



***EUROPE and ASIA CONTAINER LABEL
REQUIREMENT STANDARDS***

New BWI Data Matrix Label Introduction

As a requirement for continuous improvement, introduction of SAP Warehouse Management, driving forces from our customer base, lot management, and end to end traceability, further information within the barcode is needed. The system now demands more information be entered as well as strict label conformity to avoid relabeling at the receiving area. Many of our customers in the last few years have been migrating to a very similar label structure. All attempts have been made to adhere to, and draw from similarities of these labels, to minimize efforts from our suppliers. These changes are essential for us to remain cost competitive and to grow into and take advantage of newer time saving technologies.

The new label structure will enable the receiving dock to scan the master or single label data matrix which will then.

- Apply all critical supplier label information into the system.
- Find and pull up the ASN (Advanced Shipping Notification).
- Present the operator with all the material on the delivery.
- Verify completeness having scanned all the pallets.
- Upon scanning a master label all child labels will be loaded*

*It is critical that the child labels follow the structure and pattern specified. This prevents the need for scanning each individual tote or box on the pallet. It also prevents the supplier having to send complex multi-layered ASN's. You will not need to change your EDI mapping.

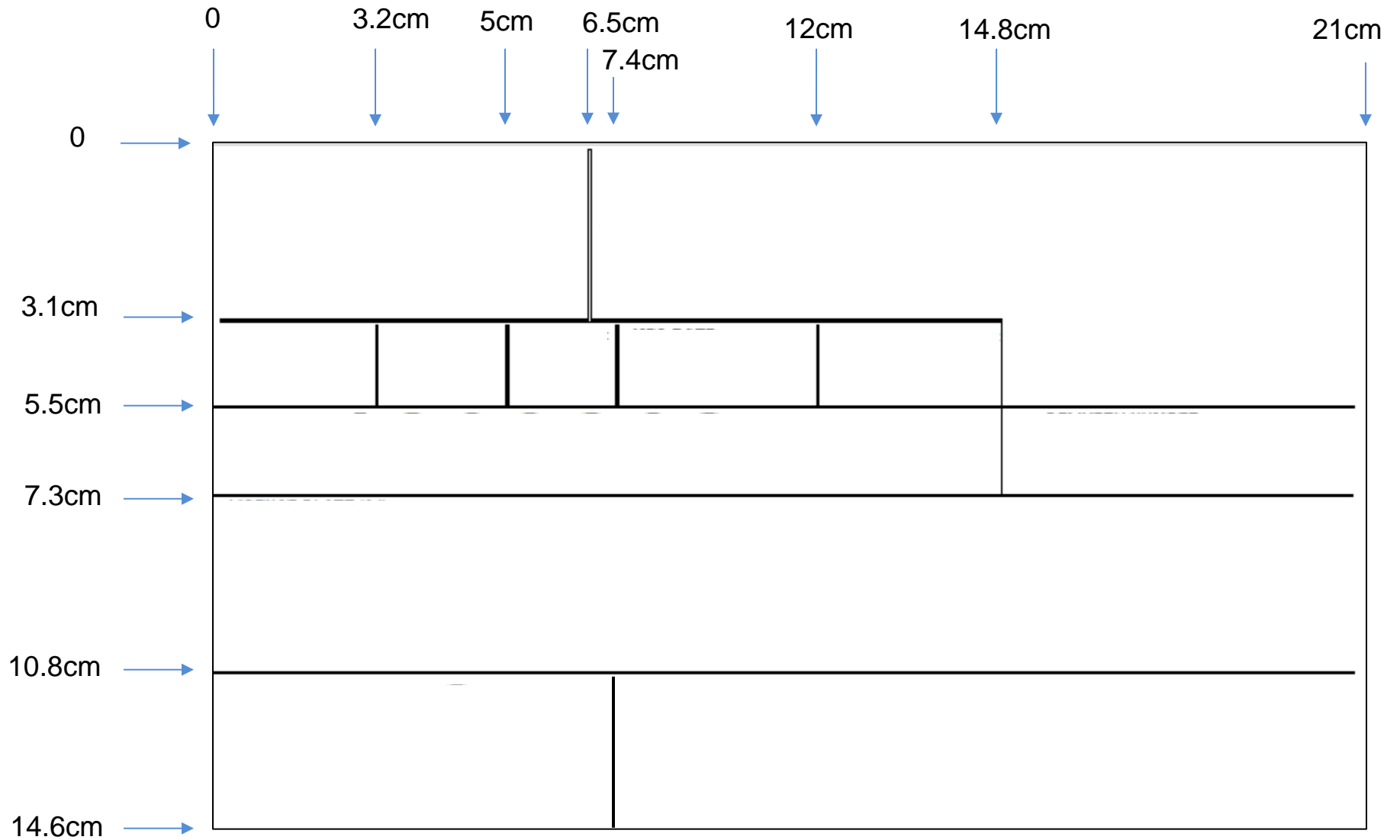
BWI Data Matrix Label Solutions

If you are using our supplier web solution “Active Orders” these label changes will be implemented there and readily available for you to use. Many of our suppliers readily create their own label solutions and have software to do so. A third App solution is being developed to enable printing to an Avery Label standard.

All suppliers must ensure that their labels meet our requirements and must be submitted for approval. To submit labels for approval or for any questions you may have please email me.

