

M/s . ETPL

BBL DAIDO Pvt. Ltd.



08.12.2022

Process change proposal

Theme :

Tin Plating (Tin Flash) process removal and instead plating process Ultrasonic washing and Rust preventive oil process to be intruded

What is plating (Tin Flash) process :

Tin plating is the process of depositing a coating of solderable tin plating onto the surface of a material via an electrical current
(Anode deposited to cathode)

Purpose of Tin plating (Tin Flash):

To avoid rust on steel surface

Comparison of Non plated and plated parts image

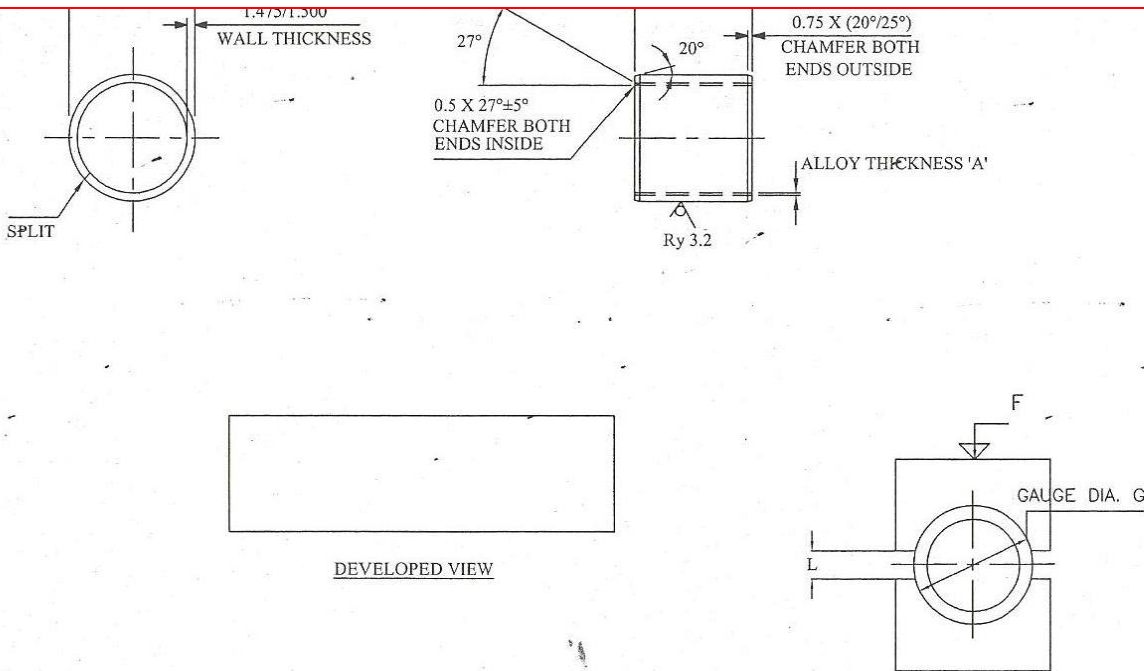
Part before Tin plating (Tin Flash)



Part Tin Plated (Flash completed)



BBLD Approved drawing requirement



LAYER THICKNESS:
 1. STEEL = REMAINDER
 2. ALLOY (A) = 0.20/0.40

Controlled Document
 27 APR 2013

NOTE:-

- 1) CHECK BUSHING OD WITH RING GAUGE
- 2) SPLIT MUST BE PLAIN TYPE
- 3) SPLIT MUST BE CLOSED WITHIN 1.5 FREE STATE
- 4) ALL SURFACES EXCEPT DDK02 SURFACE TO BE TIN FLASHED.
- 5) STAMPING MARK ON BACK METAL AS FOLLOWS
 DAIDO MARK, MATERIAL CODE, LOT No.
- 6) BBL DAIDO MATERIAL. (A)

REV	MOD	DATE	REMARKS	PRE	CHKD
A	BH-95	27.04.13	REFER ECN CHANGES	KVS	✓

BBL DAIDO PRIVATE LIMITED

CUSTOMER
ENDURANCE SYSTEM (I) PVT LTD

PART
GUDIE BUSH

ISSUE	1	A3	1 OF 1	BD REF N
DATE	19.03.08	SCALE	NONE	-
KVS	KVS	BC	PART No.	BD DRAWING N
DRAWN	CHKD	APPD	550FJ03602	BH - 205

MODEL	PCS\SET
~	~
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MM EDGES TO BE FREE FROM BURRS	
GENERAL TOLERANCE ± 0.25	
ANGLE ± 5°	
GENERAL FINISHING 25/	

4) ALL SURFACES EXCEPT DDK02 SURFACE TO BE TIN FLASHED.

