



 PHARMAWORKS™

# AFTERMARKET PRODUCTS



UPGRADES | SERVICE | PARTS

# AFTERMARKET CATALOG

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## INTRODUCTION

Pharmaworks is the USA's leading pharmaceutical blister machine manufacturer.

Pharmaworks was founded in 2002 on the principals of flexibility, customer support, and innovation.

We set ourselves apart from other OEMs in that we not only sell our line of blister machines and equipment but we also rebuild other OEM brand equipment.

In fact, rebuilding other OEM brand equipment is where we got our start. So, you might say that making your equipment run at optimal production and efficiency is in our DNA.

Innovation, flexibility, and dependability are at the core of all our blister packaging solutions.

Today, Pharmaworks manufactures a complete line of blister machines, tooling, feeding systems, cartoners, and custom automation related to blister packaging. Our clients include companies across a variety of industry sectors.

- Pharmaceutical
- Medical/ Medical device
- Nutraceutical
- Personal care
- Consumer products

Even though our current product portfolio includes a broad array of new machine technologies and solutions, our ability and passion to service your in-field equipment is the foundation upon which Pharmaworks was initially built.

A complete aftermarket support program continues to be a main area of focus, including parts, service, machinery rebuilds & upgrades, controls upgrades, tooling, and training programs for both Pharmaworks equipment and most other types and brands of blister and carton packaging machines.

Take a look...

Please browse this catalog to get an indication of some of the aftermarket solutions we offer to keep your machine running optimally.

Sincerely,

The Pharmaworks Aftermarket Team



**US SERVICE TECHNICIANS**



**PARTS COORDINATOR**



**SERVICE COORDINATOR**



**EUROPE SERVICE REPRESENTATIVE**





# SERVICES & PARTS PROVIDED

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## **PARTS & SERVICES**

We have a fully staffed Parts & Service department based in Odessa, Florida, ready to address your parts and field service needs.

## **REBUILDS & UPGRADES**

Pharmaworks has more than 20 years of experience rebuilding many types and brands of blister machines and cartoners. Whether you need a field controls upgrade or a complete rebuild done at our Odessa FL facility, Pharmaworks can handle the project.



## **TOOLING**

Pharmaworks tooling solutions will get you up and running quickly. Not only does Pharmaworks design and manufacture tooling for our own model line-up but we have excelled in providing blister machine tooling solutions for a wide range of 3rd party OEM machines.

## **TRAINING**

Pharmaworks is proud to offer the PMMI Certified Trainer Program – a recognized designation that ensures the highest standards of quality training are being met and unparalleled value is being given to the customer.

Our certified trainers make a difference by bringing the following to your company



# Aftermarket Parts & Services TF1e



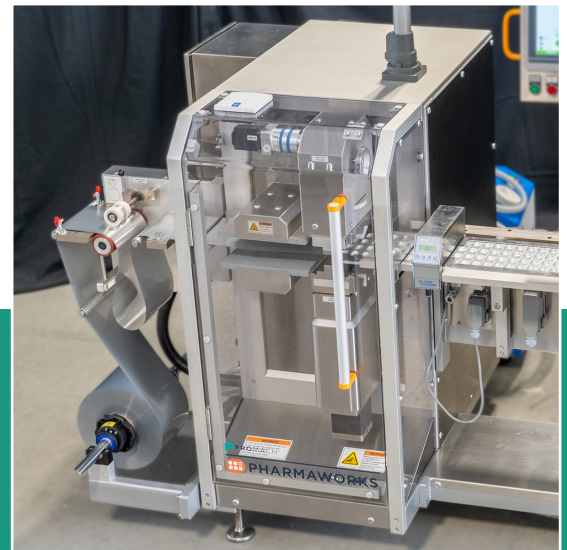
## TF1e Aftermarket Parts & Services

The TF1e is a superior choice for low to moderate blister production including clinical trial packaging. With speeds exceeding 90 indexes per minute and a format range of 90 mm x 165 mm, the TF1e delivers world-class standards in cGMP and standard features typically found on larger blister machines. Blisters up to 25mm in depth can be formed on the TF1e making it an excellent choice for medical device packaging.



**HMI-PUSHBUTTON CONTROL  
PANEL RELOCATION KIT**

See Page 14



**FORMING GUARD DOOR UPGRADE**

See Page 16

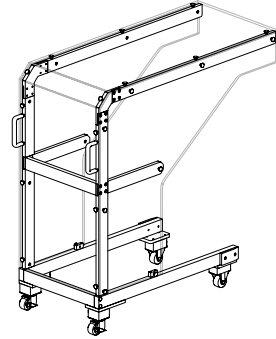
# Upgrades & Replacements TF1e

## BASE UNWIND - COVER

Adding a cover may help if you are struggling with dust and other particulates on your base material or in dusty environment. The Base Unwind Cover is compatible with base material rolls up to 800mm in diameter. This mobile cover is simply rolled over an installed base material roll. You can visually monitor remaining base material since all side of this cover are made of clear plastics.

## Part Number(s)

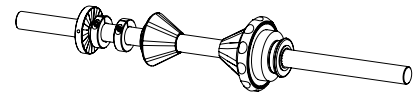
**KIT PART #: 6025440-000**



BASE UNWIND COVER

## BASE UNWIND - 3" SHAFT CHUCK

The 3" Quick-Release Shaft Chuck is ideal for thermoforming applications. The 3-inch size fits most thermoforming material cores. And with the toolless shaft chuck design, it can be tightened and loosened by hand with no need for extra tools. The conical shapes of the shaft chucks make it easy to install a new material roll, giving you a snug, perfectly aligned fit every time with no guessing. Just set it up once and you're good to go.



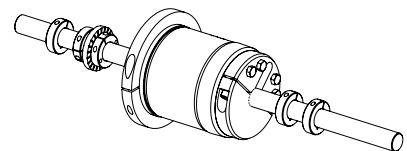
BASE UNWIND 3" SHAFT CHUCK

## Part Number(s)

**KIT PART #: 6030625-000**

## BASE UNWIND - 6" SHAFT CHUCK

The 6" Bladder Core Chuck is perfect for cold forming applications. The 6-inch size fits most foil material cores and uses an air bladder design that can quickly be inflated or deflated with an air gun for quick roll changes. The through-shaft design fits any standard shaft, and the durable bladder material ensures long-lasting performance.



BASE UNWIND 6" SHAFT CHUCK

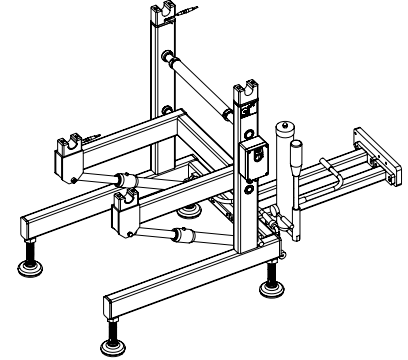
## Part Number(s)

**KIT PART #: 6030658-000**

# Upgrades & Replacements TF1e

## BASE UNWIND - STAND - 800MM

If you're doing large production runs, you'll want to keep downtime to an absolute minimum. With the innovative 800 mm Base Unwind Stand, two rolls can be mounted at the same time. When the bottom roll is low on material, one person can easily lift it to the upper cradle, giving them plenty of time to load a new roll onto the lower cradle, all while keeping the machine in production. And with the built-in hydraulic lift feature, loading a new roll is a breeze.



BASE UNWIND STAND

## Part Number(s)

**KIT PART #: 6030651-000**

## FORMING - BLOWOUT DETECTION

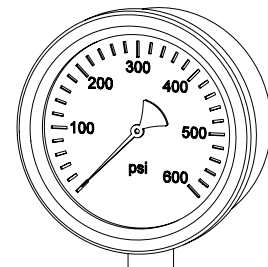
Ensuring the integrity of your packaging is vital to creating a quality product. By monitoring the amount of air escaping from the lower form tool during the forming process, the Blowout Detector can sense when a blowout in the forming blister occurs. Not only that, with this setup, the blister is automatically marked for rejection and an alarm sounds, notifying anyone nearby of the situation. The Blowout Detector is especially useful when working with thinner materials that are prone to rupture.

## Part Number(s)

**KIT PART #: 6024655-000**

## FORMING - CALIBRATED FORM AIR GAUGE

We offer high quality calibrated pressure gauges for accurately measuring air pressure used during in the forming process.



CALIBRATED AIR GAUGE

## Part Number(s)

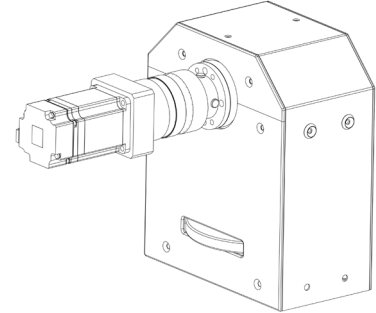
**KIT PART #: 6012836-000**



# Upgrades & Replacements TF1e

## FORMING - FORM ASSIST SERVO ACTUATOR

With the added power of the Form Assist Servo Actuator, deeper pockets can be formed during the cold forming process. And with fully functioning thermoform assist capability, it can be used for both cold forming and thermoforming applications. The Form Assist Servo Actuator is fully compatible with newer tooling sets, and adapters are available for older form tools.



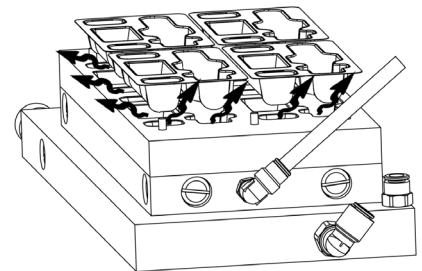
SERVO DRIVEN - FORM ASSIST

## Part Number(s)

**KIT PART #: 6024947-000**

## FORMING - MOLD RELEASE

Adding Form Mold Release assists with the release of newly formed blister pockets from the lower tool. With this option, a solenoid valve controlled through a custom PLS setting is installed. When triggered, a puff of air travels through the lower form tool vent holes releasing the material from the tooling quickly and cleanly. This can be especially useful when forming intricate or deep blister pockets.



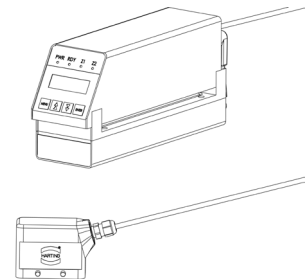
FORMING MOLD RELEASE

## Part Number(s)

**KIT PART #: CONTACT US**

## FORMING - PINHOLE DETECTION SYSTEM

The Pinhole Detection unit is a high-resolution self-contained electronic optical inspection system. It is designed to detect cracks and pinholes in formed foil aluminum that can occur during the cold form process. It can detect defects as small as 25  $\mu\text{m}$ . If a defect is detected, an alarm sounds and the index is marked for rejection.



PINHOLE DETECTOR

## Part Number(s)

**KIT PART #: 6006433-000**

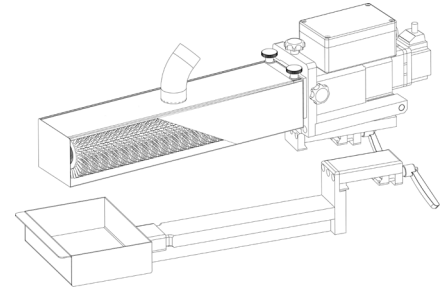
# Upgrades & Replacements TF1e

## FEED AREA ACCESSORY - CROSS BRUSH

The Cross Brush removes loose product and dust from surface of the web, directing it a stainless tray. It also comes with a hood that can be connected to a vacuum to remove debris from the brush, maintaining a perfectly clean web surface.

### Part Number(s)

**KIT PART #: 6021710-000**



CUT-AWAY VIEW OF CROSS BRUSH

## FEED AREA ACCESSORY - HAND FEED TRAY

The Hand Feed Tray offers a simple, low-cost feeding solution that is easy to use and customized to your product. This simple but effective tray sits directly on top of the tooling track, is easy to mount and remove, and is made of high-quality, durable material that will last well into the future.

