

**PACKAGE HANDLING INDUSTRY**  
Products For Distribution Centers

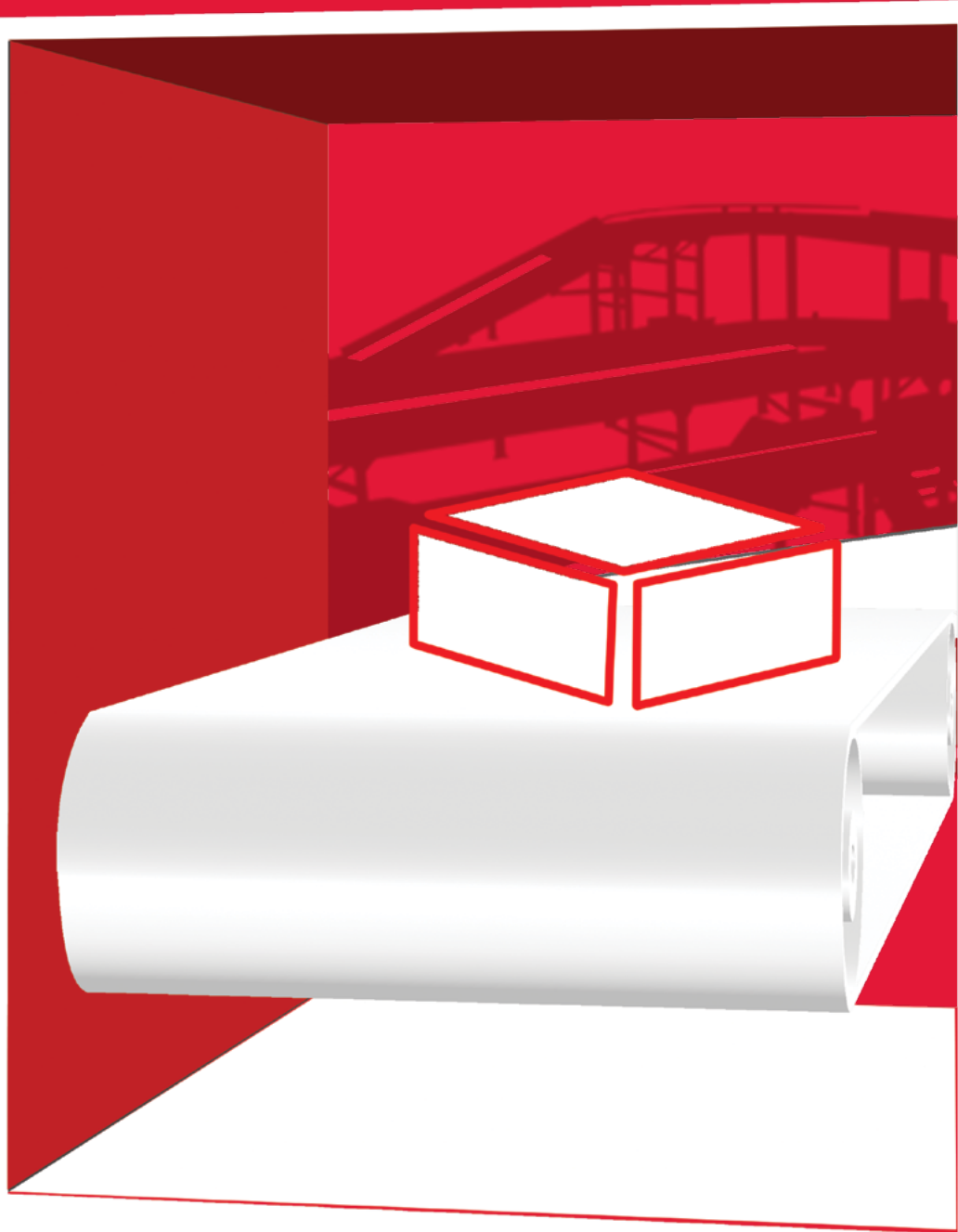


# MOVING FORWARD

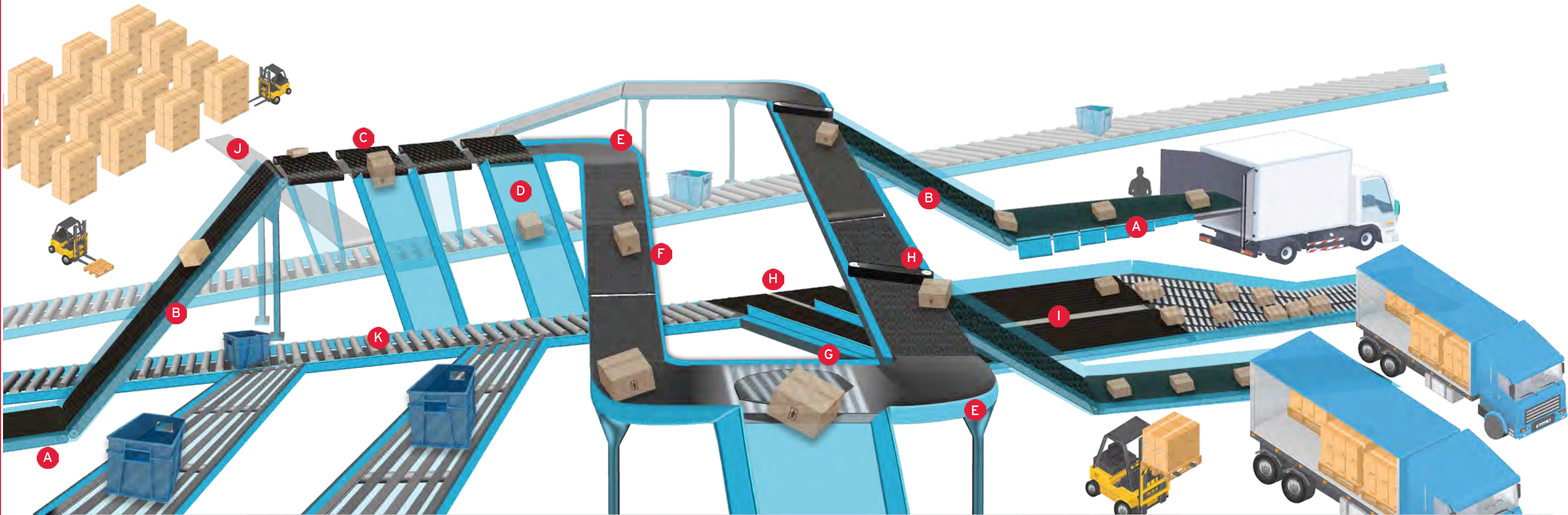
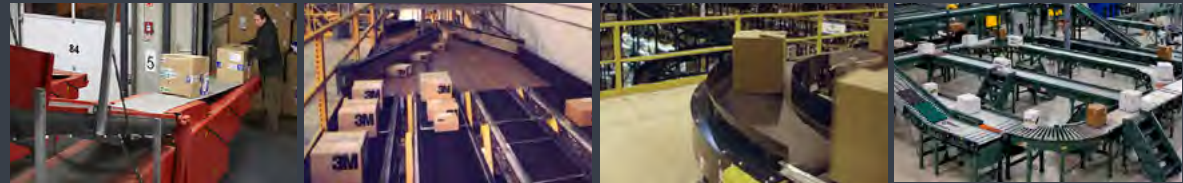
**FOOD, CLOTHING, TOOLS, TOYS, BUSINESS PACKAGES – VIRTUALLY ANY PRODUCT YOU CAN THINK OF** – are items that run through package handling or distribution center facilities on their way to homes and businesses all around the world.

In a single distribution center there can be as much as 150 miles of conveyor belts running, moving billions of packages each year. These miles of conveyor systems includes a variety of belt types, as well as other related or complementary fabricated rubber or hose products, depending on the part of the system they are traveling through.

► The complexity of many systems include not only standard flat belting, but small, round or flat belting that moves roller conveyors.



