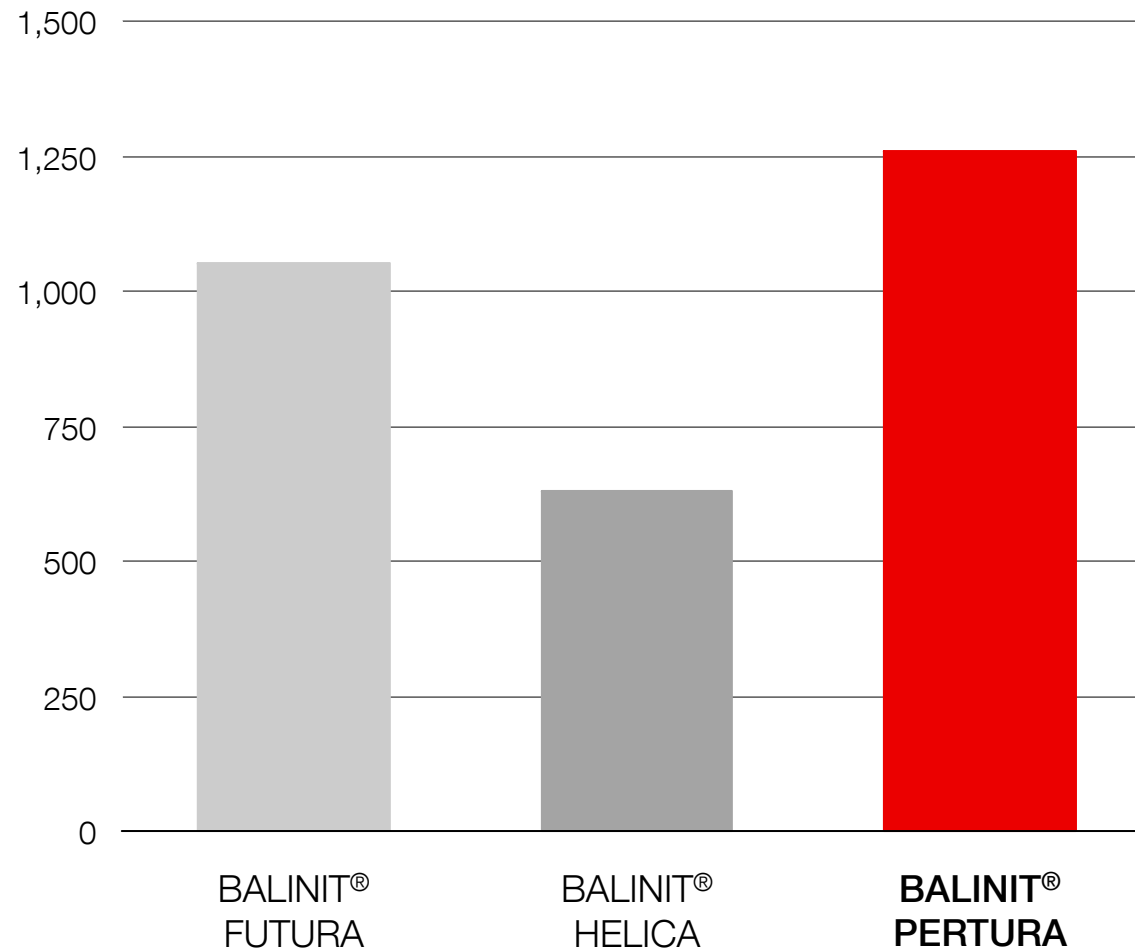


# Drilling of steel at high speed and feed

Number of produced holes



## Tool

Carbide drill,  $\varnothing = 8.5$  mm

## Workpiece

Steel 1.7225 (AISI4140,  
SCM440)  
900 N/mm<sup>2</sup>

## Cutting parameters

$v_c = 160$  m/min  
 $f = 0.20$  mm / rev  
 $L_D = 5 \times D$  (through hole)  
Emulsion (internal cooling)

## Criteria for end of tool life

VB = 0.3 mm

## Source

Oerlikon Balzers  
Cutting Laboratory