



**B L U E C H I P**  
ENGINEERED PRODUCTS

Since 1984

# Blue Chip Engineered Products

## 40+ Years

40+ years of expertise in custom fasteners and components

## Specialties

Custom engineered components, kitting, packaging solutions, and vendor-managed inventory

## Industries

Serving medical, automotive, aerospace, industrial equipment manufacturing industries and more

**Your reliable  
partner for  
supply chain  
excellence.**



**ISO Certified for top-quality and precision**

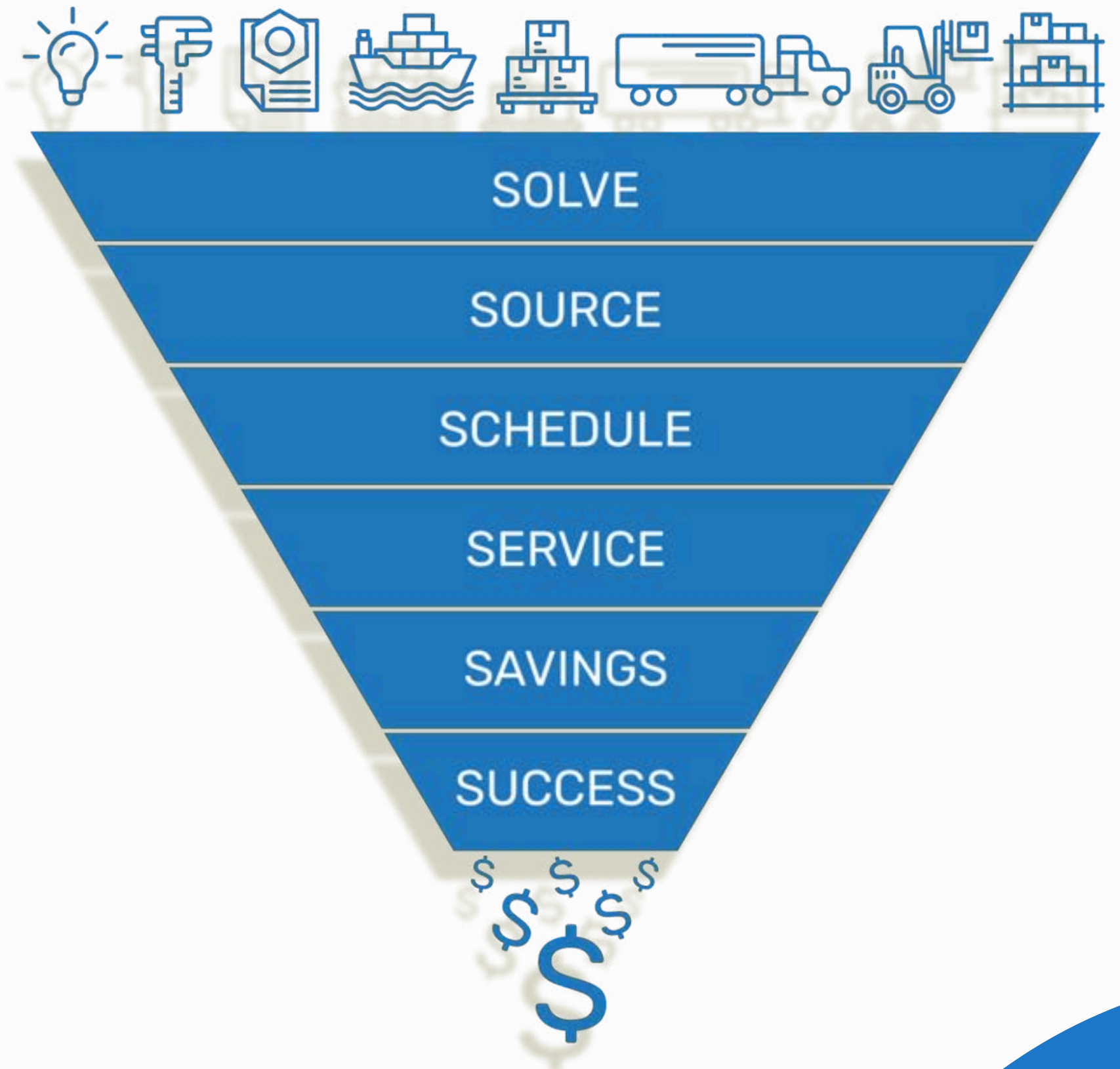
# Building Relationships. Solving Problems. Providing Solutions.