## PACKAGE HANDLING PROCESS



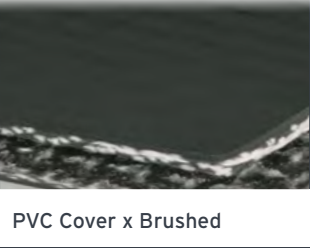
### APACHE'S BELTING SOLUTIONS FOR PACKAGE HANDLING APPLICATIONS:



PVC V-Runner x Bare



PVC Impression Cover x Bare



PVC Cover x Brushed



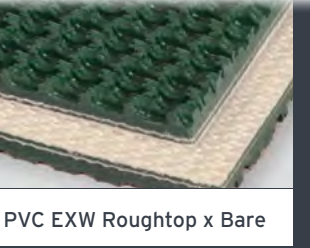
PVC Roughtop x Brushed



PVC Friction x Brushed



PVC Lattice Top x Bare



PVC EXW Roughtop x Bare

#### **A** TELESCOPING / EXTENDABLE CONVEYORS

Handles loading and unloading of packages more efficiently with an extended conveyor that can be placed directly at the side of the operator, and continue into the trailer.

#### **B** INCLINE & DECLINE SLIDER BED CONVEYOR

Transports incoming packages to different areas of the sortation process. These conveyors help maximize space by running above other conveyors in a system. Found primarily in the shipping and receiving areas of a facility.

#### **C** CROSS BELT SORTER

Diverts packages bi-directionally, transporting them to the next destination in the sorting process. Ideal where there is minimal space to route packages to multiple destinations as they are scanned for system routing.

#### **D** CHUTE

Trays or slats provide combined sorting mechanism and product transporter. Chutes carry products on a flat surface slat conveyor.

#### **E** POWERED CURVE CONVEYOR

Curved sections of the conveyor system that change the flow of packages at angles, routing them to the next step in the process. Turns can range from 150° degrees to as much as a 180° turn.

#### **F** METERING / SERVO BELTS

Creates spacing or controlled intervals between packages on the conveyor system, and helps merge or combine products smoothly when moving at high speeds.

#### **G** SCRAMBLED PACKAGE EJECTOR & RECULATOR

Diverts packages with barcodes undetected by the scanner back to the input side of the multi-stage unscrambler infeed. Flat transmission belt.

#### **H** POSITIVE SORTER/DIVERTER

Diverts each package to the proper outbound lane, typically driven by scanned info from the parcels as they move through the system.

#### **I** IN-FEED HORIZONTAL SLIDER BED LINE CONVEYOR

Accepts packages from multiple incline conveyors and transfers to the sorting process. Uses a smooth surface cover belt.

#### **J** HORIZONTAL SLIDER BEDLINE CONVEYOR

Transfers packages to the metering section and also to the outbound loading area. Uses a smooth surface bed.

#### **K** LIVE ROLLER

A conveyor type with a flat width of belt under the roller bed. PVC interwoven polyester smooth surface.



# BETTER, FASTER, & STRONGER

Package handling is an integral part of distribution centers, which can also be referred to as a "DCs", warehouses, fulfillment centers, cross-dock facilities, or bulk break facilities. Although each of these may service different segments of the market, they all have a variety of belting applications – which means unlimited sales opportunities to you.

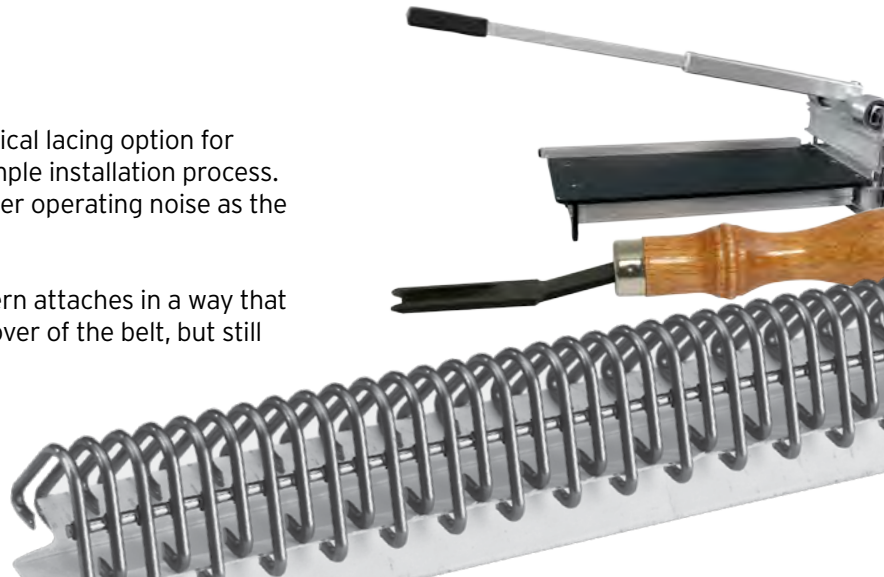
## CONVEYOR BELT SPLICING TOOLS

There are a number of ways that a belt can be spliced, which is when the ends of a belt are joined together. In package handling systems the most common method of splicing uses mechanical fasteners, or lacing due to the ease and speed of repair and replacement. Onsite repairs are common on these systems, so being able to make them with minimal downtime is essential to keep operations running.

