INTRODUCTION

This document details the minimum acceptable packaging requirements for purchased components used at Harley-Davidson's Assembly and Powertrain facilities. The principal objective of these requirements is to guarantee part quality, maximize production efficiency, and ensure safety while minimizing overall packaging and transportation costs.

There may be additional packaging requirements for the Harley-Davidson P&A Distribution Center. The majority of these requirements are addressed in this document. However, more detailed specifications are presented in the "Packaging and Labeling for Inbound Parts & Accessories" document on H-DSN.

Suppliers interested in more information regarding these requirements or seeking technical assistance should contact their Harley-Davidson Purchasing representative who can direct them to the appropriate Packaging resource.

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PACKAGING PART QUOTING

It has been determined that clear communication of packaging information prior to suppliers' quoting process, would help close the gap between quoting and defining product delivery expectations.

The decision to use expendable or returnable packaging for incoming original equipment (OE) parts is a consideration of many factors such as safety, quality, and cost. To aid in the decision-making process, suppliers should quote the part cost using both expendable and returnable packaging, and record the container size and density assumptions made while quoting.

If the new part being quoted is similar to or a revision of an existing part, assumptions may be made that packaging for the new part will be of the same manner as the current part at the same Harley-Davidson facility. If the new part is not similar to an existing OE part or if the supplier is new, the Harley-Davidson Material stakeholders will evaluate if returnable or expendable packaging will be the primary path.

Part quotes that involve a multiple tiered supply chain should quote the part cost with the assumption that Harley-Davidson returnable packaging is used only for the finished part shipment freight on board (FOB) to point of use.

PACKAGING SKETCH FORM

The packaging sketch form is a tool used to communicate packaging plans between all internal and external stakeholders. The form is used to communicate the concept and/or final packaging plans, as well as the primary and backup packaging plans.

Approvals

- Each site and each assembly/manufacturing area will have unique requirements around who needs to review, approve, and sign-off.
- For new model projects, a launch team should be identified early in the process. The team may consist of the assembly and/or manufacturing engineer, material handling, purchasing, safety, supplier, work group, etc.
- For Continuous Improvement (CI) projects, the plant packaging engineer will direct the approval process required.

Timing Requirements for Expendable Packaging Sketch Forms

- The final Expendable Packaging Sketch Form must be submitted no later than four (4) weeks prior to the first major build event. Contact your H-D Development Purchasing Analyst for detailed timing requirements.
- Component parts for the first major build event are to be shipped in production representative packaging.
- In the case of returnable packaging being the primary path, a documented backup expendable plan is required. Completion of the backup packaging sketch form must be completed six (6) weeks prior to start of production.

**Note: The above timing supports the new M9 product development methodology. For continuous improvement projects, the steps are the same, but timing is not driven by a build event.*

Packaging Sketch Form Link: http://www.h-dsn.com/genbus/packaging.jsp

PACKAGING DESIGN

Harley-Davidson is responsible for the design, development, and implementation of returnable packaging. Suppliers are responsible for the design and procurement of expendable back-up packaging. The expendable back-up design is required to be completed prior to the production launch. Proper documentation of back-up packaging is required and must be completed by filling out the Packaging Sketch Form.

It is the responsibility of the supplier to design and develop expendable packaging. The expendable packaging design must provide adequate protection to ensure safe delivery of packaging and components to Harley-Davidson free of damage. It is important for the supplier to begin the packaging design process early in the part development cycle. Suppliers must contact the respective Harley-Davidson Packaging Engineer when designing the package to ensure that it meets each site's internal logistical and ergonomic requirements. Although Harley-Davidson assists in the packaging process, the supplier is directly responsible for the performance of the final expendable packaging design.

Multiple part numbers should not be packaged in the same container without authorization from the appropriate Harley-Davidson Purchasing representative, and the appropriate Harley-Davidson Packaging Engineer. In addition, containers should not include parts for more than one Harley-Davidson facility or assembly line.

PACKAGING SAFETY AND ERGONOMICS

Safety and Ergonomics are a primary concern for Harley-Davidson in regards to the development of packaging. Suppliers must consider human interaction when designing packaging to ensure safety and prevent injuries both at Harley-Davidson and supplier facilities. Suppliers are highly encouraged to initiate ideas to improve the safety, quality, cost and efficiency of any existing product packaging. Consideration of the human tolerance to fatigue must be given priority when developing any packaging or material handling systems to prevent injuries and accidents.