Our highly skilled team of fastener professionals have been doing that for over 40 years.

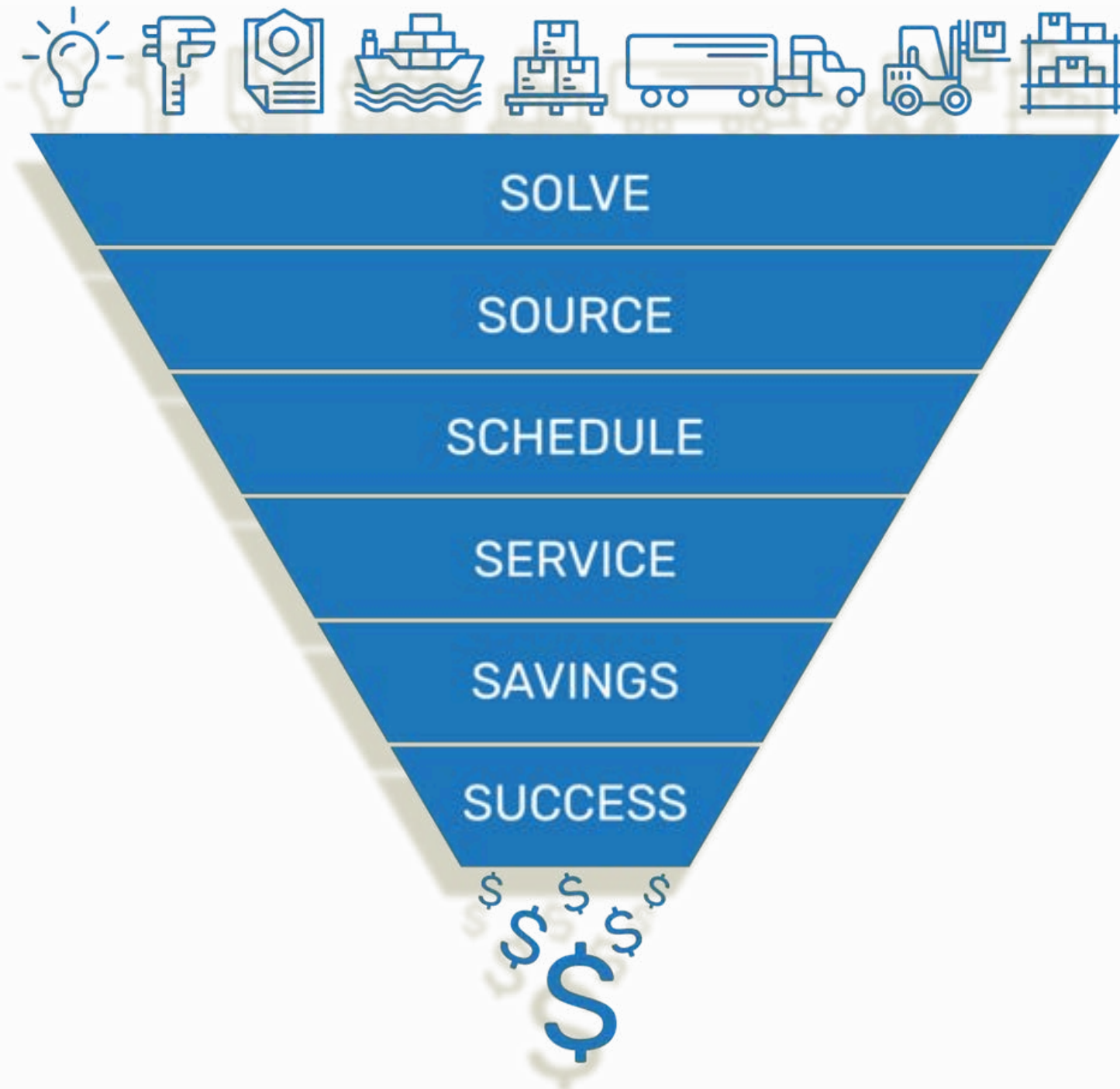
We solve your sourcing and inventory problems.