### Part Number(s)

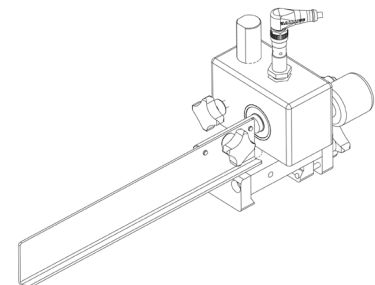
**KIT PART #: CONTACT US**

## FEED AREA ACCESSORY - HIGH PRODUCT DETECT

Loose product or materials sitting on top of the web can cause jams, seal overloads, or even damage seal tooling. The High Product Detect system prevents this by triggering an alarm and stopping the machine if any foreign material is detected on top of the web. This allows an operator to clear the unwanted matter before it causes a problem

### Part Number(s)

**KIT PART #: 6026202-000**

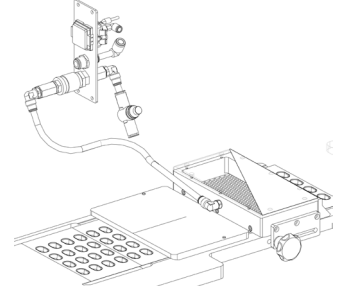


HIGH PRODUCT DETECTION

# Upgrades & Replacements TF1e

## FEED AREA ACCESSORY - NITROGEN PURGE SYSTEM

To preserve your product and inhibit oxidization, we offer the Nitrogen Purge Hood. This custom fitting unit is installed prior to sealing. It evenly and efficiently floods each blister pocket with nitrogen to displace any oxygen that might prematurely shorten your product's shelf life. Depending on your inertization needs, the purge hood system has the flexibility to use a stand-alone nitrogen tank, or directly from your facility, or a stand-alone tank, along with pressure and flow sensor to ensure proper functionality.



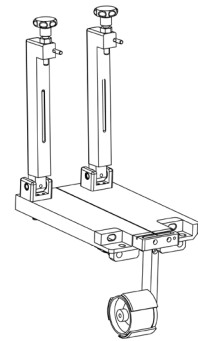
NITROGEN PURGE W/ MONITORING

## Part Number(s)

**KIT PART #: 6019885-000**

## LID UNWIND - SPLICE TABLE

Adding a Lid Splice Table to your machine reduces the amount of time it takes to splice in a new lid roll. With a solid platform to work on, and the built-in splice guide for making those perfect cuts, splicing in new lid material becomes much easier and faster.



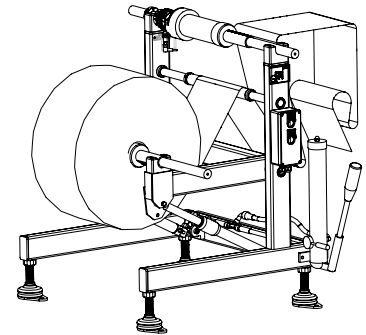
SPLICE TABLE

## Part Number(s)

**KIT PART #: CONTACT US**

## LID UNWIND - REAR STAND

The Lid Unwind Stand brings the same conveniences of the Base Unwind stand to lid material. With material stationed outside of the guards, changeovers become easier and faster. Optional splice tables make splice in new material easier. And having both a lower and upper cradle, new lid rolls can be installed and ready to go which greatly reduce machine downtime.



REAR LID UNWIND

## Part Number(s)

**KIT PART #: CONTACT US**



# Upgrades & Replacements TF1e

## DIE CUT - BLISTER OUT OF POSITION DETECTION

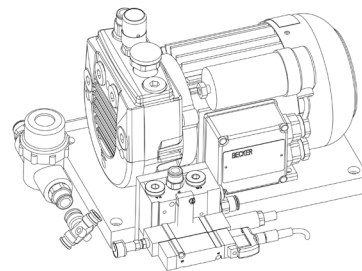
Preventing accidental damage to tooling is a top priority. With the Blister Out of Position at Die Cut Detect system, you can rest assured that no potentially damage-causing misaligned indexes will come close to your die cut tool. Sensors in this system watch the alignment of each blister edge, making sure each cut is perfect. If a misaligned index is detected, the die cut process is instantly interrupted, saving your die cut tool and your peace of mind.

## Part Number(s)

**KIT PART #:6024088-000**

## DIE CUT - VACUUM PUMP UPGRADE KIT

The process of lowering and blowing off die cut blister packs is seeing a major improvement with the Vacuum Pump Upgrade Kit. Previous versions used a series of valves and locally sourced air to create a Venturi vacuum. The lowering and blow off process could be affected by low or irregular plant air pressure. With the Vacuum Pump Upgrade Kit, a dedicated vacuum pump is installed. This eliminates variations in air pressure and reduces overall machine air usage. And, with the increased durability of the upgrade, system maintenance times are improved as well.



VACUUM UPGRADE KIT

## Part Number(s)

**KIT PART #: 6018681-000**

## WASTE SHREDDER - FILLED BLISTER DETECTION

The Blister Detect Before Shredder Unit prevents unwanted product from entering the waste shredder. This unit detects uncut blister packs that remain in the web. These blisters can contain batteries, syringes, springs, or other metal products that can damage the waste shredder. When a detection occurs, an alarm is triggered, and the machine stops before any damage can occur.

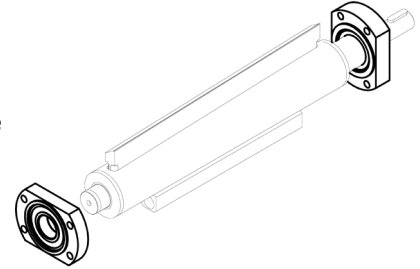
## Part Number(s)

**KIT PART #: 6013263-000**

# Upgrades & Replacements TF1e

## WASTE SHREDDER - BEARINGS UPGRADE KIT

With the new Waste Shredder Bearing Upgrade you get a new flanged hub and new bearings. The new hub and bearings run quieter, reducing the overall decibel level while making the Waste Shredder run more smoothly and efficiently. And with these durable new components, the lifespan of the bearing and rotor are extended ensuring optimal performance and reliability.



WASTE SHREDDER BEARINGS

## Part Number(s)

**KIT PART #: CONTACT US**

## WASTE SHREDDER - INFEED BRAKE MOTOR

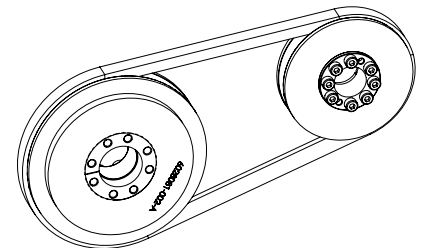
Maintaining tension on the web is vital. When using an especially tough material where web tension is high, the web can slip out of the Waste Shredder, causing issues at the Die Cut. With the Waste Shredder Infeed Brake Motor, situations like this can be averted. The brake stops the infeed motor from rolling backwards, preventing any slack from going into the web.

## Part Number(s)

**KIT PART #: CONTACT US**

## WASTE SHREDDER - BELT AND PULLEY UPGRADE KIT

The new belt and pulley design for the Waste Shredder produces a smoother, quieter operation. The new upgraded V belt and pulley design improve tracking while reducing the overall decibel level of the Waste Shredder.



BELT AND PULLEY

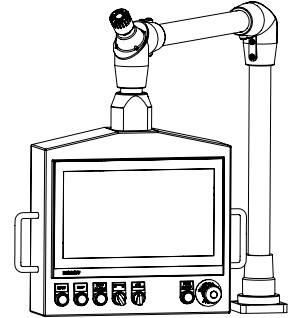
## Part Number(s)

**KIT PART #: 6029371-000**

# Upgrades & Replacements TF1e

## HMI - PUSH BUTTON CONTROL PANEL RELOCATION KIT

Lack of space can be a big issue. Especially when working in the tight constraints of a clean room. Tight spaces can make it difficult to reach those critical start and stop buttons in time when they are mounted all the way over on the front of the machine. Relocate the entire control panel from the front of the machine to the HMI enclosure. Attached to the swivel arm, both the control panel and HMI touchscreen are conveniently located in one place.



PUSH BUTTON CONTROL ON HMI

## Part Number(s)

**KIT PART #: CONTACT US**

## HMI - DISPLAY UPGRADE KIT

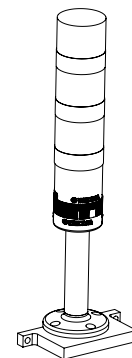
Older HMI computer components are prone to hardware failures and other issues due to old age. A new HMI ensures your system runs smoothly and is less likely to experience downtime. New HMI computers are faster, providing quick startup and fast response times. They also offer better compatibility with modern networks or remote interfacing with the latest security for better protection.

## Part Number(s)

**KIT PART #: CONTACT US**

## HMI - STACKLIGHT

Light Stacks are the perfect way to keep an eye on the status of your thermoformer or cartoner. Especially when machines are spaced far apart or are inside cleanrooms. A blue flashing light can tell an operator that the machine is low on material. A red light lets the operator too far away to hear the alarm know that the machine is down. A green light signals that all is well. They are an at-a-glance indicator that quickly let you know how your machine is doing.



HMI LIGHT STACK

## Part Number(s)

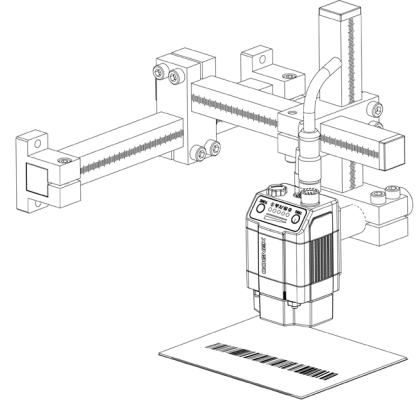
**KIT PART #: 6017300-000**



# Upgrades & Replacements TF1e

## INSPECTION SYSTEM - COGNEX BARCODE READER

A variety of Cognex Bar Code Readers are available to meet your code-reading needs. Decoding 1D or 2D codes such as UPC-A, Data Matrix, QR, and MaxiCode, the laser scan variant can achieve up to 1,300 scans per second. Image-based barcode readers can decode the same codes even faster, read omnidirectionally and even capture images for data analysis, process improvement, and quality feedback. These readers can be custom mounted to your machine, bringing you flexibility and performance.



BARCODE READER - 1D BARCODE EXAMPLE

## Part Number(s)

**KIT PART #: 6024698-000**

## INSPECTION SYSTEM - COGNEX PRODUCT VISION SYSTEM

Whether checking dimension, surface texture, shape, color, absence of surface defects, or foreign material contamination, the Cognex Product Inspection system can verify a wide range of products and criterion. This cost-effective product inspection solution can inspect large numbers of product with high accuracy. The all-in-one system is small and can fit almost anywhere on the machine. Quality, integration, and value make this a great choice for your product inspection needs.

## Part Number(s)

**KIT PART #: 6017213-000**

## INSPECTION SYSTEM - SCANWARE PRINT VISION SYSTEM

Using cutting-edge software and top-of-the-line optics, Scanware's Signum Print Verification system takes print inspection to the next level. Able to quickly read and verify ring codes, barcodes, 2D codes such as DataMatrix and QC, and able to perform OCV/OCR, the system offers precise error analysis and built-in functions for optimizing readings. Both highly flexible and ever reliable, Scanware's Signum Print Verification system is the perfect solution for checking codes, texts, and graphics printed on any of your products.



SCANWARE VISION INSPECTION

## Part Number(s)

**KIT PART #: 6022246-000**

# Upgrades & Replacements TF1e

## INSPECTION SYSTEM - SCANWARE PRODUCT VISION SYSTEM

Scanware's Spectra Product Inspection system is unmatched when it comes to optical product and blister inspection solutions. Capable of black and white, color, and 3D inspections, this product vision system can verify a multitude of products, including tablet, bowl, capsule, powder, and oblong. It can be set up to detect size, fragments, and even multi-layer defects. Whatever your requirements, this system can be tailor-suited to meet your product inspection needs.



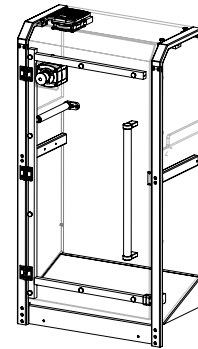
SCANWARE VISION INSPECTION

## Part Number(s)

**KIT PART #: 6022247-000**

## SAFETY - GUARD DOORS (FORMING)

With a single, easy-to-open Vertical Guard Door on the Form station, cleaning becomes a snap. Unlike the lifting guard door, the Vertical Guard Door offers access to the entire area, without having to take the time to remove the lower guard. Not only does cleaning become more accessible, but the time saved in removing the guarding makes preventative maintenance easier and quicker



FORMING ENCLOSURE GUARDING

## Part Number(s)

**KIT PART #: 6026918-000**

## SAFETY - GUARD DOORS (SEALING)

With the Seal Guard Door Upgrade, access to the Seal and Die Cut areas open right up. Unlike the lifting guard door, the Vertical Guard Door offers access to the entire area, without having to take the time to remove the lower guards. Not only does cleaning become more accessible, but the time saved in removing the guarding makes preventative maintenance easier and quicker as well.

