Imports & Exports

Stay compliant with import/export regulations by implementing Best Fit solution for eHandbook

By Chakrapani Muriki, Mahindra Satyam

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> **eHandbook (eHB)** *is a processing trade tracking mechanism to monitor inputs and outputs and is commonly referred to as a "customs handbook". The paper-based logbook is referred to as manual handbook while the electronic version as eHandbook*

Introduction

Processing Trade has been one of the biggest drivers behind China's economic ascension and has saved companies billions. It is the name given to the program which permits a company to import raw materials free of duty/VAT for producing export goods. It is used by a majority of export manufacturers to legitimately manage indirect tax costs.

In just over 25 years, the value of Processing Trade increased 333 times from US$2.5 billion in 1981 to US$831.9 billion in 2006. In the first half of 2007, the Processing Trade total import and export value rose 17.6% to US$440.9 billion.

Processing Trade Business Models in China

The characteristic of processing trade is that, a manufacturer receives raw materials from an overseas company for processing and delivers the finished products to an overseas company for distribution. The two basic processing trade business models are,

- o **Contract Manufacturing**: *The manufacturer purchases raw materials from an overseas supplier and sells the finished products to an overseas customer. Manufacturer earns profits on the goods sold*.

- o **Toll Manufacturing:** *The overseas principal consigns raw materials to the manufacturer without change of ownership and in turn receives the finished products. Revenue is earned through processing fee.*

From Customs perspective, both models generally qualify as "inward process relief schemes" and upfront exemption of Duty and VAT on the import raw materials. These materials are considered to be in bonded state. These bonded raw materials tracked and reconciled to the final exported finished goods.

Executive Summary

The Business Model discussed here is Toll Processing Model and Legal Regulations that govern this business model; and the Best Fit solution that integrates these complex processes.

As per China Customs Import/Export regulations, the imported raw materials and manufactured assemblies/sub-assemblies are in bonded state. Import/Export declarations enables China Customs to track/log the raw materials imported and finished goods exported.

As per the Trade Processing Business Model, It is mandatory to register importable raw materials and exportable finished goods prior to any physical movement. All the in-coming/out-going goods movements are recorded in customs logbook on a transactional basis. The only exception being indirect export/import transactions which can be declared to china customs on a periodical basis, this way China Customs maintains mirror image of manufacturer inventory.

Today, it is a challenging task for manufacturers to maintain registration information of importable materials, exportable finished goods and to keep track of import declarations & Customer Returns; and export declarations & Returns to Vendor; and to report On-hand Inventory of raw materials, assemblies/finished goods with corresponding consumption BOM versions for inventory reconciliation when demanded by Customs Audit Authorities

Best Fit for eHandbook – A Simplified Integrated Business Solution

eHB Best Fit is a custom solution which provides the necessary business functionality to fulfill Toll processing business model in compliance with China Customs import/export regulations.

