Wet machining of aluminum during a slotting test

Tool:
End mill Ø 12 teeth 3
Slotting milling

Workpiece:
Plate 300x300x40mm
AlSi7Mg (6.5-7.5% Si)

Cutting data:
Toolholder HydroChuck
\( v_c = 280 \text{ m/min}, f_t = 0.06 \text{ mm} \)
\( v_t = 1.337 \text{ mm/min} \)
\( a_p = 12 \text{ mm}; a_e = 12 \text{ mm} \)

Benefit:
Improved surface quality
Slightly reduced spindle power due to lubricant

Source/Customer:
German tool manufacturer