ridge.banston@bwigroup.com

Label Block Layout



Overall Label Dimensions – Approximately 14.6 cm High by 21” cm wide.

Single Label Data Matrix Structure

| Data Identifier | Qualifier | Data Content Field | Example | Total Field Max Length |
|-----------------|-----------|-------------------------------------|-----------------------|------------------------|
| 1JUN | | DUNS No + Serial No + Box No | 831310037271607940001 | 25 |
| N | | Delivery Number | 80941356 | 17 |
| P | | Part Number | 22237538 | 19 |
| 7Q | GT | Gross Weight (rounded no decimals) | 28 | 12 |
| Q | | Quantity In Container | 35 | 13 up to 3 decimals |
| B | | Container Number | TOTE | 19 |
| 21L | | BWI Plant Code | HU01 | 7 |
| 6D | 094 | Manufacturing Date (YYYYMMDDHHMMSS) | 20181019214532 | 19 |
| 20L | | Lot Number | 20181001SOC1231 | 43 |
| K | | Purchase Order Number | 5500005427 | 11 |

Example Scan of Single Label

```
[ ]><RS>06<GS>1JUN831310037271607940001<GS>N80941356<GS>P22237538<GS>7Q28GT<GS>Q35<GS>BTOTE<GS>21LHU01<GS>6D20180912133094<GS>20L201810011231<GS>K5500005420<RS><EOT>
```

- Data Format "06" = DIs
- Data Matrix Symbology Error Correction = ECC200
- []> = Message Header
- <RS> = Record Separator
- <GS> = Group Separator
- <EOT> Message Trailer



Single Label License Plate Structure

- Barcode using Code 128
- Barcode height should be minimum (0.5 Inch) or 15 mm
- Quiet zone at each end of barcode should be minimum (0.25 Inch) or 6.3mm
- X-Dimension should be around 19.8 mil



1J – Data Identifier (hidden from human readable)

UN – ISO Assigning Authority assigned by Dun & Bradstreet

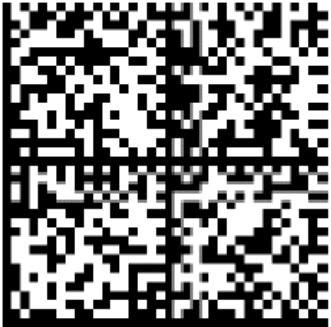
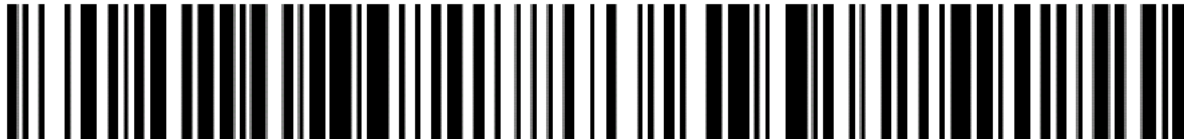
831310037 – Your Company DUNS number (9 digits 0 filled)

271607940 – Your serial number (9 Digits 0 filled) *

001 – Box number (3 digits zero filled) *

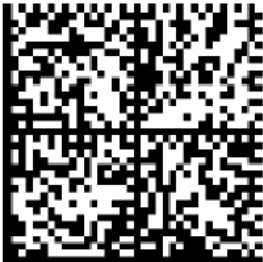
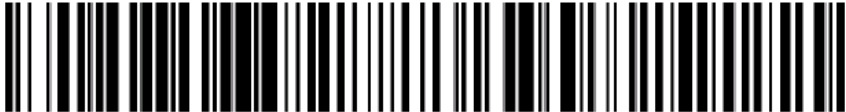
***Each pallet will have the same unique serial number throughout the master and the children. The last three digits make each tote or box unique and able to be scanned later when broken apart.**