eHB Best Fit is tightly integrated with SAP core modules such as Materials Management-Purchasing & Inventory Management, Sales and Distribution-Shipping, Production Planning – Manufacturing.
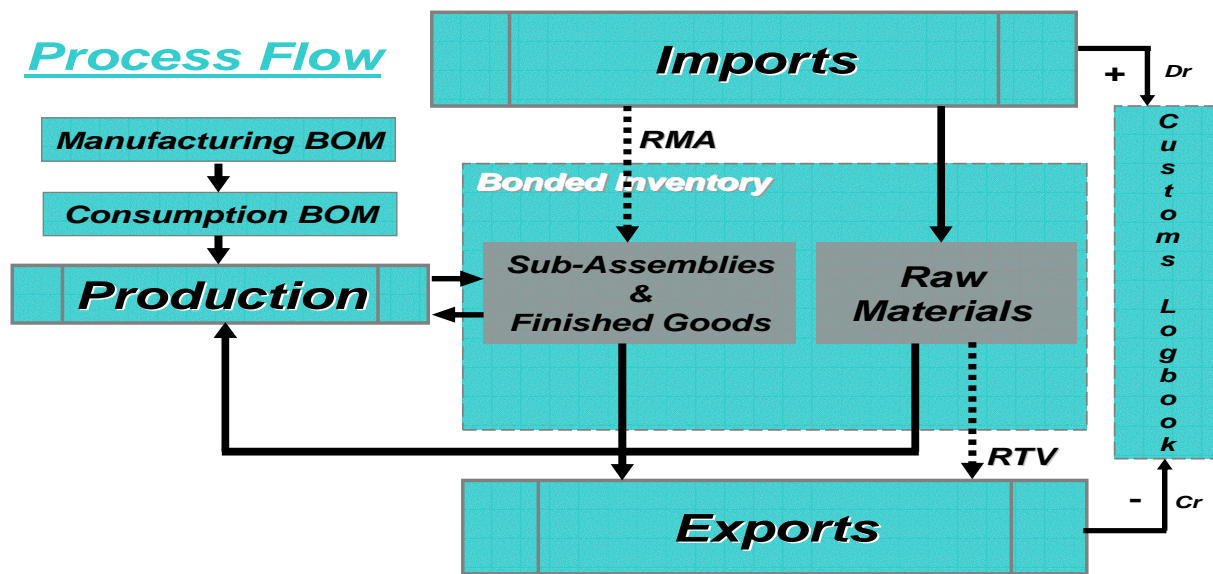
eHB Best Fit solution provides the necessary tools & utilities to fulfill the challenges that manufacturer come across in day-to-day business operations. It helps to perform various import/export related activities such as registration of importable