## Part Number(s)

**KIT PART #: 6032629-000**

# Upgrades & Replacements TF1e

## SAFETY - GUARD INTERLOCK SYSTEM UPGRADES

The Interlocking Guard System creates a secure, safe environment for machine operators. Upon opening an interlocked guard door, machine motion stops, and stored air is dumped out the system.

## Part Number(s)

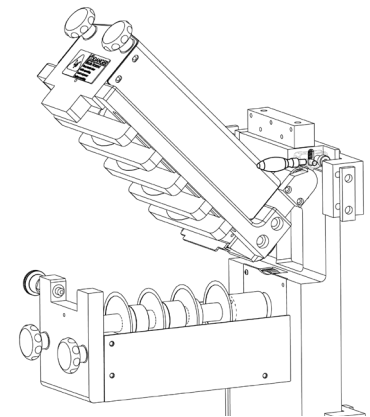
**KIT PART #: CONTACT US**

## STATIONS - SLITTER

The Slitter Station slits each lane into its own blister strip. The width of each strip is easily varied by changing the spacing of the slitter knives. As material is pulled through, the slitter knives cut each lane into their own strips, which can then be cut to a custom length by a Guillotine-style Die Cut Station. Because the Slitter Station uses the power of the existing Index, no pneumatic or electrical hookups are required.

## Part Number(s)

**KIT PART #: 6006272-000**



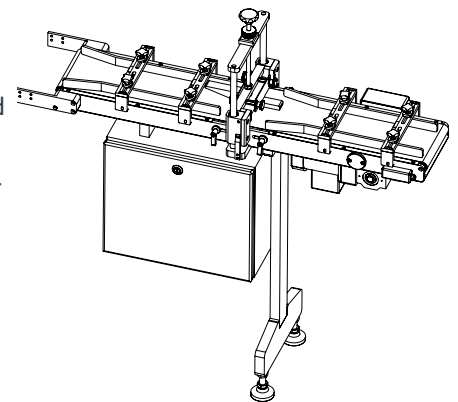
SLITTER SHOWN IN OPEN POSITION

## STATIONS - OUTFEED CONVEYOR DECURLER

Some blister packs, such as those made from Aclar or designs that lack stiffening support ribs may experience what is known as curling. This can occur when the top and bottom materials cool at different rates. The Outfeed Conveyor Decurler is perfect for making those curled blister packs flat again. And this is especially useful if those blister packs are headed directly to a cartoner.

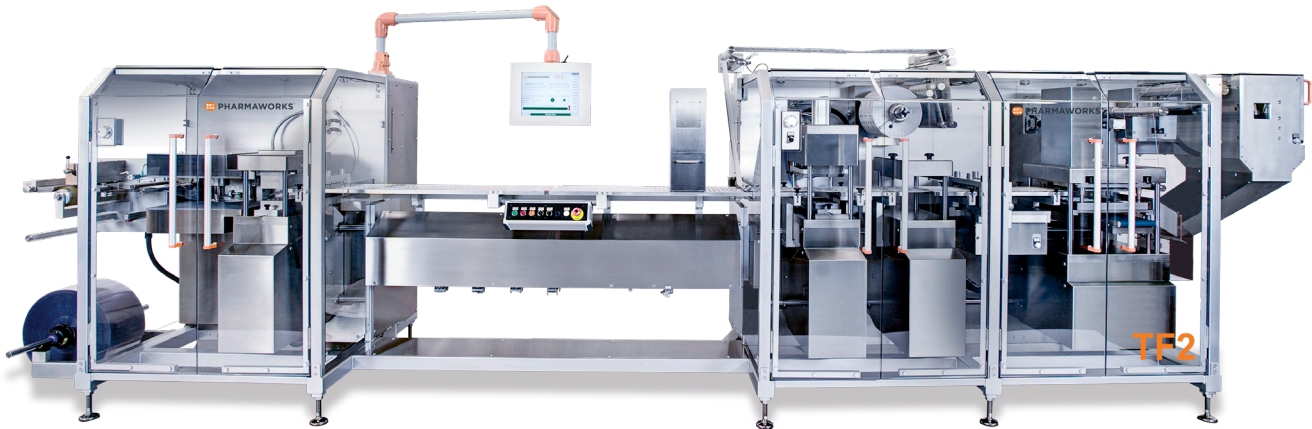
## Part Number(s)

**KIT PART #: 6019428-000**



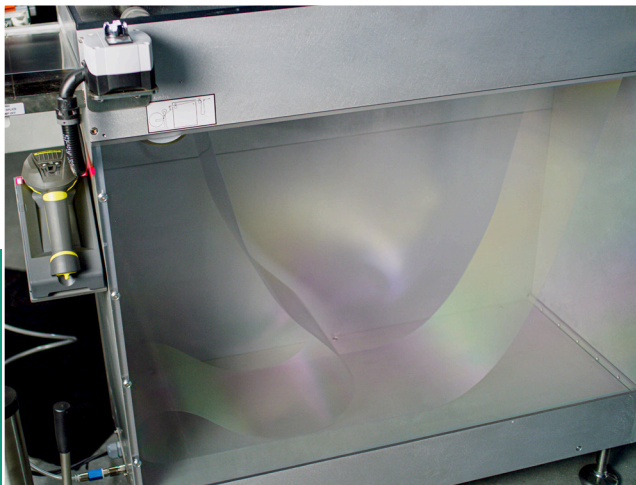
BLISTER DECURLER

# Upgrades & Replacements TF1e



## TF2 Aftermarket Parts & Services

The TF2 is a versatile medium to high output blister machine. A format range of 170mm x 300mm makes the machine perfect for a wide range of applications including standard HUD blister packs and BINGO style blister packs. The TF2 also features a 40mm forming depth making it ideal for packaging medical device and tray packaging applications.



**BASE UNWIND BUFFER BOX**

See Page 20



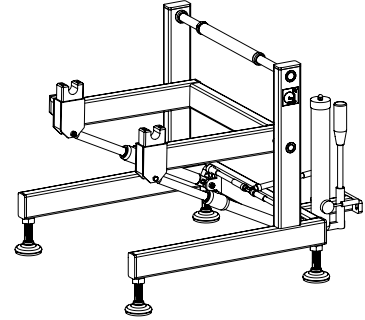
**LID UNWIND BUFFER BOX**

See Page 23

# Upgrades & Replacements TF2

## BASE UNWIND - 800 MM UNWIND STAND

If you're doing large production runs, you'll want to keep downtime to an absolute minimum. With the innovative 800 mm Base Unwind Stand, two rolls can be mounted at the same time. When the bottom roll is low on material, one person can easily lift it to the upper cradle, giving them plenty of time to load a new roll onto the lower cradle, all while keeping the machine in production. And with the built-in hydraulic lift feature, loading a new roll is a breeze.



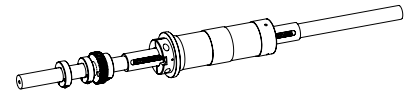
800 MM BASE UNWIND STAND

## Part Number(s)

**KIT PART #: 6017881-000**

## BASE UNWIND - 3" QUICK-RELEASE SHAFT - PNEUMATIC CHUCK

The 3" Quick-Release Shaft Chuck is ideal for thermoforming applications. The 3-inch size fits most thermoforming material cores. And with the toolless shaft chuck design, it can be tightened and loosened by hand with no need for extra tools. The conical shapes of the shaft chucks make it easy to install a new material roll, giving you a snug, perfectly aligned fit every time with no guessing. Just set it up once and you're good to go.



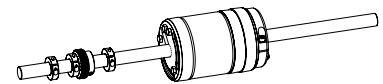
3" QUICK RELEASE SHAFT CHUCK

## Part Number(s)

**KIT PART #: 6025436-000**

## BASE UNWIND - 6" AIR-INFLATED BLADDER CORE CHUCK

The 6" Bladder Core Chuck is perfect for cold forming applications. The 6-inch size fits most foil material cores and uses an air bladder design that can quickly be inflated or deflated with an air gun for fast roll changes. The through-shaft design fits any standard shaft, and the durable bladder material ensures long-lasting performance.



6" AIR INFLATED CHUCK

## Part Number(s)

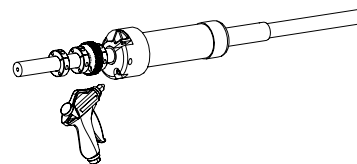
**KIT PART #: 6015543-000**



# Aftermarket Parts & Services TF2

## BASE UNWIND - AIR BLADDER SPINDLE AND AIR GUN

The Air Bladder Spindle and Air Gun will give you the most secure hold on your base material. This system uses an air bladder design that can quickly be inflated or deflated with the provided air gun for fast roll changes. The grip and pressure of the bladder ensures that your material doesn't accidentally slip on the spindle, causing inconsistent diameter readings or even base material alarms. The through-shaft design fits any standard shaft, and the durable bladder material ensures long-lasting performance.



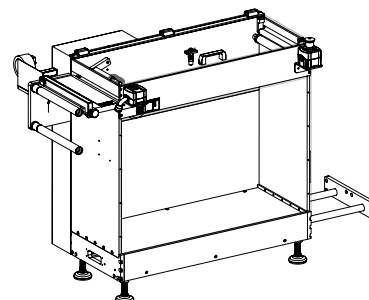
AIR BLADDER AND AIR GUN

## Part Number(s)

**KIT PART #: CONTACT US**

## BASE UNWIND - BUFFER BOX

Changing out base material usually means pausing production to perform a material roll change. Adding a Base Buffer Box to your machine keeps you running by emptying remaining base roll material into a buffer box. As material from the buffer box is used, a new roll can be installed and spliced in without skipping a beat. A simple, easy solution for avoiding downtime during material changeovers.



BASE MATERIAL BUFFER BOX

## Part Number(s)

**KIT PART #: 6027917-000**

## FORM STATION - CALIBRATED AIR PRESSURE GAUGE

We offer high quality calibrated pressure gauges for accurately measuring air pressure used during in the forming process. This pressure gauge is perfect for validating the forming process and comes with Calibration Certificate and Date.

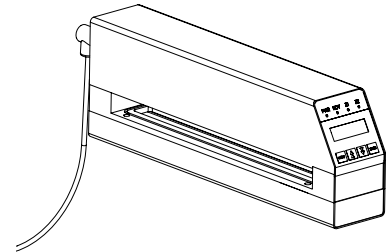
## Part Number(s)

**KIT PART #: 6012836-000**

# Upgrades & Replacements TF2

## FORM STATION - PINHOLE DETECTION

The Pinhole Detection unit is a high-resolution self-contained electronic optical inspection system. This system is designed to detect cracks and pinholes in formed foil aluminum that can occur during the cold form process. It can even detect defects as small as 25 µm. If a defect is detected, an alarm sounds and the index is marked for rejection.



PINHOLE DETECTOR

## Part Number(s)

**KIT PART #: 6016122-000**

## FORM STATION - FORMING BLOWOUT DETECTION

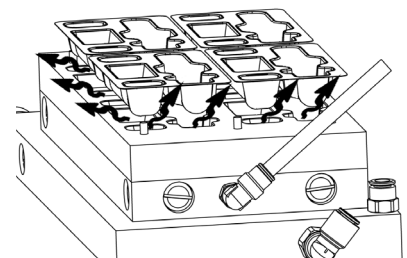
Ensuring the integrity of your packaging is vital to creating a quality product. By monitoring the amount of air escaping from the lower form tool during the forming process, the Blowout Detector can sense when a blowout in the forming blister occurs. Not only that, with this setup, the blister is automatically marked for rejection and an alarm sounds, notifying anyone nearby of the situation. The Blowout Detector is especially useful when working with thinner materials that are prone to rupture.

