

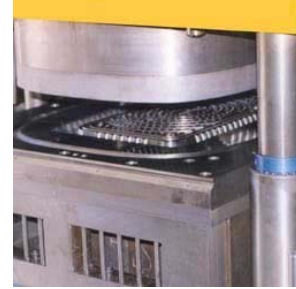
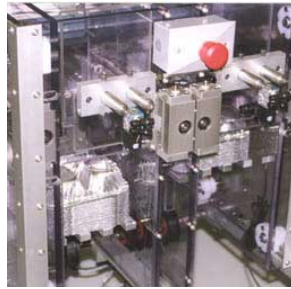
New Tooling
Tooling Repair
Dereelers
Air Consoles
Stackers
Depositors
Consulting
Design Services
Research &
Development



Foil Die International
Huntington, Indiana USA

FOIL FORMTM

Company Information



Foil Die International was founded in 1993, to meet the growing demand for quality tooling and machinery in the aluminum foil container industry. Our products and services include, New Tooling, Tooling Repair, Design and Engineering Services, Research and Development, Peripheral Press Equipment and Productivity Equipment.

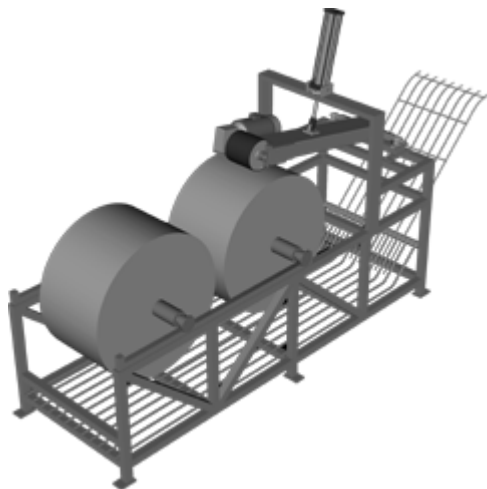
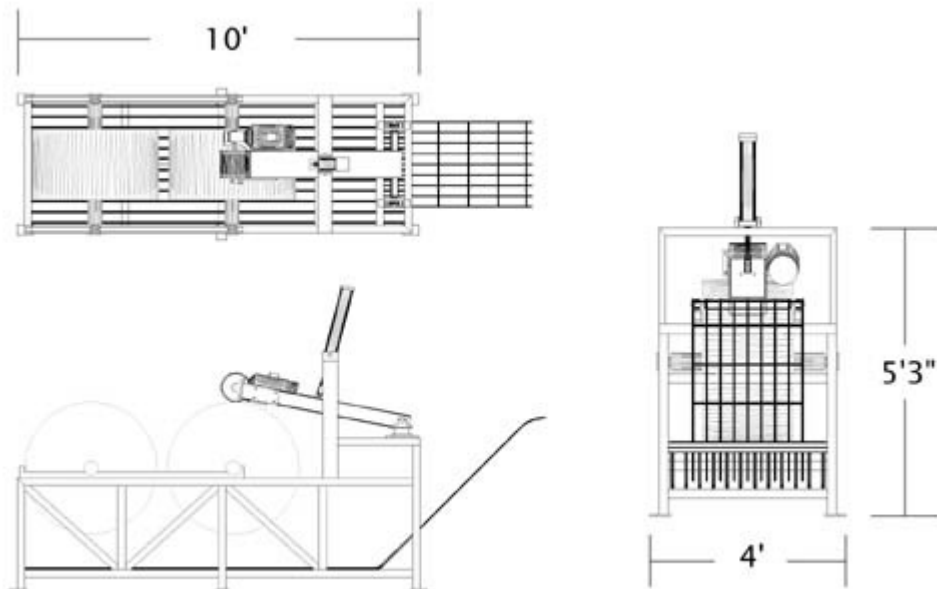
We only service the foil container industry, so our personnel specialize in foil tooling and the special machinery used in stamping foil containers. In addition to our highly skilled personnel, our manufacturing process is comprised of the most advanced technology available for designing and manufacturing both tooling and machinery. We use sophisticated

CAD/CAM software in conjunction with CNC machinery to minimize the time it takes to bring a concept to full production.

We take great pride in providing a one of a kind level of service to our customers. We make every effort to meet and exceed the customers' expectation on quality, price, delivery and above all product satisfaction. The customer is the most important part of our manufacturing process and is kept informed on the status of each project through direct consultation and web based project reporting. To help insure customer satisfaction each product we sell comes with an unconditional six month warranty against manufactures defects.