raw materials, exportable finished goods and consumption BOM versions. It provides automated interfaces to process import/export declarations. This also provides various tools and reports to ease the inventory reconciliation process between manufacturer physical Inventory and China Customs theoretical Inventory

The eHB Best Fit comprise of the following core components and are as follows,

eHB Best Fit Components
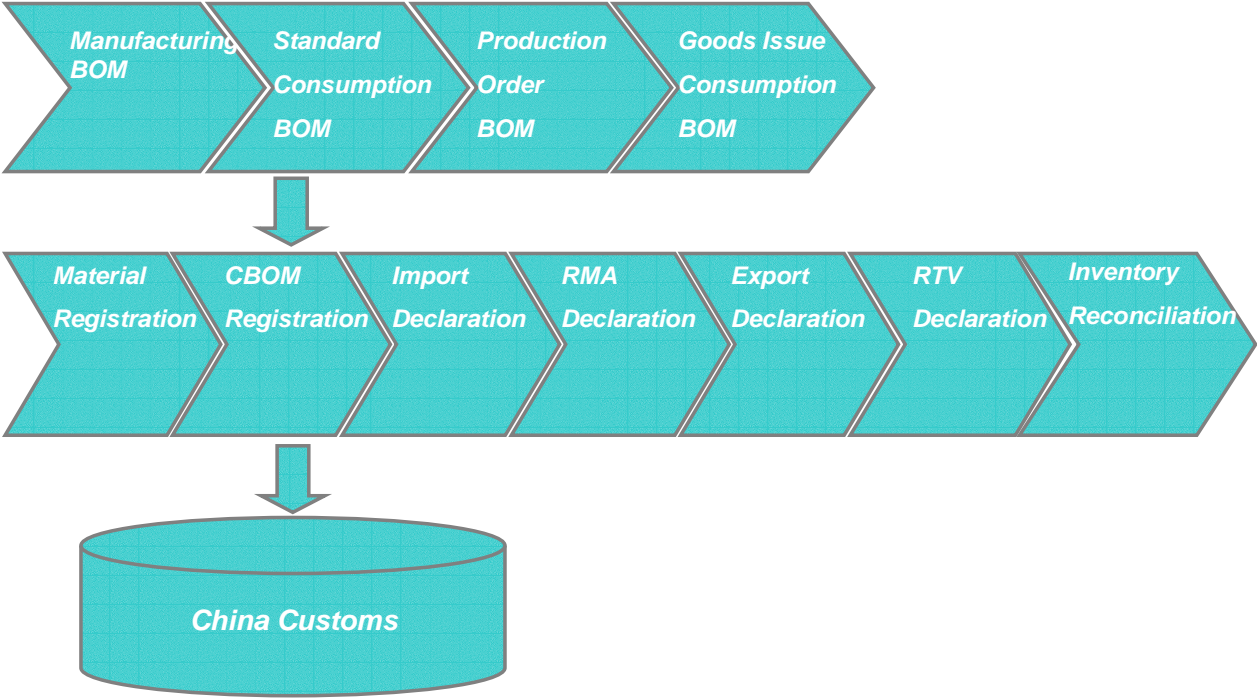
eHB Best Fit Processes