## Part Number(s)

**KIT PART #: 6023283-000**

## FORM STATION - MOLD RELEASE

Adding Form Mold Release assists with the release of newly formed blister pockets from the lower tool. With this option, a solenoid valve controlled through a custom PLS setting is installed. When triggered, a puff of air travels through the lower form tool vent holes releasing the material from the tooling quickly and cleanly. This can be especially useful when forming intricate or deep blister pockets.



MOLD RELEASE

## Part Number(s)

**KIT PART #: CONTACT US**

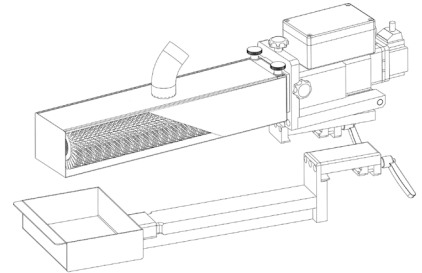
# Upgrades & Replacements TF2

## FEED AREA - CROSS BRUSH

The Cross Brush removes loose product and dust from surface of the web, directing it a stainless tray. It also comes with a hood that can be connected to a vacuum to remove debris from the brush, maintaining a perfectly clean web surface.

## Part Number(s)

**KIT PART #: 6021710-000**



CUT-AWAY VIEW OF CROSS BRUSH

## FEED AREA - HAND FEED TRAY

The Hand Feed Tray offers a simple, low-cost feeding solution that is easy to use and customized to your product. This simple but effective tray sits directly on top of the tooling track, is easy to mount and remove, and is made of high-quality, durable material that will last well into the future.

## Part Number(s)

**KIT PART #: CONTACT US**

## FEED AREA - HAND FEED INDICATOR LIGHT

Installing the Hand Feed Light Indicator makes manual feeding much easier. The Hand Feed Light Indicator is a system of highly visible lights that follow each index through the feeding process, indicating which blisters to feed. Good blisters are green and can accept product. Rejects are red and should be skipped

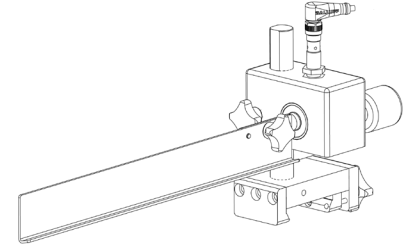
## Part Number(s)

**KIT PART #: CONTACT US**

# Upgrades & Replacements TF2

## FEED AREA - HIGH PRODUCT DETECTION

Loose product or materials sitting on top of the web material can cause jams, seal overloads, or even damage seal tooling. The High Product Detect system prevents this by triggering an alarm and stopping the machine if any foreign material is detected on top of the web. This allows an operator to clear the unwanted matter before it causes a problem.



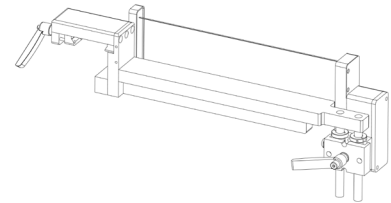
HIGH PRODUCT DETECTION ASSEMBLY

## Part Number(s)

**KIT PART #: 6026203-000**

## FEED AREA - HIGH PRODUCT DETECT (LASER)

With the Laser High Product Detect system, you can now install a high product detector after the Product Inspection station, just prior to sealing. This slimmer, more compact design is not only more sensitive to product detection, but it can also be installed in spaces too small for a normal-sized detector. Adding the Laser High Product Detect system is the perfect way to detect out-of-pocket product just before being sealed.



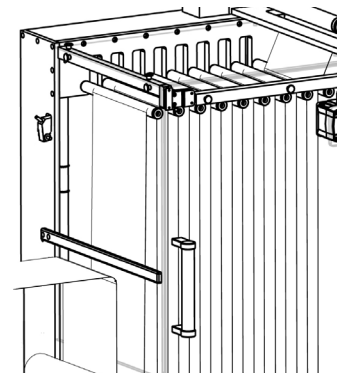
LASER HIGH PRODUCT DETECTION

## Part Number(s)

**KIT PART #: 6015863-000**

## LID UNWIND - MATERIAL BUFFER BOX

Changing out lid material usually means pausing production to perform a material roll change. Adding a Lid Buffer Box to your machine keeps you running by emptying remaining lid roll material into a buffer box. As material from the buffer box is used, a new roll can be installed and spliced in without skipping a beat. A simple, easy solution for avoiding downtime during material changeovers.



LID MATERIAL BUFFER BOX

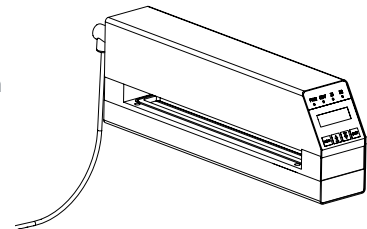
## Part Number(s)

**KIT PART #: 6028046-000**

# Upgrades & Replacements TF2

## LID UNWIND - PINHOLE DETECTION SYSTEM

The Pinhole Detection unit is a high-resolution self-contained electronic optical inspection system. It is designed to detect cracks and pinholes in formed foil aluminum that can occur during the cold form process. It can detect defects as small as 25  $\mu\text{m}$ . If a defect is detected, an alarm sounds and the index is marked for rejection.



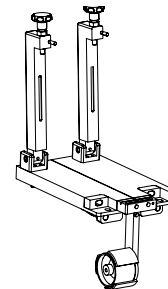
PINHOLE DETECTOR

## Part Number(s)

**KIT PART #: CONTACT US**

## LID UNWIND - SPLICE TABLE

Adding a Lid Splice Table to your machine reduces the amount of time it takes to splice in a new lid roll. With a solid platform to work on, and the built-in splice guide for making those perfect cuts, splicing-in new lid material becomes much easier and faster.



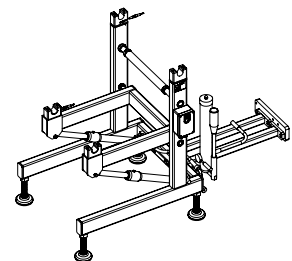
SPLICE TABLE WITH CLAMPS

## Part Number(s)

**KIT PART #: CONTACT US**

## LID UNWIND - 800MM UNWIND STAND

The Lid Unwind Stand brings the same conveniences of the Base Unwind stand to lid material. With material stationed outside of the guards, changeovers become easier and faster. Optional splice tables make splice in new material easier. And having both a lower and upper cradle, new lid rolls can be installed and ready to go which greatly reduce machine downtime.



REAR LID UNWIND STAND

## Part Number(s)

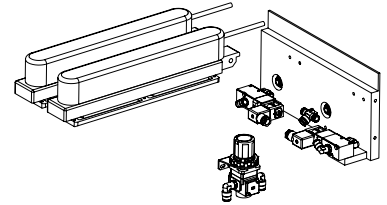
**KIT PART #: CONTACT US**



# Upgrades & Replacements TF2

## INDEXER - UPGRADE KIT

With a redesigned pneumatic system providing faster exhausting, the Indexer clamps are now quicker to release material before moving. In some rare cases, especially when pneumatic exhausts have not been properly maintained, the moving index clamp would not be able to release in time and hold for too long, causing the material to be push upstream. The Indexer Upgrade Kit prevent this by using faster exhausts and a redesigned mechanism for opening and closing the clamps.



MULTICOMPONENT INDEXER UPGRADE KIT

## Part Number(s)

**KIT PART #: 6028036-000**

## WASTE SHREDDER - BLISTER DETECTION

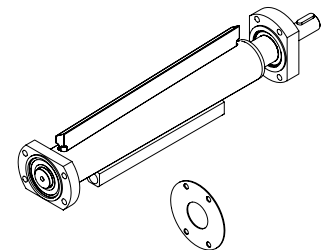
The Blister Detect Before Shredder Unit prevents unwanted product from entering the waste shredder. This unit detects uncut blister packs that remain in the web. These blisters can contain batteries, syringes, springs, or other metal products that can damage the waste shredder. When a detection occurs, an alarm is triggered, and the machine stops before any damage can occur.

## Part Number(s)

**KIT PART #: CONTACT US**

## WASTE SHREDDER - ROTARY KNIFE UPGRADE KIT

Extending the life of the knife assembly and bearings is as easy as upgrading to the Rotary Knife Upgrade Kit. Using an eccentric collar type bearing unit, the shaft is reliably coupled to the inner ring, causing virtually no deformation to the inner ring of bearings. Stresses on the bearing and knife are greatly reduced, ensuring long-lasting performance for your Waste Shredder.



ROTARY KNIFE

## Part Number(s)

**KIT PART #: 6031836-000**

# Upgrades & Replacements TF2

## WASTE SHREDDER - INFEED BRAKE MOTOR

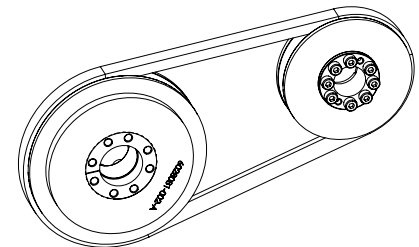
Maintaining tension on the web is vital. When using an especially tough material where web tension is high, the web can slip out of the Waste Shredder, causing issues at the Die Cut. With the Waste Shredder Infeed Brake Motor, situations like this can be averted. The brake stops the infeed motor from rolling backwards, preventing any slack from going into the web.

## Part Number(s)

**KIT PART #: CONTACT US**

## WASTE SHREDDER - UPGRADE BELT & PULLEY

The new belt and pulley design for the Waste Shredder produces a smoother, quieter operation. The new upgraded V belt and pulley design improve tracking while reducing the overall decibel level of the Waste Shredder.



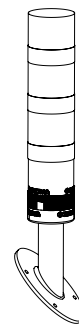
WASTE SHREDDER BELT AND PULLEY KIT

## Part Number(s)

**KIT PART #: 6029371-000**

## HMI - STACKLIGHT

Light Stacks are the perfect way to keep an eye on the status of your thermoformer or cartoner. Especially when machines are spaced far apart or are inside cleanrooms. A blue flashing light can tell an operator that the machine is low on material. A red light lets the operator too far away to hear the alarm know that the machine is down. A green light signals that all is well. They are an at-a-glance indicator that quickly let you know how your machine is doing.



CUSTOMIZABLE STACK LIGHT

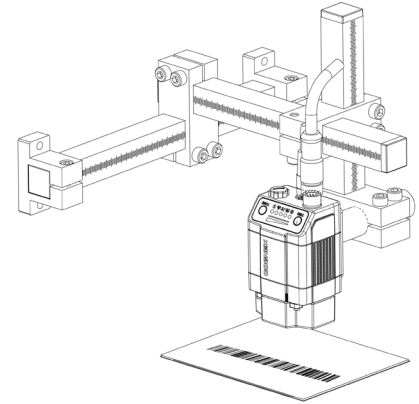
## Part Number(s)

**KIT PART #: 6017290-000**

# Upgrades & Replacements TF2

## INSPECTION SYSTEMS - BARCODE READER

Cognex Bar Code Readers can decode 1D or 2D codes such as UPC-A, Data Matrix, QR, and MaxiCode, with the laser scan variant can achieve up to 1,300 scans per second. Image-based barcode readers are also available and read omnidirectionally and even capture images for data analysis, process improvement, and quality feedback. These readers can be custom mounted to your machine, bringing you the flexibility and performance needed for your barcode reading applications.



BARCODE READER - 1D BARCODE EXAMPLE

## Part Number(s)

**KIT PART #: CONTACT US**

## INSPECTION SYSTEMS - SCANWARE PRINT VERIFICATION

Scanware's Signum Print Verification system takes print inspection to the next level. Able to quickly read and verify ring codes, barcodes, 2D codes such as DataMatrix and QC, as well as being able to perform OCV/OCR, this system offers precise error analysis and built-in functions for optimizing readings. Both highly flexible and ever reliable, Scanware's Signum Print Verification system is the perfect solution for checking codes, texts, and graphics printed on any of your products.



SCANWARE VISION INSPECTION

## Part Number(s)

**KIT PART #: CONTACT US**

## INSPECTION SYSTEMS - SCANWARE PRODUCT INSPECTION

Scanware's Spectra Product Inspection system is unmatched when it comes to optical product and blister inspection solutions. Capable of black and white, color, and 3D inspections, this product vision system can verify a multitude of products, including tablet, bowl, capsule, powder, and oblong. It can be set up to detect size, fragments, and even multi-layer defects. Whatever your requirements, this system can be tailor-suited to meet your product inspection needs.

