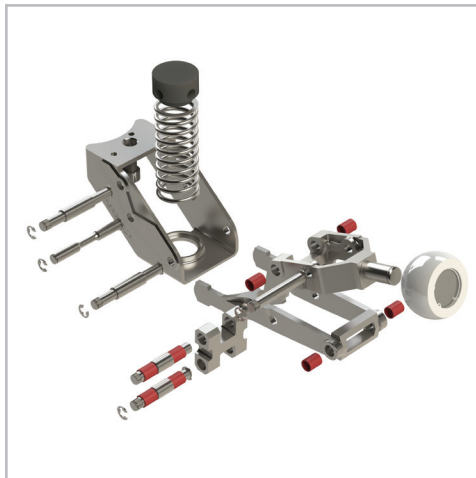
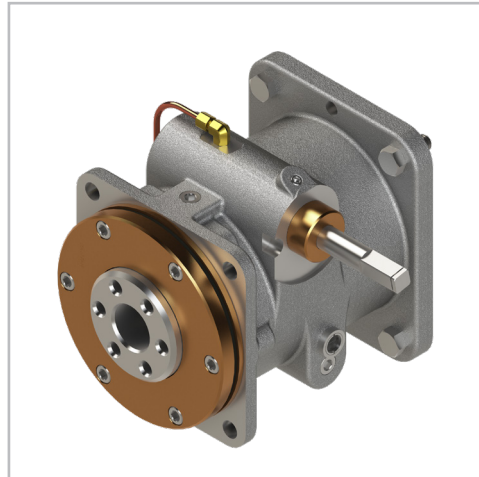
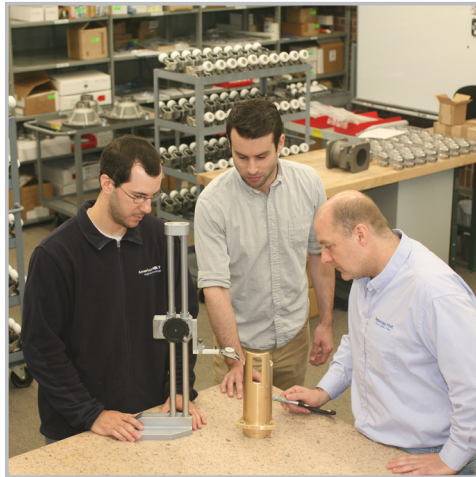


American **HOLT** *engineered savings®*



MRO Strategies for OEM Parts and Assemblies

www.americanholt.com



American Holt is a full-service engineering firm focused on the reverse engineering of high-usage machinery components. Founded in 1995, American Holt manufactures aftermarket replacement parts for machines used by the beverage, food processing, packaging, and paper converting industries. We provide engineered savings to customers around the world.

CONTACT:

American Holt
203 Carnegie Row
Norwood, MA 02062
781-440-9993
sales@americanholt.com

HOURS:

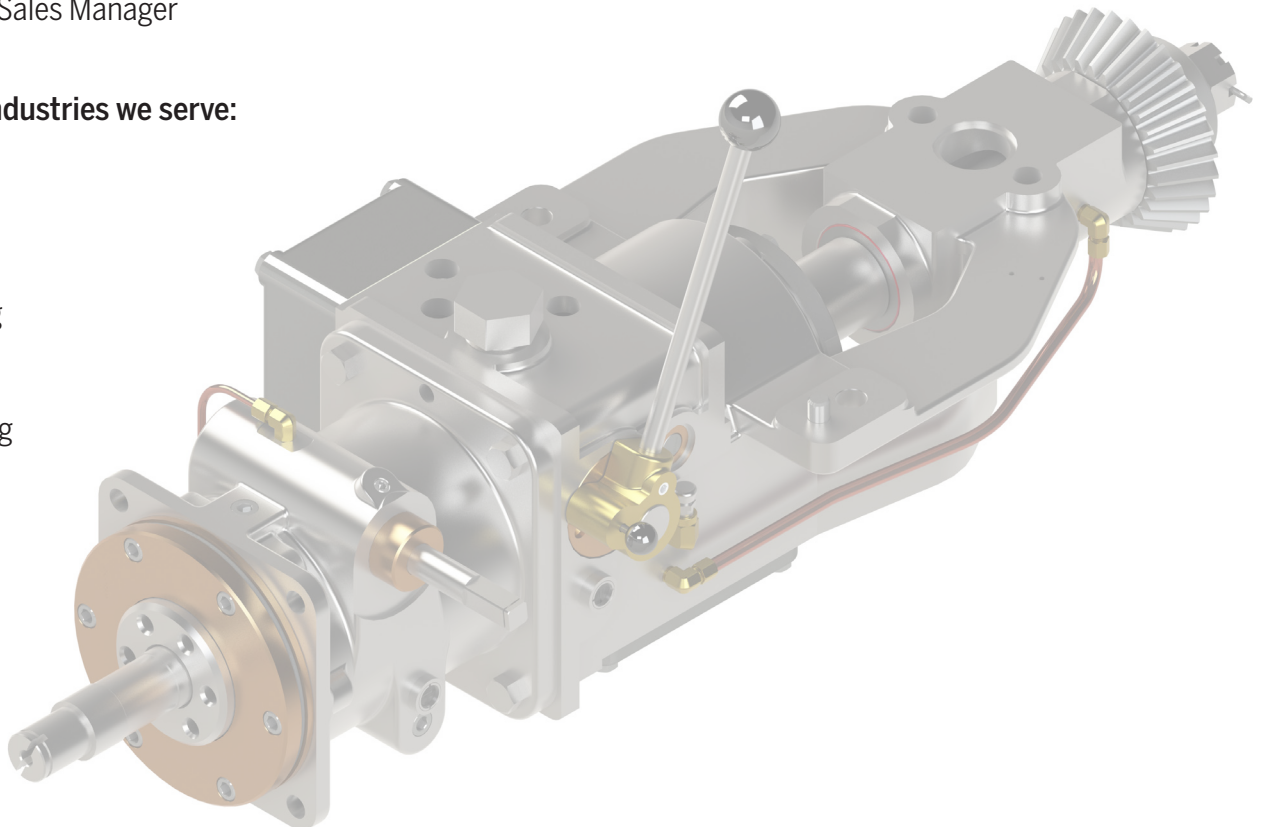
Monday-Friday
8:00am to 5:00pm EST

SALES:

Tom St. Lawrence, President
Charlene Butts, Sales Manager

Partial List of industries we serve:

Blow Molding
Bottling
Canning
Food Processing
Meat Processing
Packaging
Paletizing
Paper Converting
Printing
Robotics



Collaboration and Planning

At American Holt, we work with you to understand your specific maintenance and reliability needs and identify mission critical parts and assemblies. Our assembly rebuild programs will help to reduce changeover and repair times, free up your maintenance team, and implement your lean manufacturing goals. Let us craft a customized solution for you.



Exceptional Service, Quality, and Savings

American Holt provides exceptional customer service to deliver high quality aftermarket parts and save you money. That's why our reverse engineering services are used by four of the five largest food and beverage companies. Just three of our success stories:

- Our comprehensive original equipment manufacturer (OEM) conversion program has resulted in over five million dollars in savings by a major food company.
- American Holt has worked with the largest beverage companies to deliver in stock assemblies for filling, bottling, and seaming, allowing for quick maintenance swaps.
- With over 800 parts in stock, American Holt has established itself as the industry leader for replacement parts in the envelope converting and printing industry.

Call us today and discover why American Holt is your best solution as a second source for expensive and hard-to-find replacement parts.

American Holt makes things happen.

With many parts in stock and ready to ship, American Holt can deliver with little or no lead-time, shipping parts to you within 24 hours. Quicker turnaround results in reduced downtime, increased productivity, and a healthier bottom line.

Our parts meet or exceed OEM quality.

American Holt produces the highest quality aftermarket parts; we are proud of our ability to meet or exceed OEM quality. We can help you save money by improving the composition to create longer lasting parts. And, our in-house engineering and quality control teams rely on state-of-the-art metrology equipment to assess and quality-check our manufactured parts for material, fit, and function.

Trust American Holt for engineered savings.

