

# WAKEFIELD EQUIPMENT

[www.WakefieldEquipment.com](http://www.WakefieldEquipment.com)

## 2010/2011 PRODUCT CATALOG MACHINERY AND EQUIPMENT FOR THE FENESTRATION INDUSTRY

### SPECIALIZING IN:

Window & Door Assembly Lines • Screen Tables  
Lineal Positioners & Saw Stops • Glass & Material Handling Equipment



Vertical & Horizontal Stretch Wrap Machines  
Upcut, Chop & V Notch Saws  
Copy Routers • Gas Filling Machines • Punch Presses  
CartCaddy • Custom Built Equipment  
**AND MUCH MORE!**

Visit Us Online:

[www.WakefieldEquipment.com](http://www.WakefieldEquipment.com)

Email: [sales@wakefeldequipment.com](mailto:sales@wakefeldequipment.com)

26720 Jefferson Court • Cleveland, OH 44140

PH: 440-899-5658 • FX: 440-899-5661



## Introduction: 3-5

## Glass & Material Handling: 7-25

### Pages 8-9

Standard I.G. Dollies, Harp Type I.G. Dollies, Heavy Duty I.G. Dollies, Full Base Harp Racks, Twin Level Harp Racks, Twin Level Harp-Type I.G. Dollies

### Pages 10-11

Oven Racks, Slotted Glass Dollies, Glass Inspection Stations

### Pages 12-13

Air Float Free Fall Tables, Traveling Table, Manual & Tilt Cutting Tables, Mobile Free Fall Bases, Free Fall Racks

### Pages 14-15

Caster Transfer Tables, Caster Sealing Tables, Pneumatic and Counter Tilt Caster Tables, Grid Application Tables, Flexible Spacer Tables, I.G. Butterfly Table, Sunburst Table, Power Donut Conveyor

### Pages 16-17

Completed Window Dollies, Triangle Dollies, Frame and Sash Dollies, Dollies with Dividers, Shipping Racks for I.G. Units, Floor Dollies, CartCaddy

### Pages 18-19

Pocket Type Extrusion Dollies, Extrusion Storage Dollies, Collapsible Shipping Racks, Floor Mounted Extrusion Storage Racks

### Page 20

Glass Drawer Systems, Extrusion Drawer Systems

### Pages 21-25

Custom Racks & Dollies, Shop Dollies, A & L Type Glass Dollies, Sealing Tables, A-Type Shipping Racks, Glass L-Type Storage Racks, Low-E Shipping Racks, Overhead Spacer Conveyors, Freestanding Spacer Conveyors, Window & Glass Manipulators, Desiccant Fillers, Spacer Racks, Lifting Bars, Edge Deletion Tables, Transport & Shipping Racks, Specialty Dollies

## Lineal Positioners: 27-31 TigerStop

## Window Assembly Lines: 33-37

Standard Assembly Rack, Casement Assembly Rack, Double-Sided Assembly Rack, Tilt and Horizontal Assembly Tables, Pneumatic Tilt Transfer Tables, Tilt Work Tables, Flat Work Tables, Patio Door Assembly Racks, Vertical Transfer Tables, Panel Assembly Stations, Window & Door Rotators

## Stretch Wrap Machines: 39-44

Vertical & Horizontal Stretch Wrap Machines, Lineal Wrappers, Screen Stretch Wrappers

## Grid Notching Equipment: 45-47

Cost effective automatic grid notching equipment and optimization software

## Gas Filling Equipment: 49

CompuGas Gas Filling Machine, TGE MultiGas Fillers

## Saws & Cutting: 51-57

CTD Chop Saws, V-Notch Saws, Vertical V-Notch Saws and Double Miter Saws, Atech Upcut Saws

## Screen Tables: 59-61

Avoid Operator Fatigue and minimize workers' compensation claims with the most economical screen table on the market

## Custom Solutions: 63-68

Roller Presses, Drill & Staple Station, Laser Etching Air Table, Seaming Table, Free-Fall Arm, Film Application Table, Carousel, Glass Washer, Door Barrel, Custom Door Dolly, Oversized Door Assembly Rack with Pneumatic Tilt, Automated Rotation Table, Manual Rotation Table, Pneumatic Tilt Table with Extendable Sides, Spacer Printing Station, Hydraulic Door Press, Pneumatic Punch Press, Copy Routers, Automatic Single Corner Cleaner

## ADDITIONAL ITEMS

This catalog is updated annually. During the following 12 months, we continue to look at new products to help fabricators become more productive. If you do not see the product or item you are looking for, please call. If we don't have it, we'll be glad to listen to your ideas.





## INTRODUCTION

We thank you for your interest in **Wakefield**, and hope that you find this catalog useful. It is our mission to search out the most cost effective and reliable equipment available, and offer it to you.

### This is accomplished in two ways.

- We research the market to determine needs and future trends.
- We then look at new technology, and determine how to meet the current and future needs of the industry.

### Our offering is based upon two major criteria:

- **Cost effectiveness:** fast payback is essential.
- **Reliability:** only quality products with a proven track record are considered.

As you go through this catalog, keep in mind that it is a listing of only our most popular products. If you don't find something, give us a call. If we don't offer it, we'll do our best to suggest an alternative, reliable source. Proposals are available from anything in this catalog, and will be faxed or e-mailed upon request. Also, in many cases, we can send you a video that shows the equipment in operation.

**Wakefield** has been providing innovative, laborsaving solutions to the fenestration industry for years, and has literally hundreds of satisfied customers. If you're not turning to us for your requirements, we encourage you to call. Satisfaction through service is our goal, and we would like to hear from you.

26720 Jefferson Court • Cleveland, OH 44140 • PH: 440-899-5658 • FX: 440-899-5661

**WAKEFIELD EQUIPMENT**

Visit Us Online:  
[www.WakefieldEquipment.com](http://www.WakefieldEquipment.com)  
EMAIL: [Sales@WakefieldEquipment.com](mailto:Sales@WakefieldEquipment.com)

### LET WAKEFIELD EQUIPMENT HELP YOU PUT IT ALL TOGETHER

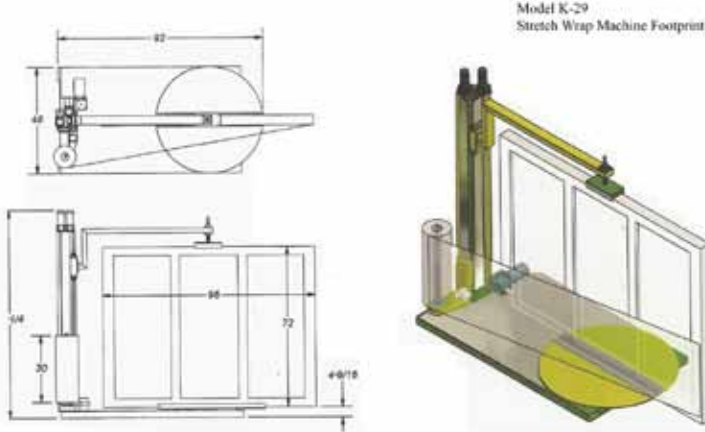
**Glass Free Fall Equipment**

**Insulated Glass Assembly Line**

**WAKEFIELD EQUIPMENT**

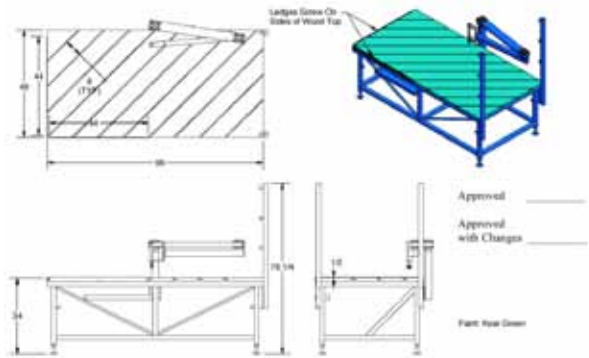
**WWW.WAKEFIELDEQUIPMENT.COM**





Model K-29  
Stretch Wrap Machine Footprint

**Stretch Wrapping and Screen Tables**  
Both vertical and horizontal wrappers to protect plus screen tables for improved quality.



### OUR MISSION

**Wakefield** specializes in the fenestration industry searching out the best possible products on the market. We know that no single equipment manufacturer is the best at everything, and that's why a careful selection process is necessary. Each machine in our line is qualified using two major criteria- price and performance. In addition, we make sure that they are state of the art. So, if you're looking for the best, turn to the experts. **We're here to help.**







## GLASS & MATERIAL HANDLING

**Wakefield** has been supplying glass handling equipment for years. We know that the main dilemma facing many window fabricators and glass shops is whether to build or buy this equipment. You want quality, and you want it to be affordable.

**Wakefield** believes that we've answered this problem with the best source of glass and material handling equipment available anywhere at the best prices possible. Some of the items in our offering include:

- Insulated Glass Dollies
- A & L Dollies for Stoces or Cases
- Shop Dollies for Individual Sheets of Glass
- Glass File & Glazier Dollies
- Dollies For Lineal Extrusions
- Box Type Dollies For Cut Extrusions
- Window & Sash Dollies
- Harp Racks
- Slings & Spreader Bars
- Extrusion Shipping Racks
- A & L Storage Racks
- Free Fall Bases
- Air Float Cutting Tables
- Pre-Loaded & Break Out Tables
- Counter Balance & Pneumatic Tilt Tables
- Caster Transfer Tables
- Sealing Tables
- Power Conveyers
- Fully Adjustable Case Racks
- **And More...**

The following pages show an overview of some of our more popular products. Pricing, and more detailed product sheets are available upon request. For products not shown, give us a call. We will fax you either a photo or drawing along with a proposal. And, also remember that we do custom work. Supply a print, or a concept, and let us discuss your needs.

It is our goal to be your source for all of your glass and material handling needs with high quality at a reasonable price. We look forward to hearing from you.

**INSULATED GLASS DOLLIES****Standard I.G. Dollies**

- Economical means to store random I. G.
- Easy I. G. loading with wood or PVC flip-up fingers
- Made from all steel construction
- Bottom protective strips on base and pull handle

**Harp Type I.G. Dolly**

- Diagonal harp type PVC covered divider rods
- Additional vertical rods used to stabilize glass
- Base & back covered with protective strips
- Has sides for shipping

**Heavy Duty I.G. Dolly**

- Steel swing-up fingers with PVC covering
- Grooved HDPE bottom strips for extra support
- All welded steel construction
- Standard floor lock and pull handle

## HARP RACKS



### Full Base Harp Racks

- Ideal for separating and transporting single lites
- Full 100% HDPE grooved base ideal for easy loading
- Divider rods covered with protective PVC
- Available with different slot widths and sizes
- Also available with partial base



### Twin Level Harp Racks

- Great way to save space
- Used for single lites or I.G.
- Standard with floor lock
- Available in different sizes

### Twin Level I.G. Dolly

- Two rows of diagonal rods
- Perfect for storing large and small units
- Full and partial bases available
- Built to your specifications



**OVEN RACKS**

**Oven Racks** are available in a number of different designs with different slot widths and sizes. They are heat tolerant for tempered and I.G. units. You can choose from partial bases, to full bases of slotted HDPE. The divider rods are non-marking and twin level racks are available for smaller units. Also, floor locks or locking casters are available. For your shipping needs, forklift stirrups & reinforced construction is offered.





