Tomahawk Manufacturing Is Growing!

To better meet the growing demand for our new forming machines we have moved to a new 23,000 sq. ft. state of the art facility.



Just because we changed locations doesn't mean we are changing the way we do business. All the luxuries of a big business while holding on to our family values.

Listen.

Improve.

Serve.



To complement our new location we are still producing quality forming tooling in our machine shop, still conveniently located just down the road.



All the products you need from one vendor with one goal in mind; your bottom dollar.



Come see what's formed us into the leader of innovative ideas and products.

- Stainless steel hydraulic tank
- Stainless steel right angle gear box
- NEMA style doors with heavy duty cam locks
- Newest version of Allen Bradley controls
- Heavy duty reinforced frames

- Optional Multi Flow [™] design, doubling your production while reducing wear and tear on your machine's parts and tooling

Same great name, same great product, Tomahawk Manufacturing 1204 Pilgrim Road, Plymouth Wisconsin 53073

Listen. Improve. Serve.

CALL TODAY

<u>920-458-8008</u>

New TM-26 Formers

Standard Fill 9" Softfill 9" With Paper Multi Flow 10"

TM-26 Kit Machines

Standard Fill 9" Softfill 9" Standard Fill 10" Softfill 10" Multi Flow 10' With Paper Allen Bradley Control System



- Heavy duty reinforced frame
- All NEMA frame doors with heavy duty cam locks
- 15 horse power drive motor
- 2 pc. hopper front
- Stainless steel hydraulic tank
- Newest version of Allen Bradley controls
- Custom design program with user friendly maintenance screens



TM-26 Formers







- Heavy duty reinforced frame
- All NEMA frame doors with heavy duty cam locks Logos and safety warnings are all laser etched (no stickers)
- Logos and safety warnings are an laser eiched (no si: New easy-to-open plunger cylinder guard
- Stainless steel tank
- Higher GPM pumps
- Higher capacity heat exchanger increases longevity of hydraulic components

CALL

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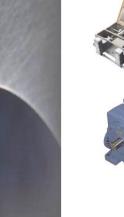
920-458-8008

- Heavier gauge auger flighting and 1/8" gauge material for front hopper improves longevity
- Utilizes heaver gauge materials for feed screw frame support
- Manufactured from solid billet of aluminum vs. casting
- Improved fastening design with longer thread bolts for mounting
- Gasket sealing design to decrease leakage
- Vacuum is eliminated as the plunger is returned with Tomahawk's 26" Anti-leak Pump Box Window
- The Anti-Leak Pump Box upgrade can be retrofit on various OEM 26" formers.
- Mold cover is completely stainless steel, not traditional plated steel.
- Rebuildable right angle drive made of stainless steel eliminating the need for a cover. Will look great for years to come.
- Using double enveloping gears will double your OEM reducer's life!
- Double enveloping gears provide two to four times the tooth drive contact over OEM's single enveloping designs
- Reducer housing is vented and comes with a fan to improve cooling, this means lower oil temperature and improved lubrication performance
- We are so confident the replacement reducer will provide double the life of your OEM unit we guarantee it!



 With our patented Multi-Flow technology, you get more pieces per stroke, yet the machine works no harder.





Listen. Improve. Serve.

New TM-19 Formers

Standard-Fill 9' Soft-Fill 9' Portion-Form 9' Form-Fill 9' Multi Flow Option 12' – Patent # 6,827,111 Paper Interleaver Option Allen Bradley Control





- Heavy duty reinforced powder-coated frame
- All NEMA frame doors with heavy duty cam locks
- Stainless steel hydraulic tank
- Newest version of Allen Bradley controls
- Custom design program with user-friendly maintenance screens



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- Heavy duty reinforced frame
- All NEMA frame doors with heavy duty cam locks Logos and safety warnings are all laser etched—no stickers

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- Replaced traditional plastic bushings with a self-lubricating stainless steel swivel ball joint bearing
- Feed screw bushings are mounted to the top of the pump box reducing movement of the supports during auger actuation
- Eliminates potential of feed screw support being dislodged



- Stainless steel tank
- Higher GPM pumps
- Higher capacity heat exchanger increases longevity of hydraulic components



- Allen-Bradley PLC Standard
- Off-the-shelf components
- Fill modes changed by customer
- Recipe recall allows fast recovery of settings
- Encoder adjustments are made at the touchscreen, which saves time—2 minutes to adjust instead of the traditional 20 minutes





CALL **TODAY** 920-458-8008





Why use two when one will do?