We know how important your budget is. Trust us for engineered savings. Save 15% to 40% off OEM prices for in-stock parts that will keep your machinery running efficiently and increase up time. In-stock parts enable you to reduce on-hand inventory costs and eliminate machinery downtime to improve your bottom line.

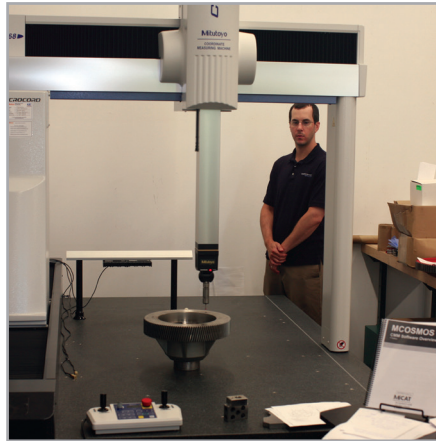
Reverse Engineering and Design

State-of-the-art reverse engineering at American Holt is the result of over 20 years engineering experience and innovation. It is critical that parts are reverse engineered in context to their function in the machine and to the assembly that they are a part of. With this knowledge we can accurately dimension and tolerance the parts that we make.



Computer Aided Design

We have developed a two-step process whereby our engineers reverse engineer the parts and assemblies and develop 3 dimensional models in SolidWorks. Our engineers then add dimensions, tolerances, surface finishes, material hardness and specifications, and other instructions.



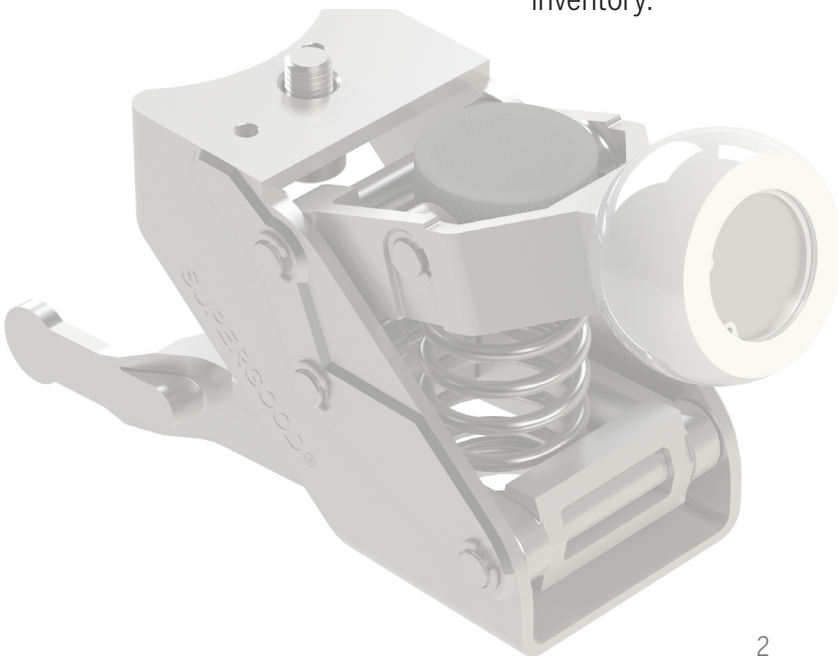
Quality Control

Quality Control takes the finished SolidWorks manufacturing drawings from the engineers as well as the OEM sample part and mating parts and performs a thorough inspection to the supplied blueprints. This second step is critical to our process. The same rigorous inspection occurs after parts are manufactured, prior to being placed in inventory.



Precision Metrology

We have invested millions of dollars in state-of-the-art metrology equipment to ensure accuracy. Pictured in the center column is our latest fully programable coordinate measuring machine (CMM) with both laser and touch probes accurate to four hundred millionths of an inch.



Additive Manufacturing 3D Printing

At American Holt, we utilize technology to ensure great outcomes. 3D printing plays an important role in our manufacturing process. We use 3D printing to test fit, form, and function; test fixtures; and print durable plastic molds for short casting runs.



