

新大型溶接実験機「RM17-1.0」の開発

DEVELOPMENT OF HIGH POWER RESISTANCE WELDING MACHINE "RM17-1.0"

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要 旨

当社のコンデンサ式抵抗溶接機は多種多様な分野に使用されているが、近年は主に自動車駆動系関連部品への適応を目標としている。装置拡販や自動車駆動系関連部品メーカーからの依頼実験を行う中で、接合対象アイテムの拡大に伴い接合物の大型化や高強度化が進み、高加圧・高電流出力の装置が求められていた。幅広い依頼実験に対応する最大加圧力 600kN の大型シリンダや新規のコンデンサと充電ユニットを搭載した実験装置「RM17-1.0」を開発したため本誌で紹介する。

Abstract

Our capacitor-type resistance welding machines are used in a diverse range of fields. In recent years, however, they are targeted mainly at applications in drive-system related components in the automotive industry. In expanding sales of these devices and conducting experimental trials at the request of the manufacturers of such components, there had been a progressive shift towards welding of large-scale workpieces (due to an increase in the size of items being welded) and towards higher strength welds. These developments led to demand for a high-pressure, high-current output welding device. In this article, we introduce the RM17-1.0 experimental device. The RM17-1.0 is equipped with a large-scale cylinder (with maximum press force of 600kN) and a new capacitor and charging unit, enabling it to handle a wide range of requested experimental tests.