With Tomahawk's 40" (1M) wide forming platform, productivity is greatly increased over narrower machines. Plus, Tomahawk designers have incorporated exciting technology improvements that allow you to EXPECT MORE from your forming machine investment and operation.

Efficient Changeover Program Pause Technology

Patented Program Pause technology, with constant fill cycle design, eliminates product waste during setup and speed changes. No need to spend time changing electro-mechanical switches and generating product waste. The TM-1000 adjusts to the speed you want with the same stroke speed each time! Simply dial a number into the operator control panel.

Recipe Recall

Recipe Recall allows fast recovery of setup conditions for previous orders, saving up to 15 minutes each changeover. Enter a recipe for a previous job that you will be running again, and the machine restores the exact settings. It's that simple and fast!

Clean Up Friendly

Access for clean up is easy. Each and every wash down can be accomplished quickly and efficiently, saving time every changeover



Reduced Costs

Fewer Moving Parts

Tomahawk machines have fewer moving parts to wear out or need replacement. The efficient design of the TM-1000 servo mold plate drive mechanism contains none of the chains, pulleys, switches, and shafts you'd find in a traditional former. Realize dramatic annualized cost savings (parts & labor) from not having the machine down to replace worn parts!

Text Diagnostics

When a problem develops in the machine, a message appears on the operator panel describing the problem. This is a text message, not some code that operators may not understand, or may have to look up.

Shutter Technology

Maintenance and operational costs are reduced by replacing the tube valve with a flat shutter plate. Tomahawk's Shutter Technology (patent pending) provides an efficient design that also optimizes product formation quality.

TM-1000 Formers

Listen. Improve. Serve.



Higher Productivity

The TM-1000 operates consistently and reliably up to 90 strokes per minute. Plus, when you adjust speeds, the machine moves to the new setting without the delay or waste that occurs in traditional formers.

TECHNICAL DATA

MANUFACTURING

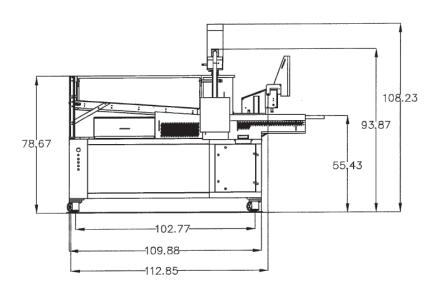
1204 Pilgrim Road, Plymouth WI 53073

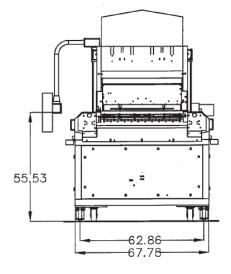
Utilities Required:

- Electrical- 480VAC 3- phase, 100 amp service
- Compressed air 90lbs psi @ 2 SCFM
- Water- plant or city water
- Standard Machine Features:
 Clean up friendly design for washing down and sanitizing inside and outside
- Stainless steel frame, externals, guard panels, and much of the machine components for optimum corrosion resistance
- Reversing product conveyor drive to assist with shut down and clean up
- Tomahawk ventilation plate controls and captures breather air and material during mold plate retraction

- Stainless steel manifold with 65–70Rc hard chrome for superior wear resistance
- Servo operated mold plate drive mechanism with closed loop positioning control
- Patented infinitely variable stroke adjustment- 6"- 9" via touch screen input for formation optimization
- Pneumatic knockout tooling support mechanism is electronically timed for up/down movement with machine cycles
- 1500-watt knockout heater
- Eight nozzle knockout water spray with variable orifice control
- Automatic lube system for mold plate drive reduces maintenance
- Industrial duty operator pendant with wash down protective window mounted on swing arm– allows 160 degree movement
- Operator touch screen control panel

 English or Spanish text
- Electronic shear pin for quick recovery of knockout plate obstruction





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. 920-458-8008

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ODAY



Reciprocating Platen Roller **TODAY**

920-458-8008

CALL

Listen. Improve. Serve.