Single Label Example

| | | | | |
|--|--------------------------|--|--|---|
| SHIP FROM: BWI SUPPLIER NAME STREET ADDRESS CITY, STATE POSTAL CODE MADE IN: US | | SHIP TO: BWI Poland Technologies Ul. Gen. Okulickiego 7 Krosno, Podkarpackie 38-400 Poland PLANT CODE P030 | |  |
| QUANTITY: 35 | COUNTER 1 OF 8 | MFG DATE 201809121 | GROSS WEIGHT 28 KG | |
| PART NUMBER 22237538 | | | C* | DELIVERY NUMBER 80941356 |
| LICENSE PLATE (1J)  | | | | |
| UN 831310037 271607940 001 | | | | |
| LOT NUMBER 20181001SOC1231 DESCRIPTION DAMPER ASSEMBLY, MR R ENG REVISION LVL A2E | | | Supplier Free Space | |

*In the event that the material is consigned a "C" should be placed here on the label.

Example of Alternative Single KLT Label

| | | | | |
|---|---------------------------------|--|--|---|
| SHIP FROM: BWI SUPPLIER NAME STREET ADDRESS CITY, STATE POSTAL CODE | | SHIP TO: BWI Poland Technologies Ul. Gen. Okulickiego 7 Krosno, Podkarpackie 38-400 Poland | |  |
| MADE IN: US | | PLANT CODE P030 | | |
| QUANTITY: 35 | COUNTER 1 OF 8 | MFG DATE: 20180912 | GROSS WEIGHT: 13 KG | |
| PART NUMBER 22237538 | | ENG REVISION LVL A2E | | DELIVERY NUMBER 80941356 |
| LICENSE PLATE (1J)  | | | LOT NO 20181001SOC1231 DESCRIPTION DAMPER ASSEMBLY,MR R | |
| UN 831310037 271607940 001 | | | Supplier Free Space | |

In some cases where the totes or lower level containers are too narrow the KLT label format and size can be used in its place.

*In the event that the material is consigned a "C" should be placed here on the label.

Master Label Data Matrix Structure

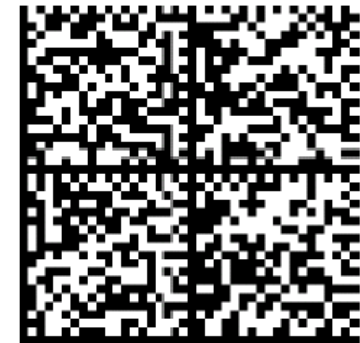
| Data Identifier | Qualifier | Data Content Field | Example | Total Field Max Length |
|-----------------|-----------|-------------------------------------|-----------------------|------------------------|
| 6JUN | | DUNS No + Serial No + 000 | 831310037271607940000 | 25 |
| N | | Delivery Number | 80941356 | 16 |
| P | | Part Number | 22237538 | 18 |
| 7Q | PL | Total Pallet Quantity | 280 | 16 up to 3 decimals |
| 7Q | GT | Gross Weight (rounded no decimals) | 28 | 12 |
| 7Q | PK | Number of Totes / Boxes | 8 | 7 |
| Q | | Quantity In Each Tote / Box | 35 | 13 up to 3 decimals |
| B | | Container Number | PALLET | 19 |
| 21L | | BWI Plant Code | HU01 | 7 |
| 6D | 094 | Manufacturing Date (YYYYMMDDHHMMSS) | 20181019224521 | 19 |
| 20L | | Lot Number | 20181001SOC1231 | 43 |
| K | | Purchase Order Number | 5500005427 | 11 |

Example Scan of Master Label

```
[ ]><RS>06<GS>6JUN831310037271607940000<GS>N80941356<GS>P22237538<GS>7Q280PL<GS>7Q28GT
<GS>7Q8PK<GS>Q35<GS>BPALLET<GS>21LHU01<GS>6D20180912133094<GS>20L20181001BCA005<GS>K5
5000054<RS><EOT>
```

- Data Format "06" = DIs
- Data Matrix Symbology Error Correction = ECC200
- []> = Message Header
- <RS> = Record Separator
- <GS> = Group Separator
- <EOT> Message Trailer

***It's critical that the number of totes /boxes and the pieces per are accurate. Upon scanning the master data matrix all of the child labels will be constructed in the WMS database based on this.**



