



# Consumer Goods Fastener



## Overview

**Industry:** Consumer Goods

**Application:** Branded fastener for use in eyeglasses

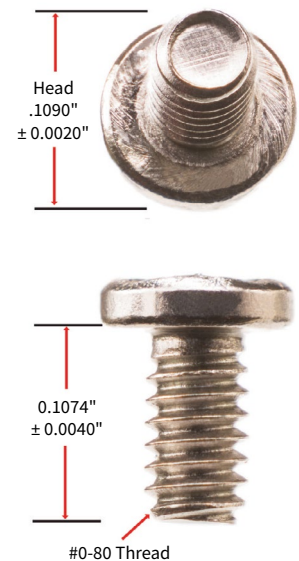
A manufacturer of premium fashion eyewear sought a means of incorporating branding and functionality into fasteners used on their products. They required a clearly defined logo that would also function as a driver to be designed onto a .1090" screw head. MW Components provided the optimal solution in four ways:

- Logo integration for brand protection
- Drive functionality of branded fastener head
- Versatile tool package to reduce future lead time and cost • Improved part strength and quality through cold heading



Screw head design with logo and driver functionality

The in-house engineering team at MW Components collaborated with the manufacturer to develop a cold headed fastener ensuring their logo met criteria appropriate for cold heading, legibility, and to allow for usability as a driver. As a result of the cold heading process, the customer benefited from an increase in both fastener thread and driver functionality strength. Through the tool design processes, MW Components considered the future needs of the customer by designing a tool that would accommodate additional fastener lengths and threads, enabling the customer to maximize investment.



### Material:

Stainless Steel 302HQ

### Critical Tolerances:

- Clarity of logo on screw head
- Head diameter of .1090"  $\pm$  0.0020"
- Fully formed, lap free #0-80 thread
- Material with sufficient strength to use the fastener head as a driver

### Manufacturing Processes:

- Cold Heading
- Thread Rolling

### Unique Benefits

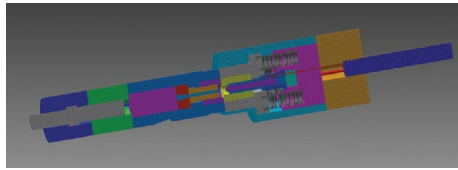
- Brand identification
- Versatile tool mitigates future lead time and cost
- Work hardening enhances component durability and product life cycle
- 100% Net Shape – No material scrap

# Engineered Cold Formed Solutions For The Most Demanding Applications

MW Components is a global pioneer in collaborative design, development, manufacture and control of miniature and micro-miniature metal components for customers seeking a better solution for yield, strength, assembly and cost through the application of cold forming technologies.

Mechanical design and assembly firms the world over turn to MW Components for their most advanced near-net-shape part requirements to eliminate material scrap, increase mechanical strength and reduce costly secondary operations.

MW Components employs vertically integrated LEAN practices in design, manufacturing, order and global inventory management including stock custom



miniature and micro components for JIT delivery to international customers in the Medical, Automotive, Aerospace, Energy, Appliance, Consumer Electronics, Defense and Semiconductor markets.

Our engineering team applies advanced progression, materials characterization, tooling and manufacturing knowledge to develop cost-effective production routines for each customer's requirements.

Using finite element analysis, quick-turn prototyping, CAD/CAM, soft tooling and in-house tool-making, MW Components has the depth and capabilities to move your project quickly into production.

## Quality Systems, Controls, Materials

### Standards:

- ISO9001:2008
- ITAR
- NIST Traceability

### Material Control:

- DFARS
- RoHS
- AMS

### Dimensioning & Tolerancing:

- AOI
- RAM Optical Metrology
- Micrometers
- Optical Comparators,
- Drop Gages
- Pin Gages
- Vernier
- 100% Inspection Capabilities

### Materials:

- 302 Stainless Steel, 304 Stainless Steel 42-6 Stainless Steel
- 48 Alloy, 52 Alloy ASTM-F30
- Copper
- Copper Core 2:1, 3:1, & Special Ratios Inconel X750
- Kovar ASTM-F15
- Molybdenum
- Nickel – Pure, Nickel Iron Alloys Niobium
- Platinum/Iridium
- RA330-04
- Silver

## About MW Components

MW Components is focused on accelerating the entire process of delivering custom, stock, and standard parts to virtually any volume and against demanding deadlines. We work to highly complex tolerances. We help simplify the management of any number of different components. And we take a no-compromise approach to quality. With MW Components you can be sure you'll get the right part to the right specification when and where you need it.



# MW Components

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