### REPLACEMENT LACING

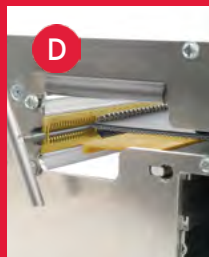
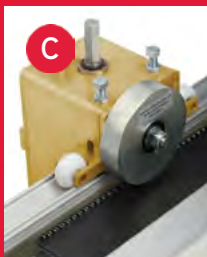
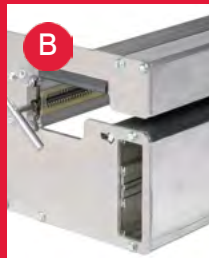
Wire hook style lacing is a fast and economical lacing option for package handling, in part because of its simple installation process. The low profile construction also offers lower operating noise as the belt moves.

The staggered grip of the hook lacing pattern attaches in a way that won't damage or degrade the carcass or cover of the belt, but still offers a solid grip when attached.



### CLIPPER® ROLLER LACER

For ease of installation, the roller installation tool:



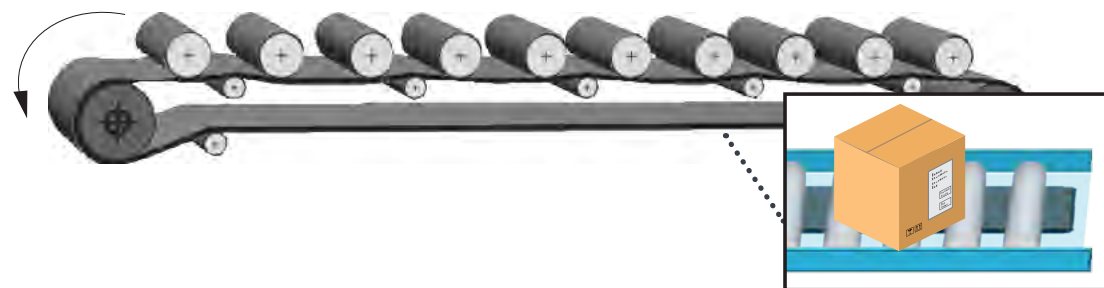
- A) Lacer Head** – moves roller shaft with manual handle or cordless drill, offering less operator fatigue and faster installation
- B) Storage** – slots provide secure access to storage of lacing strips
- C) Clevis Bracket & Guide Rollers** – provides holding force for embedding the hooks into the belt with additional stability
- D) Face Strip & Clamping Design** – holds hook during installation, guiding the belt and offering easier, reduced installation time

# LIVE ROLLER CONVEYORS

Live roller conveyors are frequently used in package handling, distribution, and warehouse facilities, and can be either belt or chain driven. There are a number of styles of both belt and chain driven live roller conveyor systems.

## BELT DRIVEN SYSTEMS

Belt driven systems are much quieter, with belts running underneath the rollers to move and direct products. The belts run the opposite direction beneath the rollers, and are sometimes obscured by the other components of the system, so they are not readily visible.



## CHAIN-DRIVEN SYSTEMS

Chain-driven systems are popular for heavier products and are sometimes viewed as having more versatility, but chain systems generally create a much noisier work environment.

### ► FRICTION PADS

Friction pads are often used to help with sound absorption on OEM equipment with chain-driven live rollers.

Our friction pad (#2275) is made with top quality resins, and has conical shaped perforations – ensuring stronger pin retention and better performance. With high durability and longer life, the friction pad offers a great option for original equipment replacement. (Available in 500' lengths as a replacement only.)



## TYPES OF BELTS

In today's distribution centers, there are a wide variety of solutions for live roller driven conveyor belts. Apache meets the application demands for these high quality products.