Master Label License Plate Structure

- Barcode using Code 128
- Barcode height should be minimum (0.5 Inch) or 15 mm
- Quiet zone at each end of barcode should be minimum (0.25 Inch) or 6.3mm
- X-Dimension should be around 19.8 mil



6J – Data Identifier (hidden from human readable)

UN – ISO Assigning Authority assigned by Dun & Bradstreet

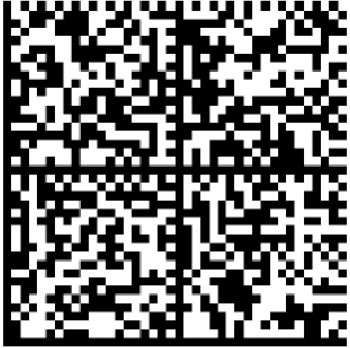

831310037 – Your Company DUNS number (9 digits 0 filled)

271607940 – Your serial number (9 Digits 0 filled) *

000 – Master or Highest Level (3 digits) *

*Each pallet will have the same unique serial number throughout the master and the children. The last three digits make each tote or box unique and able to be scanned later when broken apart. The Master or highest level is always 000.

Master Label Example

| | | | | | | |
|--|----------------------|-------------------------|--|------------------------------------|--|---|
| SHIP FROM: BWI SUPPLIER NAME STREET ADDRESS CITY, STATE POSTAL CODE MADE IN: US | | | SHIP TO: BWI Poland Technologies Ul. Gen. Okulickiego 7 Krosno, Podkarpackie 38-400 Poland PLANT CODE P030 | | |  |
| TOTAL QTY: 280 | # PACKS: 8 | QTY/ PACK: 35 | MFG DATE 201809121 | GROSS WEIGHT 231 KG: | | |
| PART NUMBER 22237538 | | | | DELIVERY NUMBER 80941356 | | |
| LICENSE PLATE (GJ) | | | | | | |
|  | | | | | | |
| UN 368135153 271607940 000 | | | | | | |
| <h1 style="margin: 0;">MASTER LABEL</h1> | | | LOT NUMBER 20181001SOC1231 DESCRIPTION DAMPER ASSEMBLY, MR R ENG REVISION LVL A2E | | | |
| | | | <div style="border: 1px dashed black; padding: 5px; width: fit-content; margin-left: auto;">Supplier Free Space</div> | | | |

*** If the material is consigned a "C" goes here on the label.**

Label to EDI Correlation

| Label Field Name | EDI Field |
|-----------------------|-----------|
| Supplier DUNS No | NAD+SU |
| BWI Material Number | LIN |
| BWI Plant Code | NAD+ST |
| Purchase order number | RFF+ON |

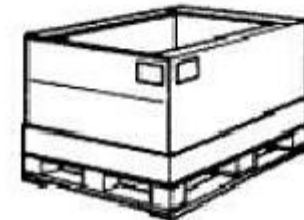
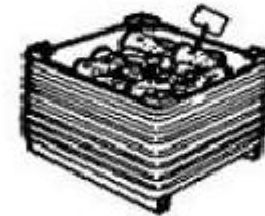
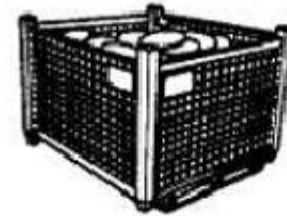
The EDI data fields shown can be found in both the DELFOR and DELJIT that is sent.

BGM+241+20100519153241+5
DTM+137:20100519:102
NAD+MI+831310037::16
NAD+SU+999999999::92 ← Supplier DUNS
NAD+SF+999999999::92
GIS+37
NAD+ST+HU01::92++BWI +++US ← BWI Plant Code
CTA+IC+:GARY BIDDLE
COM+01582815062:TE
LIN+++22239962:IN ← BWI Material Number
RFF+ON:5500000470 ← PO Number
RFF+RE:32
DTM+137:20100519:102
QTY+70:65240:C62
DTM+51:20090102:102
QTY+48:1680:C62
RFF+SI:86485201
DTM+11:20100518:102
SCC+1++F
QTY+1:2520:C62

Packaging Examples

In the case of wire basket or wire mesh containers,
metal bins or tubs,
or knock down pallet boxes,
or one single box,
only one single label should be used.

The last three digits on the License Plate in these cases
would be 000 and the License Plate would have a 1J prefix.



