

Means Engineering Method

Work Instruction

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No.: MEM-007

Change: A

Subject: Supplier Direct Part Marking - Etching Standard

1.0 Purpose:

Create Standard format of information in 2D barcode and human readable used for Means internal manufacturing process.

2.0 Scope:

All suppliers to Means where direct part marking is required. Direct Part Marking will be required whenever traceability is required.

3.0 Responsibilities:

Supplier to Means must have equipment in place for 100% verification to this spec.

4.0 Definitions (Reference Figure 1):

- 4.1 DPM = Direct Part Marking
- 4.2 Human Readable = (For this spec), English Characters

5.0 Engineering Method:

- 5.1 2D information and formatting
 - 5.1.1 2D Datamatrix code is included at minimum if traceability is needed.
 - 5.1.2 See MEM-007 spec for standard barcode sizes.
 - 5.1.3 Parts requiring traceability will at minimum have 2D datamatrix code with the following information from the supplier.
 - 5.1.3.3 Part Number including Revision
 - 5.1.3.4 Unique Serial Number
 - 5.1.4 Format will be "(P)PPPPPPPPRRRR(S)YYJJJNNNNN(E)" where

"PPPPPPP" = Part Number (30 character limit), "R" = Revision (10 character limit), "YY" = 2 digit Year, "JJJ" = Julian Date, "NNNNN" (Unique Serial Number, request would be the amount of parts created starting at midnight), "(E)" = End of character (optional)

Example for the first part made on the 75th day of 2020.

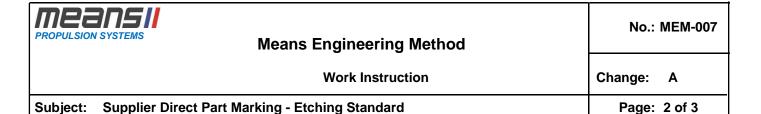
"(P)P17524A(S)2007500001"



NOTE: Parenthesis must be included in mark!

5.1.5 Means or Supplier can add Extra Information including the following...

(K) = Purchase Order Number, (1T) = Lot / Heat Number, (Q) = Quantity, (3S) = Container label, (4S) = Master Label, (5S) = Dual Parts Label, (V) = Supplier



Number, (2Q) = Actual Weight, (1Q) = Theoretical Weight, (T) = Tool, (C) = Cavity, (M) = Machine, (HU) = Means Internal

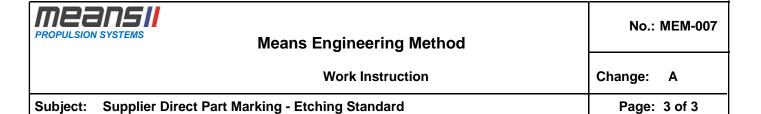
(These identifiers should all correspond to Means Shipping Label Specification v8 maintained by IT Apps group)

- 5.1.6 Supplier will be responsible to keeping record agreed upon for each part number / serial number combination with agreed upon process information for each batch / lot.
- 5.1.7 No Scribing / Etching / Marking / Finishing anywhere other than areas agreed upon and included in print.
- 5.2 Human Readable Formatting.
 - 5.2.1 3mm height text if possible
 - 5.2.2 Text should be near 2D code if possible and needed.
 - 5.2.3 Font is OCR-A or Arial
 - 5.2.4 2mm vertical spacing if multiple lines are needed if possible.
 - 5.2.5 See Table 1 for standard part mark parameters and include in part print with desired values if different than standard.

Table 1

Marking Dequirement	Doguiroment	Description
Marking Requirement	Requirement	Description
Type of Marking Required	Laser/Peen/Rolled/	
	Stamped	
2D Datamatrix Required	Yes	
Human Readable Required	Yes	
Record Length	7 years past life of	
_	program	
Extra Information on Barcode		
Extra Information on Human	NA	
readable		
Human Readable Text Height	3mm	
Human Readable Font	OCR-A	
Datamatrix Box size	10mm	x-dimension 0.5mm
Datamatrix grid	20dot x 20dot	x-dimension 0.5mm
Datamatrix Color	Normal	Black dots on white background
Datamatrix Grading	MEM-006	Means Supplier DPM Grading Standard
Dot Peen Standard Included	120deg	
Angle		

6.0 References:



6.1 MEM-006 (Means Engineering Method DPM Grading Requirements)

7.0 Approvals:

none

8.0 Revision Record:

WO#	ECR	ERN	Rev	Revision Change Description	Chgd	Appr	Date
none	01385	00757	Α	Initial release	E.	T.	08/24/20
					Klassen	Samyn	