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Deliverable D3.2 (D5)

Compilation of the optimum parameters for each of
the considered alternative surface hardening
operations

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PUBLISHABLE SUMMARY

Overall it can be concluded that the case hardening steel variants could be heat treated in a normal way using the conventional route (LPC and HPGQ) as well as the new route using LPC and WSQ. The WSQ device turned out to deliver better quenching results especially when looking at the low alloyed material 2 and the core hardness response. Also the much heavier billets were quenchable in short time with good results.

The WSQ device also showed the possibility to adjust the quenchability according to given specifications thus offering the necessary flexibility.