Harley-Davidson requires all manually handled packages to be less than 35 pounds and of a physical size easily controlled. Packages over 35 pounds must be secured to a pallet so that they can be moved with a fork truck. Expendable boxes that exceed 22 inches in height, including pallet, will require a drop panel to allow access to the parts. The drop panel must create an opening of 50 percent of the container wall height and 80 percent of the container-wall-width dimension.

Ergonomic Job Measuring System (EJMS) studies can be completed by Harley-Davidson Safety for new special design packs or any pack that causes concern for the safety and well-being of the individuals that must utilize this packaging.

All containers and palletized loads must be stackable unless part configuration and weight requirements do not permit. In these cases, prior approval must be received from the appropriate Harley-Davidson Purchasing representative. Packaging and pallets must be in good repair and working condition prior to shipment to Harley-Davidson.

Any deviations from these requirements must receive prior authorization from the appropriate Harley-Davidson Purchasing representative.

RETURNABLE PACKAGING

Harley-Davidson is committed to utilizing returnable packaging whenever feasibly possible. Returnable packaging includes any facets of the component packaging including containers, pallets, and custom-made packaging. Returnable packaging is considered anything that is used to ship a part multiple times. Types of returnable containers may include but are not limited to; plastic totes, pallet boxes, wire mesh baskets, double or triple-wall corrugated containers, metal bins, and reusable drums or barrels. Returnable pallets may be produced from plastic, wood, or metal. Specialized returnable packaging includes dunnage, racks, carts, injection molded custom trays and vacuum-formed tray packs and sleeve packs that are produced specific for a particular component or application.

Transition from expendable to returnable packaging must prove to be economically feasible in all aspects including freight, tooling, and total cost per container. Capital funding for returnable packaging projects must be supported by a business case analysis.

Returnable Container Implementation

A Harley-Davidson packaging engineer will choose a standard size container which best fits the part application. Based upon any special needs or part requirements, a unique container with specialized dunnage may be required. The container concept will be designed, developed and reviewed with the appropriate internal and external stakeholders. Following concept approval, a sample container will be ordered (if specialized) for trial shipment into the assembly plant for final approval. Following final approval, container system quantities are determined and containers are allocated to the supplier.

Container System Quantities

The container system quantities are determined by defining the value stream of the component(s) being packaged. The goal of the value stream map is to define all internal and external process requirements and to minimize the quantity of returnable containers required to support delivery of parts to Harley-Davidson. Minimizing the quantity of returnable packaging in the system is a conscious effort to control total cost and promote lean manufacturing. Harley-Davidson provides returnable packaging for finished goods only. Suppliers must not use returnable packaging for their internal processes or multiple tiered supply chains.

Variables of a value stream map may include, but are not limited to the following:

- Days in inventory at the supplier
- Days in transit to and from supplier to H-D
- Days in inventory at H-D
- Days allocated for return/sorting

In addition to the total number of “Days” defined in the value stream, there are two additional variables required to calculate the total number of returnable containers. These two variables include the part’s average daily usage (ADU), and the container pack quantity (CPQ). Once this information is defined the following formula is used to calculate the system requirements:

(ADU/CPQ) x Total Value Stream = Returnable Container System Size

Returnable Container Standards

Many parts can be shipped in standard containers. Some examples include plastic tote containers, collapsible plastic bulk containers, etc.

Specialized Containers

Parts may require a unique or specialized packaging design to be developed due to part characteristics such as geometry, fragility, cosmetic surfaces, etc. Identification of containers and dunnage will have –PKG numbers assigned to each component. –PKG numbers are Harley-Davidson controlled packaging part numbers that are used to define the part’s packaging bill of materials.

Returnable Backup Packaging Requirements

Production parts that are designated to be shipped in returnable containers may not be shipped in expendable containers without prior authorization from the appropriate Harley-Davidson purchasing representative. Suppliers will be responsible for the cost of any expendable packaging used as replacement unless the appropriate Harley-Davidson Purchasing representative waives them of that financial responsibility.