## Part Number(s)

**KIT PART #: CONTACT US**

# Upgrades & Replacements TF2

## INSPECTION SYSTEMS - COGNEX PRODUCT INSPECTION

Whether checking dimension, surface texture, shape, color, absence of surface defects, or foreign material contamination, the Cognex Product Inspection system can verify a wide range of products and criterion. This cost-effective product inspection solution can inspect large numbers of product with high accuracy. The all-in-one system is small and can fit almost anywhere on the machine. Quality, integration, and value make this a great choice for your product inspection needs.

### Part Number(s)

**KIT PART #: CONTACT US**

## SAFETY - GUARD INTERLOCK SYSTEM

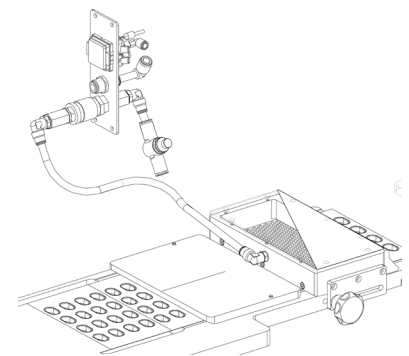
Several upgrades are available for machine guard interlocking systems. If you need the doors to physically lock so they can't be opened during operation, a magnetic or mechanically actuated locking mechanisms upgrade is available. If you have validation needs that require self-monitoring interlocks to ensure the circuit is always ready, a quick and easy upgrade for installing redundant safety circuits is available. These upgrades and more are simple yet effective ways to ensure that your machine meets all current safety requirements.

### Part Number(s)

**KIT PART #: CONTACT US**

## ADDITIONAL UPGRADES - NITROGEN PURGE SYSTEM

To preserve your product and inhibit oxidization, we offer the Nitrogen Purge Hood. This custom fitting unit is installed prior to sealing. It evenly and efficiently floods each blister with nitrogen to displace any oxygen that might prematurely shorten your product's shelf life. The purge hood system has the flexibility to use a stand-alone nitrogen tank or pull directly from your facility. Optional pressure and flow sensors give you a complete inertization system that ensures every blister pocket is protected.



PURGE SYSTEM W/ FLOW MONITORING

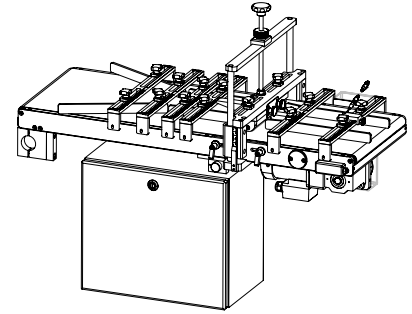
### Part Number(s)

**KIT PART #: CONTACT US**

# Upgrades & Replacements TF2

## ADDITIONAL UPGRADES - OUTFEED DECURLER

Some blister packs, such as those made from Aclar or designs that lack stiffening support ribs may experience what is known as curling. This can occur when the top and bottom materials cool at different rates. The Outfeed Conveyor Decurler is perfect for making those curled blister packs flat again. And this is especially useful if those blister packs are headed directly to a cartoner.



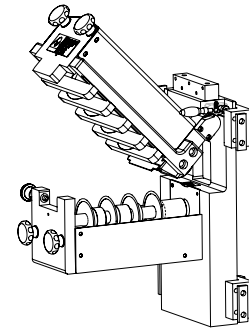
BLISTER DECURLER

## Part Number(s)

**KIT PART #: 6020072-000**

## ADDITIONAL UPGRADES - SLITTER STATION

The Slitter Station slits each lane into its own blister strip. The width of each strip is easily varied by changing the spacing of the slitter knives. As material is pulled through, the slitter knives cut each lane into their own strips, which can then be cut to a custom length by a Guillotine-style Die Cut Station. Because the Slitter Station uses the power of the existing Index, no pneumatic or electrical hookups are required.



SLITTER STATION IN OPEN POSITION

## Part Number(s)

**KIT PART #: CONTACT US**

## ADDITIONAL UPGRADES - OVERHEAD TRANSFER UPGRADE KIT

With improved belt tracking and more durable pickhead design, the Overhead Transfer Upgrade can help increase the overall efficiency of your process. A newly redesigned belt and vacuum airflow system enable better blister tracking along the length of the conveyor and the increased durability means not having to replace transfer belts as often. The new vacuum system reduces vacuum leaks, using less air overall. And a sturdier pickhead design means longer production periods between preventative maintenance cycles.

## Part Number(s)

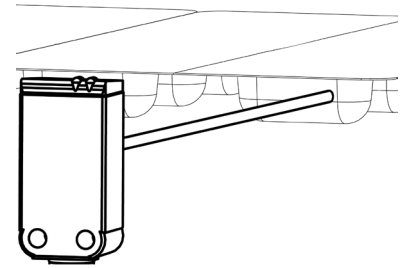
**KIT PART #: 6032074-000**



# Upgrades & Replacements TF2

## ADDITIONAL UPGRADES - LASERS CABLE RETROFIT

This dedicated amplifier-style station adjust laser provides a higher degree of flexibility and accuracy ensuring that every station is in exactly the right spot for each cycle. Featuring a more compact design and lower profile, the Lasers Cable Retrofit allows you to fine-tune adjust the beam axis for perfect alignment. Also featuring a wide range of sensitivity settings, you can now set your own high and low threshold setpoints, providing a finer degree of customization to satisfy any process requirement.



LASER REGISTRATION SENSOR

## Part Number(s)

**KIT PART #: 6032711-000 / 6032712-000**

# Aftermarket Parts & Services TF3



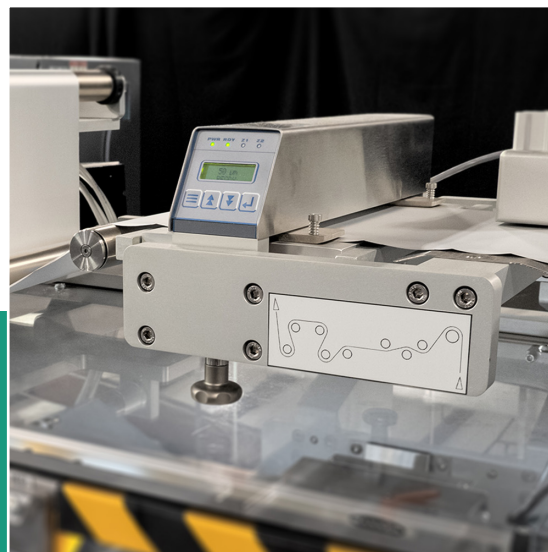
## TF3 Aftermarket Parts & Services

The TF3 is a high output blister machine with speeds exceeding 400 blisters per minute, making it the perfect machine for high volume production. The TF3 accommodates all types of feeding systems and printers. The TF3 Thermoformer has a unique laser feedback system to ensure continuous blister registration.



**OVERHEAD TRANSFER - BLISTER  
REJECT UPGRADE**

See Page 39



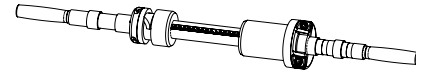
**LID UNWIND PINHOLE DETECTION SYSTEM**

See Page 35

# Upgrades & Replacements TF3

## BASE UNWIND - 3" SHAFT CHUCK

The 3" Quick-Release Shaft Chuck is ideal for thermoforming applications. The 3-inch size fits most thermoforming material cores. And with the toolless shaft chuck design, it can be tightened and loosened by hand with no need for extra tools. The conical shapes of the shaft chucks make it easy to install a new material roll, giving you a snug, perfectly aligned fit every time with no guessing. Just set it up once and you're good to go.



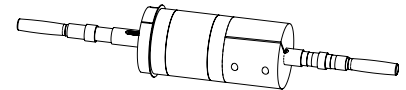
3" SHAFT CHUCK

## Part Number(s)

**KIT PART #: 6008997-000**

## BASE UNWIND - 6" SHAFT CHUCK

The 6" Bladder Core Chuck is perfect for cold forming applications. The 6-inch size fits most foil material cores and uses an air bladder design that can quickly be inflated or deflated with an air gun for quick roll changes. The through-shaft design fits any standard shaft, and the durable bladder material ensures long-lasting performance.



6" SHAFT CHUCK

## Part Number(s)

**KIT PART #: 6016305-000**

## FORM STATION - FORMING BLOWOUT DETECTION

Ensuring the integrity of your packaging is vital to creating a quality product. By monitoring the amount of air escaping from the lower form tool during the forming process, the Blowout Detector can sense when a blowout in the forming blister occurs. Not only that, with this setup, the blister is automatically marked for rejection and an alarm sounds, notifying anyone nearby of the situation. The Blowout Detector is especially useful when working with thinner materials that are prone to rupture.

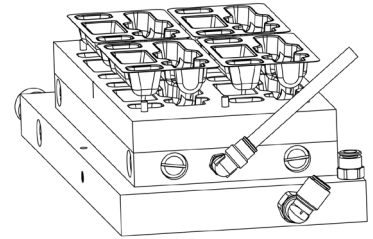
## Part Number(s)

**KIT PART #: 6010960-000**

# Upgrades & Replacements TF3

## FORM STATION - FORM MOLD RELEASE

Adding Form Mold Release assists with the release of newly formed blister pockets from the lower tool. With this option, a solenoid valve controlled through a custom PLS setting is installed. When triggered, a puff of air travels through the lower form tool vent holes releasing the material from the tooling quickly and cleanly. This can be especially useful when forming intricate or deep blister pockets.



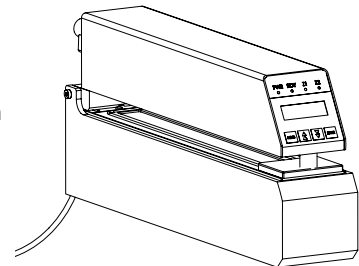
FORMED MATERIAL RELEASED  
FROM TOOLING

## Part Number(s)

**KIT PART #: CONTACT US**

## FORM STATION - PINHOLE DETECTION

The Pinhole Detection unit is a high-resolution self-contained electronic optical inspection system. It is designed to detect cracks and pinholes in formed foil aluminum that can occur during the cold form process. It can detect defects as small as 10  $\mu\text{m}$ . If a defect is detected, an alarm sounds and the index is marked for rejection.



PINHOLE DETECTOR

## Part Number(s)

**KIT PART #: 6005198-000**

## FORM STATION - STATION SERVO AND PULLEY REINFORCEMENT

With the Form Station Servo and Pully Upgrade, a stabilized mounting system is installed to further brace the station's servo and pulley system. This reduces the chance of forming defects while providing additional support resulting in fewer maintenance issues.

## Part Number(s)

**KIT PART #: CONTACT US**

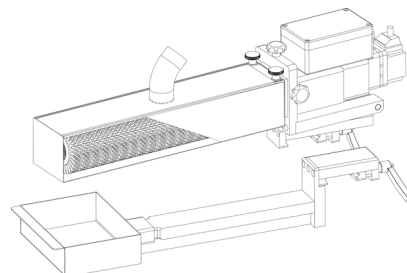
# Upgrades & Replacements TF3

## FEED AREA - CROSS BRUSH

The Cross Brush removes loose product and dust from surface of the web, directing it a stainless tray. It also comes with a hood that can be connected to a vacuum to remove debris from the brush, maintaining a perfectly clean web surface.

### Part Number(s)

**KIT PART #: 6021710-000**



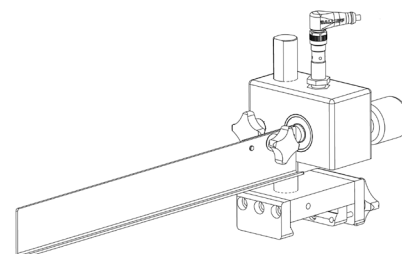
CUT-AWAY VIEW OF CROSS BRUSH

## FEED AREA - HIGH PRODUCT DETECTION

Loose product or materials sitting on top of the web can cause jams, seal overloads, or even damage seal tooling. The High Product Detect system prevents this by triggering an alarm and stopping the machine if any foreign material is detected on top of the web. This allows an operator to clear the unwanted matter before it causes a problem.

