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tempering treatments after AWST welding can lead to higher resistance to steady stress. As indicated by the results of tensile test, the quenching and

processes of AWST and ASTWR in the range of experimental temperature has shown that the ASTWR has higher impact values

temperature tensile strength will increase with the increasing sizes of Si precipitated phases. The comparison between the welding

precipitated phase of Si, the impact value will decrease with the reduction of sizes of Si precipitated phases, while the high

microstructure at the preset gap of specimen. During high temperature impacts, they are vulnerable to the effects of precipitated

of impact toughness against impacts under room temperature is ASTWR > AWST > AST, which has something to do with the

environment with the purpose of using the results as the reference for structural design. The results of this study show that the order

precision steam high-pressure container is mostly used in high temperature environment under high pressure, making it

The manufacturing of large-size precise steam high-pressure container by SAE 4130 can only follow two kinds of processes: AWST

(Annealing + Welding + Solution + Tempering) and ASTWR (Annealing + Solution + Tempering + Welding + Stress Relief).

However, this precise steam high-pressure container is mostly used in high temperature environment under high pressure, making it

黑處理型高強度低合金鋼 ||| ||| 合金鋼之合金元素及其特性 ||| ||| 合金鋼的熱處理 ||| ||| 電弧點焊的介紹 ||| ||| 電弧鋸接的介紹 ||| ||| 塊狀熱影響區

而熱影響區組織變化 ||| ||| 多層次銲道的熱影響區 ||| ||| 破斷模式

材料準備 ||| ||| 實驗流程 ||| ||| 微硬度分佈 ||| ||| 衝擊試驗 ||| ||| 拉伸試驗 ||| ||| 顯微組織觀察與分析 ||| ||| 分析

分析 ||| ||| 分析 ||| ||| 第四章 結

簡奕丞、李義剛

第三章 材料與試驗分法

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