## SLOTTED GLASS DOLLY & GLASS INSPECTION STATION



### Slotted Glass Dolly

- Push/Pull handle makes for easy maneuvering
- Slotted HDPE base and backing
- Hold-down swing away bar keeps units secure
- Built to your specifications



### Glass Inspection Station

- Eliminate rejected units
- Fluorescent lights makes it easy to spot scratches, bubbles, debris and other potential flaws
- Ledge rollers make for easy load/offload
- Built to your specifications



**FREE FALL, BREAK OUT & CUTTING TABLES****Air Float Free Fall Tables**

- Ideal for dropping, moving and cutting sheets of glass
- Top covered with heavy industrial carpet
- One horse power air float with 3 and 5 H.P. options
- Optional manual or pneumatic breaker bars

**Traveling Table**

- Efficiently transfer glass from several different racks
- Add air-float option for free-fall applications
- V-groove casters on existing tracks, or purchase with table
- Electric drive unit for smooth, easy travel

**Manual Cutting Tables**

- Glass drops for cutting on industrial carpeted top
- Can have counter-tilt or pneumatic tilting
- Optional air float and breaker bars
- Either stationary or mobile with floor lock



## FREE FALL BASES AND RACKS



### Mobile Bases

- For dropping glass from steel returnables
- Weight capacity of 8,000 pounds
- Large phenolic wheels & floor lock
- Optional front safety bar and side shield



### Free Fall Stoce Racks

- Hard rubber back makes it ideal for stoces
- Available in two-sided A, or one-sided L frame design
- Weight capacity of 8,000 or 16,000 pounds
- Can be either stationary or mobile



**CASTER AND SEALING TABLES****Caster Transfer Tables**

- Makes transporting glass an ease
- Non-marking swivel casters on top
- Standard caster spacing of 6, 7 or 8 inches
- Adjustable height and various sizes

**Caster Sealing**

- A good way to seal edges of I.G.
- Center suction cup holds glass in place
- Optional pneumatic tilt and cup rotation
- Built with various caster spacing
- Available with different platform surfaces, as a standalone or with extendable sides

**Pneumatic & Counter Tilt Tables**

- Used to tilt either single lites or I.G.
- Bottom ledge either solid or with rollers
- Top can be swivel casters or rollers
- Available as stationary or mobile with floor lock



## APPLICATION TABLES



### Grid Application Tables

- Long wearing Formica top with grid pattern
- "L" Type, "A" Type or pneumatic tilt or lift
- Air float and air suction options
- Built to any size with caster & floor lock options

### Super Spacer & Swiggle Application Tables

- Non marking Formica top with air float
- Six inch suction cup with lineal slide
- Electric rotation of cup
- Pneumatic retractable squaring sides



### Butterfly Table

- The centerpiece of an efficient I.G. unit manufacturing process
- Custom built to customer specifications
- Short cycle time and fully automated operation
- Reduce waste and improve accuracy



### Sunburst Table

- Non-marking top with grid alignment marks
- Create half-rounds and other sunburst patterns in your I.G.
- Eliminate wasted I.G. units
- Available in any size



### Custom Power Conveyors

- Ideal for use in any tempering or cleaning operations
- Options available for XY transferring
- Available with donut rollers, belts, steel and PVC rollers
- Built to your specifications

**WINDOW DOLLIES**

Once the product is transported to the proper work stations, assembled and tested when needed, the final stage is moving the finished product. These dollies have been designed to do the job.

You can between our economical completed window dolly (as shown below), or one of the other options which provide more random access to your product.

As always, if you have difficulty deciding on the right product, contact us. We've helped hundreds of fabricators make the right decision. Let us help you.

**Completed Window Dollies**

- Most economical design for complete units
- Used for both window transport and storage
- Welded frame with wooden base and sides
- Will build to any length or specification

**Triangle Dollies**

- Allows easy access of finished goods
- Bottom MDF dividers separate product
- May be used in the shop or for shipping
- Built to customer specifications

**Frame and Sash Dollies**

- Makes window transport an ease
- Both one and two sided designs
- Protective divider rods and wide slots
- Available in any size

**ADDITIONAL CONFIGURATIONS**

Besides the products shown, we can build you a complete assembly system according to your specifications. For additional information, contact us.



## WINDOW DOLLIES



### Dollies with Center Dividers

- Keeps product from sliding over
- Ideal for high units such as doors
- Post type dolly also used for I.G.
- Available in any size



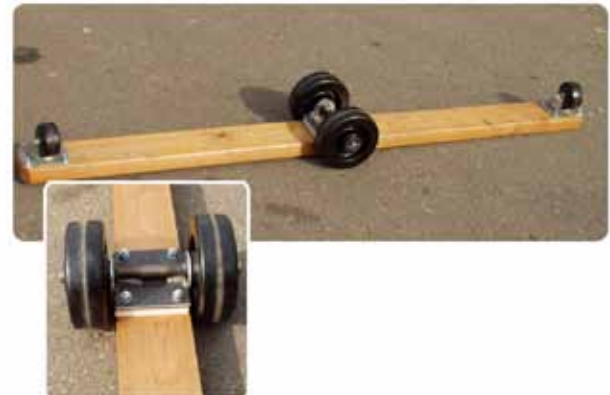
### Shipping Racks for I.G. Units

- Most dependable way to ship I.G. units
- Unique clip system effectively protects each unit
- Secondary clip for fastening smaller units available
- Built to your exact specifications
- Performance tested



### CartCaddy

- Use one person to move what would usually take 2
- Custom attachments to fit all racks and dollies
- Increases productivity
- Can help eliminate back injuries and workers' compensation claims



### Floor Dollies

- Simple way to move large single units
- Slotted or rubber base depending upon use
- Available for windows or glass
- Built to customer specifications

## EXTRUSION DOLLIES



### Pocket Type Extrusion Dollies

- Ideal for sorting random cut extrusions
- Vertical type for longer extrusions
- Horizontal type for small parts or sashes
- Typical pocket of sizes of 4, 5, 6 or 8 inches



### Extrusion Storage Dollies

- Available in a variety of configurations
- Either A or L type designs
- Mobile with floor locks or stationary
- Capacities of 500 to 1500 pounds per shelf



**EXTRUSION RACKS****Collapsible Shipping Racks**

- Racks are collapsible for stacking, shipping and storage
- Typical inside storage dimensions of 30 x 30
- Only 12 inches high when folded
- Additional designs including nesting units available

**Floor Mounted Extrusion Racks**

- Ideal for sorting and storing raw material
- Weight capacity of 1500 pounds per level
- Typical 16 ft. long & 18" arms
- Will build to specifications

**Additional Rack Designs**

Products such as nesting racks and custom designed storage systems are available.

**Contact us for additional information.**



**DRAWER SYSTEMS****Glass Drawer Storage**

- Great for organizing and storing large size glass
- Available either floor mounted or table height
- Standard 10 drawer and larger models
- Will build to any size or customer specification

**Extrusion Drawer System**

- Great way to save space
- Easy access to any type lineal
- Draw dollies hold up to 6000 pounds
- Build to any width or depth

**ADDITIONAL CONFIGURATIONS**

Besides the products shown, we can build you a drawer storage system according to your specifications. For additional information, contact us.

## MISCELLANEOUS DOLLIES

### If You Think Racks and Dollies Are the Same...



### ...then it's time to call Wakefield Equipment.



#### Shop Dollies

- To transport various sizes of cut glass
- Weight capacities of 3000 or 5000 pounds
- Available with either wood or rubber sides
- Phenolic wheels and pull-handle standard



#### A & L Glass Dollies

- Ideal for moving glass cases or stoces
- Available in two-side A, or one side L design
- Either wood or protective rubber sides
- Capacities of either 4000 or 8000 pounds





**GLASS & MATERIAL HANDLING****Sealing Tables**

- Ideal for putting hot melt sealant on I.G.
- Standard 3000 pound capacity
- Typical sizes of 3 & 4 x 8 feet
- Built to order

**Glass Storage Racks**

- Ideal for storage of large quantities of glass
- Available in two-sided A, or one-sided L design
- Typical size ranges from 4 to 6 feet deep
- Optional hard rubber on rails to protect glass

**Low-E Shipping Racks**

- Ideal for shipping either low-e or tempered glass
- Special holding clips keep each lite separate and prevents contact
- Racks nest when not in use
- Built in a variety of sizes

**A-Type Shipping Rack**

- Ideal for shipping and storing
- Bottom fork lift tongues for lifting rack
- Rubber protective sides and wood ledges standard
- Available in any size

## GLASS & MATERIAL HANDLING



### Overhead Spacer Conveyors

- Typically 8' to 20' feet long, but customization is available
- Hooks on 6" centers
- Travels 7' per minute
- Perfect for facilities with space constraints

### Freestanding Conveyor

- Great for storing and moving spacers
- Moveable to different locations in your facility
- Perfect alternative to an overhead conveyor
- Can be built and modified to your specifications and applications



### Window & Glass Manipulator

- Ideal solution that enables a single employee to handle the work of two
- Swiftly move glass units up & down, forward & reverse
- Will pick up and lay down horizontally
- Fabricated to handle up to 1,000 pounds
- Built and designed to your specifications



**GLASS & MATERIAL HANDLING****Edge Deletion Tables**

- Adjustable grind for any thickness
- Non-marking caster top with work space
- Available with 1 or 2 edge deleters
- Available in any size or shape

**Lifting Bars**

- Capacities of 4000 to 10000 pounds
- Handles stoces up to 17 feet
- Regular and low headroom designs
- Very competitively priced

**Spacer Racks**

- For moving assembled spacers
- Swivel casters
- Steel construction
- Bottom fingers rotate down to allow for longer top spacers

**Desiccant Filler**

- All steel construction
- Large capacity & air tight storage
- Free standing with adjustable height
- Saves material and labor



## GLASS & MATERIAL HANDLING



### Transport and Shipping Racks

- A wide variety of options available
- Shipping rack (on left) has removable sides and stacks
- Patio door rack (below) has fork lift tongues on both sides
- Will build to customer print and requirements



### Specialty Dollies

- Window and door carts (far right)
- Furniture glass dollies (below left)
- Jobsite dollies (below center)
- Tillet dollies (below right)







## LINEAL POSITIONERS

With a tight labor market, one of the fastest payback machines which **Wakefield** offers is the **TigerStop** lineal positioner. **TigerStop** is:

- Productive with increases of well over 100% as opposed to manual stops.
- Simple to use. Most operators can be trained in less than 5 minutes.
- Accurate, with repeatability of 4 thousandths of an inch.
- Fast, with speeds in excess of 3 feet per second.
- Expandable using communications and optimization software.
- Versatile for applications from window frames to I.G. spacers.
- Affordable, with prices starting around \$5000.

