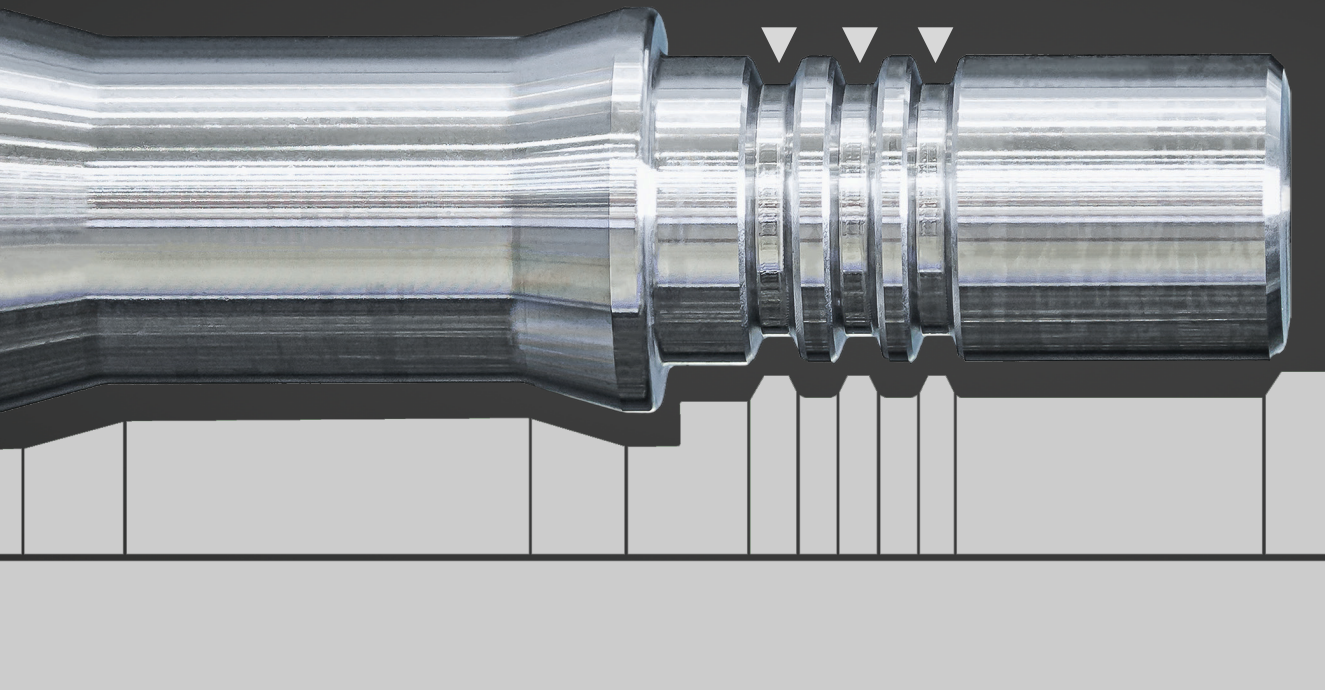




CUSTOM TURNING SOLUTIONS

DRAMATICALLY IMPROVE UP-TIME & OPERATOR CAPABILITY



Screw Machines | Multi-Spindle | Rotary Transfer | Swiss CNC

SAVINGS WHERE IT COUNTS

GWS rotary tooling solutions save time by:

1. Reducing tool changeover time by 30-50% versus traditional methods.
2. Reducing calibration time during initial set-ups by up to 15%.
3. Reduced training time needed to teach new machinists on how to perform set-up operations and changeover toolings.



4%

Tooling

Cutting tools both solid, round, and indexable type tooling.

1%

MTA

Machine tool accessories such as tool holders and work holding.

15%

Material

Ferrous and Non-ferrous materials transformed into finished parts.