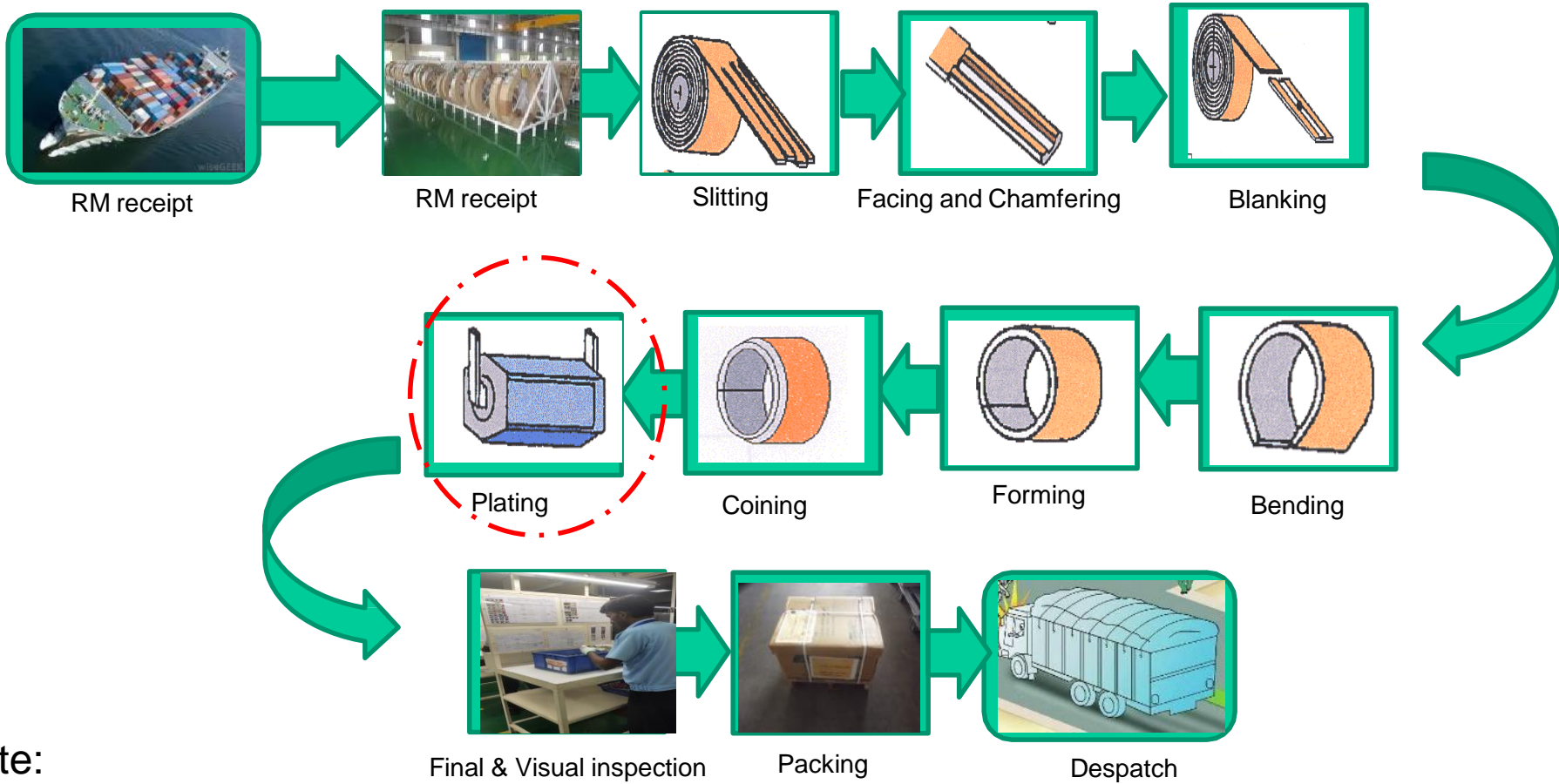
Specification Tin Flash : 0.5 ~3 Microns