Suppliers will establish and maintain a disposable backup package to be used in the event that returnable packaging is not available. This disposable packaging will contain the same part quantity as the returnable pack and occupy a footprint no greater than that of the returnable pack on any dimension. Any exceptions must be approved by the Harley-Davidson Packaging Engineer at the using plant, prior to shipment. Suppliers will assume the responsibility for these parts arriving undamaged to their final Harley-Davidson destination. With Harley-Davidson Purchasing approval, suppliers may add a surcharge to cover the additional expense for this packaging in accordance with the costs they previously provided on the Packaging Quote Form provided that they are not responsible for the returnable packaging shortage.

Volume Rate Increases

As production volumes change, the level of packaging in the system may need to be adjusted to reflect those volume changes. Similarly, as the targeted on-hand inventory levels change, so must the quantity of returnable packaging in the system. It is the responsibility of Harley-Davidson to make these calculations. Once the model planning forecast is defined, additional packaging requirements are calculated and budgeted appropriately. Any incremental packaging required to support additional volumes will be shipped to the suppliers prior to the increased requirements in the schedule. If the appropriate packaging is not provided to the supplier prior to the volume change, the supplier will be required to ship in the approved designated back-up packaging. However, proper notification and authorization is required prior to shipping in the expendable back-up packaging.

Maintenance

Both the supplier and Harley-Davidson are responsible for maintaining the cleanliness and integrity of returnable packaging. Suppliers are responsible for ensuring product is shipped in clean undamaged packaging.

Both the supplier and Harley-Davidson are responsible for monitoring and reporting packaging damage. All damaged packaging will be identified for removal from the system. It is the supplier's responsibility to notify Harley-Davidson of any damaged containers received within 24 hours of receipt. The supplier may not scrap packaging without prior approval from the appropriate Harley-Davidson purchasing representative.

Harley-Davidson is responsible for expenses incurred for the repair or replacement of returnable packaging caused by normal wear and tear. The cost of repairs which are required due to accidents or misuse will be the responsibility of the party causing the damage. All containers that are repaired must meet the original container specifications.

Items that are to be checked when inspecting returnable containers (including but not limited to):

- Cracks in the corner joints
- Missing or broken access gate hinges
- Extensive damage to the container base
- Broken off pieces
- Pierces or cuts
- Bowing sidewalls

Obsolete Packaging

Harley-Davidson is responsible for the disposition of all obsolete returnable packaging materials. Suppliers who have any obsolete dunnage or containers at their facility should contact their appropriate Purchasing representative. Disposition of Harley-Davidson assets is strictly prohibited without prior authorization

EXPENDABLE PACKAGING

Although Harley-Davidson utilizes an increasing amount of returnable packaging, a great deal of expendable packaging continues to be used. When designing an expendable container that will be the primary pack for the production part an expendable standard box size should be utilized. When designing a back-up expendable pack it is necessary to use the same footprint as the returnable container and maintain the same quantity per container.

Preferred methods used for securing containers should minimize the need for cutting the container to gain access to parts. If tape is used to secure the lid of a container, paper-packaging tape that can be torn is preferred. Staples and glues are not acceptable methods of closure for container tops, but may be contained elsewhere in the body of the container. Sealing tape must be a minimum of two inches wide and have a tensile strength of 45 pounds per square inch width. Polyester film reinforced with glass, or rayon fiber combined with a laminate of paper is not acceptable.

All expendable packaging material must be legally and economically disposable at all Harley-Davidson locations regardless of the initial location using the packaging materials. Harley-Davidson highly recommends the use of recyclable packaging materials.

Expendable Dunnage

For parts that are non-cosmetic bulk packing is acceptable, no internal dunnage is required. For cosmetic or fragile parts the use of expendable dunnage should be used only as required to protect the quality of production parts. Bagging, wrapping, masking and taping parts should be minimized to ease the process of removing parts from the packaging. Work with a Harley-

Expendable Standard Box Sizes

The following table contains nine standard box sizes for OE parts being delivered to H-D assembly and/or manufacturing facilities. These box sizes cube out Harley-Davidson standard pallet dimensions:

LENGTH Outside Dimension (inches)	WIDTH Outside Dimension (inches)	HEIGHT Outside Dimension (inches)
6	6	6
12	7	5
12	15	5
12	15	9
24	15	7
24	15	15
24	22	11
32	30	25
45	48	25

Factors in Selecting Box Size:

- Part Dimensions – best fit box to part
- Part Weight – ergonomic limit for hand held boxes is 35 pounds
- Part Quality – partition cells, wrap, and/or cushion material as required
- Parts per Box –formula to estimate the target number of parts per container:

$$EAU \div 360 = \text{Parts per Box}$$

PALLETS

Harley-Davidson requires all suppliers to ship in on standard size pallets. Below are the specifications that need to be met to ship product to Harley-Davidson.