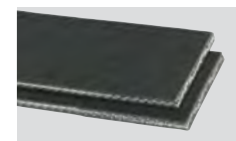
### POWER GRAVITY ROLLER BELT (KEVLAR® CORD REINFORCED - SPEC #1190)

The power gravity roller (PGR) belt, with its embossed top and brushed bottom, is designed for quiet operation and a long life. Its adhesive-free joining process increases productivity and lowers maintenance costs. The PGR belt works with your customers' existing tooling, and splices into the OEM belt – providing even more cost savings.



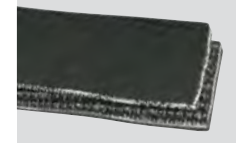
### NEEDED 120# POLYESTER BLACK PVC FRICTION X BRUSHED (SPEC #4136)

Our 120# needed polyester belt offers a great option for belting under roller applications. This product offers "no stringing" and low noise service. It has become a package handling industry favorite.



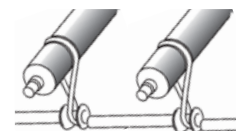
### INTERWOVEN 120# POLYESTER BLACK PVC COVER X COVER (SPEC #5042)

PVC interwoven polyester continues to be popular in package handling due to its low stretch and superior lace retention. The covers on this belt provide a high coefficient of friction for better gripping and increased drivability.



### INTERWOVEN 120# POLYESTER BLACK PVC COVER X BRUSHED (SPEC #5045)

Our PVC 120# black cover one side is a very popular general purpose belt. This belt is our most economical option for live roller driver belts, yet maintains the benefits of PVC interwoven polyester – low stretch and superior lace retention.



### ROUND BELTS

Round belts on a line shaft is an alternative to the flat belt solution. Drive provided by round belts is particularly suited to curved live roller conveyor installations.

# BELT CUTTER

This tool is made using high-grade aircraft aluminum to keep it light-weight, portable, and very durable. The cam-style cutting mechanism will cut belt reliably and with ease. The reversible aluminum anvil blade-stop ensures a clean cut from a blade that can be sharpened or replaced as needed. The heavy-duty cutting table features a belt fence to square the cut and can be mounted on either side of the table for convenience.

### ► 9" Belt cutter



### ► 20" Belt cutter





DESCRIPTION  
ABBREVIATION  
KEY

PVC = Poly Vinyl  
Chloride

SBR = Styrene  
Butadene Rubber

RMV = Rubber  
Modified Vinyl

# APPLICATION SOLUTIONS

When there is product on the move, you need something reliable that will hold up to your application. As paper based containers are replaced by more durable materials such as plastic, the belting requirements have also changed.

## BELT DRIVEN LIVE ROLLER

- #1190 45 mm wide Kevlar® Cord Reinforced Power Gravity Roller Belt
- #3808 2-Ply 100# Spun Polyester Green RMV Matte Cover x Matte Cover
- #4110 3-Ply 90# Cotton/Polyester Tan SBR Transmission Friction x Friction
- #4136 Needled 120# Polyester Black PVC Friction x Brushed

## BRAKE-SPACER

- #4328 2-Ply 100# Polyester Monofilament Black PVC V-runner x Bare
- #4340 Needled 120# Polyester Black PVC V-runner x Brushed

## FEEDER

- #4145 2-Ply 100# Polyester Monofilament Black PVC Light Impression Cover x Bare

## LIVE ROLLER FRICTION PAD

- #2275 85 Durometer

## HIGH SPEED WHEEL DIVERTER

- #4129 4-Ply 90# Sliptop Polyester Tan Nitrile Bare Nylon x Friction
- #4130 3-Ply 150# Polyester Monofilament Black PVC Bare x Bare
- #4367 2-Ply 100# Polyester Monofilament Black PVC Lattice Top & Bare

## INCLINE / DECLINE

- #4301 2-Ply 150# Polyester Black SBR Roughtop x Bare
- #4314 2-Ply 150# Polyester Black SBR Siped Diamond Top x Bare
- #4391 Interwoven 120# Polyester Black PVC Roughtop x Brushed

