

Translated and Published by Japanese Standards Association

$JIS \ Q \ 9092$: 2022

(JARI/JSA)

Quality management systems — Battery reuse — Requirements

Q 9092 : 2022

Date of Establishment: 2022-05-20

Date of Public Notice in Official Gazette: 2022-05-20

Investigated by: Japanese Industrial Standards Committee

Standards Board for ISO area

JIS Q 9092 : 2022, First English edition published in 2024-01

Translated and published by: Japanese Standards Association Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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Printed in Japan

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Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by Japan Automobile Research Institute (JARI)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act.

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Quality management systems — Battery reuse — Requirements

Introduction

As global warming, air pollution, resource and energy problems become more serious, countries are promoting the electrification of mobility and the reuse and recycling of resources and energy. In this context, advances in secondary battery technology, particularly in lithium-ion batteries, have led to the use of used batteries and battery systems for other purposes that maintain their residual performance after use in their original applications, such as electric vehicles. Supplying used lithium-ion batteries with residual value to the reuse market as safe and secure battery products contributes to the reduction of environmental impact and the effective utilisation of resources such as rare metals, thereby contributing to the realisation of a sustainable society.

On the other hand, the condition of used batteries varies according to the way they were used during primary use, the environment in which they were used, etc., and their residual performance and safety are not constant; therefore, they require special professional attention when used for secondary purposes. In other words, the reuse utilisation of used batteries with a wide variety of performances and conditions is essential for proper handling in the relevant processes, such as collection, transport, storage, design and manufacturing, in commercial terms. Attention should be paid to safety design when batteries that are reliable and safe as a battery system, such as lithium-ion batteries in particular, are used for secondary purposes. Therefore, organizations handling reused batteries, including several operators involved in each process or a new entrant, need to standardise their management systems so that the systems can be implemented seamlessly throughout the process, with each operator taking responsibility for the secondary product (under third party certification) and fulfilling the necessary management requirements.

This Standard provides general requirements for the Battery Reuse Quality Management System (BRQMS) that is required when handling used batteries for organizations handling used batteries or battery systems.

This Standard incorporates contents of **JIS Q 9001** : 2015 Quality Management Systems — Requirements in its entirety and specifies additional requirements, definitions and notes for the BRQMS. These additional requirements are indicated in italics.

0.1 General

The adoption of a *battery reuse quality management system* is a strategic decision for an organization that can help to improve its overall performance and provide a sound basis for sustainable development initiatives.

The potential benefits to an organization of implementing a *battery reuse quality management system* based on this Standard are :