### Part Number(s)

**KIT PART #: 6021429-000**



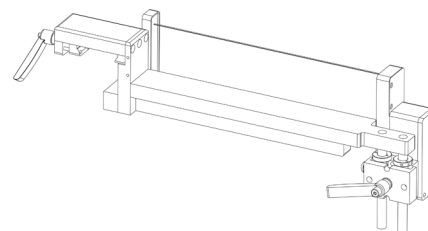
HIGH PRODUCT DETECTOR

## FEED AREA - HIGH PRODUCT DETECTION (LASER)

This slimmer, more compact designed high product detection system is not only more sensitive to product detection, but it can also be installed in spaces too tight for a normal-sized system. Product can be "bumped" out of blister pockets for a variety of reasons anywhere between the feeder and lid sealing. Adding the Laser High Product Detect system is the perfect way to detect those out-of-pocket mishaps.

### Part Number(s)

**KIT PART #: 6015863-000**



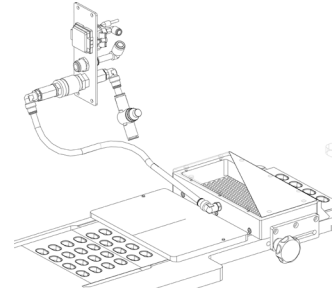
HIGH PRODUCT LASER DETECTION SYSTEM



# Upgrades & Replacements TF3

## FEED AREA - NITROGEN PURGE SYSTEM

This custom fitting unit is installed prior to sealing. It evenly and efficiently floods each blister pocket with nitrogen to displace any oxygen that might prematurely shorten your product's shelf life. Depending on your needs, the purge hood system has the flexibility to use a stand-alone nitrogen tank or pull directly from your facility. Optional pressure and flow sensors give you a complete inertization system that ensures every blister pocket is protected.



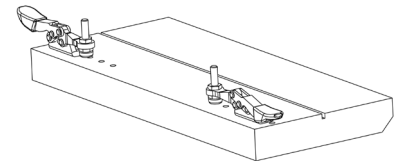
NITROGEN PURGE W/ MONITORING

## Part Number(s)

**KIT PART #: CONTACT US**

## LID UNWIND - SPLICE TABLE

Adding a Lid Splice Table to your machine reduces the amount of time it takes to splice in a new lid roll. With a solid platform to work on, and the built-in splice guide for making those perfect cuts, splicing in new lid material becomes much easier and faster.



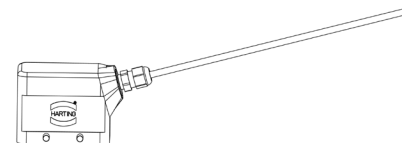
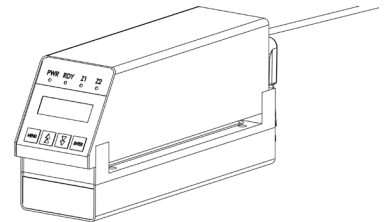
SPLICE TABLE W/ CLAMPS

## Part Number(s)

**KIT PART #: CONTACT US**

## LID UNWIND - PINHOLE DETECTION

The Pinhole Detection unit is a high-resolution self-contained electronic optical inspection system. It is designed to detect cracks and pinholes in lid material that can occur during the manufacturing process. It can detect defects as small as 25  $\mu\text{m}$ . If a defect is detected, an alarm sounds and the index is marked for rejection.



PINHOLE DETECTOR

## Part Number(s)

**KIT PART #: CONTACT US**

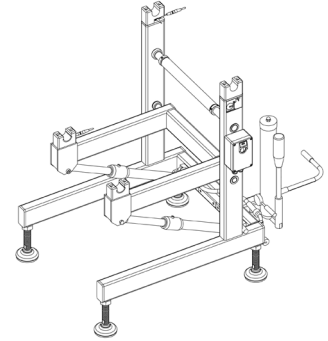
# Upgrades & Replacements TF3

## LID UNWIND - 800MM UNWIND STAND

The 800 mm Lid Unwind Stand brings the same conveniences of the Base Unwind stand to lidding material. With material stationed outside of the guards, changeovers become easier and faster. Optional splice tables make splicing-in new material much easier. And having both a lower and upper cradle, new lid rolls can be installed and ready to go which greatly reduce machine downtime

## Part Number(s)

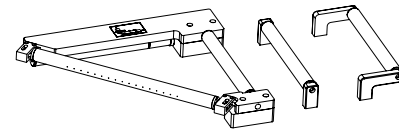
**KIT PART #: CONTACT US**



REAR LID UNWIND STAND

## LID UNWIND - REVERSING SHOULDER

Mounting the Reversing Shoulder opens up several new options for your machine when it comes to lid material. With a Reversing Shoulder, you can now use a lid unwind stand, which can mount larger material rolls and offers the convenience of open space when changing rolls. On top of that, you have the option to mount larger, more diverse printers that scale with your production needs.



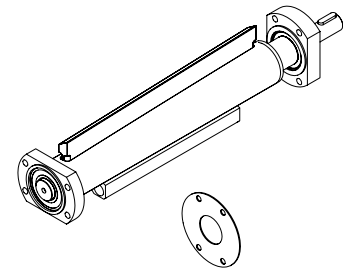
REVERSING SHOULDER

## Part Number(s)

**KIT PART #: 6022138-000**

## WASTE SHREDDER - ROTARY KNIFE UPGRADE

Extending the life of the knife assembly and bearings is as easy as upgrading to the Rotary Knife Upgrade Kit. Using an eccentric collar type bearing unit, the shaft is reliably coupled with the inner ring, causing virtually no deformation to the inner ring of bearings. This helps reduce the stresses on the bearings and knife, ensuring long-lasting performance for your Waste Shredder.



WASTE SHREDDER ROTARY KNIFE

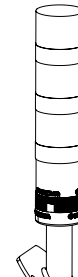
## Part Number(s)

**KIT PART #: 6022138-000**

# Upgrades & Replacements TF3

## HMI - STACKLIGHT

Stacklights are the perfect way to keep an eye on the status of your thermoformer or cartoner. Especially when machines are spaced far apart or are inside cleanrooms. A blue flashing light can tell an operator that the machine is low on material. A red light lets the operator too far away to hear the alarm know that the machine is down. A green light signals that all is well. They are an at-a-glance indicator that quickly let you know how your machine is doing.



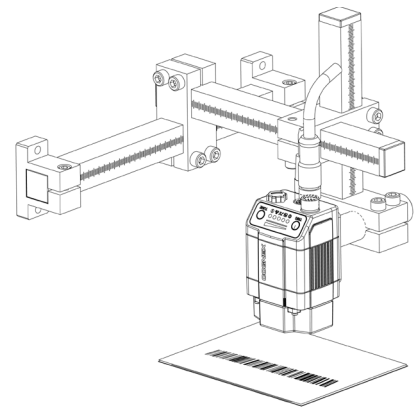
HMI STACKLIGHT

## Part Number(s)

**KIT PART #: 6015000-000**

## INSPECTION SYSTEM - COGNEX BARCODE READER

Cognex Bar Code Readers are available. Decoding 1D or 2D codes such as UPC-A, Data Matrix, QR, and MaxiCode, the laser scan variant can achieve up to 1,300 scans per second. Image-based barcode readers can decode the same 1D and 2D omnidirectionally and even capture images for data analysis, process improvement, and quality feedback. These readers can be custom mounted to your machine, bringing you the flexibility and performance needed for your barcode reading applications.



BARCODE READER - 1D BARCODE EXAMPLE

## Part Number(s)

**KIT PART #: CONTACT US**

## INSPECTION SYSTEM - COGNEX PRINT VERIFICATION

Cognex Print Verification vision systems are self-contained, industrial -grade vision systems that provide high-speed image acquisition and processing. Housed inside our custom enclosures, these systems can inspect any kind of print, code, or logo printed on the lid material. Fully capable of detecting any degree of anomaly or defect, the Cognex Print Verification vision system is a quality and affordable choice when it comes to your print inspection needs.

## Part Number(s)

**KIT PART #: CONTACT US**

# Upgrades & Replacements TF3

## INSPECTION SYSTEM - SCANWARE PRINT VERIFICATION

Using cutting-edge software and top-of-the-line optics, Scanware's Signum Print Verification system takes print inspection to the next level. Able to quickly read and verify ring codes, barcodes, 2D codes such as DataMatrix and QC, and able to perform OCV/OCR, the system offers precise error analysis and optimization. Both highly flexible and ever reliable, Scanware's Signum Print Verification system is the perfect solution for checking codes, texts, and graphics printed on any of your products.

### Part Number(s)

**KIT PART #: CONTACT US**



SCANWARE PRINT INSPECTION  
VISION SYSTEM

## INSPECTION SYSTEM - COGNEX PRODUCT INSPECTION

Whether checking dimension, surface texture, shape, color, absence of surface defects, or foreign material contamination, the Cognex Product Inspection system can verify a wide range of products and criterion. This cost-effective product inspection solution can inspect large numbers of product with high accuracy. The all-in-one system is small and can fit almost anywhere on the machine. Quality, integration, and value make this a great choice for your product inspection needs.

### Part Number(s)

**KIT PART #: CONTACT US**

## INSPECTION SYSTEM - SCANWARE PRODUCT INSPECTION

Scanware's Spectra Product Inspection system is unmatched when it comes to optical product and blister inspection solutions. Capable of black and white, color, and 3D inspections, this product vision system can verify a multitude of products, including tablet, bowl, capsule, powder, and oblong. It can be set up to detect size, fragments, and even multi-layer defects. Whatever your requirements, this system can be tailored to meet your product inspection needs.

### Part Number(s)

**KIT PART #: CONTACT US**



SCANWARE PRINT INSPECTION  
VISION SYSTEM

# Upgrades & Replacements TF3

## ADDITIONAL UPGRADES - IJET PRINTER

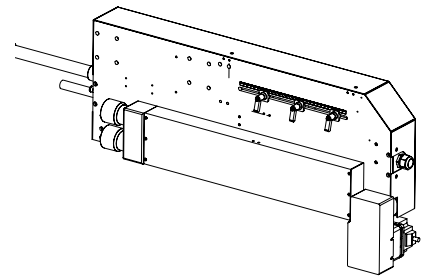
The iJet Printer is a versatile and straightforward printing system that can be customized to your exact printing needs. This compact printing system is smaller than standard inline printers, providing flexibility when mounting in small spaces or around existing equipment. And having direct control of printing custom information saves you the extra cost and effort of outsourcing preprinted material.

## Part Number(s)

**KIT PART #: CONTACT US**

## ADDITIONAL UPGRADES - REJECT UPGRADE (OVERHEAD TRANSFER)

Adding the Overhead Transfer at Outfeed Upgrade changes how rejects are handled, switching from a negative reject verification system to a positive reject verification system. Replacing the kicker system with an overhead transfer means that now, by default, all blister packs are rejected unless they are picked by the Overhead Transfer, instead of defaulting as good blisters. This provides a failsafe in case anything goes wrong and improves overall quality control.



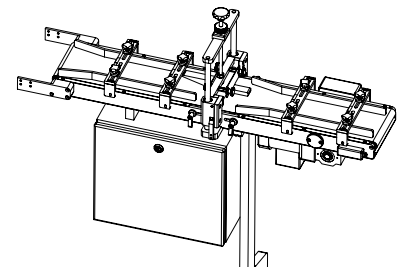
OVERHEAD TRANSFER SYSTEM

## Part Number(s)

**KIT PART #: CONTACT US**

## ADDITIONAL UPGRADES - OUTFEED DECURLER

Some blister packs, such as those made from Aclar or designs that lack stiffening support ribs, may experience what is known as curling. This can occur when the top and bottom materials cool at different rates. The Outfeed Conveyor Decurler is perfect for making those curled blister packs flat again. And this is especially useful if those blister packs are headed directly to a cartoner.