TIME IS MONEY

50%

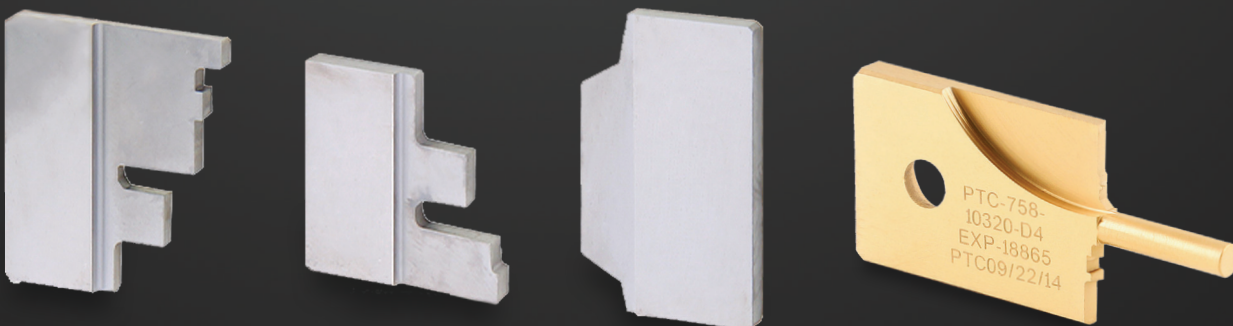
Time

On Average, machining time represents 50% of the costs in the average machining process for any given company.

30%

General

General costs include electricity, coolant, maintenance and other expenses.



GWS TURNING SOLUTIONS OFFER

Reduced Downtime

Quick change tooling allows for faster changeovers without additional resetting. As fast as 60 seconds.

Ease of use

Our system makes initial set-ups faster and easier, with simple access to adjust for diameter, center line height and lateral/angular movements.

Improved Cycle Times

Replace single point operations of complex profiles with customized carbide form inserts that can produce the same profile in a fraction of the time.

Greater precision

Technologies like the ThriftShave can maintain finish tolerances as low as 5 - microns and finishes that require no additional grinding.

Less Scrap

Scrap due to improperly adjusted offsets, tool sharpening or inaccurate tooling.

ADVANTAGES OF FORMING

- **Longer Life**
Carbide inserts extend tool life well beyond that of traditional dovetails, generally made of High Speed Steel (HSS) or carbide tipped.
- **Greater Precision**
With form inserts, more intricate profiles can be created with tighter tolerances and improved cutting geometry.
- **Faster Cycle Times**
Carbide form inserts can run 2 - 3X speed of traditional HSS dovetails and can be up to 2X more efficient.
- **Faster Changeover**
The ThriftChange[®] system permits for inserts or heads to be replaced, in the machine, without any additional adjustments. Changeovers in 60 seconds or less!

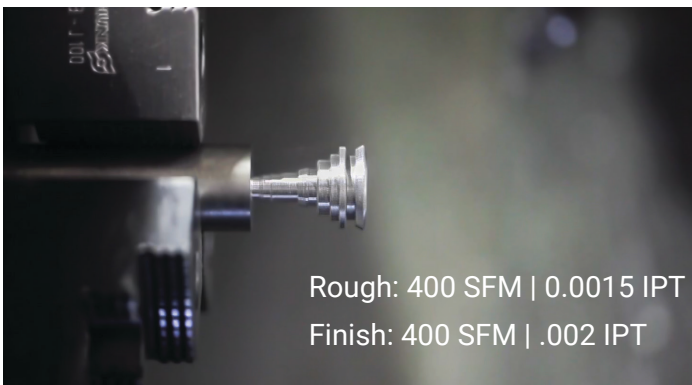


Scan for video



Profiling vs single point turning

Forming: 0.38.06 Sec



Single Point: 01.49.15 Min





THRIFTFORM®

- Easy adjustment point for diameter, centerline and taper.
- Exchangeable head with insert clamping mechanism for GWS custom profile insert.
- Exchangeable insert designed custom for your part to maximize productivity.
- Units custom built to fit your exact machine type and model.
- Precision surfaces mean no excessive torque required to secure components.

THRIFTSHAVE®

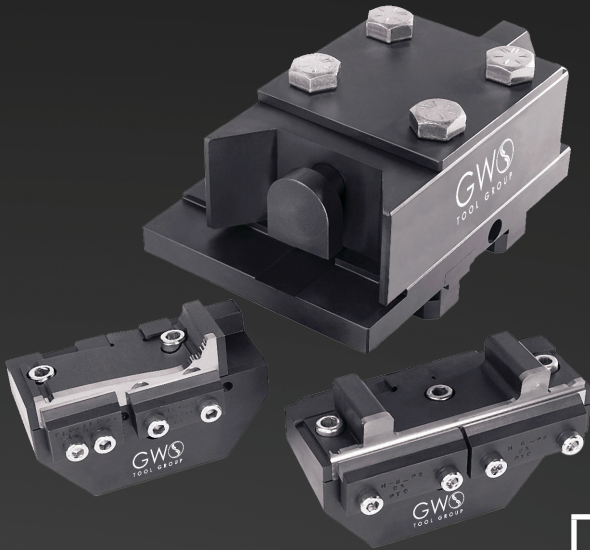
All the features of ThriftForm plus:

- Floating head to ensure centerline accuracy.
- Ultra-high precision ground components permit holding of part tolerances as low as 5 microns (0.0002").



