

# World-Class Gaging Systems



**WRENTHAM  
TOOL GROUP**

**RICO™ WRENTHAM *Astro*®**

**A PHILLIPS SCREW COMPANY AFFILIATE**





# WRENTHAM TOOL GROUP

A PHILLIPS SCREW COMPANY AFFILIATE

*A global supplier of cold and hot heading tools utilized in the production of many types of fasteners ranging from simple nails to high performance aerospace products.*



## *Index*

**Penetration Gages .....Page 1**  
**Plug Gages .....Page 2**  
**Ring Gages .....Page 3**  
**Test Blocks.....Page 4**  
**Gaging Systems.....Page 5**



ISO9001-2008

Wrentham Tool Group has been a leading supplier of cold heading tools since its founding in Wrentham, MA, USA in 1948 and is the longest operating and most experienced header tool manufacturer in the world. WTG has undergone many changes since then including ISO 9001:2008 certification and continues to re-invent itself to better serve the ever changing global market. Year after year, WTG continues to outperform the competition and expand its product line and operations. As a result of this dedication to continuous improvement, WTG has become the market leader in a wide range of hot and cold heading tools.

In July 2010, WTG purchased RICO and Astro from PCC. RICO and Astro are known around the world for their high quality industrial, automotive, and aerospace punches and associated tooling. As a result of this acquisition, Wrentham Tool Products was renamed Wrentham Tool Group. The close proximity of RICO/Astro allowed WTG to retain most of its highly skilled work force.

In April 2012, Wrentham acquired the Acument Pin Shop from the Camcar group. The Acument Pin Shop was the preliminary manufacturing location for TORX, TORX PLUS, and TORX PLUS AUTOSERT blanks for use as the basic instrument for manufacturing finished tools. With this acquisition comes a maturing of Wrentham's identity from a header tool supplier into a supplier for heading tool manufacturers. As part of this acquisition, Wrentham acquired the machines, dies, and supportive tooling for production of a full range of internal and external TORX, TORX PLUS, and TORX PLUS AUTOSERT recesses.

WTG's mission is to provide world-class quality, value pricing and unparalleled customer service. To achieve these goals WTG has dedicated significant financial and human resources to ensure success. WTG has expanded its product line and offerings to include the latest fastener recess innovations such as Mortorq Super, Hexstix, and TTAP, as well as a proprietary MOAC coating, and a new line of Black Diamond Pen and Plug Gages. WTG also manufactures a full array of carbide and steel heading tools including hex inserts, hex pins, and trim dies. WTG has increased stock levels and appointed sales agents in strategic locations around the world to better serve the customer and ensure continued expansion.

**RICO™**  
**WRENTHAM**  
*Astro®*

## Black Diamond Penetration Gages

These gages are used to determine if the recess penetration dimension in the screw head is within allowable tolerance as specified by industry standard and/or customer drawing.

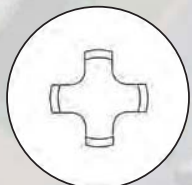
Black Diamond Gages are available in the recess types illustrated below. All sizes are available.

Individual gage components are available upon request.

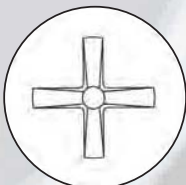
*All Wrentham Tool Group gaging is supplied with certification.*



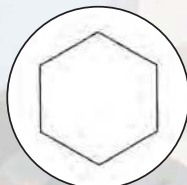
### Black Diamond Penetration Gaging Recesses



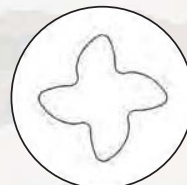
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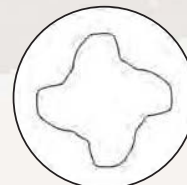
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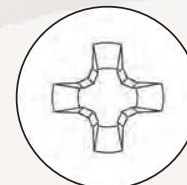
Hexagon Socket



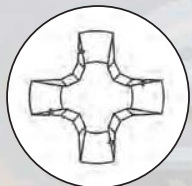
MORTORQ®



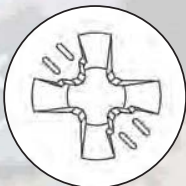
MORTORQ® Super



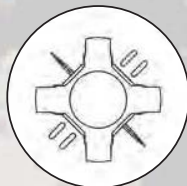
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NASM9006 / ISO8764-1