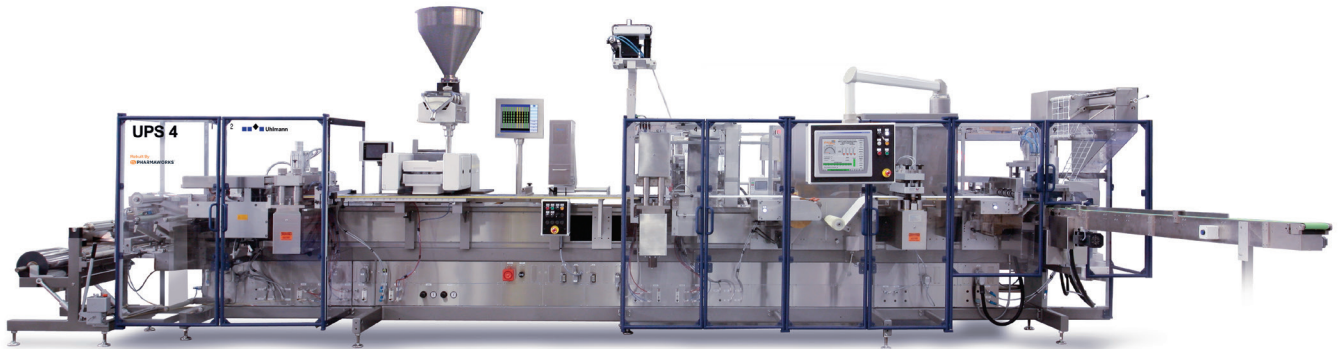


BLISTER DECURLER

## Part Number(s)

**KIT PART #: CONTACT US**

# Upgrades & Replacements UPS4



## UPS4 Aftermarket Parts & Services

An Uhlmann UPS4 Blister Machine is one of our most common rebuilds. Rebuilds may range from a full tear down and new station designs to just a basic refurbishment and controls upgrade.



**HMI UPGRADES**  
See Page 46

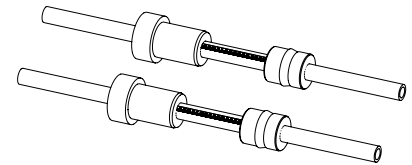


**NEW PREHEAT PLATES**  
See Page 41

# Upgrades & Replacements UPS4

## BASE UNWIND - 3" SHAFT CHUCK

The 3" Quick-Release Shaft Chuck is ideal for thermoforming applications. The 3-inch size fits most thermoforming material cores. And with the toolless shaft chuck design, it can be tightened and loosened by hand with no need for extra tools. The conical shapes of the shaft chucks make it easy to install a new material roll, giving you a snug, perfectly aligned fit every time with no guessing. Just set it up once and you're good to go.



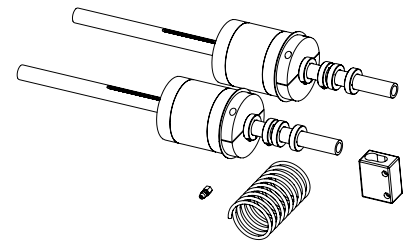
BASE UNWIND 3# SHAFT CHUCKS

## Part Number(s)

**KIT PART #: 6010130-000**

## BASE UNWIND - 6" SHAFT CHUCK

The 6" Bladder Core Chuck is perfect for cold forming applications. The 6-inch size fits most foil material cores and uses an air bladder design that can quickly be inflated or deflated with an air gun for quick roll changes. The through-shaft design fits any standard shaft, and the durable bladder material ensures long-lasting performance.



BASE UNWIND - 6" SHAFT CHUCK

## Part Number(s)

**KIT PART #: 6008104-000**

## PREHEAT STATION - HEATER PLATES

Over time, heater plate surfaces wear out. The protective coating begins to crack and peel, causing non-uniform heating of the base material. Heating elements also become less efficient, taking longer to reach target temperatures. By upgrading to our highly durable, long-lasting Heater Plate Assembly, you will not only regain that crisp, uniform heating across the base material, but also a cleaner, faster thermoforming process.

## Part Number(s)

**KIT PART #: 6000058-000**



# Upgrades & Replacements UPS4

## PREHEAT STATION - EXTENDED PREHEAT PLATES

Using Extended Preheat Plates means one thing: higher quality blister packs. Gently heating base material over a longer period at lower temperatures reduces stress during forming. The material is uniformly distributed within the pocket and cools more evenly, reducing the likelihood of the web stretching your target thermoforming temperature, but you get there much more quickly.

## Part Number(s)

**KIT PART #: CONTACT US**

## FORM STATION - COLD FORM SPACER KIT

Upgrade your UPS4 blister machine to be able to run cold form applications with the Cold Form Spacer Kit. Cold forming requires specialized spacers to be mounted below the pressure nuts on the forming posts. The spacer kit provides the on the product being run, these spacers increase the force or depth needed to form the blister pockets. The customizable Cold Form Spacer Kit provides you with a variety of options to meet your every cold forming need.

## Part Number(s)

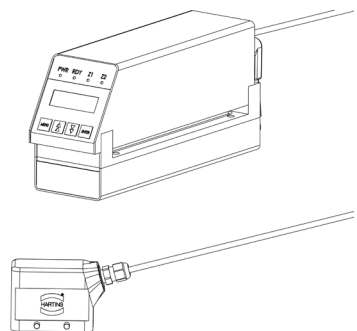
**KIT PART #: 6011689-000**

## FORM STATION - PINHOLE DETECTION

The Pinhole Detection unit is a high-resolution self-contained electronic optical inspection system. It is designed to detect cracks and pinholes in formed foil aluminum that can occur during the cold form process. It can detect defects as small as 25  $\mu\text{m}$ . If a defect is detected, an alarm sounds and the index is marked for rejection.

## Part Number(s)

**KIT PART #: 6011950-000**



PINHOLE DETECTION SYSTEM

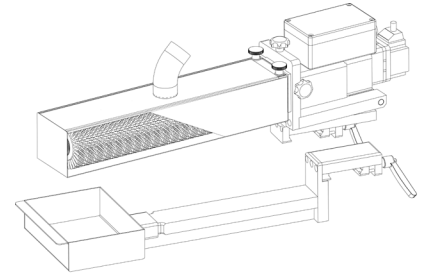
# Upgrades & Replacements UPS4

## FEED AREA - CROSS BRUSH

The Cross Brush removes loose product and dust from surface of the web, directing it a stainless tray. It also comes with a hood that can be connected to a vacuum to remove debris from the brush, maintaining a perfectly clean web surface.

### Part Number(s)

**KIT PART #: 6005912-000**



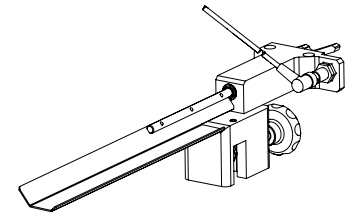
CUT-AWAY VIEW OF CROSS BRUSH

## FEED AREA - HIGH PRODUCT DETECTION

Loose product or materials sitting on top of the web can cause jams, seal overloads, or even damage seal tooling. The High Product Detect system prevents this by triggering an alarm and stopping the machine if any foreign material is detected on top of the web. This allows an operator to clear the unwanted matter before it causes a problem.

### Part Number(s)

**KIT PART #: 6012098-000**



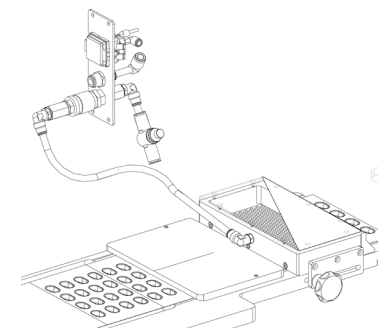
HIGH PRODUCT DETECTOR

## FEED AREA - NITROGEN PURGE SYSTEM

To preserve your product and inhibit oxidization, we offer the Nitrogen Purge Hood. This custom fitting unit is installed prior to sealing. It evenly and efficiently floods each blister pocket with nitrogen to displace any oxygen that might prematurely shorten your product's shelf life. Depending on your inertization needs, the purge hood system has the flexibility to use a stand-alone nitrogen tank, or directly from your facility, or a stand-alone tank, along with pressure and flow sensor to ensure proper functionality.

### Part Number(s)

**KIT PART #: CONTACT US**



NITROGEN PURGE W/ FLOW MONITORING

# Upgrades & Replacements UPS4

## LID UNWIND - AIR CHUCK

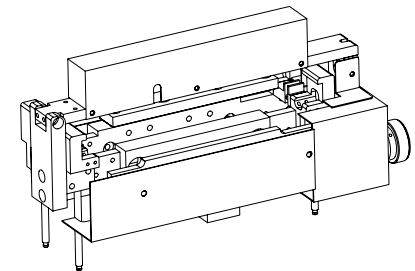
Replacing lid material becomes a whole lot easier with the Lid Unwind Air Chuck upgrade. With the push of a button, air is removed from the air shaft making the diameter smaller than the lid role core, allowing easy removal of the spent lid roll core from the shaft. Replace with a new roll, push the button again, and the air shaft delivers torque to the core, locking it into place. No fidgeting with manually locking chucks, no wrenches or tools required. Lid material changeovers become easy and fast with the Lid Unwind Air Chuck upgrade.

## Part Number(s)

**KIT PART #: 6019742-000**

## LID UNWIND - WEB CLAMP AND STRETCHER

This upgrade offers a sturdy, cost-effective way to maintain print registration on a multi-indexing machine. A sensor mounted to the unit detects when print begins to creep outside of registration and signals a pneumatic cylinder to actuate, stretching the material between two rollers slightly, and bring the lid print back into alignment. Web clamps prevent the lid material from retracting between index pulls, ensuring the print stays within registration after each correction.



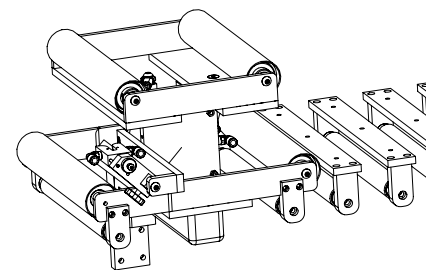
WEB CLAMP & STRETCHER ASSEMBLY

## Part Number(s)

**KIT PART #: 6005929-000**

## LID UNWIND - WEB TRACKING

Adding a Web Tracker ensures smooth operation throughout the entire process. Using idler rollers to keep material straight, the web guide maintains web alignment as it travels through the system. The air-only variant requires no wiring and adjusts the web based on air flow. The electronic version provides a variety of options for web guidance. These compact units can handle almost any application, making them the perfect solution for processes with limited space.



WEB TRACKING SYSTEM

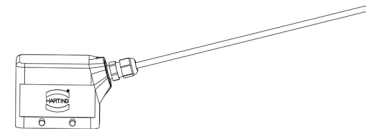
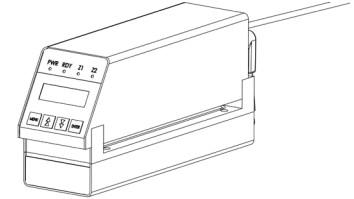
## Part Number(s)

**KIT PART #: 6010055-000**

# Upgrades & Replacements UPS4

## LID UNWIND - PINHOLE DETECTION

The Pinhole Detection unit is a high-resolution self-contained electronic optical inspection system. It is designed to detect cracks and pinholes in formed foil aluminum that can occur during the cold form process. It can detect defects as small as 25 µm. If a defect is detected, an alarm sounds and the index is marked for rejection.



PINHOLE DETECTOR

## Part Number(s)

**KIT PART #: 6014870-000**

## SEAL STATION - LOAD CELL RETROFIT KIT

Over time, pressure nuts in the Seal station wear out. The spring washers lose their ability to provide the correct amount of deflection that delivers the proper amount of force for good sealing. To ensure pressure nuts maintain the force needed for proper sealing, Load Cells can be retrofitted to the pressure nuts to measure each stroke and outputs force measurements to a display or HMI. It can even be customized to trigger an alarm when sealing forces are out of range.

## Part Number(s)

**KIT PART #: 6019742-000**

## DIE CUT / PUNCH STATION - SERVO LOWERATOR

The Servo Lowerator uses the precision and speed of a servo motor to lower product onto an outfeed system. Instead of having to deal with cam adjustments and replacements to adjust Lowerator settings, the servo-driven Lowerator offers the precision and flexibility of making adjustments on the fly. With more options to choose from allowing for a more extensive range of products to work with, transferring freshly die-cut blister packs out of your machine just became a whole lot easier.

## Part Number(s)

**KIT PART #: 6001252-000**

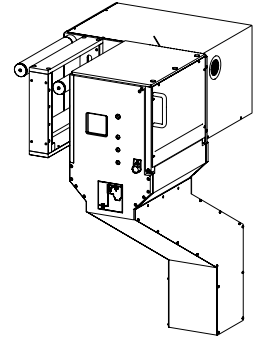
# Upgrades & Replacements UPS4

## WASTE SHREDDER - NEW WASTE SHREDDER

With its heavy-duty blades, the Waste Shredder chops waste web into small, easy-to-handle scrap. By chopping the web into smaller bits, waste can be disposed of more easily than a large, cumbersome waste rewind roll. The Waste Shredder offers a durable, low-maintenance waste solution that can handle all of your waste disposal needs.