Foil Dereelers

The Two-coil aluminum foil dereeler is designed to provide the servo or mechanical feed on the press with an unrestricted loop of aluminum foil. The two-coil configuration will help minimize the down time associated with material changes. Rigid steel frame construction and the direct drive system will require less maintenance and provide longer life over the classic belt or chain driven systems.



Product Benefits

- Consistent Material Flow
- Quicker Coil Changeovers
- Direct Drive System
- Decreased Down-Time
- Greater Efficiency

Superior Quality

Our high quality welded frames provide **maximum rigidity** thought the life of the dereeler.

Core spindles are custom made to fit the core of your raw materials.

Foil dereelers come with a **6 month warranty**

Direct Drive Technology

An 8" diameter rubber lagged drive wheel provides the main contact surface with the raw materials.

The drive wheel is driven directly by a 1 1/2 horse motor with **variable speed controls**

Dynamic breaking allows optimal control of coil inertia.

There are no belts or chains used in the direct drive system, thus providing a safer more stable process

Material Coil Changes Made Easy

Two coil capacity allows for a material coil to be loaded while the other coil is in use thus decreasing your associated down-time.

Coil changes are easily performed by sliding the roll "in waiting" into position and starting the material feed.

An **air cylinder** mounted to the Armature allow the user to easily raise and lower the arm into position when loading a new coil.

Feature	Standard	Option
Direct Drive	■	
Dynamic Breaking	■	
Variable Speed Drive	■	
Pneumatic Arm Control	■	
Core Spindles (2)	■	
2 Coil Capacity	■	
Material Feed Rack	■	
6 Month Warranty	■	
Additional Core Spindles		■

Material Flow

Fluid transition between the coil and the press is provided through a monitored feed loop.

Solid state proximity switches control the start and stop of the coil to insure efficient material flow.

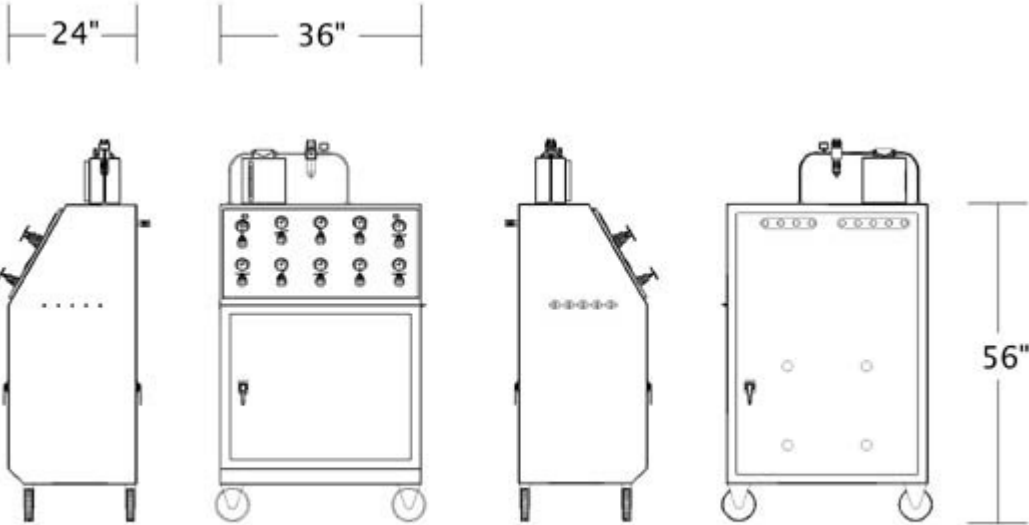
Air Console

To create a quality container it involves several key factors, one of which is internal pressure control in the die. Our Air Consoles allow you to adjust the pressure for Draw (Lower Cushion), Head (Upper Cushion), blow up, blow down, IVC Piston, Lube, and Stripper. The air console will allow you to make precise pressure changes quickly and easily, thus providing you with infinite control over the forming process.



Product Benefits

- More Control over Internal Die Pressures**
- Quicker Die Setting**
- Higher Quality End Products**
- Mobility**
- Increased Die Versatility**
- Greater Efficiencies**



Die Set-up made Easy

Each air console has the capacity to regulate one or two station tools.

With minimal additional setup you can run full curl, IVC, hemmed edge or raw container styles.

Quick disconnects allow for a more productive set-up procedure

Quality Construction

Rigid **12 gauge** steel enclosure

Electric solenoid valves are used to control the timed air functions within the tool.

Each air console is constructed with high quality push-on fittings for increased life and easy maintenance.