Our service after the sale is why our customer base has consistently grown since 1984.

Bring us your problems and we will provide solutions.



# 6-S Inventory Management System



- Over the past years manufacturers have realized that “soft costs” related to sourcing parts, purchasing, expediting, receiving, stocking and paying for inventory to be used in production, many times exceeded the value of the goods associated with them.
- Blue Chip’s 6-S approach to inventory management systems has helped reduce these costs for our customers and has given them more time to focus on other company goals & objectives.
- Realizing every customer’s needs are different, Blue Chip utilizes a detailed step-by-step plan to address every department’s concerns to offer the most cost effective solutions.

# How Does it Work?

- Blue Chip is committed to providing solutions and value added services to our customers. Developing a partnership between Blue Chip and your Purchasing, Engineering, and Quality teams allows us to explore all options for your application, and helps to reduce your time to market and minimize costs. Our advanced planning and thorough analysis of assembly methods, logistics, and inventory systems ensure a quality product, improving efficiency, and **offering the most cost effective solutions.**
- Whether your product calls for a special Cold Headed fastener or a complex assembly, Blue Chip has the resources to provide a diverse variety of products. Achieving our ISO 9002 Accreditation has helped propel us to a level that produces **the best results in quality, response, and value.**
- Whether you have single or multiple locations you tell us where, when and how and we will make it happen. We diligently control the entire process from the time of your order, throughout manufacturing, to the flexible scheduling of releases. We understand the high costs associated in the procurement of your products. Our goal is to reduce your time spent on logistics and your investment in inventory, helping you to enhance your company's profitability. **We work hard for your success.**

# 6-S Scope and Objective

This system is designed to simplify procurement for all assembly related parts used in production.

## Inventory

Inventory levels to be determined based on the customer's previous & projected history and stocked for release per your manufacturing schedules.

Every part will be inventoried in bar-coded containers for identification as well as color coded for area identification, if needed.

## Inspection

All parts will be inspected to current drawings or standards on file prior to packaging and shipping to ensure product conformity.

## Bar-coding

All shipments can have bar-coded labels with the following: Quantity, Part Number, and Description for ease of identification.

## Technology

\*Our computer system provides our customers with inventory tracking and reporting.

\*Projected needs, based on historical usage.

\*Reports by part number

\*Consolidated billing options

\*Bar Coding

# 6-S Scope and Objective

## **Inventorying of Material**

The method and frequency of inventorying materials will be determined by the implementation team.

## **Accounting**

Accounting procedures to be determined by the implementation team.

## **Existing Inventory**

Existing inventory will be counted by Blue Chip and entered into our system for ease of tracking and usage control. This inventory will be depleted first.

## **Delivery**

Delivery will be made to the customer for inventoried items. Special requests will be handled on an as required basis.

## **Engineering Support**

Blue Chip will support the customer's engineering on application issues, assembly methods, technical information, and samples when requested.

Our knowledge of cold forming and other manufacturing methods, industry innovations and related assembly components, make us a solid addition to our customer's team.

# Labels

Labels can be customer defined to assist in the receiving and inventory allocation process.