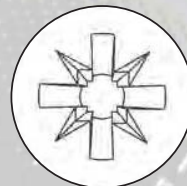
ACR® PHILLIPS®  
NAS7100



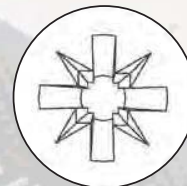
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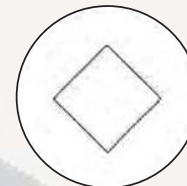
PHILLIPS SQUARE-DRIV®



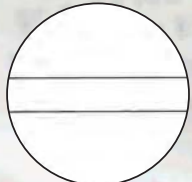
POZIDRIV®



Type 1A  
(generic POZIDRIV®) ISO8764-1



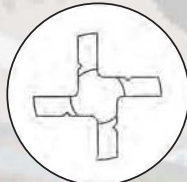
Square Socket Type III



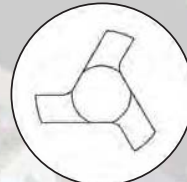
Struck-Slot



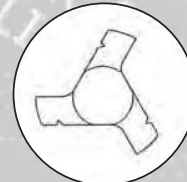
TORQ-SET®  
NASM33781 / ISO7994



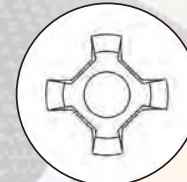
ACR® TORQ-SET®  
NASM14191 / ISO7994



TRI-WING®



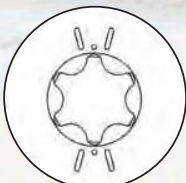
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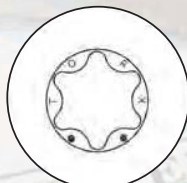
QUADREX®



TYPE 31®



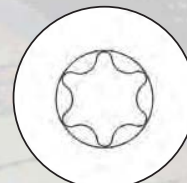
HEXSTIX®



TORX®



TORX PLUS®



HEXLOBE®

*Request required size of recess as needed.*



## Plug / Fit Gages

These gages are used to check driver recess fit & wobble tolerance in the screw.

WTG Plug Gages are available in the recess types illustrated below. All sizes are available.

Individual gage components are available upon request.

*All Wrentham Tool Group gaging is supplied with certification.*



### Plug / Fit Gaging Recesses



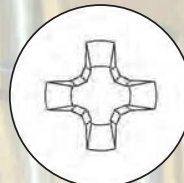
Hexagon Socket



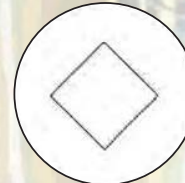
MORTORQ®



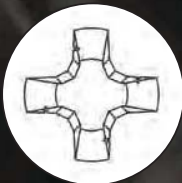
MORTORQ® Super



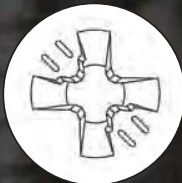
PHILLIPS® Type I  
NASM9006 / ISO8764-1



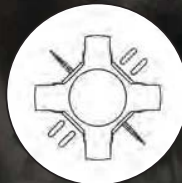
Square Socket Type III



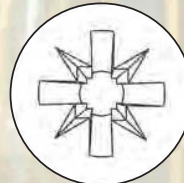
ACR® PHILLIPS®  
NAS7100



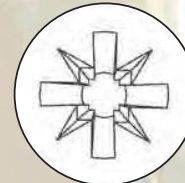
ACR® PHILLIPS II®



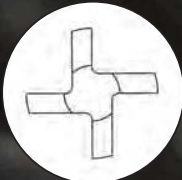
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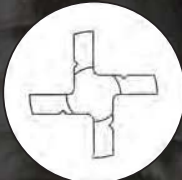
POZIDRIV®