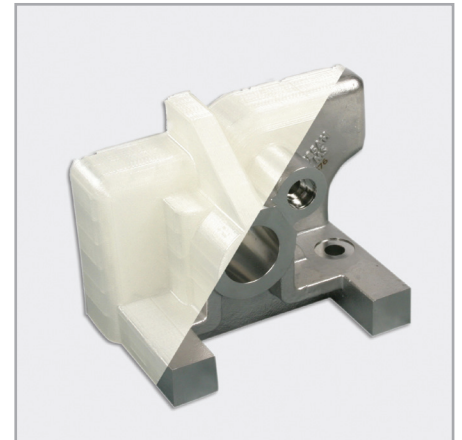
Fit, Form, and Function

With complex parts and assemblies, it is a great advantage to test a sample part for fit, form, and function. At American Holt, we often print a plastic 3D model of a part to enhance the quality control process. Additionally, it allows us to work with our customers to develop improvements together.



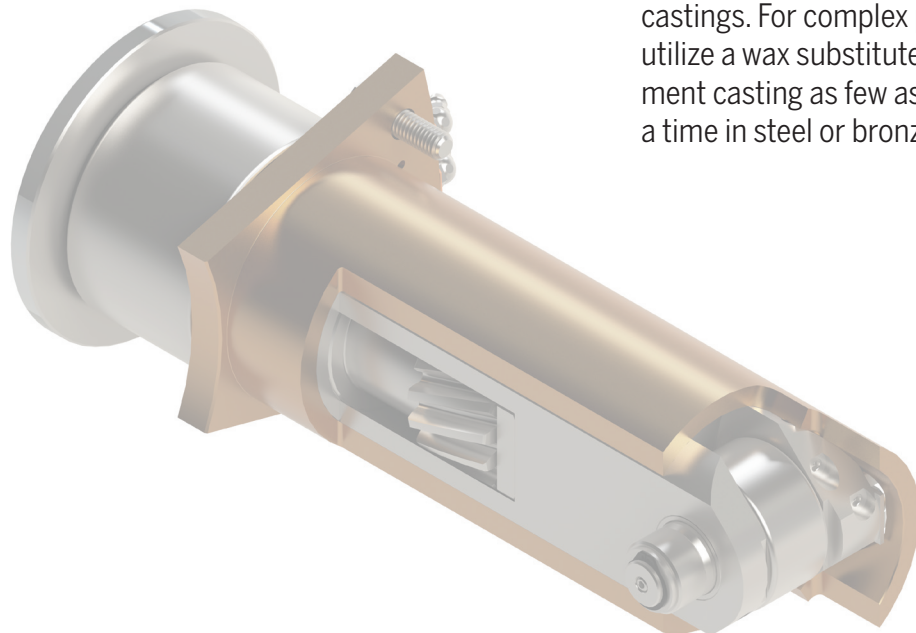
Assembly and Test Fixtures

3D printing allows for cost effective assembly and test fixtures of all types. Pictured above is an assembly fixture that ensures that a lever is vertical to enable accurate alignment for a bearing press fit.



Casting Patterns

Traditional casting technologies require expensive patterns which, when amortized over a small quantity of parts, makes an ineffective cost solution. At American Holt, we have developed a short run 3D printed mold program. For sand casting we 3D print durable plastic molds that can last for fifty or more castings. For complex parts we utilize a wax substitute for investment casting as few as one piece at a time in steel or bronze.



The American Holt Process

1



2



3



4



FAST TRACK



EVALUATION



ANALYSIS

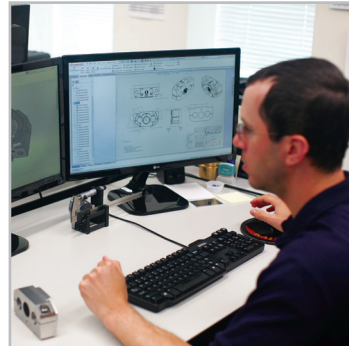


DESIGN



Send Us Your Part

Whether you send us an actual sample, or use our Fast Track Quote Request, we will respond to your request promptly. We then track your part through the process.



Preliminary Quote

Once we receive your part, our engineers will evaluate it to determine how we can provide value, and we will issue a preliminary quote.