## MERGE / ACCUMULATION

- #4127 2-Ply 100# Polyester Monofilament Black PVC Bare x Bare
- #4129 4-Ply 90# Sliptop Polyester Tan Nitrile Bare Nylon x Friction
- #4130 3-Ply 150# Polyester Monofilament Black PVC Bare x Bare

## POWER FACE DEFLECTOR

- #4130 3-Ply 150# Polyester Monofilament Black PVC Bare x Bare

## SERVO

- #4328 2-Ply 100# Polyester Monofilament Black PVC V-runner x Bare
- #4340 Needled 120# Polyester Black PVC V-runner x Brushed

## SINGULATOR

- #4138 2-Ply 100# Polyester Monofilament Green PVC Cover x Bare Anti-static
- #4149 2-Ply 100# Polyester Monofilament Green Urethane Cover x Bare

## SLIDER BED

- #4136 Needled 120# Polyester Black PVC Friction x Brushed
- #4137 2-Ply 100# Polyester Monofilament Black RMV Cover x Bare

## SPACER

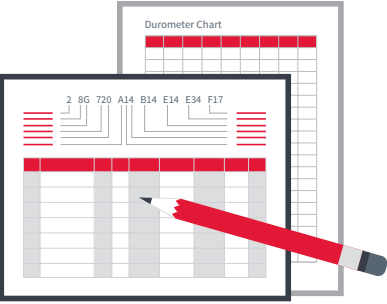
- #4145 2-Ply 100# Polyester Monofilament Black PVC Light Impression Cover x Bare
- #4392 2-Ply 100# Spun Polyester Black PVC Pebbletop x Friction

## SPIRAL LAGGING

- #4322 Interwoven 120# Polyester Green PVC Extra Grip Roughtop x Brushed

## USING TOTES

- #1425 2-Ply 100# Polyester Green EPDM High Grip V-runner x Bare (HAL-12E)
- #4304 2-Ply 150# Polyester Tan Natural Rubber Roughtop x Bare
- #4313 2-Ply 150# Polyester Tan SBR Siped Diamond Top x Bare



# HOSE PRODUCTS & ACCESSORIES

Sourced from the top manufacturers, hose products from Apache are assembled and fabricated to meet the exact specifications needed such as hydraulic hoses for specific equipment. Keep package handling systems free of dust or other debris with pressurized air.

Assembled by technicians trained to NAHAD guidelines and vendor-certified processes, product quality meets or exceeds the original OEM specs. All of Apache's hose production facilities maintain ISO certification.

## AIR / MULTIPURPOSE

Versatile general purpose hose is excellent for air, water, and many chemicals. The EPDM tube and cover resists heat, sunlight, ozone, and weathering. Its RMA Class C tube makes it suitable for oil mist lubricating air lines

- Bulk/uncoupled 200 & 300 PSI – 2 & 4 spiral reinforcement
- Bulk/uncoupled & assemblies 500 PSI 4 spiral reinforcement
- Adapters, reels, & accessories



## HYDRAULIC HOSE

Assemblies and high pressure hydraulic lines meet SAE standards. They are coiled and sleeved for easy storage, and labeled with size and specification for easy identification.

- Bulk/uncoupled 100R1AT & 100R2AT
- 2-wire 100R2AT male pipe thread x male pipe thread assemblies at 4000 & 5000 PSI
- Adapters & accessories



# CUT & MOLDED PRODUCTS

We fabricate all types, sizes, and quantities of custom parts to help your systems and equipment operate as efficiently and effectively as possible.

Whatever your custom cut, molded, and extruded part requirements, Apache has the capabilities you need, including waterjet and flashcutting. Here are just a few options available for package handling facilities:

- Transitions Strips
- Chute Liners
- Guides



Apache has a full suite of hose products available for package handling facilities, as well as endless other applications.

# CHOOSE APACHE

As your single source supplier, Apache will save you time, money, and energy.

