航空学报
ACTA AERONAUTICA ET ASTRONAUTICA SINICA
ISSN 1000-6893
CN 11-1929/V

航空学报 » 1994, Vol. 15 » Issue (11) :1408-1410 DOI:

对焊接头几何形状参数统计分布及焊趾处K_t计算

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STATISTICAL DISTRIBUTION OF BUTT WELDED JOINTS' GEOMETRY PARAMETERS AND CALCULATION OF K AT THE WELD TOE

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摘要 对焊接头主要外形尺寸进行了测量,经统计分析：焊趾角、焊缝宽、焊缝加厚高与接头错位符合正态分布,焊趾曲率半径符合对数正态分布,焊缝加厚高与接头错位亦符合威布尔分布。依此对焊接头焊趾处应力集中系数K t 进行了计算。

关键词： 焊接联接 统计分布 应力集中 系数

Abstract： The major shape measurements of butt welded joints are measured It is obtained by statistical analvsis taht the statistical distribution of weld toe angle,weld width,weld reinforce-ment and weld misalignment is nonnal and that of radius at the weld toe is logarithm nonnal.It is also found that the distribution of weld reinforeement and misalignment is Weibull.The stress concentration factor Kt at the weld toe is calculated.

Keywords： welded joints statistical distribution stress concentration coefficients

Received 1993-01-18; published 1994-11-25