

## ES-88-H: FINISH SPECIFICATION – SELECTIVE GOLD OVER SELECTIVE PALLADIUM

### NICKEL ALLOY WITH SELECTIVE TIN

#### 1.0 SCOPE

This specification defines the requirements for all SELECTIVE GOLD OVER PALLADIUM NICKEL ALLOY WITH SELECTIVE TIN ALLOY finishes on metallic surfaces.

#### 2.0 PURPOSE

To define the standard finish characteristics and finish codes along with their minimum and maximum layer requirements.

#### 3.0 REFERENCE DOCUMENTS

ES-88 Molex Finish Specification

REVISION: <b>C1</b>	EC INFORMATION: EC No: <b>663282</b> DATE: <b>2021/05/08</b>	TITLE: <b>FINISH SPECIFICATION SELECTIVE GOLD OVER SELECTIVE PALLADIUM NICKEL ALLOY WITH SELECTIVE TIN</b>	SHEET No. <b>1 of 2</b>
DOCUMENT NUMBER: <b>ES-88-H</b>	CREATED / REVISED BY: <b>MANOHARA HV</b>	CHECKED BY: <b>SHIVA B ARALI</b>	APPROVED BY: <b>SHIVA B ARALI</b>

## 4.0 DEFINITIONS ES-88-H

### 4.1 Finish Specification Codes

#### 4.1.1 Selective Hard Gold over Selective 80/20 Palladium Nickel Alloy with Selective Tin over Nickel Overall

Note: See ES-88 for specific material properties, quality, packaging, etc. details.  
Conversion factor  $1\mu\text{m} = 39.37\mu\text{in}$

PROCESS CODE	APPEARANCE CODES	FINISH CODE	SELECT HARD GOLD MIN $\mu\text{in}$ ( $\mu\text{m}$ ) MAX $\mu\text{in}$ ( $\mu\text{m}$ )	SELECT 80/20 Pd/Ni MIN $\mu\text{in}$ ( $\mu\text{m}$ ) MAX $\mu\text{in}$ ( $\mu\text{m}$ )	SELECT TIN MIN $\mu\text{in}(\mu\text{m})$ MAX $\mu\text{in}(\mu\text{m})$	OVERALL NICKEL MIN $\mu\text{in}$ ( $\mu\text{m}$ ) MAX $\mu\text{in}$ ( $\mu\text{m}$ )	OBSOLETE/ RECOMMENDED
	B	219	2(0.05) 10(0.25)	30(0.76)	100(2.54)	50(1.27)	
	B	220	2(0.05) 10(0.25)	30(0.76)	150(3.81)	50(1.27)	
	B	221	2(0.05) 10(0.25)	30(0.76)	200(5.08)	50(1.27)	
	M	234	2(0.05) 10(0.25)	30(0.76)	100(2.54)	50(1.27)	
	M	235	2(0.05) 10(0.25)	30(0.76)	150(3.81)	50(1.27)	
	M	236	2(0.05) 10(0.25)	30(0.76)	200(5.08)	50(1.27)	

UNLESS OTHERWISE SPECIFIED MAXIMUM FINISH THICKNESS ALLOWED ABOVE MINIMUMS:

Continuous and batch plating:

Nickel	Continuous plating	50 $\mu$ " (1.27 $\mu\text{m}$ )
	Batch plating	50 $\mu$ " (1.27 $\mu\text{m}$ )
Gold	Continuous plating	10 $\mu$ " (0.25 $\mu\text{m}$ )
	Batch plating	20 $\mu$ " (0.51 $\mu\text{m}$ )
Palladium Nickel Alloy	Continuous plating	20 $\mu$ " (0.50 $\mu\text{m}$ )
	Batch plating	50 $\mu$ " (1.27 $\mu\text{m}$ )
Tin	Continuous plating	100 $\mu$ " (2.54 $\mu\text{m}$ )
	Batch plating	250 $\mu$ " (6.35 $\mu\text{m}$ )

REVISION: <b>C1</b>	EC INFORMATION: EC No: <b>663282</b> DATE: <b>2021/05/08</b>	TITLE: <b>FINISH SPECIFICATION SELECTIVE GOLD OVER SELECTIVE PALLADIUM NICKEL ALLOY WITH SELECTIVE TIN</b>	SHEET No. <b>2 of 2</b>
DOCUMENT NUMBER: <b>ES-88-H</b>	CREATED / REVISED BY: <b>MANOHARA HV</b>	CHECKED BY: <b>SHIVA B ARALI</b>	APPROVED BY: <b>SHIVA B ARALI</b>