Material Laboratory

We use a combination of technologies including X-Ray Fluorescence, Fourier Transmission Infrared, and Optical Emissions Spectrometer to pinpoint the exact materials used by the OEM. With so many variations of materials, this step is critical.



Computer Aided Design

Our engineers render parts in SolidWorks using our proprietary two-step process. In addition to understanding how parts function in a machine, we have developed strict protocols used in specifying fit, finish, and tolerance.

5



6



7



8

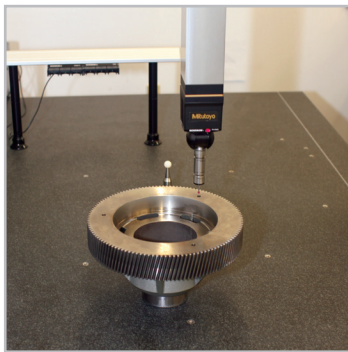
TESTING



Specialized Testing

We use several types of hardness testers to test metals and plastics. Surface roughness testers provide details for critical surfaces. Force gauges measure spring tension. Specialized gauges help test splines, keyways, and gears and holes.

QUALITY



Quality Control

During the second part of our quality control process, we independently confirm every dimension on the manufacturing drawing to the Original Equipment Manufacturer's part.

INSPECTION



Incoming Inspection

Once parts have been manufactured, they go through the same rigorous inspection and testing process that was followed in quality control.

INVENTORY



Inventory

We maintain an inventory of over 2,000 parts so you don't have to. We ship over 99% of all catalog parts from stock. Let us keep you up and running.

Inventory and Efficiency

You can count on American Holt to respond quickly with the parts you need to get production up and running. We keep an extensive inventory on hand, and we will work closely with you to guarantee the parts you need are in stock.



Avoid Downtime

When your line is down, you can depend on American Holt to respond quickly with the parts you need to get production up and running. By making large quantities of parts we ensure ample inventory and create value by amortizing engineering and set-up costs over a larger run.

Extensive Inventory

American Holt stocks over twenty million dollars in parts inventory so you don't have to. We take the time to understand your parts requirements to ensure they are available when you need them. We ship over 99% of all catalog parts immediately from stock.

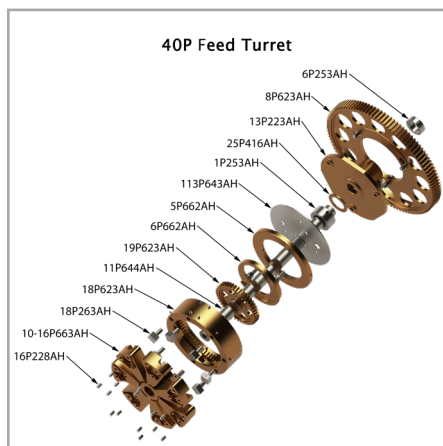
Guaranteed Inventory Program

If you have critical spare parts that are not part of our catalog, we can guarantee their availability, including obsolete and hard to find parts. We will work with you to identify these parts and create a solution together that will guarantee we keep that inventory stocked.



Comprehensive Solutions

American Holt offers comprehensive solutions for your specific requirements. Our assemblies, parts kits, and rebuild programs save you time, and money.