## PROVEN EXPERIENCE

- ▶ A proven market leader with a global reach
- ▶ 50+ years of dedication to quality, selection, service, and support
- ▶ Durable, quality products tested and proven to withstand the toughest applications
- ▶ Experts who understands the unique challenges of the package handling industry and the needs of distribution centers
- ▶ A partner committed to your success with 24/7 online order tracking

**1 Point of Contact**

**1 Purchase Order**

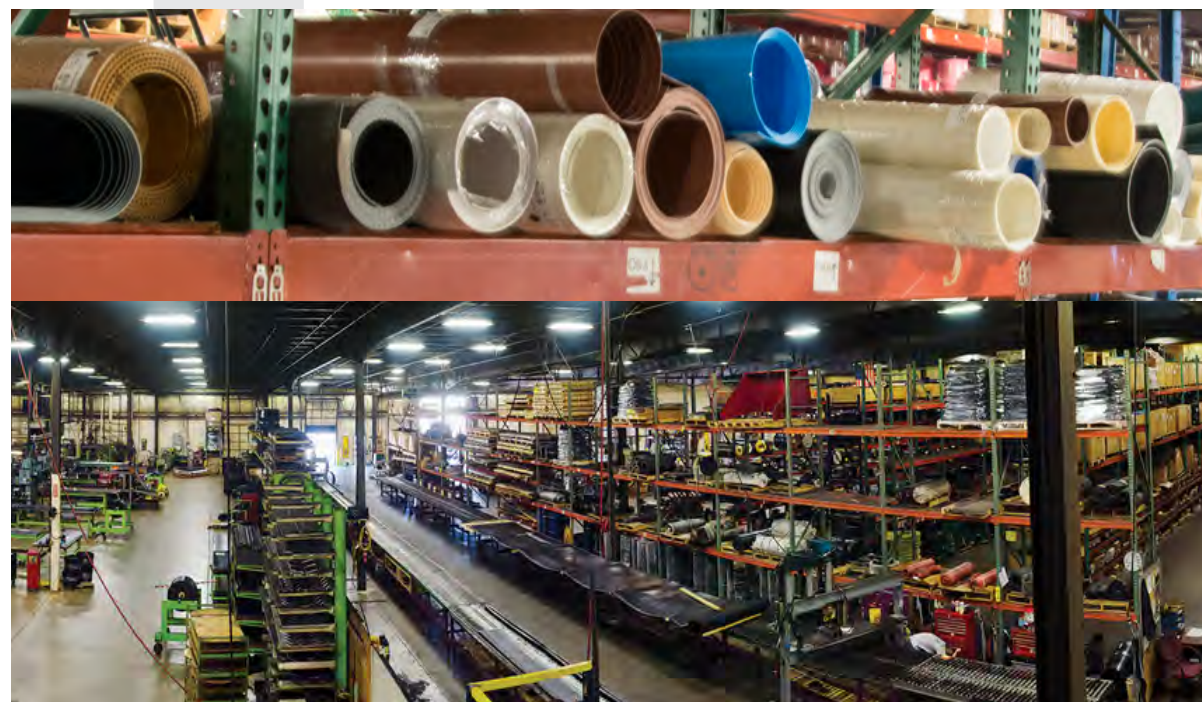
**1 Bill of Lading**

**1 Invoice**

## IT STARTS WITH ONE CALL

As your single-source supplier, Apache will save you time, money, and energy. With Apache, a single PO can cover multiple product lines, helping reduce overhead and paperwork. That also makes it easier to qualify for freight discounts which can significantly reduce shipping costs.

At a time when vendor reduction initiatives are at the forefront for many organizations, partnership with Apache helps you consolidate your supplier base while increasing efficiencies – all while making you look like a hero to your company.



# SUPPORT THAT'S SECOND TO NONE

Sometimes you know exactly what you need – you just need it fast. Other times, you know what you want to accomplish, but you're not sure which products are best for the job. Apache gets it. Our experts are here to help you make the right decision from the start – and connect you and your customers' with the right solution.

## THE DIFFERENCE TENURE MAKES

Officially, they're called support staff. But we've heard them referred to as day-makers and miracle workers, too. Experience is what makes the Apache support staff so special. When you call, you're talking to people who know our products inside and out, as well as the customers they serve.

As a team, there isn't any problem they can't solve (but we do challenge you to try). They pride themselves on bringing our customers smart, nimble, cost-effective product-based solutions that keep distribution centers moving.

You also have the face-to-face support of our outside account managers. This next level of customer support gives you an opportunity to discuss your needs in-person. Our staff can come to your location and answer any questions you may have about our products. It's all part of the Apache experience.