**TigerStop** is normally sold as a positioner with a working length of 10 feet, but is also available in sizes from 4 feet up to 30 feet. The longer **Tigers** can be used for curtain wall, or as a pusher. However, the most economical length is 10 feet, and 95% of our sales are in this range.

Some of the more popular options are extended stops, attachment hardware, and tables. Call us, and we'll discuss the model and options which best suit your needs.

If optimization is important, there are various programs available. Many of these optimization packages are included with those popular manufacturing software programs used in our industry, and they interface with **Tiger**. Call us for a list of suppliers.

For the small investment it requires, **TigerStop** has surprised many fabricators with its fast payback and ease of use. We encourage you to take a hard look at this machine.

## LINEAL POSITIONERS

LINEAL POSITIONERS

### Why Buy a Positioner?

There are a multitude of reasons to place an automatic lineal positioner in your facility. Most studies show a production increase of three fold over manual stops. The greater the number of different lengths that are cut over a production cycle, the faster the payback. A few of the many benefits that a lineal positioner will provide include:

- Reduced labor in changing set ups.
- Increased measurement accuracy.
- Use of less skilled labor in cutting.
- Overall faster production rate.

Another major benefit of a positioner is the ability to interface cut lists, and reduce material cost through optimization. This application is discussed in more detail in the pages that follow.

**Perhaps the fastest, and most cost effective means to reduce labor today is with lineal positioners strategically placed throughout the shop.**

### Why Tiger?

Today, fabricators spend substantial sums of their capital budgets to acquire costly, and often, complicated equipment. Without a doubt, many of these expenditures are justified. Quite often, however, a simple item such as a lineal positioner, placed **throughout the factory**, can offer a quick, and guaranteed payback. This is one of the strengths of *TigerStop*.

Due to *Tiger's* cost, it can be placed in a multitude of areas to perform a variety of chores. Besides conventional uses for positioners such as frame and sash lineals, *Tiger* can be justified in areas never before considered. Some of the uses beside frame and sash measuring includes screen rail, glazing beads, I.G. spacers and more.

Traditionally, positioner use has been restricted due to price. A machine which costs in excess of \$10,000 has limited applications. Since *Tiger* sells for a fraction of the price of other positioners, a multitude of new uses can now be considered.

**The uniqueness of Tiger is tied directly to its low cost which enables it to be used in a much wider variety of applications.**

### What about Reliability and Performance?

Today, there are thousands of *Tigers* in operation. Many of these have been in continuous use for years. There is no other lineal positioner on the market with a track record like *Tiger*.

When it comes to performance, the statistics are equally impressive. *Tiger* is:

- Accurate with repeatability of 4 thousandths of an inch.
- Fast with speeds in excess of 3 feet per second.
- Easy to use with typically operator training time of under 5 minutes.

Each machine comes with an easy to read operating manual with complete instructions for simple set up and immediate use. *Tiger* operates on 100 volt, single phase electric and is ambidextrous, or non-handed so it can be set up on either side of the machine or saw you'll be using.

Support is available through both **Wakefield** and *Precision Automation* with replacement parts shipped with same day service. *Tigers* will operate equally well in a wood, vinyl, fiberglass or aluminum environment.



As with all equipment using a microprocessor, clean power is needed, and a line filter with a surge protector is highly recommended. Please consult with your local electrician when first setting up *Tiger*.

**Tiger has one of the finest track records of any machine in its category.**

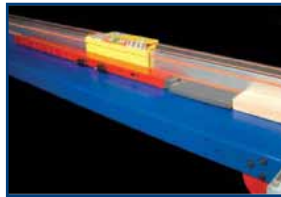
**Tiger is easy to set up, simple to use, and a cinch to maintain.**

## LINEAL POSITIONERS

### Which Model & What Accessories Do You Recommend for my Tiger?

*TigerStop* is available in various lengths from 6 to 30 feet. The most is the 10 foot version since it is the most price effective, and works well for most applications. Remember, that the length of the machine refers to the working dimension (the actual extrusion is two feet longer) which means that a 10 foot machine, for example, can cut anything within a ten foot range (1 to 11 feet, 2 to 12 feet etc. depending upon where it is set next to the saw).

The most popular way to buy a *Tiger* is as a basic unit which includes a stand to mount the controller and line filter. Since most fabricators are replacing a manual stop, they usually already have a table. If a table is required, this option is also available. The most popular table is a smooth slide unit, however, there are roller tables for longer, heavier extrusions. A ledge stand can also be used, but only if the finished parts are immediately removed after cutting.



The last item to consider is the stop itself. *Tiger* comes standard with a flip away stop which comes to within 4-1/2 inches of the end of the extrusion. To this, one has to add the distance to the saw blade. If you cut pieces smaller than this, you might want to consider a "pusher foot" to move the stop closer to the blade. If you're cutting multiple pieces, a gang stop might be considered.

Besides these accessories, there are other options available to help increase your productivity. We'll be glad to review them with you. Give us a call, and we'll make sure that you get the right *Tiger*, with the right options at the right price.

**The length of a Tiger refers to the overall range of movement.**

**The accessories you choose depends upon your particular needs, and we will help you with that selection.**

### What Software Should I Use?

Many *Tigers* are used as "stand alone" machines without an interface. In fact, most machines are initially sold this way, and communications are added later. Remember, if you plan to drive your *Tiger* through a PC, you must transfer the cut list into an

optimization package first. **Some programs currently working with Tiger include:**

- Caliburn
- Creative Systems
- D-Calc
- Fenevision
- Friedman
- G.D.S.
- Opti-Cut
- PainLess Window
- PMC Software
- Winsys
- Window Maker
- Window Magic
- WTS Paradigm

In most cases, an interface only requires Level Two Software. The exceptions to this are G.D.S., Friedman and Window Maker where Level Three may be required.

If you have a manufacturing program other than one listed above, and would like to optimize, contact us. Many of the above suppliers will be glad to work with you with just their optimization package.

Typically, optimization can save anywhere from 10 to 20% on material usage. The payback can become quite phenomenal, and in some cases will be only a few weeks. Besides material, there are substantial labor savings since cuts will no longer be entered manually. Contact us for more information.

**You can purchase a Tiger as a stand alone unit at first, and add communications later.**

**Optimization software can save up to 20% on material costs which can sometimes reduce your payback to only a few weeks.**

### Conclusion

If you're like most manufacturers today, you want to stretch your investment dollar as far as possible. You know the importance of reducing labor, but have a multitude of priorities.

We firmly believe that *TigerStop* lineal positioners offer the absolute best possible payback for your investment. **Wakefield** has successfully put in scores of these installations throughout the United States and Canada with great results.

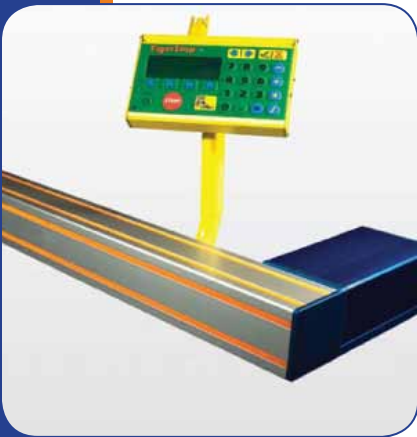
If you need additional information including a free video, please call. We want to help you on the path to higher productivity and reduced costs.

**For more information, give us a call. We're here to help.**

# WAKEFIELD EQUIPMENT

## TigerStop™

Lineal Positioners for the Fenestration Industry



### Get Fast, Get Accurate, Get Automated.



You want faster production- to save time and money.

You want every employee to easily make consistent, accurate measurements.

You want versatile equipment that works your way.

You want TigerStop. Get automated and get rid of your tape measurer!

### Get automated, get productive.

It's simple: the more productive you are, the more successful you are. And today, automation is essential to productivity. Investing in **TigerStop** pays off immediately by increasing your productivity with automated measurements that are fast, accurate and consistent- so you produce more, with less waste.

### Get versatile, get efficient.

Your shop should work your way: with **TigerStop**, it will. **TigerStop** automates almost any tool and setup- including table, miter, panel, and chop saws; boring and punching machines; and drill presses- and makes your production line faster by eliminating time wasted on manual processes. You can enter dimensions the way you want: in feet, inches, fractions or decimals, standard or metric. **TigerStop** also has a fully functioning calculator that adds, subtracts, multiplies and divides. By customizing **TigerStop** to your equipment, you'll be more efficient instantly.



## TigerTalk (TigerStop)

"Accuracy is the key thing, and reduced operational errors. The TigerStop was dependable, reliable, and lived up to my production needs and capabilities. In fact, it improved production. I would buy another one."

– **Joe Mccord, Acme Window Products, Willowbrook IL**

"I'm using TigerStops on two double-miter saws, and on chop saws in the screen department, glazing department, and vinyl finishing department. TS is very small compared to other machines, it is user friendly and is far superior."

– **Craig Bachman, Champion Window Coverings, Denver CO**



## TigerStop Specifications

**Working lengths:** 4' to 30'

*(Custom length available at no upcharge. Overall length is 2' longer than working length.)*

**Power requirements:** 110v @ 15 amps

**Motor type:** DC servo with optical encoder

**Speed:** Adjustable 10" ~ 35"/sec

**Repeatability:** +/- 0.004" (4/1000")

**Number of cut lists/patterns:** 99

**Quantity per size:** 999

**Max number of sizes/positions:** 2000

**Measurement system:** Inches & metric

### Standard Features

- Set point stop mode
- Push feed mode
- Pattern mode
- Increment push
- 99 programmable hot keys
- 99 programmable cut lists

### Upgrade options

- Standard interlock for semi-automatic operation
- Advanced interlock for fully automatic operation
- RS232 port for TigerSet communication
- Bar code reader
- TigerOptimizer & TigerLink for data download & optimization
- Label printing





## Window Assembly Lines

With today's labor market, no aspect of the manufacturing process should be left unstudied. The assembly process is often one of the more labor-intensive operations where small improvements can result in big rewards.