BBLD Approved drawing requirement



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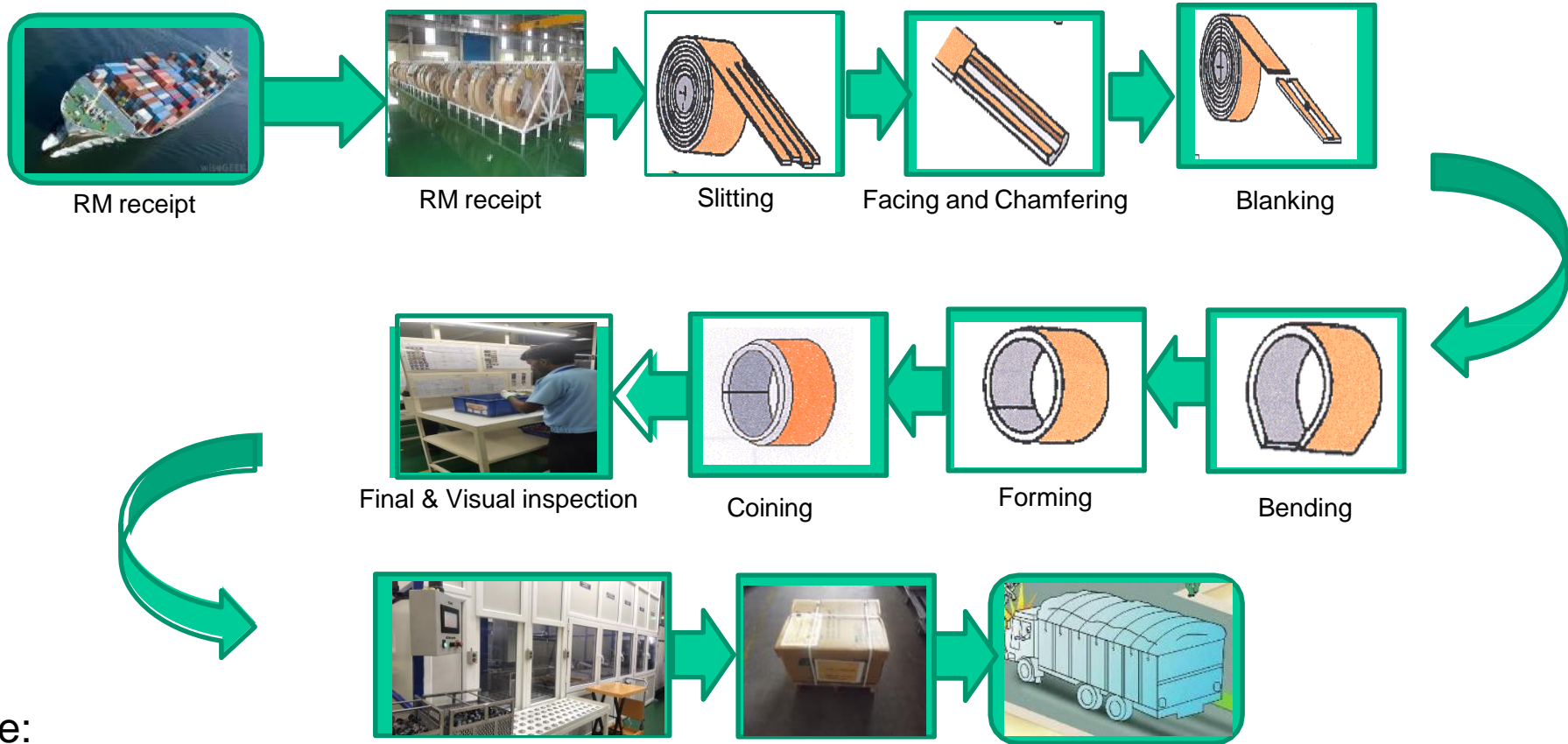
EXISTING PROCESS FLOW



Note:

Tin Plating at out sourcing

PROPOSED PROCESS FLOW



Note:
Tin Plating removed
Ultrasonic cleaning and Rp oiling introduced

Process comparison Photo

Plating process



Out sourcing process

Auto -Ultrasonic washing and RP oiling



Newly introduced at BBL Daido at Inhouse

Process comparison Merits and Demerits

Plating process	Ultrasonic washing and RP oiling
<p>1. Purpose is Only For rust protection</p> <p>2. Chemicals are hazardous leads Pollution to environment- Red category process</p> <p>3. Since press fit assembly During pressing Tin coating Peel off can happen and it leads to Contamination for shocker assembly</p> <p>4. 20 % customer only procuring this old method , timing plan Available to eliminate tin plating</p>	<p>1. Rust preventive oil used for protection</p> <p>2. No hazardous process Pollution free environment – Green category process</p> <p>3. During pressing no peel happen and Ultrasonic cleaning leads better Cleanliness for shocker assembly</p> <p>4. 80 % customer eliminated and Without plating procured as green sourcing</p> <p>5. Can be implement immediately once cut off decision with approval</p>

PCR back round :

- Ultrasonic cleaning process is being implemented at Daido metal Japan and other our group companies and there is no any Adverse impact , hence request to provide approval as early as possible.
- BBLD customer around 80 % approved to non plating parts , change proposal already been validated for similar material , similar size and similar application , hence there is no any risk and no adverse impact involved .