Disposable Pallet Materials
Wood, metal and plastics are acceptable materials as long as the pallet meets the criteria in this specification. Expendable corrugated pallets are not acceptable unless approved by a Harley-Davidson packaging engineer. Harley-Davidson does not provide expendable pallets for supplier shipments.

Environmental Issues
All international wood packaging shipments, including pallets must comply with USDA treatment and labeling standards. These standards can be obtained at:
http://www.aphis.usda.gov/import export/plants/plant imports/wood packaging materials.shtml

Returnable Pallet Materials
Reusable transport pallets are provided at the discretion of Harley-Davidson. A Harley-Davidson packaging engineer will determine if and when to use returnable pallet programs.

Pallet Dimensions (Length & Width) & Max Load Heights

Pallet Dimensions

LENGTH (inches)	WIDTH (inches)	MAX HEIGHT (inches)
48	45	37.5
32	30	40
48	32	50

Pallet Capacity
The loaded gross weight of a pallet load must not exceed 1200 lbs. unless otherwise approved by Harley-Davidson.

All pallets shipments need to withstand being double stacked during transportation. Shipments need to be double stacked in trailers to maximize cube space and efficiency of transportation vehicles.

Pallet Style and Type

All pallets must be four-way entry notched stringer pallets. They must be flush (no winged) reversible or nonreversible stringer pallets. For safety considerations block style pallets are generally not accepted. Pallet construction must meet the standards defined by the National Wooden Pallet/Container Association.

1800 North Kent Street Suite 911
Arlington, VA 22209-2104
(703) 527-7667
www.nwpca.com – General Website
http://www.nwpca.com/IndustryStandardsSpecifications/Standards.htm - Standards Website

Pallet Loading

No overhang of boxes is allowed. Under hang is only allowed as long as 90% of the surface is utilized.

All packages must be secured to prevent the load from shifting during transit. Nonmetallic (plastic) strapping is required on all shipments. Metal strapping/banding is not acceptable. Stretch film may be required to ensure the load does not shift during transit and should be used in addition to nonmetallic strapping when applicable.

LABELING AND IDENTIFICATION

All Labeling information can be found on H-DSN under Doing Business with Harley-Davidson, Operations Process Information, Bar Coding Requirements. The link to this document is: http://www.h-dsn.com/genbus/PublicDocServlet?docID=450&docExt=pdf

HAZARDOUS MATERIALS

Hazardous Materials
All suppliers and/or shippers are responsible to comply with all applicable international, national, federal, provincial, state or local laws and regulations for packaging hazardous materials *(packing, marking, labeling, describing and certifying)*.

U.S. Federal regulations including Hazardous Materials Regulations (Title 49 CFR Parts 100-185) can be obtained at: http://hazmat.dot.gov/regs/rules.htm

INTERNATIONAL SUPPLIERS

General Packaging Requirements:
International suppliers must comply with all packaging requirements defined or referred to within this document unless noted below.

Returnable Packaging Materials
The majority of international source parts are packaged in expendable packaging. Requests for an analysis of returnable vs. expendable packaging can be initiated by contacting your Harley-Davidson purchasing representative. The Harley-Davidson purchasing representative and the packaging engineering group will investigate the opportunity.

