



Research Fund for Coal and Steel



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Evaluation of the hot forgeability

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PUBLISHABLE SUMMARY

Hot ductility can be a tool to estimate the influence of the steel grade on forging costs. Physical simulation tests were performed in a Gleeble thermal mechanical simulator 3800C to assess the hot forgeability of the chosen steel grades.

All the steel grades show a good hot ductility for a wide range of forging temperatures, except 40CrMoBi4 that exhibits a lower ductility. In any case, the four steels are forgeable as the reduction of area exceeds the 60% for all of them in the typical ranges of temperatures used in hot forging.