## Part Number(s)

**KIT PART #: 6018606-000**



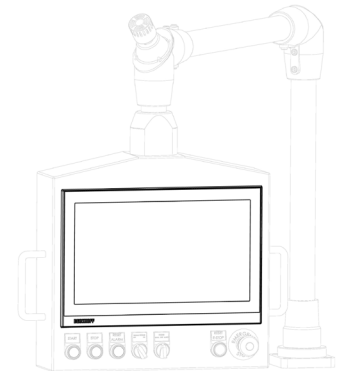
WASTE SHREDDER

## HMI - HMI UPGRADE

Older HMI computer components are prone to hardware failures and other issues due to old age. A new HMI ensures your system runs smoothly and is less likely to experience downtime. New HMI computers are faster, providing quick startup and fast response times. They also offer better compatibility with modern networks or remote interfacing with the latest security for better protection.

## Part Number(s)

**KIT PART #: CONTACT US**



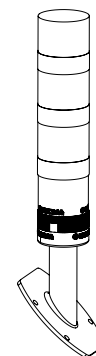
HMI TOUCHSCREEN

## HMI - STACKLIGHT

Stacklights are the perfect way to keep an eye on the status of your blister machine or cartoner. Especially when machines are spaced far apart or are inside cleanrooms. A blue flashing light can tell an operator that the machine is low on material. A red light alerts the operator across the production floor that the machine is down. A green light signals that all is well. They are an at-a-glance indicator that quickly let you know how your machine is doing.

## Part Number(s)

**KIT PART #: CONTACT US**



CUSTOMIZABLE STACKLIGHT

# Upgrades & Replacements UPS4

## ADDITIONAL UPGRADES - COMPENSATION LOOP ENCODER

The Compensation Loop Encoder gives you the ability to measure the Compensation Loop wheel position. This creates a firm BTR position at the Comp Loop for each format being run. During changeover, no physical sensor setup is required to determine limits or overtravel – this can all be done through the program when formats are recalled. This is especially useful for measuring compensation loop positions during MT setup.

### Part Number(s)

**KIT PART #: 6001324-000**

## ADDITIONAL UPGRADE - ET INDEXER UPGRADE

Upgrading the single indexing (ET) process to a servo-controlled unit breathes new life into an otherwise dated blister machine. With servo-driven single indexing, index lengths are as easy to enter and adjust as pushing buttons on a screen. When single and multi-index processes are servo-driven, changes to the single index length automatically update the multi-index length.

### Part Number(s)

**KIT PART #: CONTACT US**

## ADDITIONAL UPGRADE - MT INDEXER UPGRADE

Upgrading the multi-index (MT) process to a servo-controlled unit is the best thing you can do to restore and modernize aging blister machines. Converting the multi-indexing stage to a servo-drive decreases setup time and reduces the hassles of the old cam-driven system. Index lengths are easy to enter and adjust using the HMI touchscreen. When both single and multi-index processes are servo-driven, changes to the single index length automatically updates the multi-index length.

### Part Number(s)

**KIT PART #: CONTACT US**

# Upgrades & Replacements

## UPS4

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### **ADDITIONAL UGRADES - MANUAL FEED MAGAZINE**

When downstream equipment is paused or stopped, some blister machines continue running, sending good blister packs to an overflow bin or pack off conveyor. These blisters can be reinserted into the process via the Manual Feed Magazine. The Manual Feed Magazine is designed to sit on or over the transfer conveyor between the blister machine and downstream equipment (usually a cartoning machine). Good blisters are inserted into the top and a sensor detects gaps in product on the belt and drops in the good product. This is a simple, cost-effective solution to maintaining production throughput without having to further invest in expensive automated equipment to save those few overflow blister packs.

### Part Number(s)

**KIT PART #: CONTACT US**



# Scanware Inspection Systems



### Vision Inspection Technology

As the exclusive distributor of industry-leading scanware inspection systems in the USA and Canada, we combine our experience with machine design to provide complete, fully integrated product inspection system solutions. Multiple vision systems are offered to fit your inspection need and product application.



#### PRODUCT VISION INSPECTION SOLUTIONS

Scanware's Spectra Product Inspection system is unmatched when it comes to optical product and blister inspection solutions. Capable of black and white, color, and 3D inspections, this product vision system can verify a multitude of products, including tablet, bowl, capsule, powder, and oblong. It can be set up to detect size, fragments, and even multi-layer defects. Whatever your requirements, this system can be tailor-suited to meet your product inspection needs.

#### PRINT VISION INSPECTION SOLUTIONS

Scanware's Signum Print Verification system takes print inspection to the next level. Able to quickly read and verify ring codes, barcodes, 2D codes such as DataMatrix and QC, as well as being able to perform OCV/OCR, this system offers precise error analysis and built-in functions for optimizing readings. Both highly flexible and ever reliable, Scanware's Signum Print Verification system is the perfect solution for checking codes, texts, and graphics printed on any of your products.



Pharmaworks is the North American Supplier for scanware vision technology.



# Feeders and Product Handling

## Automate Your Blister Feeding Process

Product handling technology such as feeders, fillers, and bulk product conveyors are used on blister machines and feature improved performance, state-of-the-art technology, increased product control, and ease of use. Multiple feeding solutions are available and compatible across our line-up of fully automatic blister machines. Each feeder has been designed with machine docking, changeover, cleaning, and product handling in mind.

Pharmaworks offers complete blister packaging solutions including feeding equipment for dry products, solid dose products, liquids, and devices such as:

Tablets	Capsules
Gel caps	Animal chews
Liquids & Powders	Medical Devices
Batteries	Vape Products
Syringes	Gummies

Ask about our different feeder series and product handling methods.

- FA Series Pick & Place Feeder
- FF Series Flood Feeder
- FT Series Tube-Style Feeder
- FA Series Semi-Automatic Feeder
- BV Series Bulk Vibratory Conveyors
- Custom Robotic Feeders
- Custom Liquid Fillers





# Training Services

## OEM Training That Provides Results.

Training is one of the most valuable services available when purchasing new Pharmaworks equipment, especially if you are new to the industry. The same is true if you have new inexperienced staff or just need a refresher. Pharmaworks offers different training solutions to fit your needs.

### CLASSROOM & HANDS-ON TRAINING

Pharmaworks offers in-person training conducted by an experienced Pharmaworks Service Technician. Participants will be able to setup, operate, troubleshoot, and maintain Pharmaworks equipment upon successful completion of the training program

### ONLINE TRAINING

Let your staff work through online training at their individual pace. Each training course has been designed using narrations, interactive exercises and animations.



# Training Services

## Interactive Online Training

Skip the generic training programs and go straight to content that provides results for operators and technicians. Our engineering, service, and documentation teams have worked together to bring you an original training program you won't be able to get anywhere else.



### COMPREHENSIVE

The online program is perfect for operator and technician training. No one knows our equipment like we do. All training content was created by our in-house professionals.

### COURSES AND MODULES

Participate in training designed specific to each piece of Pharmaworks equipment. Each machine course is separated by modules that cover each machine stations.

### LEARN THE BASICS

Start with the a basic introduction and identify parts of the equipment before diving into other advanced topics and concepts.

### DELVE DEEPER

Once you have the basics down, each module covers an individual station providing setup, operation, troubleshooting, and maintenance information.

### TESTING AND CERTIFICATION

Interactive excercises and quiezzes reinforce information through the course. Users are only awarded a certificate of completion upon passing the final quiz.

### USER MANAGEMENT

Once purchased, invite and manage your own personnel. Managers can track user progress and completion.

SAMPLE COURSE & DEMOS ARE AVAILABLE  
CONTACT US

# Field Controls Upgrades

## MODERNIZE EQUIPMENT AND CONTROL SYSTEMS

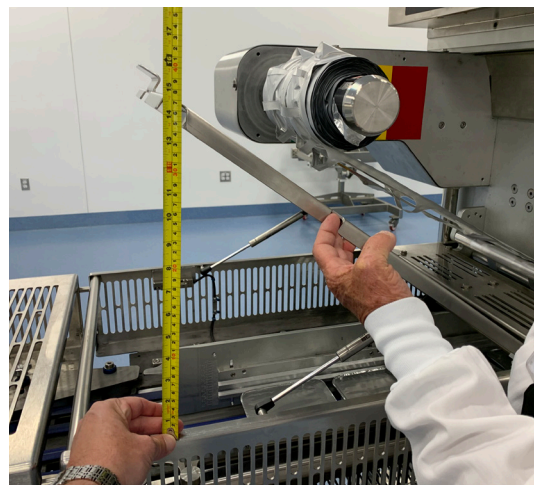
Your equipment may have proven itself reliable for over a decade but times have changed and it's time to bring your equipment control system up to modern day specifications. Pharmaworks offers field controls upgrades that can be completed at your facility to make your blister machine easier to operate and help meet today's safety requirements.

Pharmaworks customize your upgrade but upgrades include:

- PLC and Control System Upgrade
- HMI Upgrades
- Modernized Safety Controls
- Motion Control / Servo Upgrades

Pharmaworks is the leader in providing controls upgrade solutions for popular brands of equipment.

- Uhlmann
- Klockner/ Koerber Medipak
- Marchesini
- MAC
- Blipack
- Pentapack



## DID YOU KNOW?

Pharmaworks started rebuilding and upgrading third-party blister machines in 2003. Today, Pharmaworks continues offering a range of rebuild and upgrade solutions for thermoformers and cartoners. Complete rebuild solutions executed at the Pharmaworks facility offer an alternative to investing in new equipment. Partial rebuilds and controls upgrades can be completed onsite, at your facility.



# Tooling and Change Parts

## PRECISE TOOLING FOR ANY MACHINE

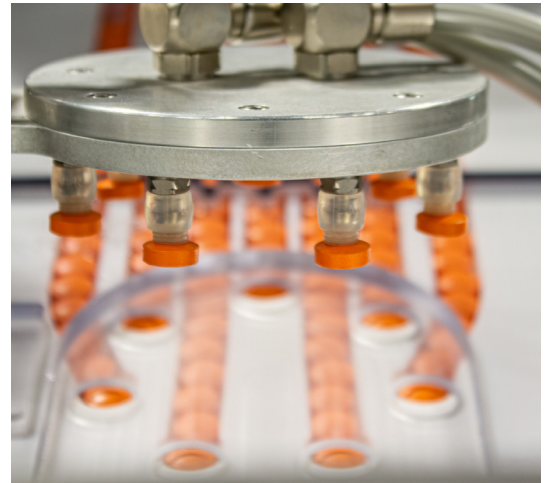
Designed and manufactured by the leading North American manufacturer of pharmaceutical blister machines, Pharmaworks tooling solutions will get you up and running quickly. Not only does Pharmaworks design and manufacture tooling for our own model line-up but we have excelled in providing blister machine tooling solutions for a wide range of 3rd party OEM equipment.

## BLISTER MACHINE TOOLING

Pharmaworks offers tooling across our entire line-up of blister machines. Our tooling solutions are not only limited to Pharmaworks blister machine models though. Our tooling division is capable of designing tooling for any third-party blister machine as well.

## FEEDER TOOLING AND CHANGE PARTS

Tooling and change parts design and manufacturing services are not just limited to blister machines. Pharmaworks provides tooling and change parts across our entire line of feeders and custom feeding technology. Pharmaworks is also the leader in providing rebuild solutions & tooling for popular brands of the solid dose product feeding industry.



## FACTORY TESTING ON PHARMAWORKS EQUIPMENT

Working with the leading manufacturer of blister machine technology has its perks. Since Pharmaworks is the machine OEM, we can test your next set of tooling in-house. Our engineers and technicians can provide optimal machine parameters for your tooling, reducing setup time at your facility.



Pharmaworks manufactures innovative blister packaging systems for the pharmaceutical, consumer goods and contract packaging industries. With a robust and flexible lineup of solutions that spans from standalone machines to turnkey packaging lines, Pharmaworks can handle nearly any customer challenge with unmatched precision to meet even the most stringent requirements.

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