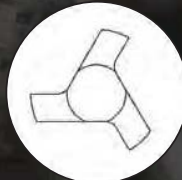
Type 1A  
(generic POZIDRIV®) ISO8764-1



TORQ-SET®  
NASM33781 / ISO7994



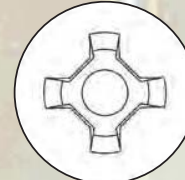
ACR® TORQ-SET®  
NASM14191 / ISO7994



TRI-WING®



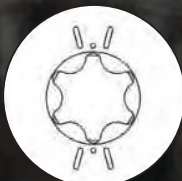
ACR® TRI-WING®



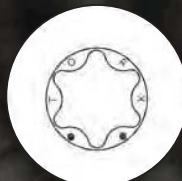
QUADREX®



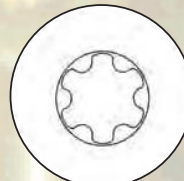
TYPE 31®



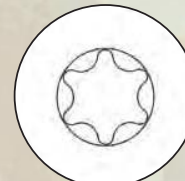
HEXSTIX®



TORX®



TORX PLUS®



HEXLOBE®

*Request required size of recess as needed.*



## Ring Gages

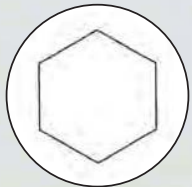
These gages are used by driver bit manufacturers to check driver fit on a *GO-NOGO* basis.

WTG Ring Gages are available in the recess types illustrated below. All sizes are available.

*All Wrentham Tool Group gaging is supplied with certification.*



### Ring Gaging Recesses



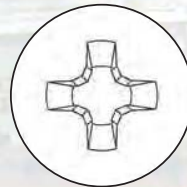
Hexagon Socket



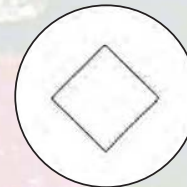
MORTORQ®



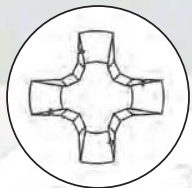
MORTORQ® Super



PHILLIPS® Type I  
NASM9006 / ISO8764-1



Square Socket Type III



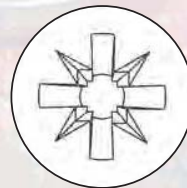
ACR® PHILLIPS®  
NAS7100



ACR® PHILLIPS II®



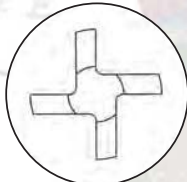
PHILLIPS SQUARE-DRIV®



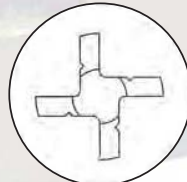
POZIDRIV®



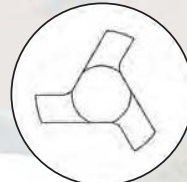
Type 1A  
(generic POZIDRIV®) ISO8764-1



TORQ-SET®  
NASM33781 / ISO7994



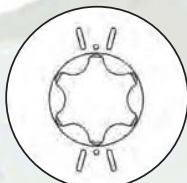
ACR® TORQ-SET®  
NASM14191 / ISO7994



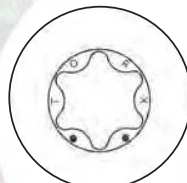
TRI-WING®



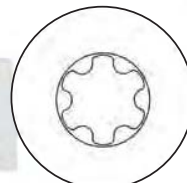
ACR® TRI-WING®



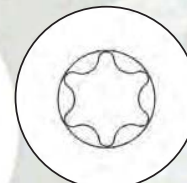
HEXSTIX®



TORX®



TORX PLUS®



HEXLOBE®

*Request required size of recess as needed.*

## Test Block Gages

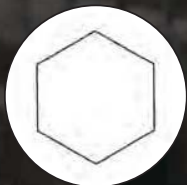
Test blocks are used by the manufacturers of driver bits when measuring the torque exerted on driver bits during inspection procedures.

WTG Test Blocks are available in the recess types illustrated below. All sizes are available.