An optional air amplifier is available to increase the usable head pressure.

Pressure tested surge tanks are installed for the Draw and Head pressure to help stabilize back pressure.

Air Consoles come with a **6 month warranty**

Die Lubrication System

Lubrication systems are integrated into the design of each Air Console

By incorporating a die lubrication system into the air console we can increase the likelihood of proper lubrication and **increased tool life**.

Refillable 1 gallon reservoir makes it easy to monitor and refill lubricant.

Feature	Standard	Option
Inlet Dryer	■	
Inlet Lubricator	■	
Die Lubrication System	■	
Electric Solenoid for Lubrication System	■	
IVC Controls (2)	■	
Head Pressure Controls (2)	■	
Draw Pressure Controls (2)	■	
Timed Air Controls (3)	■	
Lube Outlets (3)	■	
Stripper Pin Outlets (1)	■	
Additional Auxiliary Port		■
Air Amplifier		■
Applicable Cords and Hoses		■
6 Month Warranty	■	

Flexibility

Adjust and monitor internal die pressure "**on the fly**" to increase end product quality.

Easy to read gauge interface

Five timed air controls that work with the cams in your press

Stackers

Stackers provide an efficient method of stacking and counting aluminum foil containers as they are being produced. They help reduce the likelihood of over/under shipping by insuring the proper number of containers are in each stack. Stackers come in several styles to meet both container requirements and customer specifications.



VDS Style

Product Benefits

Eliminate Over/Under Shipments

Reduce Operating Costs

Greater Employee Efficiency

Space Concise Design

Custom Built for each Application

Our aluminum foil container Stackers are custom designed for the specific container or containers that you wish to stack. We build four main styles of stackers, they are; Vertical Drop Stacker (VDS), Vertical Drop Palette Stacker (VDSP), Waterfall and Custom. Most containers can be stacked using the vertical drop style or the vertical drop palette style, but the waterfall and custom styles are used when required either due to custom request or design specifications.

Vertical Drop Stacker (VDS)

As the containers leave the press they land on a conveyor belt, which feeds the containers into the stacking well. As the containers enter the stacking well they are counted, when a predetermined sub-count is reached rotary actuated paddles release the stack of container and drop to the bottom of the stacking well. This process continues until the stacker reaches the total predetermined count for a finished stack. Once the last "sub-stack" is dropped a transition paddle is actuated and the containers are pushed laterally to the exit conveyor belt. The stacked containers travel on the exit conveyor where they are picked up by the user and placed into the boxes for shipment. The single station VDS is U-shaped to minimize the required floor space.

In a multi-station tool the sub-stacks are dropped onto the exit conveyor directly and the finished stacks exits the stacking well from the front and are then packed as they exit the stacking well.

Quality Construction

Each stacker body is constructed of extruded aluminum components.

Our Stacking wells are constructed of clear material so as to allow for the entire well to be visible.

All electronics can be custom specified to match your current inventory of spare parts or our standard **Allen Bradley®** components can be used.

We use **food grade white nitrile** laced belting for the upper drive and a variety of nitrile or urethane belting for the exit conveyor. Custom belts are available if requested.

Each Stacker comes with a **6 month warranty**

Various Style Descriptions

Waterfall Stacker

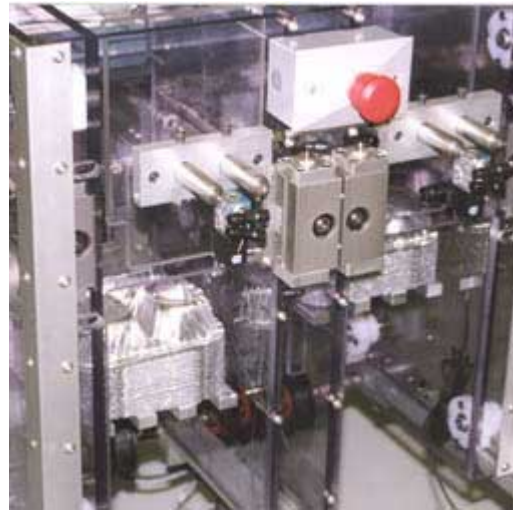
As the containers leave the press they land on a conveyor belt, which routes the container to into stacking lanes. Here they are forced down a radius shoot to a lower conveyer belt. When they reach the end of the radius they are blow onto the next conveyor belt in the vertical position. As the containers enter the second belt they nest within each other. The second conveyor belt is actuated each time a container leaves the "waterfall". The waterfall stacker allows the containers to be stacked horizontally in the stacking lanes. The user then reaches in and selects the proper amount of containers needed for each package. The downfall of this design is that it does not provide pre-counted stacks of containers.