***FASTEST WAY TO MINIMIZE
CHANGEOVER TIMES!***

GWS
TOOL GROUP



THRIFTCHANGE®

- Use the same attachment and simply exchange heads.
- Custom series of heads can be produced to fit an entire family of parts.
- Simple and elegant design reduces training time & headaches.
- Replaceable anvil & clamp is designed specifically for your inserts including machined surfaces that mirror your insert shape for maximum rigidity.
- Machinists on their first day can changeover tools without extensive set-up training.

***REDUCE CYCLE
TIMES BY 30%***



THRIFTTURN® & THRIFTPOINT®



Ideally Suited for:

CNC
Machining Centers
Swiss
Hydromat
Multi-spindle
Single-spindle

ELIMINATE TOOL OPERATIONS

- 2 inserts per tool = 2 processes in 1 op.
- Inserts adjustable individually or as a whole.
- No need to reset diameter, size or lengths - all dimensions are locked in.
- Makes machining small parts with greater length-to-diameter ratio's possible.
- System permits micro adjustments and quick changes to inserts for changeover times of 60 seconds or less.
- Designed with 12-micron tolerance.
- Exchangeable inserts can be replaced without moving the holder.

**ELIMINATE
MULTIPLE OFFSETS
&
COMPLEX
PROGRAMMING**



Additional Tool Types: Pointing, LH Back Drill, Trepan, Hole Cutter

**INDISPENSABLE
QUICK CHANGE**

GWS
TOOL GROUP

THRIFTEGE[®]



Significant upgrade to HSS or brazed carbide tools

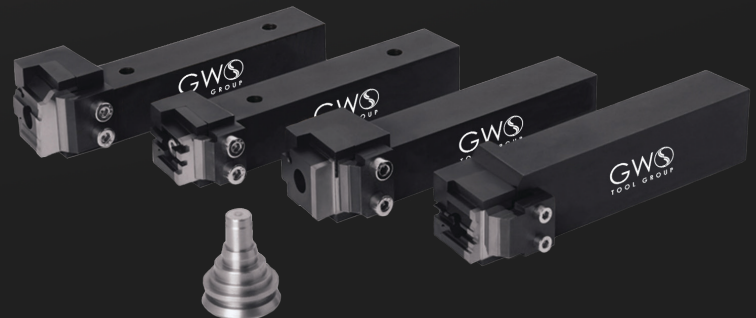
Quick change: insert replacement in less than **60 seconds** versus minutes with HSS and brazed carbide tools.

12-micron tolerance between all components=Minimal to **zero adjustment** when changing inserts.

Dovetail Form Tools



CNC Flat Holders



PARTS

Aerospace

Fasteners
Hydraulic Components
Fuel Line Components
Air Pressure Sensors
Drive Components
Drum Rollers

Automotive

Bearings
Struts
Valve Bodies
Shafts
Spark Plug Bodies
Tie Rods

Hydraulics

Ball Valves
Couplings
Fasteners
Fittings
Hose Connectors

Work Materials

Ferrous Materials

Steels
Cast Iron
Stainless Steel
Nickel Alloys & Titanium

Non-Ferrous Materials

Aluminum Alloys
Cast Aluminum
Plastic, PEEK

Medical

Bone Screws
Ball Joint
Hip Joint
Spinal Implants

Construction

Screw & Fasteners
Power Tool Components
Ratchets

Other

Connectors
Ammunition
Bicycle Parts
Motor Shafts
Plumbing Fixtures

MACHINES

Multi Spindle

ACME Gridley
Brown & Sharpe
Davenport
Euroturn
Gildemeister
Greenlee
Index

New Britain
Schutte
Tornos
Wickman
ZPS

Swiss CNC

Citizen
Hardinge
Index
Star
Swiss
Tornos

CNC

Kitamura
Miyano
Modern
Doosan
Shenyang

Rotary Transfer

Hydromat
Rismatic

Custom Holders



Hydromat /
Rismatic Tool



Trepan Tool



Polygon Tool



ID Tools



Custom Adaptors





Toll Free: 1-877-497-8665

Phone: 352-343-8778

Fax: 352-343-8311

Email: sales@gwstoolgroup.com

www.gwstoolgroup.com

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