**Wakefield** offers several products to help fabricators in these areas. One is a line of window assembly and squaring racks, transfer conveyers and work tables.

Our open back assembly rack is unique for several reasons. First, it is extremely affordable. Second, it is one of the few racks able to do casements. One variant on this rack is a system that has both vertical as well as horizontal clamping. With the addition of scissors to spread out a fixed panel on patio doors, it really helps the assembly process.

Our closed back, angled assembly rack is also quite affordable, but is designed for single hung, double hung and slider windows. Closed back assembly racks can also be built to operate with a pneumatic tilt feature. This can be extremely helpful with larger windows or those which require mulling in the horizontal position.

We also offer horizontal transfer tables. Besides moving product, these items facilitate assembly operations. A stationary assembly table with adjustable hold down pins to keep the product in place is also available.

Another way to move product through the assembly process is by using vertical conveyers. These are designed for either frames or sashes. The major difference is the height of the bottom ledge. This ledge can be smooth H.D.P.E. or rollers. Rollers can also be grooved to accommodate nailing fins required for new construction windows.

Of course, inserting glass may also be simplified even before you get to the assembly process. Our automatic glass insertion equipment is ideal for large I.G. units for patio door panels or picture windows, and can triple your productivity.

Besides the products which follow, we encourage you to refer to the section labeled "**Glass and Material Handling**", and "**Stretch Wrap Equipment**". Within these sections, there are product sheets showing the wide array of items we can supply, such as window dollies, general handling equipment, and stretch wrapping machinery. Remember, we're here to help.





## WINDOW ASSEMBLY LINES

### Vertical Assembly & Squaring

Assembly racks come in two basic designs: for hung windows with a 15 degree tilt and the open back design for casements or swing patio doors. The hung, or standard rack, also has a pneumatic lift (two feet of travel) option and can tilt (see below) to the horizontal.

Another option on the standard rack is retractable stops which recess for a continuous production flow. This is ideal when using a complete transfer system (see next page) for an un-interrupted and continuous production flow.

#### Standard Assembly Rack

- Holds and squares window during assembly
- Ergonomic design tilts back 15 degrees
- Has protective back and bottom strips
- Options include retractable sides and tilt



#### Casement Assembly Rack

- Open back for casements & swing doors
- Positioned 90 degrees from floor
- Vertical member applies pressure
- Available in different sizes and designs



### Double-Sided Assembly Rack

Just one more innovation that we've added to our full line of squaring and glazing racks. With several options available, these racks can be custom made to suit any application. If you need retractable squaring members, pneumatic lift or a casement-type rack to access both sides of window, door or patio, we've got you covered.

- A-Frame design ideal for space limitations
- Use for squaring, glazing and any other application
- Have retractable members or pneumatic lift on either side
- Built for use on any size window or door



### Tilt & Horizontal Assembly

Pneumatic tilt squaring racks can be mobile (shown at right) or stationary. These are basic variations on our standard assembly rack and have some of the same options such as retractable stops.

Also available are work tables for assembly from tilt to flat tables (far right). These are economical ways to handle large units, and speed up production.



#### Pneumatic Tilt & Press Racks

- Ideal for large windows which need mulling
- Protective HDPE strips on back
- Rail moves as either vertical or horizontal
- Casters and floor lock optional

## WINDOW ASSEMBLY LINES

### Window & Door Transfer Systems

Effective use of frame or sash transfer conveyers eliminate labor and provide an excellent work in process data. The vertical design typically has rollers. An allowance for nailing fins can be made. Horizontal conveyers can spin freely or be powered.

Hold down clamps can be added to create stability when needed. Transfer arms are available to merge sashes and frames into the same line for final assembly.

The tilt version can have a fixed ledge as shown which remains in place to minimize interference with the operator. This same feature can be incorporated into our pneumatic tilt assembly racks shown on the previous page.



#### Vertical Transfer

- Helps flow throughout shop
- Ledge smooth or rollers
- Ledge height varies for sashes or frames
- Available with hold down clamps or transfer arms



#### Tilt Transfer Tables

- Easily move window from vertical to horizontal
- Either pneumatic or counter-balance
- Back and ledge covered with HDPE or rollers
- Built to any size according to specifications



#### Horizontal Transfer

- For frames, sashes or completed units
- Top rollers have non-marking PVC
- Legs adjustable for height
- Built to any size or dimension

### Tilt & Horizontal Assembly: Tilt Work Tables

- For positioning large size windows
- Counter-balance or pneumatic tilt
- Optional casters and floor lock
- Built to any size



#### Flat Work Tables

- Keeps product stable
- Adjustable hold down pins
- Middle platform for storage
- Variety of sizes



## WINDOW ASSEMBLY LINES

### Patio Door Assembly Racks

The racks previously shown work extremely well for patio doors as well as windows. Shown here is another specialty rack which is similar to the casement rack previously shown but with the added feature of scissors to hold the fixed insert while the movable unit is put into the frame.



It uses both horizontal and vertical clamps to hold the frame in place. With the fixed member locked in with scissors, attaching the movable panel becomes simple and allows for testing.

**Patio door assembly often requires that the fixed panel be positioned prior to placing the moveable panel into the frame.**

### Mechanical Panel Assembly



This rack is ideal for assembling large mechanical units such as patio door inserts or large non-operable units.

The glass is laid on the rotator in the horizontal position. The rotator lifts and turns for easy application of boot glazing and both the top and bottom

rails. The squaring members then apply pressure to insure a tight fit. When the operation is complete, the finished product is tilted up to the vertical to be transferred down the line.

**Mechanical units have screw together rails which are usually assembled directly over the glass, and require a specifically designed squaring rack.**

### Vertical Transfer

By adding rollers to the surface of a pneumatic tilt table, units can be taken off the vertical line and then transferred horizontally into a wrapper. In this operation, rollers would typically also be on the bottom ledge. Conversely, a unit coming out of a wrapper or a horizontal assembly line can be tilted down to easily slide into a window dolly for easy transport to the shipping area. As with all roller conveyers, the rollers are non-marking for use with vinyl, wood or aluminum. Oversized cylinders for heavy windows and closer roller spacing are a couple options to consider.



**Transfer can be performed in any direction, or for any purpose.**

### Rotation or Turning

Quite often larger units will have to be turned. This is common with patio doors which require that the movable panel overlaps the fixed panel prior to wrapping. The rotator shown below is normally used when the product is transferred after assembly from a vertical conveyer and then placed into a vertical stretch wrap machine.



**Rotators along with tilt tables enable one worker to perform the job normally required of two.**

### Conclusion

The previous pages highlight our assembly equipment offering. They represent the most common ways fabricators use to increase productivity and reduce costs.

**Let us help with your specific needs by giving us a call. We know the industry, and will be glad to offer suggestions, and alternatives to your production requirements.**





## Stretch Wrapping Machines

Protecting windows for shipment is a technology that has grown dramatically over the years. Wrapping windows, however, is a very unique process. Wrapping boxes on a pallet is entirely different than wrapping windows for shipment.

**Wakefield** is aware of the challenges associated with window wrapping, and for this reason, we have been associated with KPS for years. Simply stated: they know our industry, they know how to wrap windows, and they have more experience in this market than anybody. Their offering consists of several different units:

### **The Model 939 Series:**

These are vertical machines. Advantages include the ability to wrap practically any size window, and only one employee is required to operate the machine. Capacity per shift ranges from 275 to 300 windows.

### **The Model 800 Series:**

These are horizontal machines, sometimes referred to as ringers. The basic KPS ringer has a unique feeding system designed just for windows. Capacity per shift using two employees ranges up to 1000 windows.

### **Machines for Lineals & Screens:**

These machines are specialty units. The lineal wrapper is patterned off the 800W series while the screen wrapper uses Model 939 technology. Both have platums specifically designed for the application.

The following pages provide an overview of the machines listed above. Each machine has its own booklet with detailed descriptions. For additional information, give us a call. We're here to help.

## STRETCH WRAP MACHINES

### Introduction

If you've studied your packaging needs, you probably have certain requirements that are essential. Usually, a packaging operation will have four priorities:

- Attractive looking package
- Reduce shipping damage
- Eliminate bottlenecks
- Minimize labor

The advantages of film to show your product, protective corners for shipping and high speed throughout are obvious. These pages address the last concerns of zero bottlenecks and minimum labor. You should find it useful.

While looking through this booklet, keep in mind two things. First, consider packaging as a system. It's more than a single machine, but actually a series of input and output conveyers to create an efficient and seamless flow of product. Second, look at your product and the various nuances including jamb thickness, lift rails, and maximum plus minimum window width. There is a list of questions to answer before a proper proposal can be presented, and we will be glad to help you through the process from your initial inquiry to the final installation of your new systems. We know packaging for the fenestration industry better than anybody.

Protecting your finished product with film is today's preferred method, and we know how to do it better than anybody in the industry.

Two essential points to remember is to look at this as a system, and know exactly what will be wrapped.

### Zero Bottlenecks

In most parts of this country, window manufacturing is a seasonal business. It makes absolutely no sense to ramp up production and then create a bottleneck in the shipping area. That's why it's important to make sure that your wrapper has more than enough capacity for your needs. An FA series machine is capable of 5 windows every two minutes- over one thousand per shift. But are your employees capable of loading and unloading this volume? Loading and unloading will be discussed later in this booklet. Not only is it an essential part of the system, it accounts for a major portion of your investment dollar. Zero bottlenecks and minimum labor for year round output can be obtained.

### Film Type

The high speed ring shown on the right uses film specifically designed for wrapping windows, and we can help you with selecting the right supplier. Also, if you use protective corners, make sure that they fit tight.

Standard film rolls are either 10 or 12 inches, however a 20 inch film option is available. Although 20 inch film will reduce material costs due to less overlap, the output of the material will not be materially increased. This is mainly determined by the ability to load and unload as discussed earlier. Both the size of the film and length of window have very little to do with overall cycle time.

The advantage of 10 or 12 inch film is the ability to handle shorter windows. As a rule, 10 inch film can wrap windows as short as 20 inches long with forks or 28 inches long without forks. With 20 inch film, the shortest window is 32 inches with a fork, or 36 inches without a fork. For this reason, most fabricators choose 10 inch films unless window length is consistently over three feet long.

### Machine Basics

Below are listed some basic concepts of the machine which will help guide you through the decision process. Although it is not important to understand the exact design of the FA series, some of these options are important to determine the best configuration to guarantee you the right machine.

Wrapping is completely automated. The film cylinder (shown on previous page) moves in and out to grab the film and attach it to the window. When down, it is cut with a U-shaped hot tube that is practically maintenance free. Unlike wires, there is never a problem with breakage. The entire cycle is controlled with a PLC and circuit breakers are standard.