Count Separating Mechanism

A count separating mechanism is available for the waterfall style stacker that allows for a set amount of space to be inserted between stacks. The containers are still stacked horizontally, but they are separated into stacks of predetermined quantities. The inclusion of this feature will require additional space.

Vertical Drop Palette Stacker (VDSP)

The VDSP is similar to the VDS except that within the stacking well there is an aluminum palette. This palette rests just under the rotary actuated paddles and allows the containers to drop the minimum required amount in order to clear the paddles. Each time a sub-stack of containers is dropped the palate lowers. Once the stacker has reached the total stack count the palette lowers the remaining distance and the containers exits the stacking well. VDSP style stackers provide a method for eliminating the "float" that sometimes occurs in smaller containers causing the container not to stack properly.



Custom Style Stacker

If you have a container, which will not work, in any of the listed styles or your physical constraints do not meet any of the style requirements then a custom style can be generated to meet your needs.

Depositors

Depositors are custom made for each container. The Depositor's variable speed drive allows you to optimize the number of containers that can be processed through a secondary operation such as adhering labels. They require little maintenance and provide a long useful life.

Product Benefits

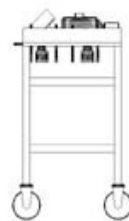
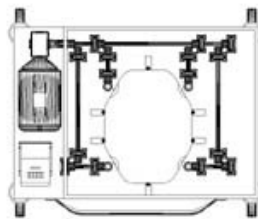
Efficient method of dispensing containers

Containers are dispensed without damaging or marking containers.

Variable speed controls allow you to match a secondary operation.

Highly mobile—locks into place when applied.

The 15 foot power cord plugs into standard wall socket.



Depositor depicted as example only size will vary based on customer specifications

Quality Construction

Depositor bodies are made from welded 2 inch steel structural tubing.

1 inch aluminum tooling plate provides a stable base for the depositor.

8" casters and locks provide increased mobility

Variable speed drive will dispense containers at speeds exceeding 120 containers per second.

Each Depositor is structured around our **Stainless Steel Double Lead System**

The leads are powered by a 1/2 horse three phase motor and right angle gear box.

The gears are completely enclosed with a Plexiglas shield for **maximum safety** to operator

Stainless Steel Double Leads

Each depositor encompasses on our revolutionary stainless steel double lead system. The "Pickup" lead is used to separate the individual containers from the original stack, the second lead is used to rapidly pull the container away from the stack. This allows for the container to fall unhindered from the stack. The stainless steel lead is heat-treated to 50 Rockwell to reduce wear and increase life.

Precision Gears and Bearings

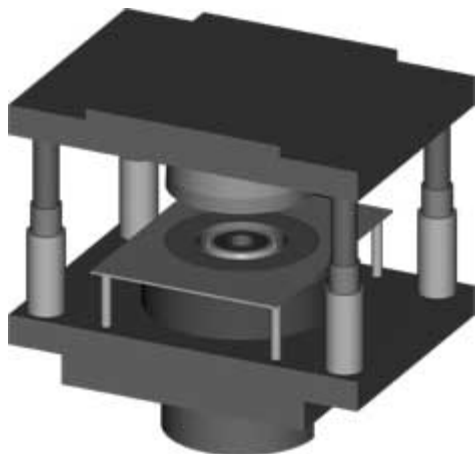
Steel miter gear and bearing drives: The mechanical movement of the leads is done through a series of quality miter gears which are supported by ground shafts and bearings. Standard components are used so that they can easily be replaced if maintenance is required. Guarding placed around the mechanical drives protect any user from being injured during operation.

Performance Guarantee

Each depositor comes with a performance guarantee. To insure this we require sample containers to be sent to our facility for the testing of the depositor

Tooling Services

New tooling and tooling repair is at the core of our business. We provide high quality custom tooling for every container style available. We also provide new tooling for completely new container ideas. We have in house engineering and design services and the latest technology in computer aided manufacturing. We are confident we can meet all your tooling needs.



Tooling Services

[New Tooling](#)

[Tooling Repair](#)

[Preventative Maintenance](#)

New Tooling

Dedication

At Foil Die International new die design and manufacturing is the core of our business. Our company only services the foil market and therefore, our success relies heavily on new die manufacturing. Recently, we have added addition capacity to our operations and to take advantage of this we have developed a new die program that we think is the best offer available. We combine state of the art design, engineering and manufacturing with unparalleled warranties to insure your satisfaction with any new tooling purchased from our company.

