Designation: B1022 – 22

Standard Specification for
Zinc-Aluminum-Magnesium Alloys in Ingot Form for Coating Steel Sheet by the Hot-Dip Process[1]

1. Scope

1.1 This specification covers commercial zinc-aluminum-magnesium alloys in ingot form for remelting for the coating of steel sheet as specified in Table 1, and referenced in Specifications A875/A875M and A1046/A1046M.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

A875/A875M Specification for Steel Sheet, Zinc-5 % Aluminum Alloy-Coated by the Hot-Dip Process

A902 Terminology Relating to Metallic Coated Steel Products

A1046/A1046M Specification for Steel Sheet, Zinc-Aluminum-Magnesium Alloy-Coated by the Hot-Dip Process

B897 Specification for Configuration of Zinc and Zinc Alloy Jumbo, Block, Half Block, and Slab Ingot

B899 Terminology Relating to Non-ferrous Metals and Alloys

B914 Practice for Color Codes on Zinc and Zinc Alloy Ingot for Use in Hot-Dip Galvanizing of Steel

B949 Specification for General Requirements for Zinc and Zinc Alloy Products

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

E527 Practice for Numbering Metals and Alloys in the Unified Numbering System (UNS)

E536 Test Methods for Chemical Analysis of Zinc and Zinc Alloys

2.2 *ISO Standards:*[3]

ISO 3815–1 Zinc and zinc alloys — Part 1: Analysis of solid samples by optical emission spectrometry

ISO 3815–2 Zinc and zinc alloys — Part 2: Analysis by inductively coupled plasma optical emission spectrometry

2.3 *SAE Standards:*[4]

SAE 1086 Numbering Metals and Alloys

3. Terminology

3.1 Terms shall be defined in accordance with Terminology B899.

3.2 See Terminology A902 for definitions of general terminology relating to metallic-coated hot-dip products.

4. Ordering Information (see Specification B949)

4.1 Customers may order an alloy type and specify a target level for aluminum or magnesium within the minimum and maximum for the type listed in Table 1. The acceptable composition range that may be specified is listed as the tolerance in Table 1.

5. Materials and Manufacture

5.1 See Specification B949.