Environmental Requirements:
All international wood packaging shipments, including pallets must comply with USDA treatment and labeling standards. The current standard is ISPM15. The details on the standard can be obtained at:
http://www.aphis.usda.gov/import_export/plants/plant_exports/wpm/wpm_faqs.shtml

TERMS AND DEFINITIONS

AIAG (Automotive Industry Action Group) – A North American based association focused on continuously improving business processes and practices in the automotive supply chain

Backup Packaging – Temporary or expendable packaging which is utilized when primary packaging is not available

Banding – Material that is used to secure a load to a shipping platform or pallet

Block Style Pallet – A type of pallet with blocks between the pallet decks or beneath the top deck

Box Over hang – The portion of the unit load that exceeds the width or length dimension of the pallet

Box Under hang – The portion of the unit load that is less than the width or length dimension of the pallet

Common Carrier – An organization that transports goods and offers its services to the general public

Dimensions – The three dimensions of a container, given in sequence of length, width and height

Dunnage – Any material used to secure and/or protect product during shipment

Ergonomic Job Measurement System (EJMS) - The analysis of complex physical relationships between people, machines, job demands and work methods

Expendable Packaging – Disposable or limited use

Four Way Entry Pallet – A pallet configuration which permits the insertion and removal of handling equipment from all four sides of the pallet

Freight On Board (FOB) – A term used in shipping to refer to the place where the buyer becomes responsible for the shipment and the shipping charges

H-D Fleet – Harley-Davidson owned and operated truck fleet

Man-Tran – Fleet of small trucks making local pick-up and deliveries to York

Notched Stringer – A stringer that has openings cut out for insertion and removal of pallet handling equipment

Original Equipment (OE) – A component used in the manufacturing of a production item

Packaging Sketch Form – Documentation of a part's packaging bill of material

Primary Packaging – The designated container for shipping

Returnable Packaging – Container and/or dunnage that is used to ship multiple times.

Reversible Pallet – A pallet that is structurally symmetrical and can be used in either orientation (also known as mirror image pallet)

Stretch Film – A polymer film that is used to secure loads by stretching.

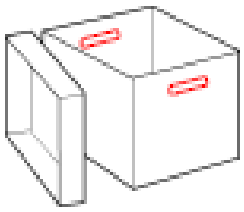
Stringer – A continuous longitudinal member that supports the deck boards on a pallet.

USDA – United States Department of Agriculture

Value Stream Mapping – A lean technique used to analyze the flow of materials and information required to bring a product or service to a consumer.

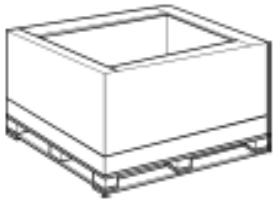
CONTAINER EXAMPLES

Returnable Hand Held

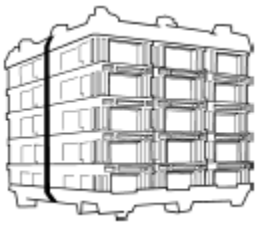


Expendable Hand Held

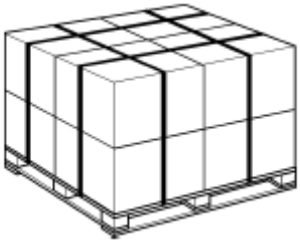
Returnable Bulk Bin



Expendable Bulk Bin



Returnable Palletized Load



Expendable Palletized Load

STANDARD RETURNABLE CONTAINERS

STANDARD RETURNABLE CONTAINERS

POWERTRAIN OPERATIONS (PILGRIM ROAD)