Meatball Roller

Tomahawk's meatball rollers are equipped with all stainless steel construction, turning formed product into perfectly proportioned meatballs. All guards are engraved with safety instructions, not labels, offering a much more sanitary working environment. Tomahawk's meatball rollers can be equipped to run electric or hydraulic, single phase or three phase, and on various voltages.

IOMAHA

Reciprocating Platen

• Simple all stainless steel construction • Multiple heights, lengths, and widths are available to meet production needs

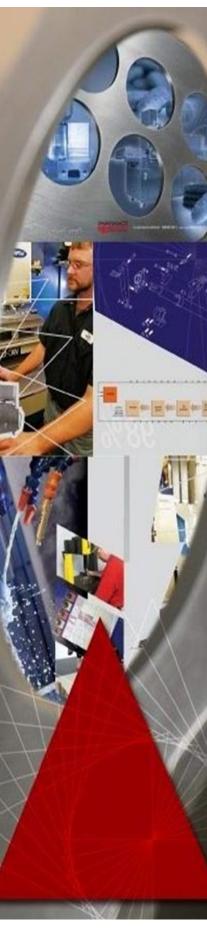
· Easily change the height of the upper platen to change the size of the meatballs being formed

Hydraulic or electric drive; single or 3 phase (any voltage)
 Quick automatic release of upper platen allows for easy
 and safe cleaning

<u>Play Video of Reciprocating Platen by</u> Tomahawk Manufacturing

Just hold control and click the blue link.





Rotating Formed Roller

CALL TODAY

920-458-8008

Listen. Improve. Serve.

Meatball/Kibe Roller

Tomahawk's meatball rollers are equipped with all stainless steel construction, turning formed product into perfectly proportioned meatballs. All guards are engraved with safety instructions, not labels, offering a much more sanitary working environment. Tomahawk's meatball rollers can be equipped to run electric or hydraulic, single phase or three phase, and on various voltages.

Rotating Formed Roller 19"

Meat is shaped by a rotating formed roller matched up with a stationary shoe, different tooling types are available: Meatball, kibe, oval, other shapes available upon request.

- Various heights and widths to fit any size former
- Self-cleaning, water sprayer can be manually run to clean roller quickly and efficiently

Direct drive Motor-no belts, chains, or pulleys







Rotating Formed Roller

CALL TODAY

920-458-8008

Listen. Improve. Serve.

Meatball/Kibe Roller

Tomahawk's meatball rollers are equipped with all stainless steel construction, turning formed product into perfectly proportioned meatballs. All guards are engraved with safety instructions, not labels, offering a much more sanitary working environment. Tomahawk's meatball rollers can be equipped to run electric or hydraulic, single phase or three phase, and on various voltages.

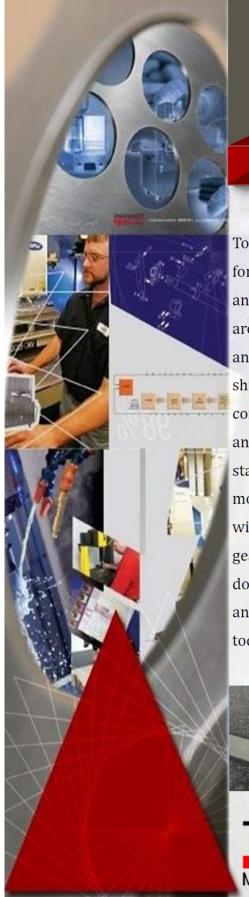
Rotating Formed Roller 6"

Meat is shaped by a rotating formed roller matched up with a stationary shoe, different tooling types are available: Meatball, kibe, oval, other shapes available upon request.

