



BRASS STRIP (SAE CA 260)

ESE-M2A58-A

1. SCOPE

The materials defined by this specification are two annealed tempers of SAE CA 260 brass strip, furnished in the soft anneal or light anneal condition. The anneal desired to be indicated on the Purchase Metal Specification Sheets.

2. APPLICATION

This specification was released originally for materials used for the manufacture of tanks, headers, and baffles for heaters, radiators, and supply tanks.

3. REQUIREMENTS

3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.1 CHEMICAL COMPOSITION

Copper	68.50 - 71.50
Lead	0.05 max
Iron	0.05 max
Other Elements	0.10 max
Zinc	Remainder

3.2 MECHANICAL PROPERTIES (ASTM E 8 and E 18)

	<u>Soft Anneal</u>	<u>Light Anneal</u>
3.2.1 Tensile Strength psi (MPa)	40,000 - 48,000 (276 - 331)	46,000 - 56,000 (317 - 386)
3.2.2 Yield Strength, min psi (MPa)	12,000* (83)*	--- ---
3.2.3 Elongation, %	60 - 70*	40 - 50*
3.2.4 Hardness-Rockwell	"F" 52 - 65	"15T" 65 - 75*

Date	Action	Revisions
2003 09 11	Revised	Para 3.0 inserted; para 3.4 and 4 deleted
1978 08 11		Metricated and Retyped R#12/CH8G-RD834170
1963 12 16		Released, E7-2884





3.3 METALLURGICAL PROPERTIES

		<u>Soft Anneal</u>	<u>Light Anneal</u>
3.3.1	Micro-Structure	Fully Recrystallized	Fully Recrystallized
	*Indicated properties not to be used as basis for rejection; however, can be used to support functional rejection.		
3.3.2	Grain Size	0.050 - 0.090 mm	0.010 - 0.035 mm

5. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification.

5.1 SURFACE CONDITIONS

- 5.1.1 Material to be free from holes, laminations, abrasions, and other surface defects and when unrolled must be free of buckles, crimps, and short waves.
- 5.1.2 Surface Finish 5-10 micro in (0.13 - 0.25 micrometer) rms*

5.2 QUALITY

5.2.1 Cleanliness

Material must be clean and shall be free from scale, stains, dirt, greases, oils, or foreign matter which are detrimental to fabricating operations. (Certain lubricants not detrimental to fabricating may be used if very lightly and evenly applied.)

5.2.2 Fabrication Technique

Annealing, rolling, cleaning, and slitting must be in accordance with best commercial practice.

5.3 DIMENSIONAL REQUIREMENTS

- 5.3.1 Edgewise bend or curvature not to exceed 1/4 in (6 mm) in 72 in (1830 mm) length.

*Indicated properties not to be used as basis for rejection; however, can be used to support functional rejection.

5.3.2 Thickness and Width

Dimensions covering thickness and width as shown on Purchase Metal Specification Sheets.

- 5.4 Suppliers to furnish written report on their test results for each shipment regarding dimensional, chemical, mechanical, and metallurgical properties.