*All Wrentham Tool Group gaging is supplied with certification.*



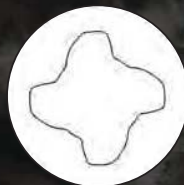
## Test Block Recesses



Hexagon Socket



MORTORQ®



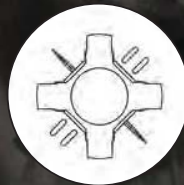
MORTORQ® Super



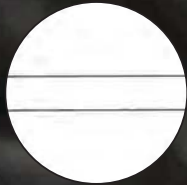
ACR® PHILLIPS®  
NAS7100



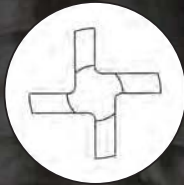
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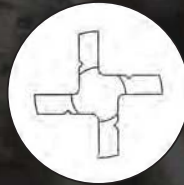
PHILLIPS SQUARE-DRIV®



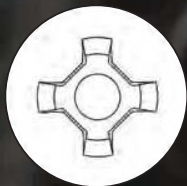
Struck-Slot



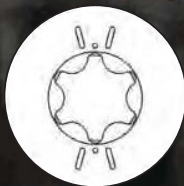
TORQ-SET®  
NASM33781 / ISO7994



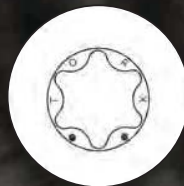
ACR® TORQ-SET®  
NASM14191 / ISO7994



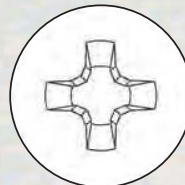
TYPE 31®



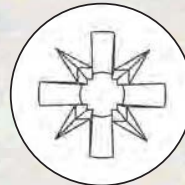
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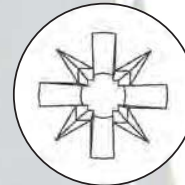
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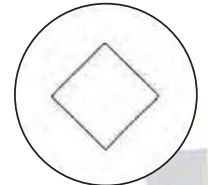
PHILLIPS® Type I  
NASM9006 / ISO8764-1



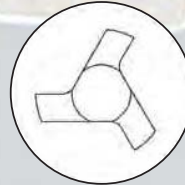
POZIDRIV®



Type 1A  
(generic POZIDRIV®) ISO8764-1



Square Socket Type III



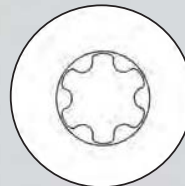
TRI-WING®



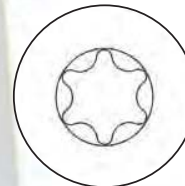
ACR® TRI-WING®



QUADREX®



TORX PLUS®



HEXLOBE®

*Request required  
size of recess  
as needed.*



## Concentricity Gages

The Concentricity gage system is used to inspect and identify run out conditions in your fastener or tooling.

### The system includes:

- Two high quality precision measurement instruments
- Two 360 degree fixture arms with electromagnet base
- Black anodized aluminum alloy expansion arm
- Black anodized base fixture with 5-point anchoring system

The gage system comes complete with a padded hard case with handle.

This gage system is fundamental equipment for any screw/header tool manufacturer, machine shop, or quality department.

*All Wrentham Tool Group gaging is available with certification.*

Some micro screws have recess "A" diameters as small as .030 inch making it incredibly difficult to determine if your element is seated properly within the recess. WTG's Micro Screw Penetration Gage eliminates the guesswork so you can be certain that your penetration reading is correct.

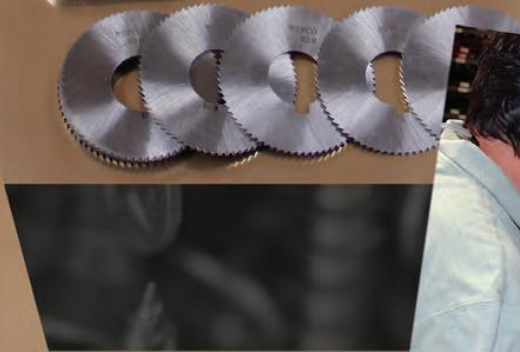
This fixture can be further optimized to measure torque required for recess cam out as well as to test driver bit strength.



## Micro Screw Penetration Gage

Utilized for the visual enhancement of the entry point between the penetration element and the screw recess.





# WRENTHAM TOOL GROUP

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