Effective Dispatch Process,
Efficient Warehousing Management System
&
Inventory Control

Presented by: M&M Technologies Pvt. Ltd.
Existing Production and Dispatch Process

Pre-Printed Pouch Roll → Printed with Date of Mfg. & MRP → Filled with oil from Filling machine → Pouch is Sealed

Printing the 2D/QR code on the carton with min. Info:
- Batch no.
- Date of packing
- Qty of Contents (If the Product is One per Batch per Day)

Sealing of Master Carton → Offline weighing to cross-check the no. of pouches inside a carton. → Shift to Warehouse

Packed in Master Carton
Existing Production and Dispatch Process

Printing of the 2D code on Carton

Printing

Online

Can be done by online Data Access (ERP)

Offline

Can be manually fed to the printer for printing

Offline weighing

Shift to Warehouse
**PROCESS DETAILS**

The Inventory Control, Dispatch process can be made hassle free by scanning the 2D code printed on the carton as per below steps.

- Scan the code with the scanner and the scanned Data can be uploaded to SAP.
- The segregation can be done as per Batch No / Date / Day of Packing.
- Packing list & Invoice can be done as per the [Batch No / Date of Packing and Dispatch process](#) can be followed.
**Existing Production and Dispatch Process**

**LIMITATIONS**

This process is limited to following facilities.

- The product traceability can not be maintained 100%.
- The Recall cost will be much higher.
- No efficient Supply Chain Management.

M&M suggests the online printing with variable data printing for Effective and Efficient Supply Chain Management.
Existing Production and Dispatch Process

Pre-Printed Pouch Roll → Printed with Date of Mfg. & MRP → Filled with oil from filling machine → Pouch is Sealed

Online Printing Station for Printing
- Batch no.
- MRP (Price per Unit X no. of Packs)
- Date of Packing

Sealing of Master Carton → Offline weighing to cross-check the no. of pouches inside a carton. → Shift to Warehouse

M&M Suggests Printing of 2D code (QR Code / Datamatrix) using the existing setup of online printing station with the Product code / Batch code (Other details optional) the Variable Online Data can be obtained from the ERP System (SAP)
M&M **Proposed** Inventory Control and Dispatch Process

**At Production Line:**

Printed Cartons with 2D Code → Checked with the offline Weighing Scale → Move to Warehouse
M&M Proposed Inventory Control and Dispatch Process

At Warehouse:

Production Declaration

A

<table>
<thead>
<tr>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>▼ Data Upload &amp; Download</td>
</tr>
<tr>
<td>▸ Physical Material Movement</td>
</tr>
</tbody>
</table>

APAR SAP SERVER

B

Preparation of Packing List

C

Preparation of Invoice
M&M Proposed Dispatch Process

A. Production Declaration:

- The 2D code printed on the carton is scanned with programmable scanner.
- The additional Warehousing details like Bay No / Location No / Stock No / Warehouse No (In case of Multi Warehousing) is also scanned by the Authorized operator (We can adopt this process by assigning 2D code to each Location / Bay of the Warehouse)
- The whole data is **Uploaded** to SAP as Production Declaration with Location Details
- Sample file type is shown as next slide.
### M&M Proposed Dispatch Process

#### A. Production Declaration Sample File:

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Batch No</th>
<th>Traceability QC No</th>
<th>Contents Qty</th>
<th>Warehouse Loc No</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 23</td>
<td>B1 78</td>
<td>QC – 21</td>
<td>5</td>
<td>L1</td>
</tr>
<tr>
<td>P2 45</td>
<td>B2 89</td>
<td>QC – 25</td>
<td>10</td>
<td>L3</td>
</tr>
<tr>
<td>P3 67</td>
<td>B3 49</td>
<td>QC – 28</td>
<td>25</td>
<td>L10</td>
</tr>
<tr>
<td>P4 89</td>
<td>B4 56</td>
<td>QC - 30</td>
<td>34</td>
<td>L13</td>
</tr>
</tbody>
</table>
M&M **Proposed** Dispatch Process

**B. Dispatch Record:**

- The dispatch details is prepared in SAP on the basis of Customer Purchase Order.
- The details are **Downloaded** to the programmable scanner for **Pick & Dispatch** Process.
- The operator puts the password in the scanner for access.
- The operator scans each box (X No of boxes) **Location wise.**
- The correct scanning gives **BEEP**, incorrect / duplicate scanning gives **indications.**
- If its not a predetermined quantity dispatch (Truck Load etc.), scanner will also have an option to scan the items first and then generate the packing list.

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M&M Proposed Dispatch Process

B. Dispatch Record:

- The operator can enter manually the Truck No / Destination / Date & Time / Driver Name in to the scanner.
- The whole data can be Uploaded back to SAP for generation of Packing List and Invoice.
- Sample file type is shown as next slide.

C. The Invoice & Packing List is prepared from the uploaded data to SAP.
## M&M Proposed Dispatch Process

### B. Dispatch Section Sample File:

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Invoice No</th>
<th>Batch No.</th>
<th>Warehouse Loc No</th>
<th>Truck No</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 23</td>
<td>XYZ</td>
<td>B1 78</td>
<td>L1</td>
<td>MH – 03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AH – 5572</td>
</tr>
<tr>
<td>P2 45</td>
<td>PQR</td>
<td>B2 89</td>
<td>L3</td>
<td>MH – 02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BP – 5376</td>
</tr>
<tr>
<td>P3 67</td>
<td>ABC</td>
<td>B3 49</td>
<td>L10</td>
<td>MH – 04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CA – 8825</td>
</tr>
<tr>
<td>P4 89</td>
<td>LMN</td>
<td>B4 56</td>
<td>L13</td>
<td>MH – 04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AY - 2908</td>
</tr>
</tbody>
</table>
Benefit of 2D Code

- Production Declaration
- Complying to Regulatory Requirements (if any)
- Inventory Control
- APAR ERP SERVER
- Warehousing Data
- Dispatch Record
- Invoicing
Benefit of the QR code Implementation

- Zero Error in Operation
- Higher Data Density (can accommodate larger data in smaller space available)
- Improve Production Management
- Effective & Efficient Supply Chain Management
- Effective Inventory Management Control
- Warehousing Management

.....continued
Benefit of the QR code Implementation

- Efficient Shop-floor Management
- Efficient Record Keeping
- Accelerate Product – Planning & Development Cycle
- Minimize Operational Risk
- Eliminate Recall Cost
- Accelerate Traceability
- Enhance Team Management
Thank You