Registration Process
- Import material registration
- Export goods registration
- Consumption BOM registration

Import Declaration Process
- *Import declaration of raw materials*
- *Indirect import declarations*
- *RMA declarations*

Production Process
- *Standard Consumption BOM Generation*
- *Goods Issue Consumption BOM Generation*

Export Declaration Process
- *Export declaration of finished goods*
- *Indirect export declarations*
- *RTV Declarations*

Inventory Reconciliation Reporting
- *Import Transactions*
- *Export Transactions with consumption BOM explosions*
- *RTV Transactions*
- *RMA Transactions with consumption BOM explosions*
- *Indirect Import Transactions*
- *Indirect Exports Transactions with consumption BOM explosions*
- *Inventory "As Of" Report with consumption BOM explosions*

Exceptional Reporting
- *Import Cycle Time*
- *Imports Declared and Not Received*
- *Imports Received and Not Declared*
- *Exports Declared and Not Issued*
- *Exports Issued and Not Declared*
- *Production Order variance*
- *Truly reject*
- *Unplanned Issues and Receipts*
- *Work In Progress Report*

Registration Process

```
Start
  ↓
New Product Introduction
  ↓
User Departments Setup
  ↓
eMail Notification to I/E Dept.
  ↓
HTS Classification    Group Number Classification
  ↓
eHB Material Master Setup
  ↓
Material Registration Extract Simulation  →  Output OK?
                                              Yes ↑        No ↓
                                          Registration Files    Correct Data
                                              ↑
                                          China Customs
                                                          Registration Confirmations
                                                                ↓
                                                              End
```
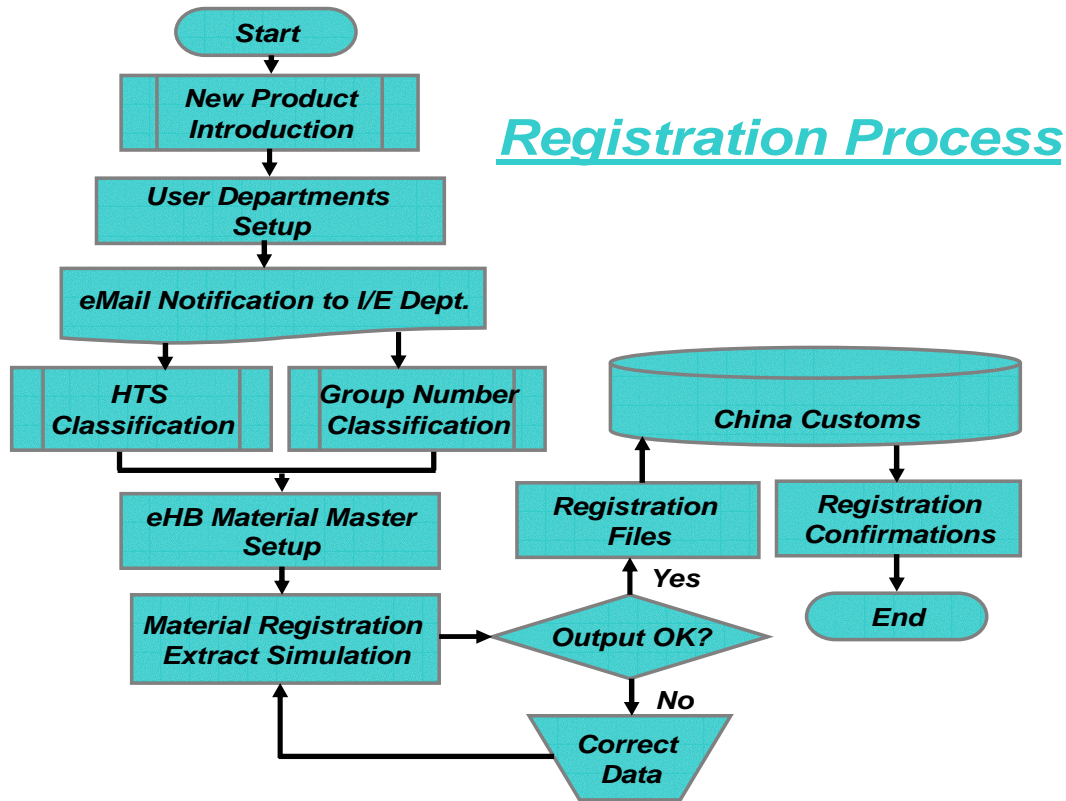
Registration Process