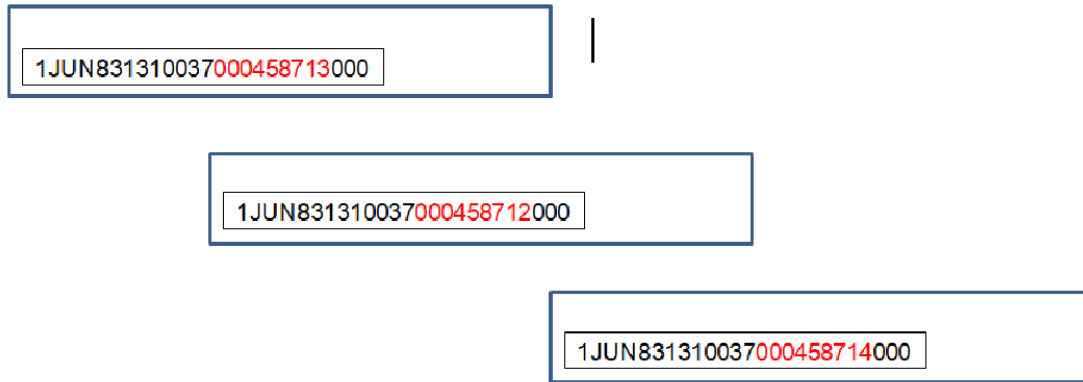
In the case of Master and Child labels they should look like the following example.
Just the License Plate scan value is shown for reference.

| | | | |
|---------------------------|---------------------------|-----------------------------|-----------|
| Lid | 6JUN831310037271607940000 | 280 Pieces Total 8 Totes | |
| Tote | 35 Pieces | Tote | 35 Pieces |
| 1JUN831310037271607940007 | | 1JUN831310037271607940008 | |
| Tote | 35 Pieces | Tote | 35 Pieces |
| 1JUN831310037271607940005 | | 1JUN831310037271607940006 | |
| Tote | 35 Pieces | Tote | 35 Pieces |
| 1JUN831310037271607940003 | | 1JUN831310037271607940004 | |
| Tote | 35 Pieces | Tote | 35 Pieces |
| 1JUN831310037271607940001 | | 1JUN831310037271607940002 | |

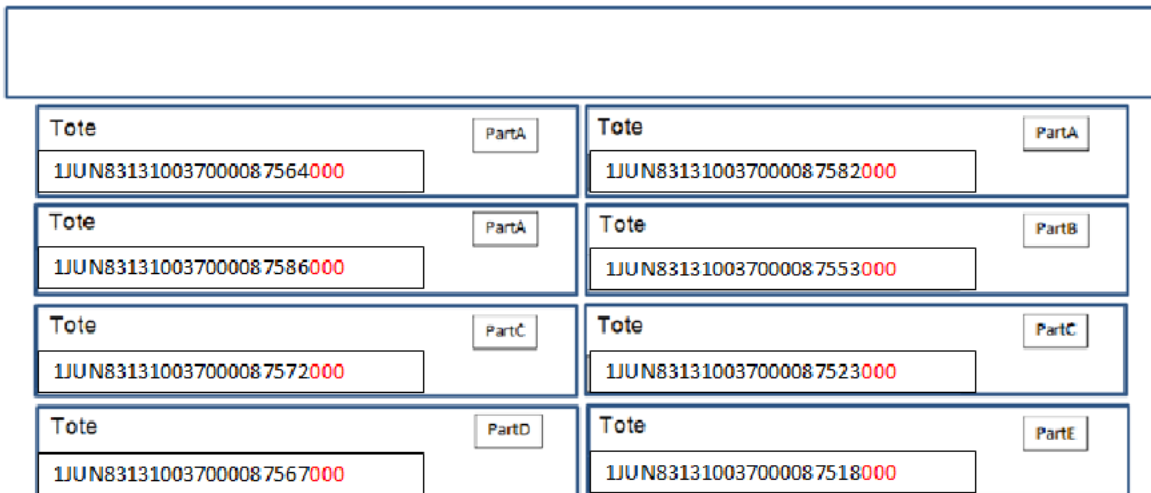
In the event that there is an odd quantity remaining or one tote is short the odd quantity must be in the last tote or box. In this case number **008**. The program will scan the master label divide the total quantity sent by the number of boxes and check against the number per box sent 35. When this doesn't calculate out the program will assign the shorted amount in the one box to the last box.

| | | | |
|---------------------------|-----------|-----------------------------------|-----------------------------|
| Lid | | 6JUN831310037271607940000 | 263 Pieces Total 8 Totes |
| Tote | 35 Pieces | Tote | 18 Pieces |
| 1JUN831310037271607940007 | | 1JUN831310037271607940 008 | |
| Tote | 35 Pieces | Tote | 35 Pieces |
| 1JUN831310037271607940005 | | 1JUN831310037271607940006 | |
| Tote | 35 Pieces | Tote | 35 Pieces |
| 1JUN831310037271607940003 | | 1JUN831310037271607940004 | |
| Tote | 35 Pieces | Tote | 35 Pieces |
| 1JUN831310037271607940001 | | 1JUN831310037271607940002 | |

If you are shipping 3 loose boxes for example then the labels would be something like this.