- Various heights and widths to fit any size former
- Smaller footprint on floor, allowing for future expansion
- Great for R&D projects or small runs
- Self contained; all operating parts are enclosed inside of the cabinet

Play Video of Reciprocating Platen by Tomahawk Manufacturing





Shuttle Arms

CALL TODAY

920-458-8008

Listen. Improve. Serve.

Tomahawk Solution

Tomahawk offers high quality replacement shuttle arms for any former, including paper feed and XP styles, that increase wear life and improve performance! What's different? Standard shuttle arms are provided as raw stock steel, which have the lower straightness and parallel tolerance of raw material. Tomahawk replacement shuttle arms are of significantly higher quality. We grind all four contact surfaces, which results in the highest tolerance straightness and parallelism. Chrome plating adheres better. The dimensional stability of Tomahawk replacement arms decreases drag on the mold plate drive system, increasing the life of shuttle bearings and wipers. Wear and tear on the connecting rod, drive arms and gearbox are also reduced. Better performance, and less machine downtime as a result! Providing our customers with higher quality, and more affordable replacement arms! That's real value, contact us today for quote.





TXL Shuttle Bearings

Listen. Improve. Serve.

CALL

ΟΠΑΥ

920-458-8008

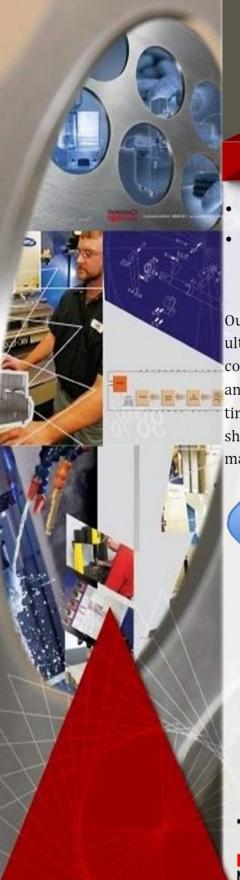
- Tired of lubricating shuttle bearings daily?
- Seeking to reduce maintenance time and money?

Tomahawk Solution

Our engineers selected a unique polymer which is oil impregnated, food grade compatible and requires <u>no</u> lubrication for the entire life of the bearing. We call it *TXL material*. Not only do machine owners save in lubrication labor, but also part maintenance costs are dramatically reduced as *TXL* shuttle bearings last 3 times as long. Tomahawk TXL shuttle bearings are available for MP-800 and 26" forming machines.







Tomahawk's TXL Vitalloy® Shuttle Bearings

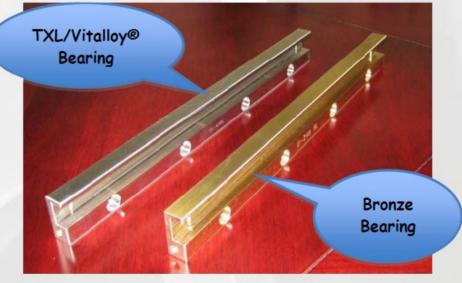
CALL **TODAY** 920-458-8008

Listen. Improve. Serve.

- Tired of replacing shuttle bearings pre-maturely?
- Seeking to reduce maintenance cost and changeovers?

Tomahawk's Solution

Our engineers selected a revolutionary patented alloy which is an ultra high-wear material that contains no copper and is food grade compatible. We call it *TXL/Vitalloy® material*. With proper lubrication and preventative maintenance, *TXL/Vitalloy®* shuttle bearings last 5 times as long as traditional shuttle bearings. Tomahawk *TXL/Vitalloy®* shuttle bearings are available for all types of 26" patty forming machines.







Anti-Leak Pump Box Window Patent # 9,282,753

CALL TODAY 920-458-8008

Listen. Improve. Serve.

Loosing Product Between the Plunger and Pump Box Wall?

Each shift, a significant amount of meat can aspirate through the rear of the pump box during normal patty forming. Meat, fats, and oils form a liquid seal between the plunger and the pump box wall forcing meat to be pulled back as the plunger returns. This vacuum forces meat out of the cavity, wasting it. This can accumulate up to hundreds of pounds per shift!