PART NO. (P) P08493 [Barcode]	
QUANTITY (Q) [Barcode]	P.O. (K) 35038-42 [Barcode]
SUPPLIER (U) S051 [Barcode]	
SERIAL (S) [Barcode]	

PART NO. (P) P08493 [Barcode]	PART DESC: PRINT #2506020 M6-1.0 WELD NUT RE SUPPLIER PART NO /2506020
QUANTITY (Q) 1500 C [Barcode]	LOT NO. (T) [Barcode]
SUPPLIER (U) BLU001 [Barcode]	P.O. (K) 35038-42 [Barcode]
SERIAL (S) [Barcode]	FROM: BLUE CHIP ENGINEERED PROD CINCINNATI OH DATE: 01/18/02

# 6-S Summary

Blue Chip Engineered Products Inventory Management System is a service to help our customer reduce the total cost of procuring fasteners and other assembly components.

Blue Chip Engineered Products assumes full or partial responsibility of managing the procurement, inventories, and just-in-time delivery of the fasteners and other related hardware items.

## How will you benefit?

### 1. Administrative Costs Lowered

- Supplier base reduced
- Expediting needs eliminated
- Accounting transactions reduced
- Purchasing can have more effective use of time

### 2. Inventory Investment Reduced

- Inventory levels become Blue Chip's responsibility
- Minimize inventory obsolescence
- Scheduled JIT delivery
- Local supply center

### 3. Warehouse Costs Reduced

- Smaller inventories are possible
- Floor space opened
- Receipt of Material
- Standardized packaging, labeling

### 4. Increased Product and Technical Support

- Design and engineering support
- Quality assurance
- Standardization programs

# 6-S Action Plan

Customer provides a basic framework of their goals and objectives, and profiles their current material handling system. Begin conversation regarding Pilot Area and operational issues.

Blue Chip presents initial program suggestions and alternatives, and also discusses the exchange of information required to analyze the program.

Implementation team members need to be selected to ensure continuity.

Representatives of the Accounting Departments from both companies begin discussions on developing an acceptable program.

The customer would provide a total part number usage throughout the plant. This information should include total plant usage and location usage.

Blue Chip, along with the customer, analyzes part number information and plant floor inventory levels.

Blue Chip reviews the Pilot Area's parts listing and categories and advises lead time.

Select implementation date for Pilot Area

Final discussions on package selection and storage configuration. Finalize recording process and communication of information.

Blue Chip Engineered Products develops a listing of the inventory levels by part number to be carried at the local distribution center and reviews this with the customer's planners/schedulers to determine the accuracy and make any necessary adjustments.

# How can Blue Chip serve you?

**Packaging/Assembly/Kitting**

**Product Development Support**

**Cost Reduction VA/VE Initiatives**

**Technical Support**

# Packaging, Assembly & Kitting

Utilizing our automated packaging equipment, we can simply build hardware kits with multiple parts, or a single part.

Packaging can include your logo, barcode, and/or data matrix code along with a description of contents. The capability to insert instruction sheets is also available.

We also can design and supply special custom packaging when required.

Blue Chip builds and stocks thousands of kits daily for our customers.



