

Typical Products and Manufacturing Processes of Can Materials in JFE Steel†

KOJIMA Katsumi^{†1}

Abstract:

Can materials are steel sheets which are used as materials for steel beverage cans and food cans. Surface treated steel sheets such as tin plate (electrolytic tin coated steel) and tin free steel (electrolytic chromium coated steel; TFS) are typical examples.

1. Overview

Can materials are steel sheets which are used as materials for steel beverage cans and food cans. Surface treated steel sheets such as tin plate (electrolytic tin coated steel) and tin free steel (electrolytic chromium coated steel; TFS) are typical examples.

This paper introduces the features and manufacturing processes of typical can material products produced by JFE Steel.

2. Surface Treatment

Figure 1 is a schematic illustration of the layer structures of typical surface treated can materials of JFE Steel.

The following presents an overview of these respective products.

2.1 Tin Plate

Tin plate has a beautiful surface appearance with a

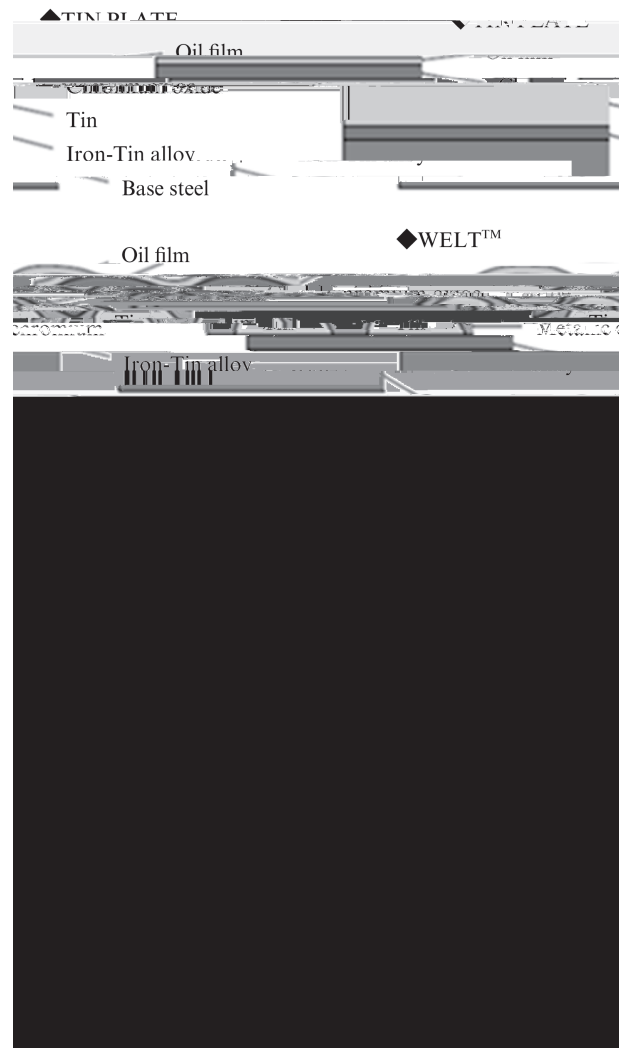


Fig. 1 Schematic layer images of typical can material products in JFE Steel

metallic luster, as well as excellent properties such as corrosion resistance, weldability and printability. Its applications extend to all types metal containers, including food cans, beverage cans, 18-liter cans and

† Originally published in, *ELECTRIC* No. 39 (Feb. 2017), p. 1–3



^{†1} General Manager, Can & Laminated Materials Research Dept., Steel Res. Lab., JFE Steel

with prestigious awards. UNIVERSAL BRITE Type F received the Surface Finishing Society of Japan Technical Award 2005, and UNIVERSAL BRITE Type E received the Japan Institute of Metals and Materials Technical Development Award 2005.

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In addition to materials used in its own products, JFE Steel manufactures and supplies tin mill black plate (cold-rolled steel sheets as a substrate for tin plating) to overseas alliances. In order to meet a wide range of requests from customers in Japan and other countries, corresponding to their respective markets, JFE

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