Tomahawk's

Anti-Leak Pump Box Window

CALL TODAY

920-458-8008

Listen. Improve. Serve.

The Tomahawk Solution

With Tomahawk's 26' Anti-Leak Pump Box Window vacuum, is eliminated as the plunger is returned. Air is vented through a slot near the plunger's rearward travel. With the air vented, vacuum in the pump box is eliminated and no meat is wasted. The Anti-leak Pump Box upgrade can be retrofit on various OEM 26" formers. Contact us today about upgrading your formers, and helping you reduce waste each shift. Patent # 9,282,753



Mold Plate Drive Reducer

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Double Up for Double the Life 920-458-8008

Listen. Improve. Serve.

CALL

TODAY

Mold Plate Drive Reducer Life Too Short?

Mold plate drive reducers use single enveloping gears due to their relative simplicity and low cost to manufacture. Single enveloping gears depend on the mesh of one to two teeth to transfer and multiple torque. This design provides an economical solution for low and medium horsepower applications, but life of these units can be quite short causing painful, unnecessary downtime to change. Insufficient cooling from elevated oil temperatures also shortens life. Now an alternative reducer is available.

920-458-8008 TOMAHAWK www.tomahawkmfg.com 1204 Pilgrim Rd. INC Plymouth, WI 53073

MANUFACTURING

1204 Pilgrim Road, Plymouth WI 53073

With TH-3691-A Mold Plate Drive Reducer Double Up for Double the Life

CALL TODAY

920-458-8008

Listen. Improve. Serve.



Tomahawk Solution

A heavy-duty replacement reducer using double enveloping gears is now available that will **double your reducer's life!** Our replacement reducer housing is vented and comes with a fan to improve cooling, this means lower oil temperature and improved lubrication performance. Lubrication between the worm and gear is also improved due to a more favorable directional flow of our design. Double enveloping gears provide two to four times the tooth drive contact over other OEM designs. We are so confident the TH-3691-A replacement reducer will provide double the life of your other OEM unit we guarantee it!



Mold Cover Knock Out Gear Box

Listen. Improve. Serve.

No more steel mold cover K.O. Gear Box to rust, creating potential sanitation problems!



Tomahawk's Solution

Now, a stainless steel replacement upper right angle gearbox for your mold cover is available from Tomahawk to replace the traditional steel gearbox. The Tomahawk

box uses internal compoother OEM models. Bemachines the housing and Once you replace the OEM stainless box, you can box internals when they to spend the money to Plus, because the designed for corrosion like the other gear boxes,

-- 400 -- 400



nents compatible with cause Tomahawk custom internals, they last longer. box with Tomahawk's repair and replace gear wear. You no longer need replace the whole unit. Tomahawk box is resistance, it doesn't rust offering you a much more

CALL

TODAY

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sanitary unit mounted near the food zone. Contact Tomahawk today about upgrading your knock Out Gear Box with a stainless unit!





Shear Plate Spacer Keeper

920-458-8008

TODAY

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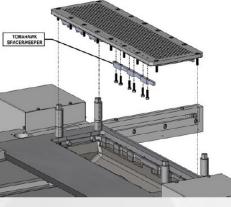
Listen. Improve. Serve.

- Tired of loosing your spacers?
- Sanitation problems with other OEM shear plate spacers?

Tomahawk Solution

A replacement shear plate spacer keeper from Tomahawk improves sanitation and saves time. Sanitation is improved because there is less mating surface space for product to seep through. Installation is simple with this robust designed spacer. The one-piece design is easy to locate when removed. Performance life is longer, reducing replacement frequency.

Contact us today to find out more!









2 Piece Hopper

CALL TODAY

920-458-8008

Listen. Improve. Serve.

Are you tired of your hoppers getting damage during sanitation, and loosing valuable yields as a result?



Tomahawk Solution

We've made a heavy duty reinforced base with seal that will withstand the harsh environment and reduce meat leakage. The new 2 piece hopper raises with the mold cover for easy changeover and cleans in place, reducing the risk of damage. The hopper is made from a heavier material, but because of it's 2 piece design it is lighter and easier for your operators to handle. This new design will last longer, increase yields, and reduce the risk of operator injury.