Product hold downs help to guide the window by creating tension against the powered infeed belt. Tension is required for most windows unless they are extremely heavy. The spring loaded hold downs standard with the FA series allow for 2.5" thickness range of windows, but if the range of thickness in your window line is greater than this, air powered hold downs should be considered.

Product forks are required for short windows to bridge the gap and are necessary for the film to pass underneath. If 20 inch film will be used, they become even more important because the gap is wider. The exact requirements were discussed on the previous page.

## STRETCH WRAP MACHINES

Ring diameter is probably the easiest decision to make. Each model on the FA series ends with the number 40, 50, 60, 70 or 80, which determines the widest window that can pass through. The ring diameter is approximately one foot larger. Two considerations are the pass through height, which gets tall on the 870 and 880 series, and the limits of wrapping a small window with a large ringer. The effect known as "kilting" will occur when film catches the wind and attempts to wrap a small window. As a rule of thumb, an 850 can handle even the smallest width, an 860 can wrap 12 inches, but both the 870 and 880 can have this "kilting effect" with windows less than 24 inches wide.

The simple design of the FA series makes this an easy to use, low maintenance machine.

The basic machine along with options is primarily determined by the size of windows to be wrapped.

### Loading & Unloading

Since the main constraint on output come from the ability of your workers to load and unload the product, the decision on conveyers is extremely important. It is also a major portion of your investment dollar. There are several ways to handle the assembly process leading up to the wrapper.

Vertical assembly requires that the window or door be tilted into the horizontal position. This means that a tilt conveyer to join with the infeed power table is necessary. With rollers centered on the tilt conveyer as shown here, centering becomes easy and eliminates the need for an expensive auto-centering device. The window is then pneumatically tilted and power fed into the ringer. Of course, with horizontal assembly, this is not necessary.

Buffer conveyers can also be used behind the initial loading table to keep windows separate. Although this can allow for an almost continuous feed, the physical demands and limitation of the employee must be remembered.

Outfeed can be accomplished in the same manner as infeed, but some fabricators choose a simple slide table. This is an easy way to drop the finished product into a window dolly and move it to the shipping area.

With proper study of your workflow, the type and size of conveyers can be recommended. We will be glad to help you with this process.

Making the right decision on infeed and outfeed conveyers will determine the overall efficiency of the wrapping operation.

Powered conveyers can account for up to 40% of the cost of the total system.

### Designing a System

Once you're convinced that the design and capacity of the FA series is right for you, you'll need to answer a few simple questions on both your product and operation. We can then prepare a specific proposal. Information we'll need to get started includes:

- Window thickness (range)
- Window width (minimum & maximum)
- Assembly method (vertical or horizontal)
- Units per shift (maximum)

Either a representative from Wakefield or a factory technician from Kalamazoo Packaging will go over the details and cover every base. We've done this countless times before and know the right questions.

Throughout the process, remember that we will be proposing a system. More than just a machine will be offered, but a total solution which meets your requirements for an attractive package to show off your product along with productivity and the cost savings necessary in today's market.

The importance of investing in a system, and not just buying a machine cannot be overstated.

### Conclusion

There are scores of companies producing machinery for packaging today. Some companies focus on generic equipment for wrapping pallets, while others focus on specific industries.

**Both Wakefield and Kalamazoo Packaging** are specialists in the fenestration industry. The equipment described in this booklet was designed specifically for wrapping windows, and nothing else. When you make your decision on a packaging system, ask yourself how well your supplier knows you and your business. We're sure that you will decide that we offer the best solution for the smallest investment dollar, and look forward to working with you.

The best decision that you can make is to go with somebody who knows the industry, and offers a total solution.

## STRETCH WRAP MACHINES

### Vertical Window Wrapper

Today, stretch wrap film is the preferred method of wrapping windows. And, the vertical stretch wrap design is the number one preferred method of wrapping random sizes.

Remember, the KPS line is designed for windows, and is not just another redesigned, or converted pallet wrapper. The continuous cycling with these constant demands requires a KPS in your plant.

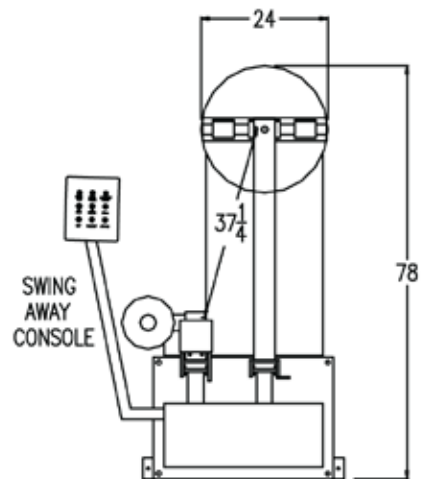
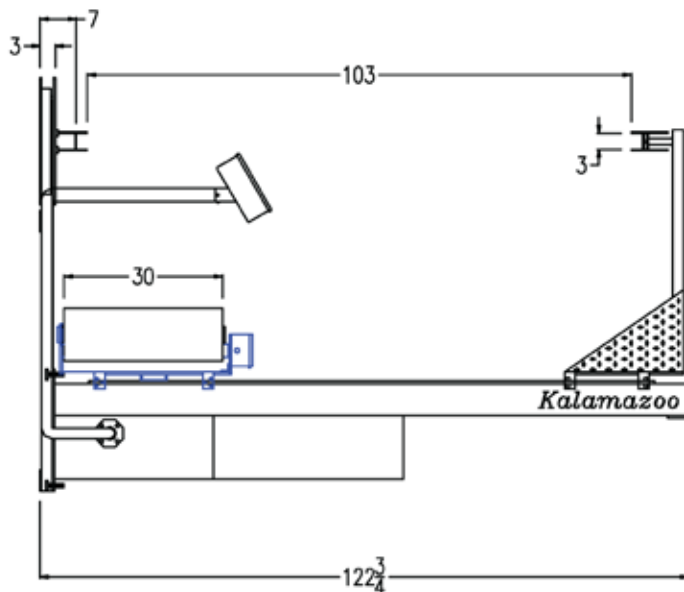
So, if packaging random size windows is a problem, we have your answer. The KPS line of Model 938 and 939 vertical stretch wrap machines offer:

- Increased Productivity with a high speed design.
- More flexibility to wrap a wide variety of sizes.
- Reliability with 15 years of experience.
- Easy operation with a low profile table and swing out control panel.



Remember, KPS is the only major manufacturer of stretch wrap equipment to build machines exclusively to wrap windows. Tell us your requirements, and we'll tell you a solution.

MAXIMUM WINDOW/PANEL HEIGHT 96"  
 MAXIMUM WINDOW/PANEL WIDTH 60"





## STRETCH WRAP MACHINES

### Horizontal Window Wrapper

Horizontal wrappers, sometimes known as “ringers”, come in a variety of sizes. Typically, a 60 or 72 inch ring is used. Input and output conveyers are common, although, some ringer operations use a direct feed of the window into the ring without pre-staging it on a conveyer. The unit shown below uses a direct feed.



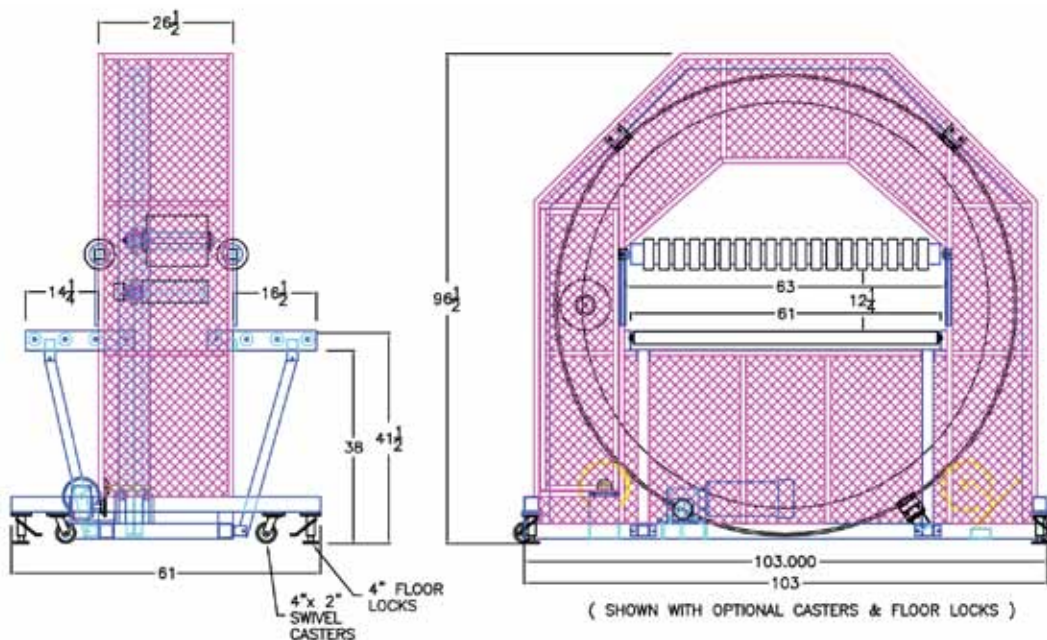
The 850W series from KPS is unique for several reasons. This design was developed through years of experience in wrapping windows, and includes:

- Bottom rollers have a special polyurethane cover which helps “grab” the window for an easy feed.
- Top “donuts” ride over grooves and ridges in profile and keep windows straight during the wrapping process.
- Special Pro Gaff tape on donuts made with cloth help the window to track a straight line.
- Distance between rollers and donuts is easily adjustable to accommodate any size window.

The actual means to feed the machine is up to the customer. Two workers are normally required. Sometimes, infeed tables for staging are used. They can be either a slide type, or rollers. Contact us for suggestions on your applications.

The 800W Series can wrap from 500 to 1000 windows per shift depending upon size. Test details are available.

If you would like to see a video of these tests which feature the 800W series, let us know. We’ll also be glad to send you a detailed proposal, and answer your questions. We’re here to help.



## STRETCH WRAP MACHINES

### Stretch Wrap Equipment for Lineals

Wrapping lineals properly is critical to avoid shipping damage and present the right product to your customer. As specialists in the fenestration market, we know the type of equipment that is required. This horizontal wrapper, or "ringer" is designed to do the job quickly and cost effectively.

Suggested film is 12" wide by 80 gauge fed with a rotating ring. The specialized rollers may be either steel or have a specialized polyurethane cover to minimize scratches and maintain appearance. The ring diameter in this photo is 30 inches and will take 22 inch bundles. Other sizes are available.

The adjustable top guide is removable, and may be either a "V" as shown or straight. The infeed table is usually manual feed while the outfeed can be manual or powered which allows one operator to handle the entire process.