CONTAINER NAME	-PKG Number	DESCRIPTION	Container Weights (Lbs.)	Weight Capacity (lbs)	OD (in)			ID (in)		
					L	W	D	L	W	D
Bulk Bins										
A1	-PKG000526	Collapsible - 30 x 32 x 25	67	2000	30.00	32.00	25.00	27.10	29.30	19.40
A2	-PKG000527	Collapsible - 30 x 32 x 34	86	2000	30.00	32.00	34.00	27.10	29.30	28.40
A3	-PKG000528	Collapsible - 45 x 48 x 34	141	2000	45.00	48.00	34.00	41.50	44.20	28.30
Pallets										
48x45 Single Sheet Thermoform	-PKG005228	Mirror Image	26		48.00	45.00	8.25	48.00	45.00	2.25
48x45 Journey Pallet Lid	-PKG026168	48x45 Pallet Lid (w/buckle asm)	15		48.92	45.66	1.00	48.33	45.03	1.00
48x45 Pallet Base	-PKG004334	48x45 Pallet Base (w/seatbelts)	26.5		49.13	46.13	6.00			
32x48 Single Sheet Thermoform	-PKG005103	Mirror Image	17		48.00	32.00	8.50	47.50	31.50	2.25
30x32 Ropak base	-PKG005083	30x32 as a Pallet	25		32.00	30.00	13.25	29.25	27.25	8.00
30x36 Seat Belt Base	-PKG005564	4 way entry	11.5		37.00	31.00	6.80	36.20	30.20	5.40
30x36 Seat Belt Lid	-PKG005565	Seat belt lid	10.5		38.00	32.00	3.30			
30x32 MBX Pallet Base	-PKG005094	Black plastic pallet base			31.63	25.63	6.38			
30x32 MBX Pallet Top	-PKG005100	Black plastic pallet Top								
32x34 Thermoform Pallet	-PKG007043	Mirror image	13		34.00	32.00	6.20	33.17	31.15	5.2
32x34 Pallet Reducer Insert	-PKG022999	Pallet Insert			33.00	31.00	1.63			
Hand Held Totes										
NSO1207-5	-PKG005127	3/8 Nesting Lug	1.10		12.00	7.40	5.00	9.40	5.50	4.50
NSO1215-5	-PKG005085	3/8 Nesting Lug	1.81		15.00	12.00	5.00	13.00	9.40	4.40
NSO1215-7	-PKG002333	3/8 Nesting Lug	2.20		15.00	12.00	7.50	13.00	9.40	6.80
NSO1215-9	-PKG000070	3/8 Nesting Lug	2.50		15.00	12.00	9.50	13.00	9.40	8.80
NSO1615-7	-PKG000087	3/8 Nesting Lug	2.90		16.00	15.00	7.50	13.00	13.00	6.88
NSO1615-9	-PKG008596	3/8 Nesting Lug	3.30		16.00	15.00	9.50	13.00	13.00	8.80
NSO2415-5	-PKG002330	3/8 Nesting Lug	3.00		24.00	15.00	5.00	21.40	13.00	4.50
NSO2415-7	-PKG005578	3/8 Nesting Lug	3.60		24.00	15.00	7.50	21.40	13.00	6.80
NSO2415-9	-PKG002332	3/8 Nesting Lug	4.40		24.00	15.00	9.50	21.40	13.00	8.80
NSO2415-11.5	-PKG008302	3/8 Nesting Lug	4.40		24.00	15.00	11.50	21.40	13.00	10.90
SO3215-7	-PKG007075	3/8 Nesting Lug	5.60		32.00	15.00	7.50	29.40	13.00	6.90
SO3215-9	-PKG026171	3/8 Nesting Lug	7.20		32.00	15.00	7.50	29.40	13.00	8.70
MFG Pans										
18.5x9.75x1.75	-PKG005095	3/8 Nesting Lug	2.60		20.75	11.25	2.38	18.50	9.75	1.75
16x16		3/8 Nesting Lug	4.20		17.50	17.50	4.25	16.00	16.00	4.00
24x16x4.5	-PKG005082	3/8 Nesting Lug	5.44		25.75	17.75	4.50	23.88	15.88	4.50
24x16x6	-PKG000064	3/8 Nesting Lug	7.13		25.75	17.75	6.00	23.88	15.88	5.75
Steel Racks										
48 x 30, 32, 45, 60, 90		Steel Rack with Variable Heights								
32 x 30, 45, 60, 90		Steel Rack with Variable Heights								
Flipak										
FP03	-PKG005075	Nesting Feature	2.1		11.80	9.80	7.70	10.10	7.80	6.50

ASSEMBLY OPERATIONS (YORK, KANSAS CITY, TOMAHAWK)