Materials Registrations:

Whenever new product is introduced; and if the product is determined as raw material to be consumed in the manufacturing of assembly or sub-assembly then those items need to be registered with China Customs as importable materials prior to purchasing.

And if the product is determined as an exportable assembly/ finished good then these items need to be registered with Customs as exportable materials prior to sales, while the assemblies/sub-assemblies which are neither imported nor exported are not subjected to any registration process.

As per the Customs Legal regulations a material imported can never be exported without any value add, except returns to vendor (RTV) and any finished goods can never be imported unless Customer Returns(RMA).

Consumption BOM (CBOM) Registrations:

The primary component in the exportable goods registration processes is the Consumption BOM version. The CBOM need to be registered with China Customs along with finished good it is derived from. One Finished good can have "n" number of CBOM versions.

It is mandatory to register importable raw materials and exportable finished goods with associated CBOM version prior to import/export declaration processes.

Consumption BOM (CBOM): This is a flat Bill of Materials (BOM) actually consumed in the manufacturing of sub-assembly or finished products. The CBOM component list is the imported raw materials or sub-assemblies. The Consumption BOM is expressed in direct Material equivalent
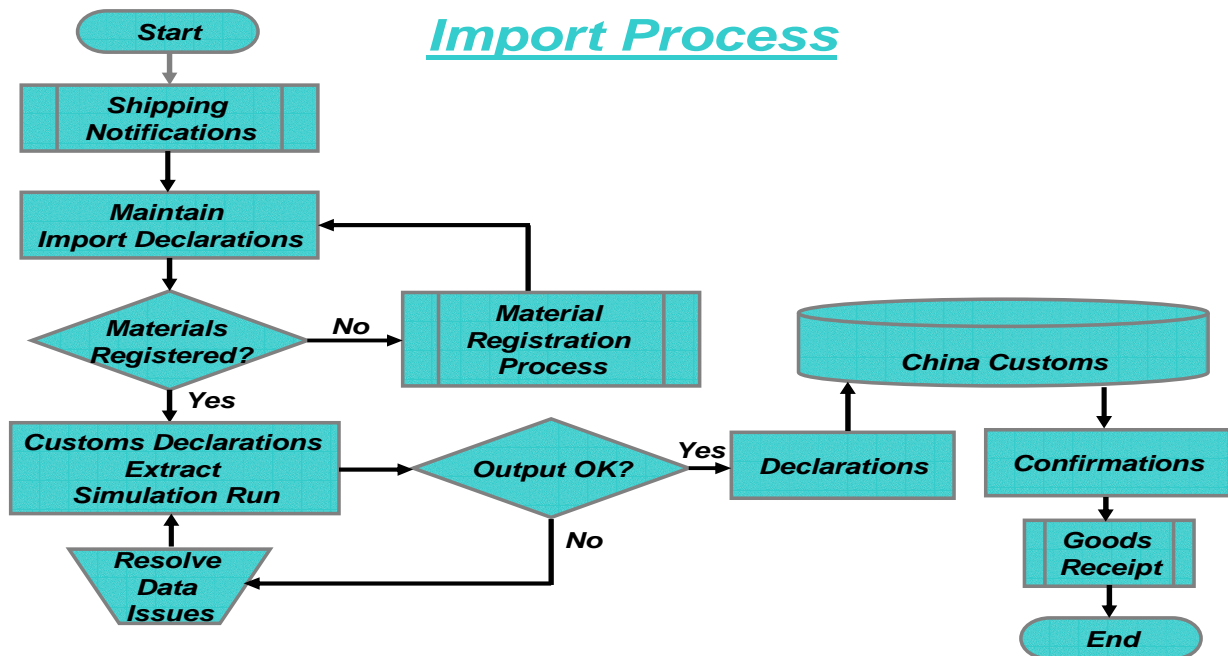
Import Process

Import Processing

- *Import declaration of raw materials*
- *Material Registration validations*
- *Customs Declarations simulation Runs – Data verifications*
- *Interfaces to upload Declaration Information to China Customs*
- *Interfaces to receive Declaration Confirmations from Customs Authorities*
- *Post Goods Receipts upon Confirmations*