For more details, including a video or a quotation for a machine to fit your application, give us a call. We've been helping fabricators for years with their wrapping needs.



### Stretch Wrap Equipment for Screens

Wrapping screens is a specialty operation which requires knowledge and experience within the fenestration industry. As specialists, we have developed a machine for this purpose which is not only cost effective, but ideally suited for the application.

We have found that the best way to wrap screens is to bundle them first. This makes an ideal size package for handling and shipping to your customer. Note that the wrapper is on rollers to easily move as your needs change, and it is powered by 110 volt to make set up simple.

Each bundle is then placed on the bottom plate which has been specifically designed for screens. The top platum, which is also designed specifically for screens, is then lowered and the variable speed drive takes over.

This top platum (shown at left) is in a "V" configuration to accommodate different sized bundles. It is spring loaded with a cut-off switch to prevent damage, and was developed after extensive research into the application and industry.

For more details on this screen wrapper including a video and proposal, give us a call. We've been helping fabricators for years with their wrapping needs, and we are available to help you.



## GRID NOTCHING EQUIPMENT

**Wakefield** offers the most cost effective automatic grid notching equipment on the market today. It has eight tracks to push lineals, and eight punches to notch. Typically, four are used in each cycle allowing for fast change over to another thickness or style.

The optimization software which is included is a high yield, proven program. It is a complete turnkey system with features such as:

- **Single Cycle Automatic Action:** Merely place the material on the end of the pusher, and the machine takes over.
- **Optimizes with Pentium Processor:** Great yields with optimization reduces scrap to only a few percent.
- **Handles Multiple Pieces with 12" Upcut Saw:** By processing up to four lengths at once, productivity is increased.
- **TigerStop Pusher Eliminates Potential Slippage:** Never ruin parts with belts that can slip.
- **Works on Grids, Spacer & Screen Rail:** More than just a muntin processor, can be used in many applications.

Included this section is a complete interface to your glass cutting software. You will receive support throughout the installation process, and future operation is simple, and practically maintenance free.

A video is available at [www.WakefieldEquipment.com](http://www.WakefieldEquipment.com) which demonstrates the features of this workhorse. Check it out, and see how this machine can be a boost to your productivity.

## GRID NOTCHING EQUIPMENT

### Why It's Important

Budgets definitely drive all investment decisions. Large expenditures can be justified when processing frames, sashes or glass. Smaller items such as grids, screen rail or I.G. spacers sometimes are neglected or ignored while the expense of processing these items add up tremendously over the years.

**Grids, screen rails and spacers may be the last area to automate, but the savings will add up big.**

As a key supplier to our industry, **Wakefield** has observed one essential fact over the years.

**Successful companies look at all areas of processing to minimize labor and material.**

If you've ignored grid notching, screen rail or I.G. spacers before because you felt the manufacturing cost was "not significant", think again. It's too competitive to overlook any area of your fabrication process today.

### About the Machine

The **Wakefield** grid notching machine employs the most efficient and cost effective pusher on today's market with **TigerStop** coupled with optimization software from Opticut, a Pentium processor plus a 12" upcut saw with punches.

This system comes complete and ready to use. The typical installation takes less than a day, and will have you realizing savings in the first week.



**This is a complete system, ready to use, employing the latest components and software available in today's market.**

Each piece of raw material is fed, or pushed by a special arm attached to the basic pusher on **TigerStop**. This arm has multiple grippers to hold up to four pieces of material. The positive pushing action is far superior to friction wheels which attempt to pull the material and can easily slip. Over time, this condition can worsen resulting in bad parts and scrap. This potential problem can be entirely eliminated by pushing with a **TigerStop**.

**The TigerStop pusher system ensures a positive feed and eliminates potential slippage and the bad parts and interrupted production flow which can result.**

As the material is pushed, it is guided through a track (there are four tracks standard per machine allowing up to four pieces to be processed in each cycle), and is then automatically cut to the precise length as determined by your cut list. When processing grids, the secondary operation of notching is then performed.

The notching punch is provided according to the type grid being processed, and different punches are available which can be easily interchanged. The finished product is then removed and placed into extrusion dollies with the bin in slot number provided for final assembly on the I.G. or screen line depending upon the material.

**Up to four pieces of raw material can be fed and automatically processed at a time.**



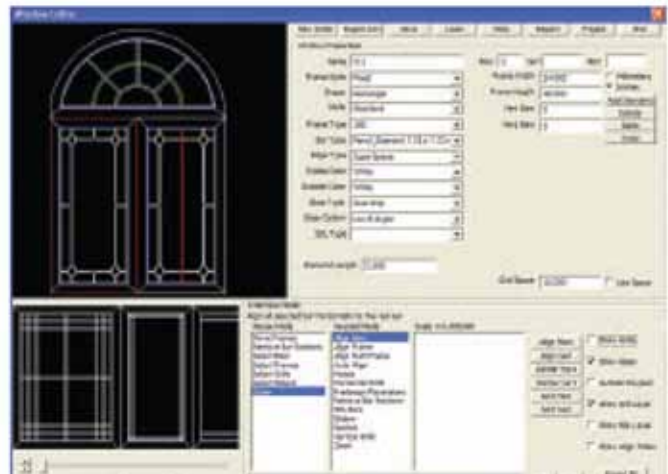
## GRID NOTCHING EQUIPMENT



The heart of this system lies with the surrounding mechanics previously discussed along with **TigerStop** and the state-of-the-art software optimization interface from Opticut reviewed below. There are more **TigerStop** lineal positioner/push feed systems in use than any other lineal movement machine on the market today. Able to communicate through a serial port to the processor, the **Tiger** takes commands and automatically moves to the exact position each time. With a speed set of over 2 feet per second, and accuracy of four thousandths of an inch, you will never need to worry about low production, bad parts or material waste again.

**TigerStop is definitely the best performing and most cost effective pusher system found on the market today.**

### Software



The second key to **Wakefield** automatic cut off and grid processing equipment is software from *Opticut Technologies*. *Opticut* takes your cut list, optimizes it, and then exports it to **Tiger** using a Pentium processor. The specific grid pattern is determined and programmed into the system. Bin and slot numbers are then assigned for movement to the assembly process.

**Opticut Technologies has been providing software to the fenestration industry for years working with various fabricators in North America.**

### Conclusion

If making money is all about payback, purchasing this system becomes an easy decision. Production should easily be doubled by being able to process up to four lineals at a time automatically. Material waste will be dramatically reduced with the positive feed of **TigerStop** and optimization software from *Opticut*.

After the first system is installed for grids, it's quite common to find fabricators returning for additional machines to process screen rail and other items where automation has previously been too costly. To learn more, give us a call. We're here to help with quality products to make you more competitive and increase your bottom line.

**This is the best possible material and labor savings option available anywhere for automatic grid processing equipment.**



## GAS FILLING EQUIPMENT



The **CompuGas Gas Filling Machines** from **Wakefield Equipment** come with a steel rack for holding the gas machine and tank. Large caster wheels for easy movement and one timer per four hoses are also included. They are available as 2, 4, 8 or 16 stations and for use with Argon or Krypton.

### Options:

- Proportionate Gas Mixing Capability
- One timer per hose
- Heat Mirror Application (Super Glass)
- Custom built machines to suit your specific needs

**Gas Filling Dollies are also available**

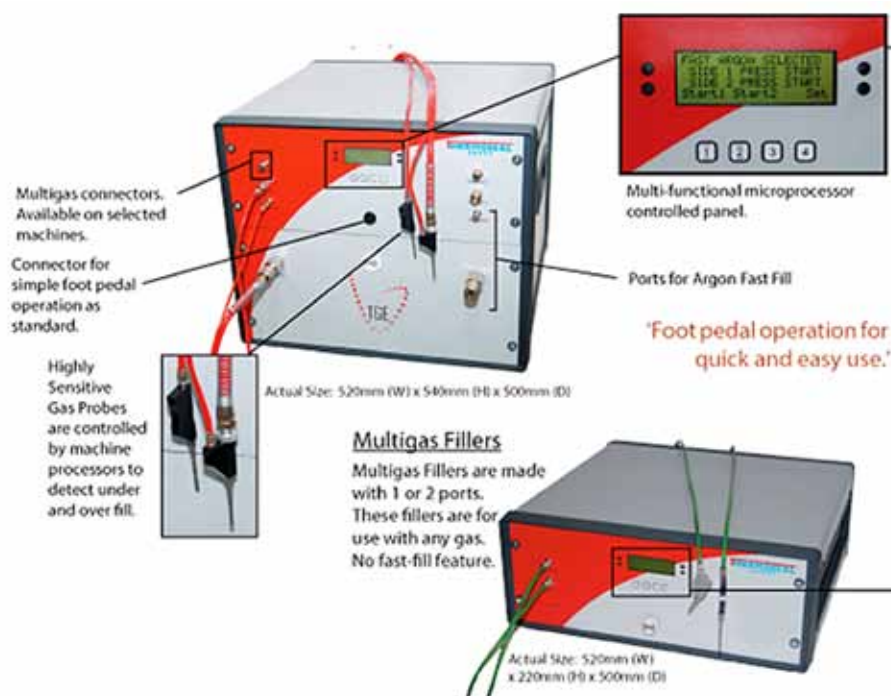


### TGE MultiGas Fillers

There are six models in our range, all of which work using the Filler/Sensor system to ensure that the sealed units are filled to 100%. Visual and audio indicators tell the operator when the sealed unit is full, the gas bottle is empty and how much gas is flowing in to the sealed unit.

The range of the machines comprise of the new basic Multi-1, which can be used with all gases, but is especially designed for use with Krypton, Zenon and SF6, with a gas flow rate of 10 to 12 liters per minute.

The new NM range has a gas fill rate of over 30 liters per minute and is ideal for filling Argon gas. The new combination machine, NM/Multi models have been designed and built to fill all gases at the correct filling speeds.







## SAWS AND CUTTING

**Wakefield** offers several types of saws. Some of our more popular models include:

**CTD Chop Saws:** For a pneumatic feed of the head chop saw, we recommend CTD. Available with both miter cut and fixed head, these saws have a variety of options for practically any need.

**CTD “V” Notch Saws:** The model D45AX comes with either a 10, 12 or 14 inch cutting capacity. The pneumatic feed of the head is extremely fast since the operator does not have to wait for a full cycle before progressing to the next cut.

**CTD Vertical “V” Notch Saws:** CTD also offers the N80 and N90 models which are a “true vertical” and may be better suited for higher, and narrower profiles. We will be glad to discuss your requirements, and recommend the saw best suited for your application.

**CTD Double Miter Saws:** For precise cuts, and special applications, a double miter saw may be preferred. Priced higher than a “V” notch saw, it is not normally possible to put a lineal positioner on these saws.