CONTAINER NAME	-PKG Number	DESCRIPTION	Container Weights (Lbs.)	Weight Capacity (lbs)	OD (in)			ID (in)		
					L	W	D	L	W	D
Bulk Bins										
A1	-PKG000526	Collapsible - 30 x 32 x 25	67	2000	30.00	32.00	25.00	27.10	29.30	19.40
A2	-PKG000527	Collapsible - 30 x 32 x 34	86	2000	30.00	32.00	34.00	27.10	29.30	28.40
A3	-PKG000528	Collapsible - 45 x 48 x 34	141	2000	45.00	48.00	34.00	41.50	44.20	28.30
48x45 Journey Pallet Lid	-PKG026168	48x45 Pallet Lid (w/buckle asm)	15		48.92	45.66	1.00	48.33	45.03	1.00
48x45 Pallet Base	-PKG004334	48x45 Pallet Base (w/seatbelts)	26.5		49.13	46.13	6.00			
Front Pick Face Containers										
A2, 1 sided with curtain	-PKG028680	Single Pick Face - 30 x 32 x 3	96		30.00	32.00	34.00			
A2, 1 sided no curtain	-PKG028682	Single Pick Face - 30 x 32 x 34	98		30.00	32.00	34.00			
A2, 2 sided with curtain	-PKG028268	Dual Pick Face - 30 x 32 x 34	109		30.00	32.00	34.00			
A2, 2 sided no curtain	-PKG027577	Dual Pick Face - 30 x 32 x 34	111		30.00	32.00	34.00			
A3, 1 sided, with curtain	-PKG010008	Single Pick Face - 45 x 48 x 50	219		48.00	45.00	50.00			
A3, 1 sided, no curtain	-PKG027593	Single Pick Face - 45 x 48 x 50	221		48.00	45.00	50.00			
A3, 2 sided, with curtain	-PKG010006	Dual Pick Face - 45 x 48 x 50	229		48.00	45.00	50.00			
A3, 2 sided, no curtain	-PKG027594	Dual Pick Face - 45 x 48 x 50	227		48.00	45.00	50.00			
Hand Held Totes										
NSO1215-5	-PKG005085	3/8 Nesting Lug	1.81		15.00	12.00	5.00	13.00	9.40	4.40
NSO1215-7	-PKG002333	3/8 Nesting Lug	2.20		15.00	12.00	7.50	13.00	9.40	6.80
NSO1215-9	-PKG000070	3/8 Nesting Lug	2.50		15.00	12.00	9.50	13.00	9.40	8.80
NSO2415-5	-PKG002330	3/8 Nesting Lug	3.00		24.00	15.00	5.00	21.40	13.00	4.50
NSO2415-7	-PKG005578	3/8 Nesting Lug	3.60		24.00	15.00	7.50	21.40	13.00	6.80
NSO2415-9	-PKG002332	3/8 Nesting Lug	4.40		24.00	15.00	9.50	21.40	13.00	8.80
NSO2415-11.5	-PKG008302	3/8 Nesting Lug	4.40		24.00	15.00	11.50	21.40	13.00	10.90
NSO2415-14	-PKG030127	3/8 Nesting Lug	5.70		24.00	15.00	14.50	21.40	13.00	13.30
RSO	-PKG000522	Non-collapsible - 12 x 7.4 x 5	1.73	38.27	12.00	7.40	5.00	9.40	5.50	4.30
RC-1	-PKG000523	Collapsible - 15.5 x 11 x 7	3.9	36.1	15.50	11.00	7.00	13.90	9.70	6.25
RC-3	-PKG000524	Collapsible - 21.875 x 15.5 x 10.5	7.05		21.88	15.50	10.50	20.30	14.25	9.75
RC-5	-PKG000525	Collapsible - 21.875 x 15.5 x 14	8.4	31.6	21.88	15.50	14.00	20.10	14.25	13.20
Sleeve Packs										
Unipack		29 x 23 x (Variable Height)			29.00	23.00				
Unipack		48 x 40 x (Variable Height)			48.00	40.00				
Unipack		48 x 45 x (Variable Height)			48.00	45.00				
Unipack		57x48 x (Variable Height)			57.00	48.00				
PB Containers										
PB2	-PKG002334	PB2 Bin Container	0.3		7.00	4.00	2.90	6.00	3.40	1.60
PB3	-PKG002335	PB3 Bin Container	0.6		9.50	5.80	5.00	8.40	5.00	2.60
PB4	-PKG002336	PB4 Bin Container	1.3		12.80	8.10	6.00	7.10	3.10	3.10
PB5	-PKG002337	PB5 Bin Container	2.2		18.50	11.60	7.10	17.10	10.80	3.80
PB6	-PKG009349	PB6 Bin Container	2		15.00	12.00	7.50			
Steel Racks										
48 x 30, 45, 60, 90		Steel Rack with Variable Heights								
32 x 30, 45, 60, 90		Steel Rack with Variable Heights								