Stripper Shuttle Cylinder

920-458-8008

TODAY

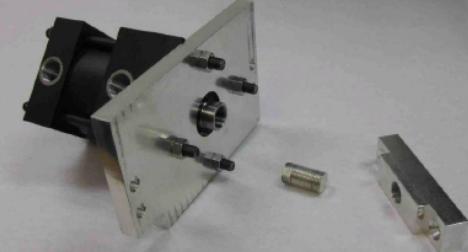
CALL

Listen. Improve. Serve.

Frequent stud breakage on the Stripper Shuttle Cylinder causing you maintenance down time?

Tomahawk Solution

Tomahawk has developed a replacement rod end stud and bracket to significantly strengthen the Shuttle Cylinder Assembly. The new parts double the diameter of the rod end stud at the point it's assembled into the bracket. Instead of a 3/4" stud stepped down to 3/8" at the bracket, Tomahawk's solution is 3/4" through the rod end in the bracket. That's 60% stronger than other OEM designs! All you need to do is replace parts A-13266 and B-13257 with TH-3790 and TH-3791 (2 per machine).







Listen. Improve. Serve.

Patent Numbers: 6,604,935 ; 6,713,111 ; 6,827,111

Productivity Increase

The Multi-Flow System[®] provides a larger area of the mold plate to be used for product cavities. This usable space provides up to 100% more product per stoke. For example, 10-1 beef patties increase from 5 to 10 patties per stroke. Nuggets increase from 24 to 36 nuggets per stroke. Multi-

Flow[®] creates more product pieces per stoke; thus increasing productivity with the same or less operation cost.

Maintenance

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Using the Multi-Flow[®] System, our customers benefit from both increased production and a concurrent decrease in maintenance parts due to machines running at optimal strokes per minute. With each mold plate producing more pieces, less duplicated tooling is needed and less overall space is needed to store tooling; reducing tooling replacement costs, maintenance costs, and associated cost of space to store mold plates, spacers, and K.O. cups

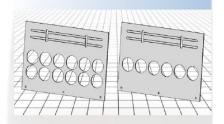
Return On Investment (ROI)

Although results can vary form location-tolocation and/or machine-to-machine, we believe a ROI of 1 month or less is not unreasonable, but the norm.





EXPERIENCE THE DIFFERENCE



Value

- Multi-Flow® retrofit kit
- TM-1 alloy material
- 3 to 5 day delivery or sooner
- Emergency 1 day delivery
- 3-D tooling
- Custom mold plate design
- Meets highest quality standards



Tomahawk's Patented CALL Multi-Flow System

CALL TODAY 920-458-8008

Multi-Flow[®] System

Success Stories

Advance Brands

26-1089 Strip Shape: Multi-Flow® Conversion

- They were producing 14 strips a stroke. With the Multi-Flow® conversion they now produce 28 strips per stroke.
- An increase of 50,400 more strips per hour based on 60 strokes per minute.

Advanced Brands Conclusion:

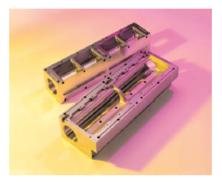
- The Advance Brands Multi-Flow[®] conversions enabled them to fill their fryer and freezer to capacity.
- They slowed down their 26" forming machine and yet increased their production numbers and concurrently stated they have seen a decrease in costs of maintenance parts for their 26" machine.

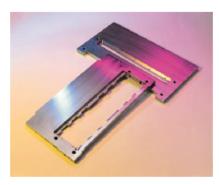
26-1187 Nugget Shape: Multi-Flow® Conversion

- They were producing 26 nuggets with each stroke.
- With the addition of a Multi-Flow[®] conversion, Advanced increased their production from 26 nuggets per stroke to 46 nuggets per stroke; an increase of 72,000 more nuggets per hour based on 60 strokes per minute.