**Atech Up-Cut Saws:** The Crater-02A and Crater-06A heavy-duty automatic up-cut saws make cutting large extrusions safe, easy and accurate. These saws can be used with a TigerStop to automate any cutting operation.

### Measuring Devices

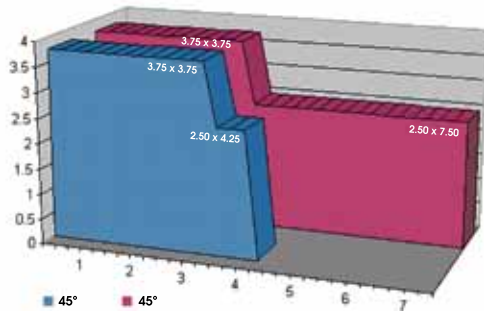
Although CTD and Atech both offer tables and gauges, lineal positioners are recommended for all your cutting equipment. With the **TigerStop** lineal positioner, it is now extremely affordable to maximize productivity by eliminating potential errors and the tremendous amount of time associated with conventional stops. For more information on **TigerStop**, refer to our section on “Lineal Positioners”.

## SAWS AND CUTTING

### 12, 14, 16 & 20 Inch Diameter Blades

#### CTD 200 Series

- Either straight or miter cut with 12 or 14 inch blades
- Standard 2 HP with larger horse power options available
- Optional pneumatic feed of head
- Horizontal or vertical clamps



Cut chart shown for 12" saw. Please call for 14" chart.



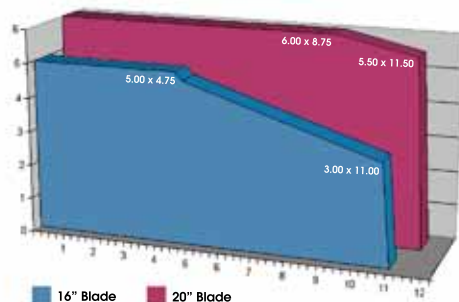
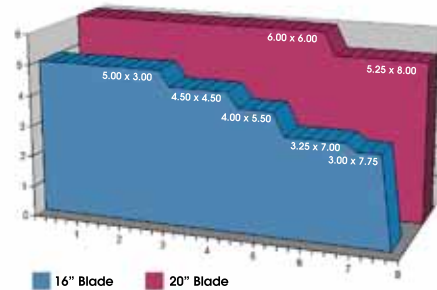
#### CTD 400 Series

- Either straight or miter cut with 16 or 20 inch blades
- Standard 7.5 HP motor with magnetic starter
- Optional pneumatic or hydraulic feed of head
- Horizontal or vertical clamps



#### Cut Charts

Top for 45°, bottom for 90°, 16" blade in blue, 20" blade in red.



## DOUBLE MITER AND COMPOUND SAWS

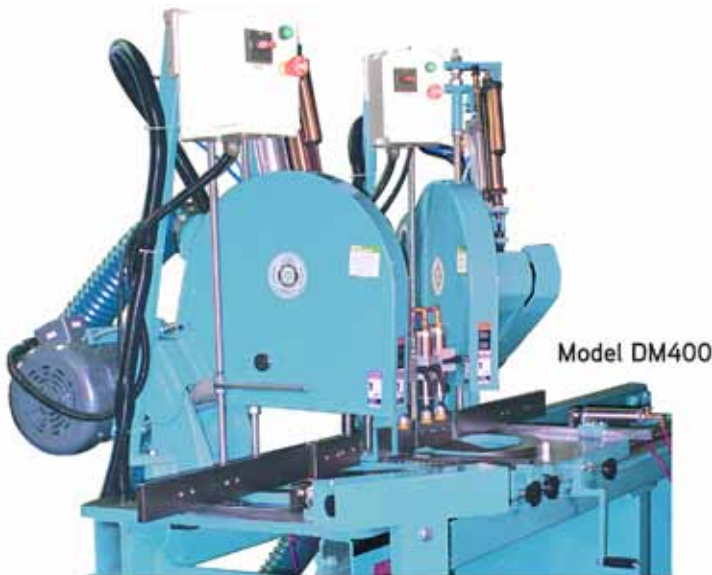
### Double Miter Saws

- Available as 12" (Model DM200R) or 16" and 20" (Model DM400)
- Each head is moveable and will miter up to 45°
- Pneumatic feed of head and inside vertical clamps included
- Standard 8 foot bed



### Additional Options

- Longer bed
- Digital read out
- Extra heads
- Additional pneumatic clamps
- Compound heads (see below for more information)



### Compound Saws

- Available as a single-head (shown) or with double miter saws, as shown above
- Blade sizes of either 12" or 16"
- Pneumatic clamps available

**Cutting charts are available on all of these saws.  
Contact us for the details.**

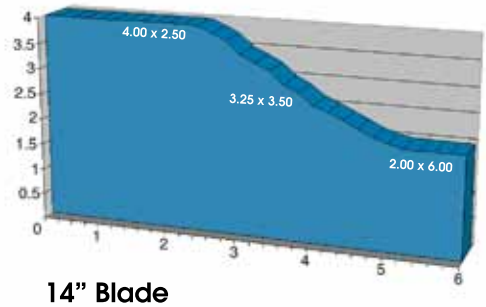
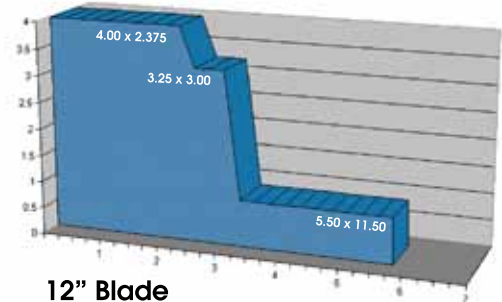


## CTD V-NOTCH SAWS

### CTD D45AX Series

- Extremely fast cycle with up to a stroke per second
- Available with either 12" or 14" blades
- Standard pneumatic feed of head and adjustable fences
- Horizontal or vertical clamps

Cut chart shown for 12 or 14 inch blades



### TRUE VERTICAL SAWS

#### CTD N80 & N90 Series

- Either 13" or 16" blades
- Ideal for high profiles
- Standard pneumatic feed with true vertical travel
- Horizontal or vertical clamps

#### Cutting Capacity

- N80: Up to 5" high
- N90: Up to 6" high





**CUT-OFF SAW****CTD Model M25RHC & F255RHC 14" Capacity Cut-Off Saws**

Have you ever considered something larger than your 12" chop saw, but couldn't justify the cost of a 16" machine?

Now, we have an answer. The new 14" chop saw from CTD.

Like no other saw on the market and best of all, it's "budget-friendly" with a price around what you would pay for a 12" saw.



The model M25RHC is a rugged, accurate, and heavy duty industrial cut-off saw which will miter up to 60°, with positive stops at 45°, 30°, 22.5°, 15°, 0°. The F255RHC cuts 90° only. Both the M25RHC and F255RHC are equipped with a 14" blade capacity, with 1" arbor. Both models come standard with 2 HP single or 3 HP three phase TEFC motor with a manual starter switch and two belt drive. Base and discs are made from precision machined iron castings for lasting accuracy. Fences are set on the centerline; however, they can be adjusted front to back for more width cutting capacity.

The Model M25RHC comes standard with our new air bearing system that allows easy movement of the head to various degrees with less than 5 lbs. of pressure.

*The picture shows the machine with accessorized stand, conveyor and lube system, and air power feed. Please contact Wakefield Equipment for pricing & information on this and other optional equipment.*

## UPCUT AND DOUBLE MITER SAWS

### Crater-02A Heavy duty automatic upcut saw 16.5" (420 mm)

#### Standard Equipment

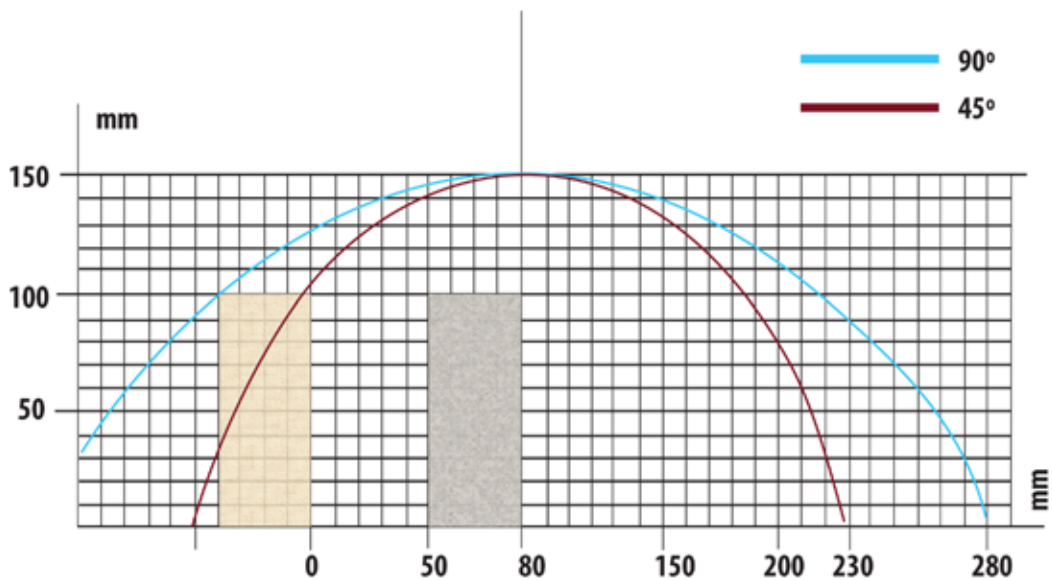
- 420 mm (16.5") carbide tipped saw blade
- Pneumatic twin horizontal & vertical clamps
- Air gun
- User's manual

#### Optional Equipment

- Infeed & outfeed tables
- Pneumatic spray mist lubrication

#### Specific Capacities

- Heavy duty construction for long machine life
- The moveable back fence enables you to cut bigger profiles both straight and miter cut
- When the cutting process is finished, the saw blade moves down to its starting point automatically for safety reasons
- Fixed angle adjustments at 15°, 22.5°, 30°, 45° and 90°. Intermediate angles are adjusted via mechanical stop



## UPCUT AND DOUBLE MITER SAWS

### Crater-06A Heavy duty automatic upcut miter saw 18" (460 mm)

#### Standard Equipment

- 460 mm (18") carbide tipped saw blade
- Pneumatic twin horizontal & vertical clamps
- Air gun
- User's manual