Assemblies

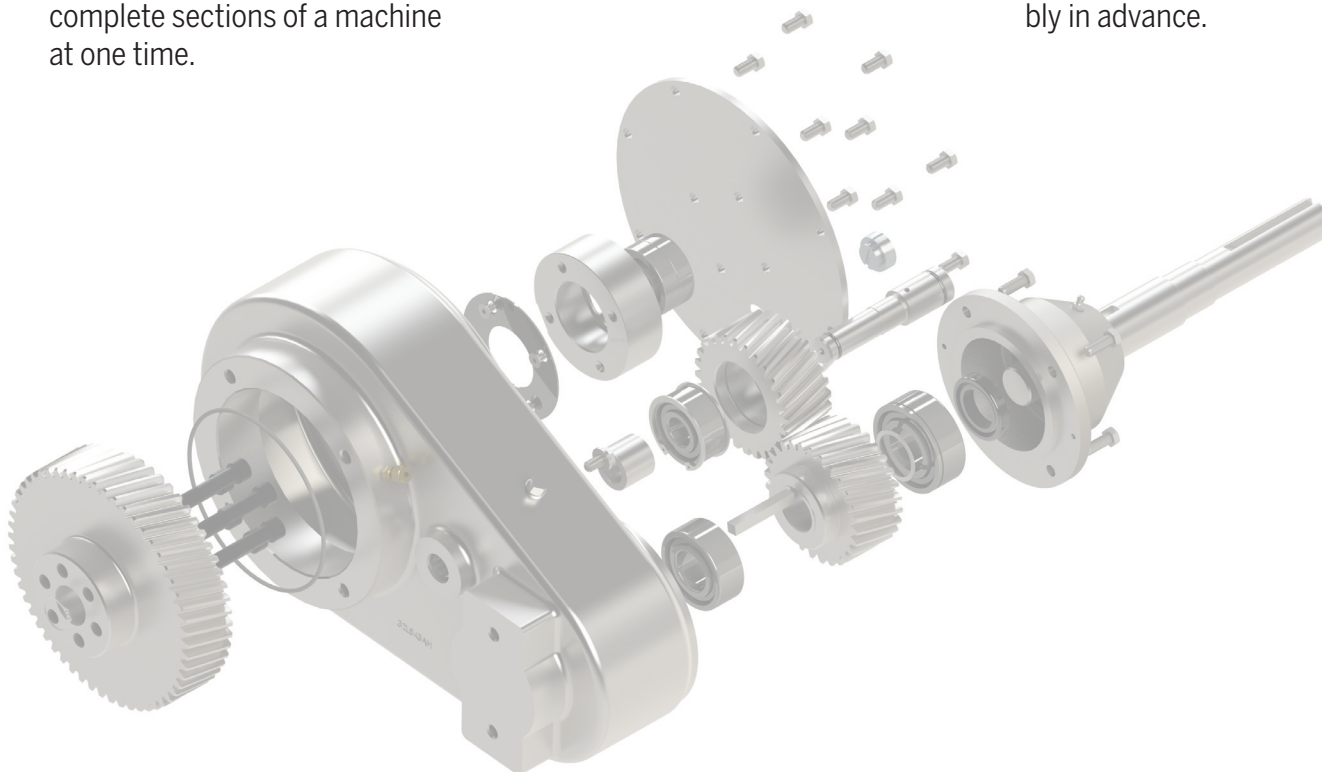
We reverse engineer complete machine assemblies. The process allows us to better understand the interplay between all of the component parts. Our assemblies reduce your machine downtime by enabling you to swap in brand new, complete sections of a machine at one time.

Parts Kits

If you have available labor on-staff, we can provide complete repair kits with all of the necessary parts for the job. This means your staff spends less time compiling individual orders and has more time to complete the job.

