

10kW

10kW Laser Welder for Stainless Steel Annealing and Pickling Line

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:

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10kW

mm

Synopsis :

A laser welder, installed in the stainless annealing and pickling line (APL) at No.2 Cold Rolling Mill of Chiba Works, started operation in March 1986. This is the first industrial application of 10kW oscillator in the world, which can weld stainless steel up to 8mm in thickness. By stabilizing optical parts and laser beams through a long optical transmission path at high power welding, welding stability has been obtained. High strength of the welded joint obtained by the laser welder has made it possible to improve productivity and material yield by passing the full length of the coil mp₈

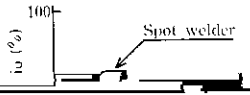
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要旨

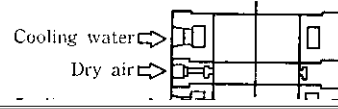
千葉製鉄所第2冷間圧延工場のステンレス用連続焼鈍・酸洗ライ

Table 1 Specifications of laser welder



Thickness (mm)

1.6~8.0



程でこの部分を除去するため歩留りが低下する。本溶接機では剪

(2) ノッチャー

断装置は、ノッチャーを用いて、溶接部を除去し、歩留りが低下する。

を使用した。溶接部断面を **Photo 2** に示す。いずれの場合も十分な
溶け出し、溶け込み、溶け込みが得られており、溶接強度の評価係数の一

つである反復曲げ回数も必要回数を十分達成している。