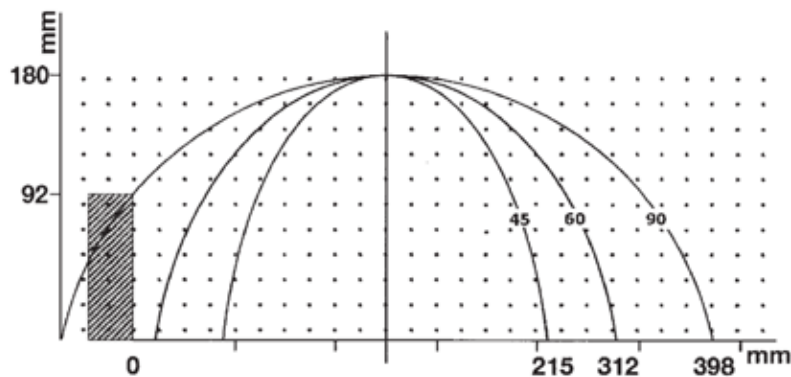
#### Optional Equipment

- Infeed & outfeed tables
- Pneumatic spray mist lubrication
- Pneumatically operated upper guard



#### Specific Capacities

- Heavy duty construction for long machine life
- The moveable back fence enables you to cut bigger profiles both straight and miter cut
- When the cutting process is finished, the saw blade moves down to its starting point automatically for safety reasons
- Fixed angle adjustments at 15°, 22.5°, 30°, 45°, 90° and 60° on the right side. Intermediate angles are adjusted via mechanical stop
- The rising speed of the saw blade can be adjusted as required
- Built-in handle for turning the table to the desired cutting angle
- Net height cut 180 mm (7")







## **SCREENING TABLES**

There are three basic ways to manufacture anything: manually, automatically or manually with power assist. The choice depends upon many variables, including volume, capital expenditure appropriations, and preference. Often, the decision is difficult, and the results questionable. This is especially true with the screen making process.

Producing screens remains one of the most labor intensive areas of manufacturing today. It is extremely difficult to find employees to perform this task, and even more difficult to retain them. Once a manufacturer has an experienced "screener", they soon become one of the highest paid, and most expensive employees to maintain.

**Wakefield** screening tables offer a solution to these dilemmas. With a low cost, but effective means to assist with the screening process, a fabricator can now put inexperienced, and lesser paid employees to the task.

Another problem facing employers with the screen making process is repetitive stress injury. Sometimes known as carpal tunnel syndrome, this is becoming a greater concern every year. Workers compensation claims, and poor morale are just two of the drawbacks.

The **Wakefield** screen table also helps in this area. With the power assist of an articulating arm, and ease of use, potential claims will be reduced. Added bonuses will be higher worker morale, increased productivity, and a square product without bows.

We encourage you to review the following information, and give us a call. Our screen table is just one more example of how we can help you to increase productivity, reduce costs, and make a better product.

**SCREENING TABLES****Until Now, Making Screens Was a Real Pain**

Today, this has all changed. The low cost **Wakefield** Screen Making Table with its simple mechanical design and pneumatic assist can be a big benefit to your operation. It allows you to:

- Train any employee in less than 10 minutes.
- Reduce operator fatigue.
- Minimize workers compensation claims.

**It's easy to use! Here's how:**

- Position the frame on the table with the self locking discs.
- Pull the film and spline from one of three convenient spools.
- Glide the suspended articulating arm over the frame.
- Press the pneumatic trigger to plunge the insertion wheel.
- Trace the frame with the insertion wheel to complete the screen.

Take a moment to review the enclosed literature. Prices start at around \$4,000 for a complete system. To receive a proposal, contact us. Let us help you run your plant more efficiently, and more economically starting today!



**SCREENING TABLES****Making screens is an extremely labor intensive operation.**

Usually, only a few select employees are able to perform the job, and there can still be quality problems and the potential of developing carpal tunnel syndrome.

If this concerns you, take a hard look at this system. Developed to offer an economical way to increase productivity, insure quality and eliminate carpal tunnel, it can be a critical piece of equipment to your operation.

Each **Wakefield** screen table comes with three film spool rods and three spline rods. The top is made from non-marking Formica which is grooved for self-locking discs. These discs provide exact squaring for each screen.

The spline insertion wheel is actuated pneumatically with the use of a trigger. This wheel glides across the table to any position, and is suspended with an articulating arm. The arm has two sets of ball bearings for effortless movement.

Each **Wakefield** screen table has a heavy duty welded steel frame. It is adjustable in height from 30 to 36 inches to accommodate all workers. It is best used with fiberglass mesh. These tables will:

- Increase your operation
- Reduce operator fatigue
- Give consistent quality
- Simplify your operation

Remember, when it comes to look at your production needs, turn to us. We're here to help with high performance, and affordable products.







## CUSTOM SOLUTIONS FROM WAKEFIELD EQUIPMENT

**WAKEFIELD** can supply a custom solution to your manufacturing needs. Once approval is received, typical time frames are around 6 weeks although complex projects may take a little longer. Typical steps within the process include:

We begin by discussing your needs and reviewing the problem or project which you have in mind. Capacity concerns and a budget outline are requested. We then ask for a simple sketch from you to confirm our discussion. We will review the sketch, and make suggested changes.

1. A preliminary estimate is supplied which determines if the solution will fit into your budget.

2. Upon approval of the estimate, a detailed drawing will be supplied by us for final approval.

3. After the order has been entered, you will be given a time table, and invited to inspect the equipment during construction, or we will supply photos for your review.

4. Once the product has been shipped, we can supply installation assistance if necessary to help with set up.

## CUSTOM SOLUTIONS



### Roller Presses

- Minimizes breakage and provides accurate gap sizes for I.G. units
- Extra-wide capacity and custom work height
- Available with a heated roller press for insulated glass units
- Custom gap size available

### Drill & Staple Station

- Drill holes directly in to your lineals to secure fixtures such as locks and handles.
- TigerStop length per specification (machines range from 4-30 feet)
- Adjustable drill and staple gun
- Up/down pneumatic clamps
- Programmed to store your unique work order



### Laser Etching Air Table

- Easily mount the laser of your choice
- Provides stable setting for laser etching identification or certification
- Special carpeted top won't scratch units
- Air-float makes it easy to move units on and off



### Seaming Table

- Built to your specifications for mounting any type of seaming machine
- Ergonomically designed to increase efficiency and reduce fatigue
- Non-marking casters to handle heavy units without incident
- Perfect for multiple applications





## CUSTOM SOLUTIONS



### Free Fall Arm

- Eliminates the need for manually dropping or holding glass
- Can be mounted in several different positions around free-fall table
- Independently drops different glass types from free-fall bases or drawer system
- Use with your existing system or part of new glass line from Wakefield Equipment

### Film Application Table

- Efficiently apply film outside of individual lites or I.G. units
- Automatic feed makes for a productive cycle
- Available for any width of glass and built to your specifications



### Carousel

- Easily access various types of film without taking up valuable space
- Eliminates time consuming process of setting up individual film
- Can be set up to automatically rotate to the film type you select
- Built in any size

### Glass Washer

- Comes in 2 main sizes: 60" capacity and 84" capacity
- Standard features include circulating detergent & rinse systems, heater safety shut-off, stainless steel tank, dividers and pumps
- Up to ¼" thickness, no adjustment
- 5 pairs of solid rubber rollers throughout
- Clamshell top allows for easy access to service



## CUSTOM SOLUTIONS



### Door Barrel

- Allows for easy access to both sides of unit
- Can be operated by a single employee
- Eliminate back injuries due to heavy lifting
- Can be fabricated to use in multiple applications

### Custom Door Dolly

- Front end roller makes for easy loading
- Slotted HDPE base and support fingers keep units securely in place
- Perfect for transporting around the facility or shipping
- Built to your specifications



### Oversized Door Assembly Rack with Pneumatic Tilt

Another example of how Wakefield Equipment helps the customer find solutions. This custom-built assembly rack makes the process of setting, clamping and moving oversized units to the next phase of your assembly process easier than you thought possible. Let us know how we can help you find the best solution for your plant.



## CUSTOM SOLUTIONS

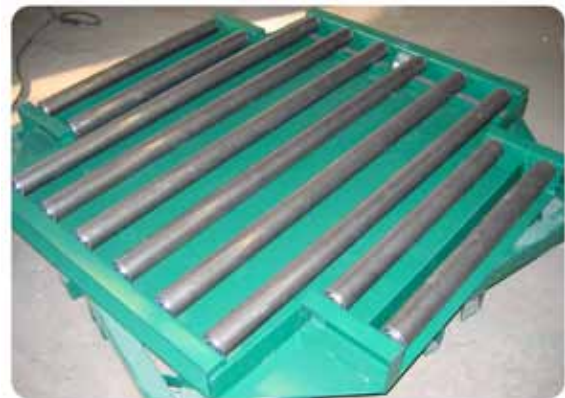


### Manual Rotation Table

- Economical and user-friendly
- Roller surface makes for easy loading and unloading
- Add tabletop to an existing work table, or have one custom built for you

### Automated Rotation Table

- Save time and avoid injuries
- Solid HDPE strips over steel makes for easy transfer
- Pneumatically raise the center section and rotate 360°
- Great for multiple applications and built to order



### Spacer Printing Station

- Fits all sizes of aluminum spacers
- Variable speed (approximately 200 feet per minute)
- Load/Offload tables with stainless steel trays available

### Pneumatic Tilt Table with Extendable Sides

- Retractable ledges make it easy to work while in horizontal position
- 3 side extensions to accommodate larger units for assembly
- Built to your dimensions and different tabletop surfaces are available



## CUSTOM SOLUTIONS



### Hydraulic Door Press

Ideal for pressing architectural and commercial doors, Wakefield's hydraulic door press offers 6,000 pounds of pressing force and is suitable for pressing header rails on to tempered glass doors. It features 3 suction cup-turning cylinders and its length is adjustable. Call us today to find out more about this impressive piece of equipment.

### Punch Press

- Pneumatically punch holes or slots on to aluminum and vinyl (PVC) profiles
- 4 dies can be attached to the press simultaneously
- Changing dies is fast and easy
- Operates via pneumatic system with foot pedal
- Can be used with a profile support system



### Automatic Single Corner Vinyl (PVC) Welding Machine

- Composed of steel plate chassis for guaranteed stability
- Adjustable set squares placed over aluminum tables provides welding between 15° to 180°
- Equipped with electrical, pneumatics protection and safety systems for machine operator's safety
- Machine has been designed for corner connection of PVC profiles in 15° - 180° degrees by melting

**For additional specifications and options on this machine give us a call today!**



### Copy Routers

- Designed to open key holes, slots, holes and other window & door accessory shapes on to PVC and aluminum profiles
- Available with manual or pneumatic clamps
- Copy templates are customized to profile drawings supplied by customer

**Call us today to find out more!**



**NOTES**