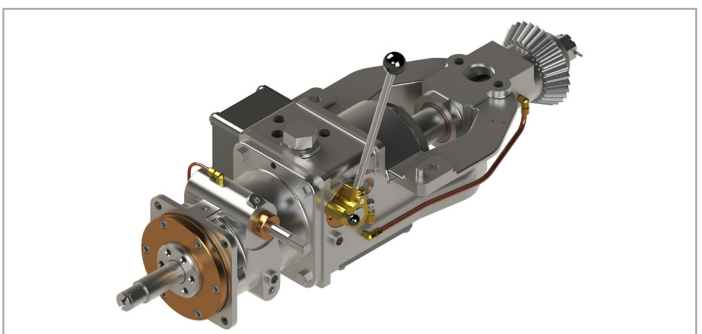
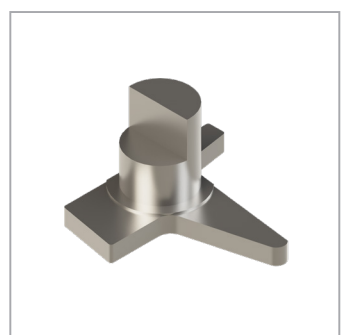
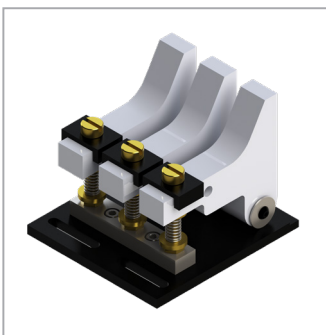
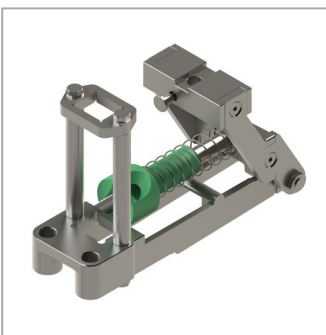
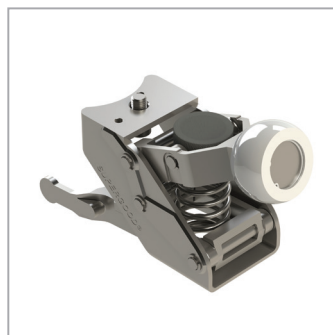
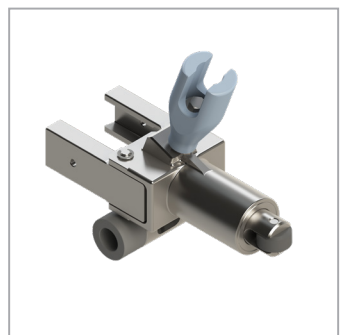
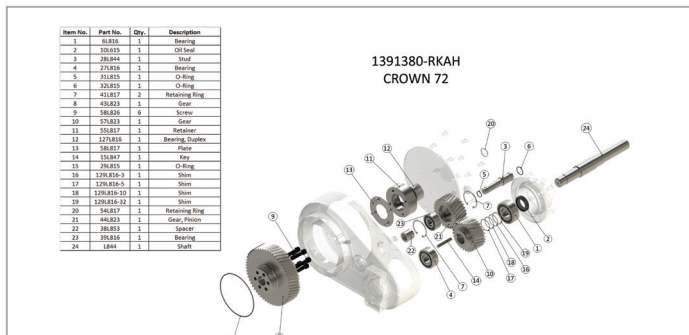
Rebuild Programs

If labor hours are in short supply, we can offer you completely built assemblies with a trade-in program. Send us your used assembly and we can reduce your cost, labor hours, and downtime. In many cases we can supply a rebuilt assembly in advance.



Proven Capabilities

American Holt provides high quality parts fast at a fair price. This is why four out of five of the world's largest food and beverage companies turn to American Holt for our MRO parts expertise. We will analyze your OEM parts purchases to develop an understanding of your consumption. Then we will perform a detailed analysis of your parts usage, identifying which parts are operation critical, difficult to obtain, have long lead times, or are just too expensive. Let us develop a program that is specifically designed for your company's needs.



Fast Track Quote Request

Our Fast Track Quote Request allows you to quickly and easily provide key information that can help us to provide a preliminary quote.



Provide Some Information

Use the back of this brochure to fill out some key information about your part in the space provided.



Photograph the Part

Place your part on the form and take two or three clear photos of the part and the information.



Send a Text or Email

Text or email your photos to American Holt at the email or number provided for a quote!

You are also welcome to ship the part to us for a quote as well.

American Holt, 203 Carnegie Row, Norwood, MA 02062

Partial List of OEM's we make aftermarket parts for:

Alcoa	Evergreen	Kliklok	Solbern
Allen	F. L. Smithe	Krones	Soudronic
Angelus	Fleetwood	Markem	TNA
Benhil	Fogg	Matrix	Triangle
Bete	H & K	Norwood	Urshel
Bosch	Halm	Omori	Vemag
Continental	Hayssen	Pacmac	Videojet
Crathern	Ilapak	Procomac	W + D
Cryovac	Ishida	Reiser	Winpak
Delavan	Jarvis	Rovema	Woodman
Douglas	KHS	Sidel	Yamato

NOTICE: All parts offered by American Holt are manufactured by or for American Holt and not by or for the original equipment manufacturer. American Holt is an independent supplier of quality replacement parts having no affiliation with any original equipment manufacturer.