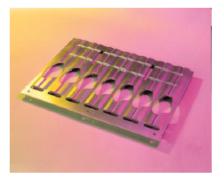












Tomahawk Manufacturing....Your Source for Forming Machine Replacement Parts!

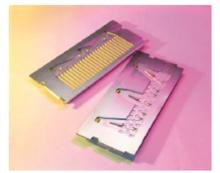
We understand, downtime is painful! You need replacement parts fast that work: and are affordable. No matter what OEM machine, choose Tomahawk forming parts!

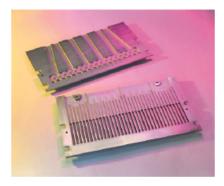
Top 5 Reasons to Choose Tomahawk Forming Parts....

- COMPETITIVE PRICES that beat the OEM. You will save money. Experience what others already know.
- FAST SERVICE. 98% of parts ship within 48 hours from our generous inventory to meet the 24/7 speed of your business.
- QUALITY better than, or equal to OEM. Why? We test our materials with independent labs to assure compliance with performance standards. Over 27 years specializing in forming parts enables us to deliver parts you can count on.
- PARTS IMPROVEMENTS, not just parts. Downtime is expensive. For example, we developed a TXL shuttle bearing that lasts in excess of a year, needs no oiling, and replaces an OEM aluminum bronze bearing that needed planned oiling and changing multiple times over a year. Imagine the savings!
- FRIENDLY, COMPETENT SERVICE. Tomahawk technical service support work seamlessly together to solve your parts problem. When you call for parts, the same knowledgeable, friendly team will help you.

LISTEN. IMPROVE. SERVE. Tomahawk Parts Experience the Success











Tooling Optimization Program (TOP)

- Approximately 25% Cost Savings on all tooling
- Exceptional customer service with the quickest Turnaround in the industry (Design to End Product) Standard Mold Plates-2-3 Working Days
 - 3D Design-2 Weeks
 - 1st Rework No Charge-Customer pays shipping
- Tooling Support-No Charge

Plant visits that include tooling training and audits which WILL extend the life of your tooling and SAVE you money!

• Product Formulation

The Tomahawk team not only leads the industry in creative engineering and machining but has vast product experience with meat formulations, grinding, and forming. We understand meat science and can help with your upcoming projects to ensure success.

• Mold Plate Optimization

We will work with individual plants collecting data to determine when a mold plate has worn past its useful life. Next, we determine a payback number and when to order a new plate which will pay for itself due to less giveaway, leakage, and shape quality.

This data is recorded on an Interactive Mold Plate wear spreadsheet. We train personnel how to measure, what to look for and how to enter data assisting in the decision to use or replace the plate.

A tooling gauge is used to assist plant personnel with inspecting Mold Plates and tooling.

Reduce Product loss

We can assist you in reducing product leakage via tooling or Pump Box analysis. Then we can justify purchasing new tooling or an anti-leak window by demonstrating payback of the items due to the reduction of leakage.

Tooling (Breather Plate) Rework Results in Savings

We will work with your plant personel to determine the most cost-effective way to evaluate your tooling. A reworked breather plate typically costs about 20% of a new one. We will give you honest evaluations and work hard to save you money on your tooling.



Tomahawk Parts Program

• Our quality parts will perform equal or better than OEM. We stand behind our parts with a money back guarantee and strive to build relationships to earn your business.

• We have top quality engineers that will work with your engineers and maintenance personel to make better parts that will SAVE you money!

• We will work with you to make improvements using your ideas to increase efficiencies in your production while decreasing your down time. We are willing to invest the time to increase your bottom line.

• We own our machining facility with state of the art equipment, which allows us to give you the quick turn-around time that can be vital to your company.

• We have engineered parts and improvements that will surpass OEM, which will result in lower maintenance costs and less frequent rebuilds.

• We are a family-owned company that understands the meat industry and the demands the environment puts on your equipment.

• All we want is a chance to show you our capabilities and you will find what many other companies that have given us the chance have found. We have a money back guarantee with experienced staff that can help you with your orders which will save you time.

Just give us a try and we will SAVE YOU MONEY with our quality parts program!