Also if you have a situation like below where you have many mixed parts on a pallet. The labels all need to begin with 1J and end in 000 with different serials and no master.



If you have two materials one pallet then you need to have two masters.
So your labels would look something like this below.

| | | | |
|---------------------------|--------|---------------------------|--------|
| 6JUN831310037000985623000 | | 6JUN831310037000982653000 | |
| Tote | Part A | Tote | Part B |
| 1JUN831310037000985623001 | | 1JUN831310037000982653001 | |
| Tote | Part A | Tote | Part B |
| 1JUN831310037000985623002 | | 1JUN831310037000982653002 | |
| Tote | Part A | Tote | Part B |
| 1JUN831310037000985623003 | | 1JUN831310037000982653003 | |
| Tote | Part A | Tote | Part B |
| 1JUN831310037000985623004 | | 1JUN831310037000982653004 | |

BWI Plant Codes and Address

| Plant Code | Name | Street | City | Region | Postal Code | Country |
|------------|--------------------------------|-----------------------------|------------------|--------------|-------------|----------------|
| CZ01 | BWI Czech Republic s.r.o | K Hradisti 168/4 | Cheb | | 350 02 | Czech Republic |
| DE01 | BWI Germany | Stahlstrase 42-44 | Russelsheim | Hessen | 65428 | Germany |
| FA01 | BeijingWest Industries Co., Lt | Doudan Town, 85 Pu An Road | Beijing | Fangshan | 102402 | China |
| FR01 | BWI France | 167 rue de la Belle Etoile | Roissy-en-France | Val-d'Oise | 95700 | France |
| GF01 | BWI Greenfield , Indiana , US | 989 Opportunity Parkway | Greenfield | Indiana | 46140 | United States |
| H201 | BWI North America Inc. | 3100 Research Blvd. | Kettering | Ohio | 45420 | United States |
| HP01 | BWI North America Direct Ship | 3100 Research Blvd. | Kettering | Ohio | 45420 | United States |
| HU01 | BWI North America Inc. | Los Pinos | El Paso | Texas | 79906 | United States |
| JP01 | BWI CO. LTD - Japan | | Tokyo | Tokyo | 1000001 | Japan |
| MP01 | BWI Veh Dyn Sales/Service | Vialidad CH-P 8802, Colonia | Chihuahua | Chihuahua | 31416 | Mexico |
| MX01 | BWI Veh Dyn Sales/Service | Vialidad CH-P 8802, Colonia | Chihuahua | Chihuahua | 31416 | Mexico |
| P001 | BWI Poland Technologies sp. | Ul. Podgórkí Tynieckie 2 | Kraków | Malopolskie | 30-399 | Poland |
| P030 | BWI Poland Technologies | Ul. Gen. Okulickiego 7 | Krosno | Podkarpackie | 38-400 | Poland |
| SH01 | BWI (Shanghai) Co. Ltd. | 328 HuaJing Road | Shanghai | Shanghai | 200131 | China |
| U020 | BWI UK Ltd. | 60 Windmill Road | Luton | Bedfordshire | LU1 3XL | United Kingdom |
| US01 | BWI Chassis dynamics NA INC. | Grand River Avenue | Brighton | Michigan | 48116 | United States |
| XT01 | BWI(Shanghai)Co.Ltd XiangTan | Xiangtan City,Hunan Prov. | Xiangtan | Hunan | 411100 | China |

Change Control

| Date | Version | Changes | Reason |
|-----------------------------|---------|--------------------------------|---|
| Oct 21 st , 2018 | 1.0 | Original | New label format specifications for receiving with WMS and SAP. |
| Feb 6 th , 2019 | 1.1 | Box field extended to 3 places | Plant to go on WMS has some pallets > 99 totes. |
| May 20 th , 2019 | 1.2 | Engineering Revision Level | Engineering requires it to be on the label. |