## DETAILED INFORMATION AT YOUR FINGERTIPS

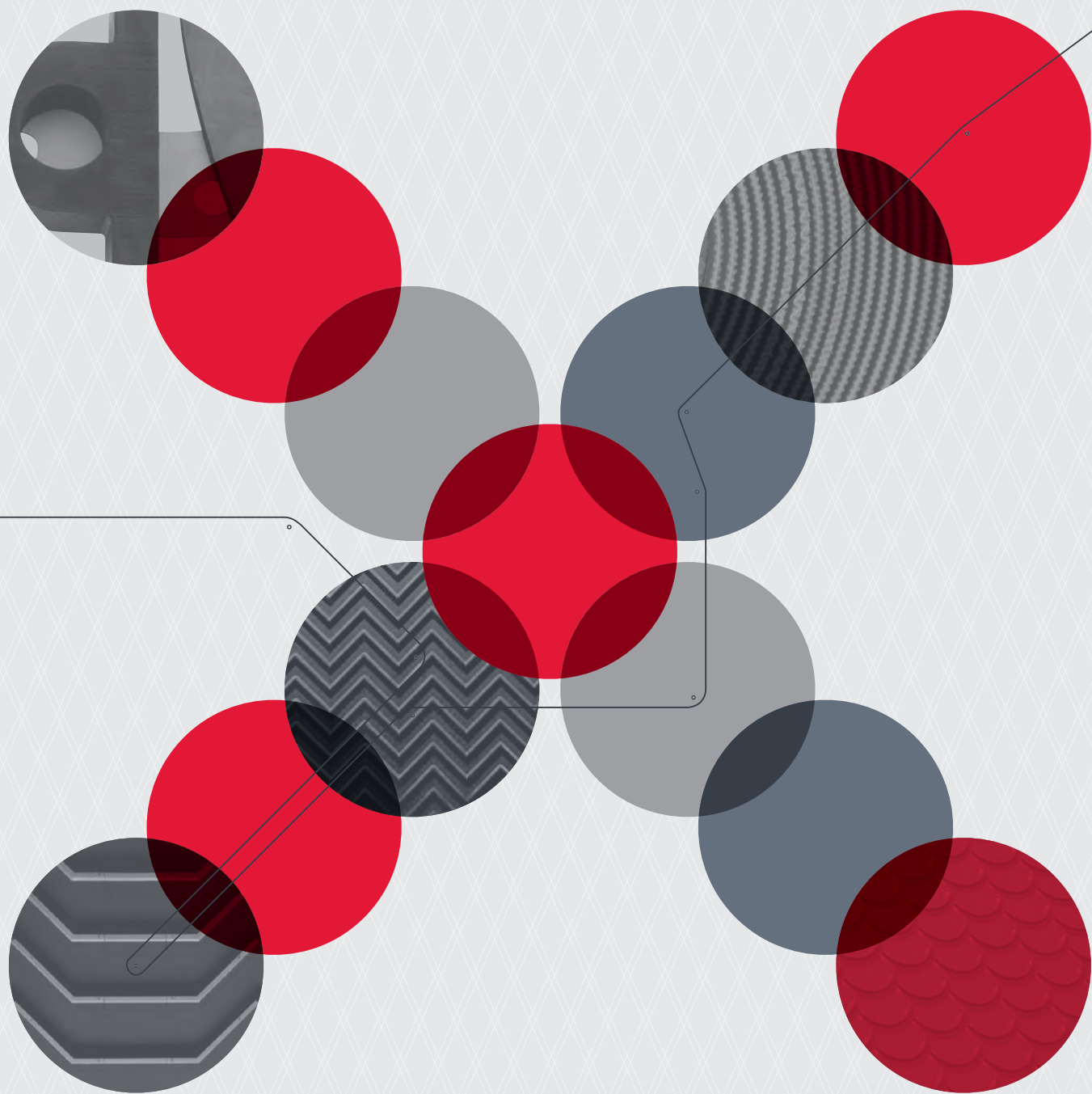
To help you make informed purchasing decisions about Apache hoses, belts, and cut and molded products, we offer a wide selection of materials:

- ▶ Product Brochures
- ▶ Worksheets
- ▶ Technical Data Sheets



Find worksheets and reference information online at [www.apache-inc.com](http://www.apache-inc.com)





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