Production Process

```
Start
  │
  ▼
Production Order
Processing
  │
  ▼
Production Order ◄──────────────────┐
Release                             │
  │                                 │
  ▼                                 │
eHB MM ──── No ──► eHB Material Master
Maintained?       Maintenance
  │
 Yes
  │
  ▼
Perform GI to ◄────────────┐        Update Standard SAP
Production Order           │        Inventory
  │                        │              ▲
  ▼                        │        Goods Receipt ──┤
Key Items ──── No ─────────┘        Process         │
Completely Issued?                                  ▼
  │                                 Update eHB CBOM
 Yes                                Inventory
  │                                       │
  ▼                                       ▼
CBOM Engine ──► Associate Consumption    End
                BOMs for the Production Order
```
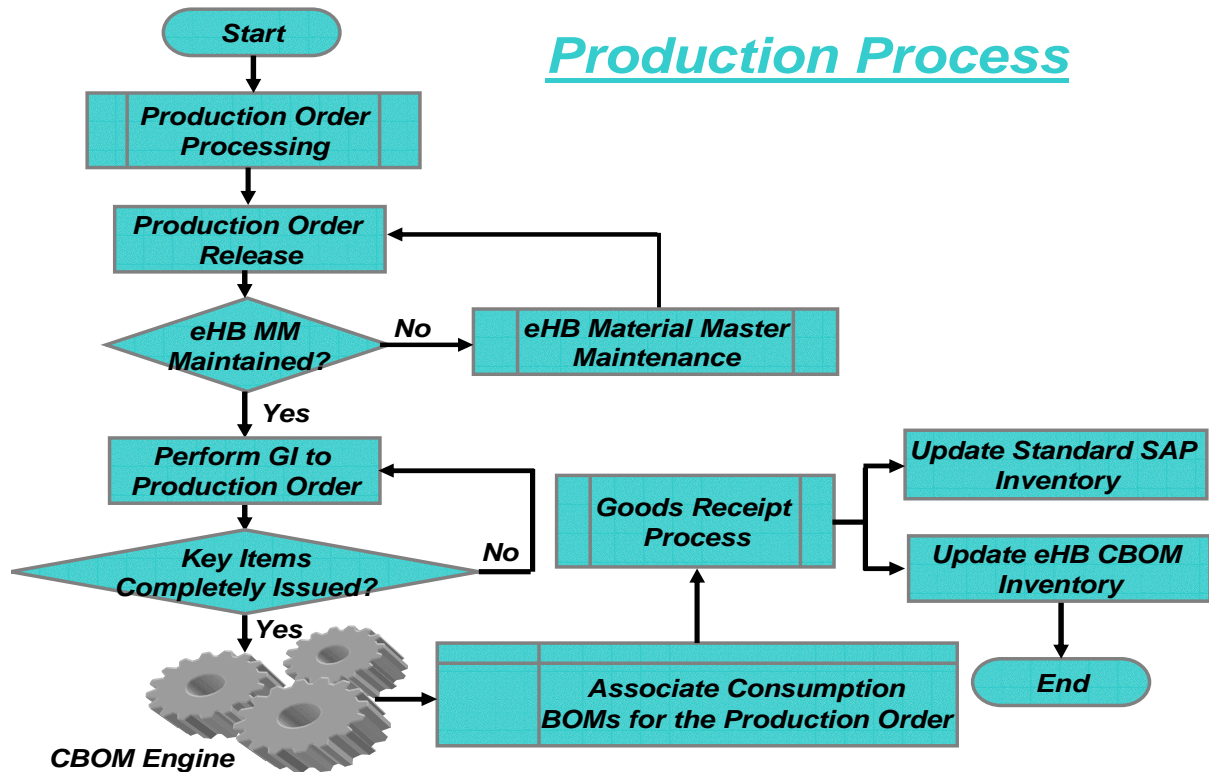
- Production Order Release
- eHB Best Fit Material Master attributes validation
- Maintenance of eHB Best Fit Material Master
- Processing multiple batch Issues to the Production Order
- Key Components validation of Production Order BOM Component List
- Generation Consumption BOM based on Goods Issue batches
- Association of one or more Consumption BOMs to Production Order Quantity
- Update eHB Best Fit Control Tables with Consumption BOM Inventory

Consumption BOM (CBOM) Engine

The CBOM engine is an eHB Best Fit core component and hosts the Consumption BOM derivation mechanism. The Consumption BOM is of two Types i) Standard Consumption BOM and ii) Goods Issue Consumption BOM.

Standard Consumption BOM: *The standard Consumption BOM is derived based on the Primary Components of the Manufacturing BOM.*

Goods Issue Consumption BOM: *The Goods Issue Consumption BOM is derived based on the actual goods issues to the production order i.e. from multiple batch inputs.*

The consumption BOM built will ease the reconciliation process by expressing the assemblies, sub-assemblies and finished goods in direct material equivalent. The consumption BOM also plays significant role in determination of Toll Processing Fee of finished goods i.e. the processing fee incurred in the manufacturing process of procured raw material/sub-assemblies to finished product where sub-assemblies are multi-sourced i.e. manufactured in-house Vs procured externally.