New Tooling Features

Electronic Prints

(Digital Copy of all prints accompany fully printed designs upon completion)

Product Drawings

(Upon design completion a drawing of the final product is submitted)

Die Stand

(Steel Die Stand used for shipping, maintenance and Storage. Approx. weight 100 lbs.)

Digitized Blank

(Each blank is electronically captured to insure accuracy on all replacement parts)

6 Month Limited Warranty

(The die is warranted against manufactures defect for six months from delivery date)

Experience and Quality Service

Each toolmaker has extensive experience in aluminum foil container tooling

Our manufacturing environment is designed explicitly for producing and repairing foil tooling.

Design and manufacturing are connected through high speed computer networks to facility a faster and more accurate manufacturing process.

Tooling Repair

Tooling Maintenance: Tooling maintenance usually needs to be performed at the most inopportune times. To accommodate this Foil Die International offers both expedited and normal repair services.

Standard Service

This type of repair is usually performed on tools that are not currently in production. This is a more scheduled process where the tool is sent in and the repairs are made and then tested in our press. Updates are then posted onto project reports via the Internet. Whether you have an immediate repair that needs expedited or a schedule maintenance project, we are able to provide high quality repairs to your tooling in a timely fashion.

Expedited Service

If a tool needs repaired and Foil Die International manufactured it, we can begin the repair process immediately upon notification. If it requires a new part we have all the information necessary to the process. All other tools can be expedited by either sending a fax of the print or emailing a copy. If it is a repair that requires the tool to be sent to us the prints can accompany the tool. Expedited service is placed immediately into production, thus, minimizing downtime. If necessary our own drivers can pick-up or deliver expedited repairs.

Preventative Maintenance

Preventative maintenance on your existing tools is also available. We will work with you to develop a schedule and custom program that meets your requirements. We can either pick up and deliver the tools or they can be shipped by common carrier. All P.M. work is picked up and returned usually within 4 business days. Our standard P.M. package consists of the following:

Preventative Maintenance Includes

Disassemble Die

Clean Components

Change Quad Rings

Change O-rings

Inspect Components for Damage

Remove Any Galling

Stone and Polish Rough Draw Surfaces

Inspect Pins, Bushings and Ball Cages in Die Set for excessive wear

Sharpen Cutedge

Sharpen Form Punch if Necessary

Lubricate Complete Tool

Reassemble Tool

Inspect Stripper Pins

Try Out in Press

Professional Services

At Foil Die International we compliment our products with an outstanding level of service. Our Professional Services range from design and engineering to full turnkey plant implementation and management. We believe have assembled a comprehensive set of products and services to meet all your foil stamping related needs.

Design & Engineering

With each new tool purchased we provide full design and engineering service. Our designers can take either a product drawing or an actual container and produce a full set of tooling designs. The design process is done on the most current CAD software available. Upon completion of the tool the designs are transferred to you via CD ROM and a full set of paper prints.

We offer fee based design services for the engineering of complete tooling prints to our international customers. The design service is priced based on the specific container that the tool will produce, along with the characteristics of the tool such as the number of stations. The design process usually takes four weeks to complete.

Research and Development

Foil Die International has an up to date design facility that can create both electronic prototypes and real world prototypes. We often are requested to turn a customer's ideas into 3-D electronic drawings, that can be viewed on the web. Real world prototypes are also possible using plastics and wood to manufacture the necessary parts to create a sample product. Rapid prototyping allows the customer to test concepts from an engineering and marketing stand point without incurring high levels of expenditures. Our design facility can usually turn ideas into 3-D prototypes in under a week.

Turnkey Implementation

Foil Die International has personnel with experience setting up foreign and domestic foil stamping facilities. We have the ability to handle the entire project from designing, and manufacturing machinery, to plant installation and setup, to training of personnel. We are able to work both on and off-site to insure a smooth transition into manufacturing.

Latest Technology

We use the most current software available for both CAD and CAM operations

Prints supplied on CD ROM, e-mail and paper copies

High speed computer network connects design directly to manufacturing



3-D Product Drawing created in CAD software to test new product design

Manufacturing Consulting

Our staff has extensive experience in implementing, running and maintaining foil tooling, scrap systems, peripheral equipment and packaging equipment. We are able to provide customers with a comprehensive resource for answering most questions that arise in the production of foil containers. We can help in the development of a new product, planning and implementation on new lines, or even aiding in the start-up of complete plants. This service is usually billed out on an hourly basis and the fee ranges on the complexity and length of the project.