> **Processing Fee:** *This is the revenue earned by the manufacturers for processing raw materials to sub-assemblies or finished products*
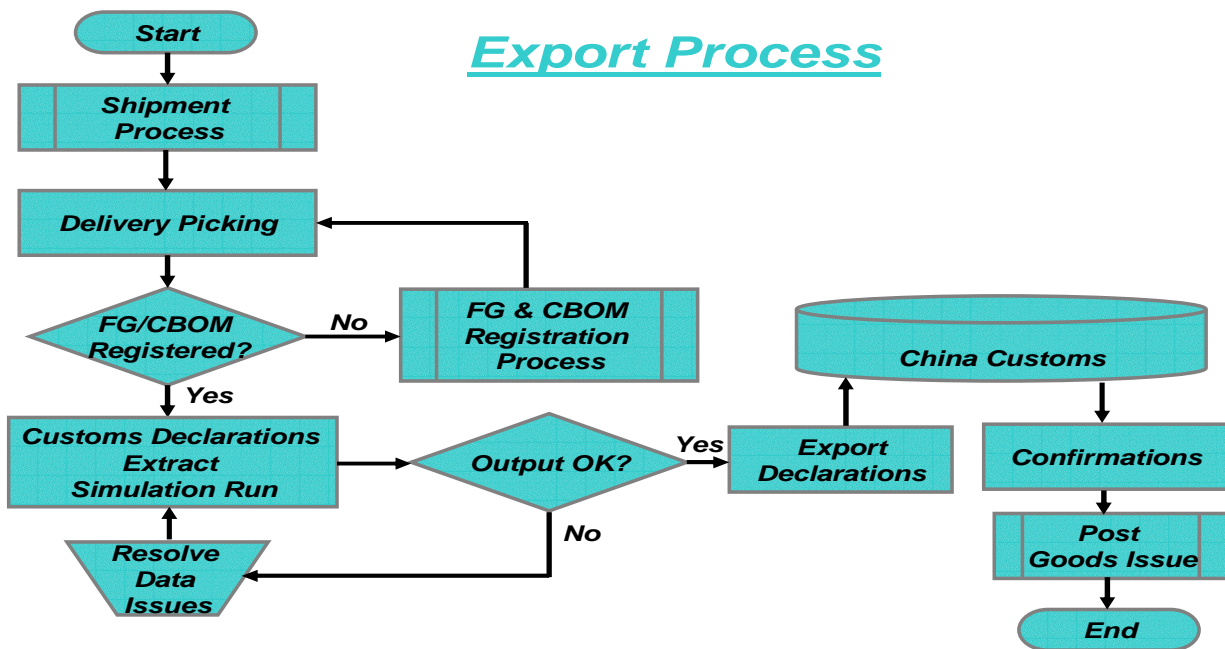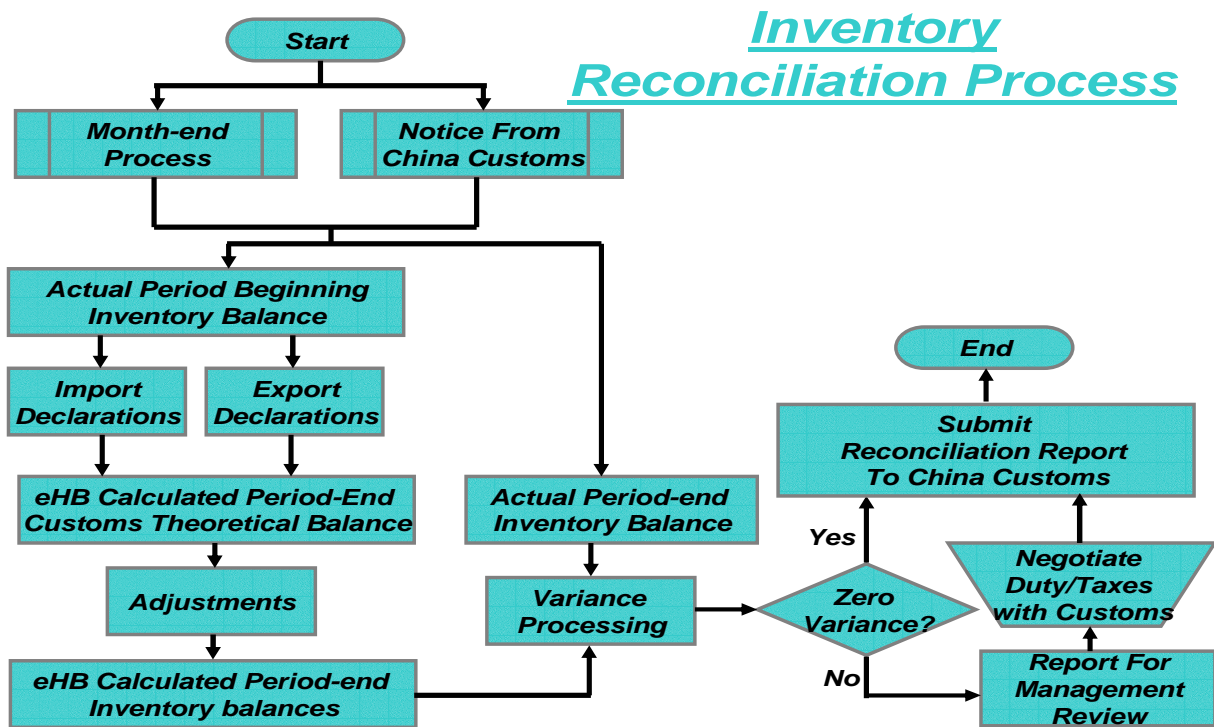

Export Processing

- *Delivery Picking & Packing*
- *Finished Goods & Consumption BOM Registration validations*
- *Export Declarations simulation Runs – Data validations*
- *Interfaces to upload Declaration Information to China Customs*

- *Print Export Declarations*
- *Interfaces to receive the Declaration Confirmations from Customs Authorities*
- *Post Goods Issue upon confirmations*

> **Indirect Exports:** *This is a bonded transfer within China from one factory to another factory and some times referred to as "indirect export"*

Inventory Reconciliation Process

```
                    ┌────────┐
                    │ Start  │
                    └───┬────┘
          ┌─────────────┴─────────────┐
   ┌──────────────┐          ┌──────────────────┐
   │ Month-end    │          │ Notice From      │
   │ Process      │          │ China Customs    │
   └──────┬───────┘          └────────┬─────────┘
          └─────────────┬─────────────┘
   ┌────────────────────────────┐
   │ Actual Period Beginning    │
   │ Inventory Balance          │
   └──────┬──────────────┬──────┘
   ┌────────────┐  ┌────────────┐
   │ Import     │  │ Export     │
   │ Declarations│ │ Declarations│
   └─────┬──────┘  └─────┬──────┘
   ┌──────────────────────────┐   ┌──────────────────┐
   │ eHB Calculated Period-End│   │ Actual Period-end│
   │ Customs Theoretical Balance│ │ Inventory Balance│
   └──────────┬───────────────┘   └────────┬─────────┘
   ┌──────────────────┐          ┌──────────────────┐
   │ Adjustments      │          │ Variance         │
   └──────────┬───────┘          │ Processing       │
   ┌──────────────────────────┐  └──────────────────┘
   │ eHB Calculated Period-end│
   │ Inventory balances       │
   └──────────────────────────┘
```

Inventory Reconciliation Process

The objective of this process is to reconcile the inventory between China Customs theoretical inventory and actual inventory balances in the bonded warehouse. In this process all the on-hand inventory of assemblies, sub-assemblies & finished goods will be expressed in the form of raw materials by exploding the assemblies/finished goods using Consumption BOM associated with material batches.

The ultimate goal of Inventory reconciliation is to have zero inventory variances.

> *Inventory Reconciliation formula:*
>
> - *Inventory On-hand = Finished Goods + Semi-Finished Goods + Raw Materials + Scrap + WIP*
> - *(Imports + RMA) – (Exports + RTV) – Inventory On-hand = Variance*

Inventory Adjustments

Inventory Adjustments activity is the crucial activity in overall the inventory reconciliation process, the exceptional reports will significantly help to analyze the actual reasons for variances and facilitates to verify and correct the variances in the theoretical inventory. The Inventory Variance Analysis can be achieved at material level or group level.

References

*Business Forum China (*www.bfchina.de*)*
Ernst & Young (http://www.ey.com/china)