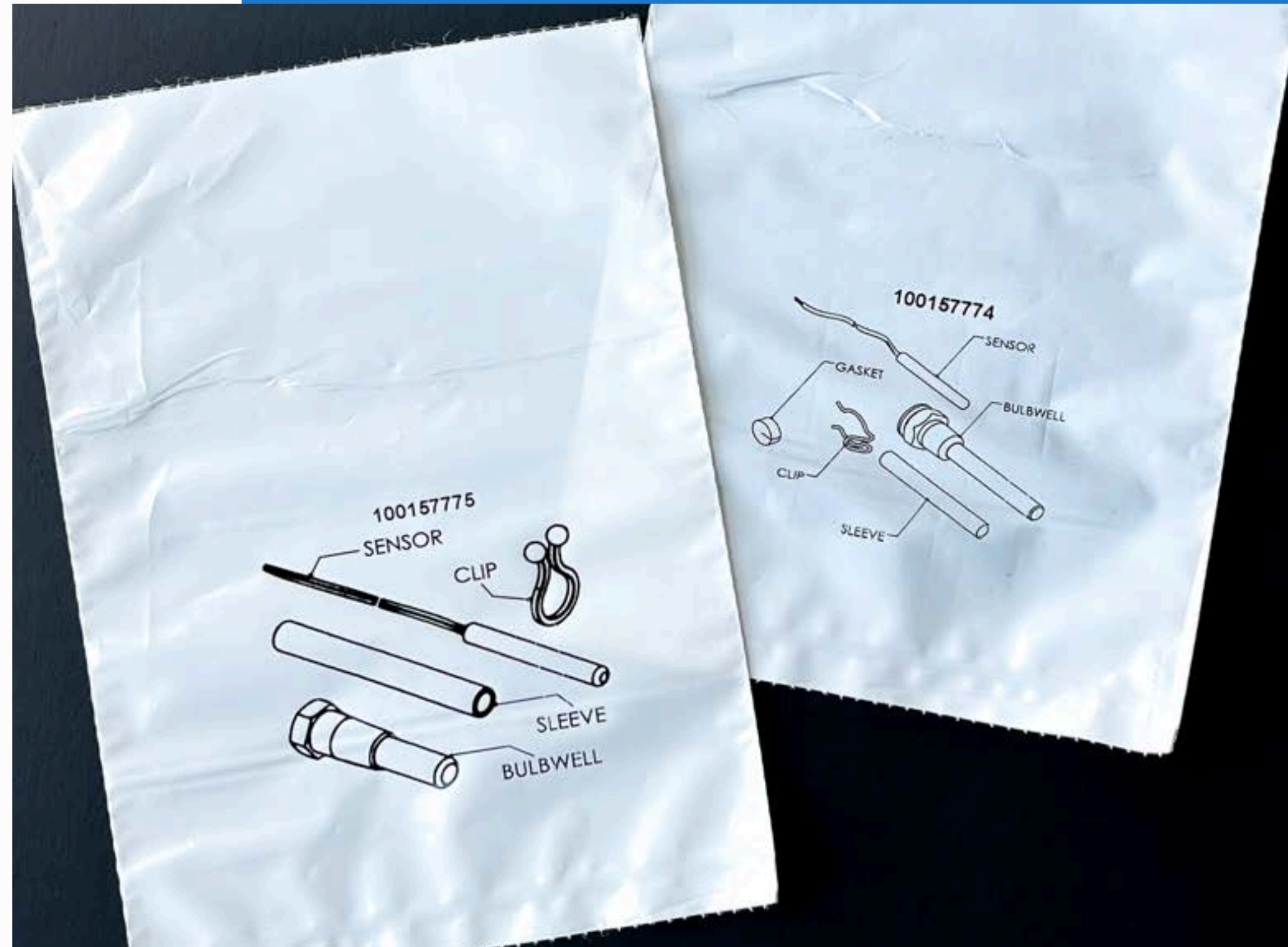
# Packaging & Kitting

## Project scope:

- Parts being kitted by our customer on the line
- 2 kits with similar parts getting mixed up during packaging

## Result:

- Pictures of parts and descriptions printed on bags
- Kit number included for identification
- Eliminated packaging errors on the line
- Prevented incorrect kits from being packaged with incorrect units



# Assemblies

## Project Scope:

Customer experiencing extended delivery and cost increases  
Customer buying stock plastic sheets and die cutting



**Plastic extruded and slit to size  
on rolls then stamped from roll**



**Magnets purchased in bulk**



**Assembled on auto riveter**

## Result:

Shortened lead time, Lowered cost, Controlled Manufacturing in house, Parts in inventory

# Assemblies Solutions

## **Time Savings:**

Eliminate in-house assembly.  
Accelerate production timelines.

## **Cost Efficiency:**

Reduce labor and equipment costs.  
Minimize waste and optimize materials usage.

## **Quality Assurance:**

ISO-certified processes ensuring consistency.  
Skilled technicians for error-free results.

## **Simplified Supply Chain:**

Single-source solution for fasteners and assembly.  
Seamless integration into your workflow.

## **Scalability:**

Capable of handling small to large-scale projects.  
Adaptable to changing requirements.



# Product Development Support

## Project Scope:

Customer provided sample of part they wanted to use

Had no drawing and needed assistance determining materials and dimensions

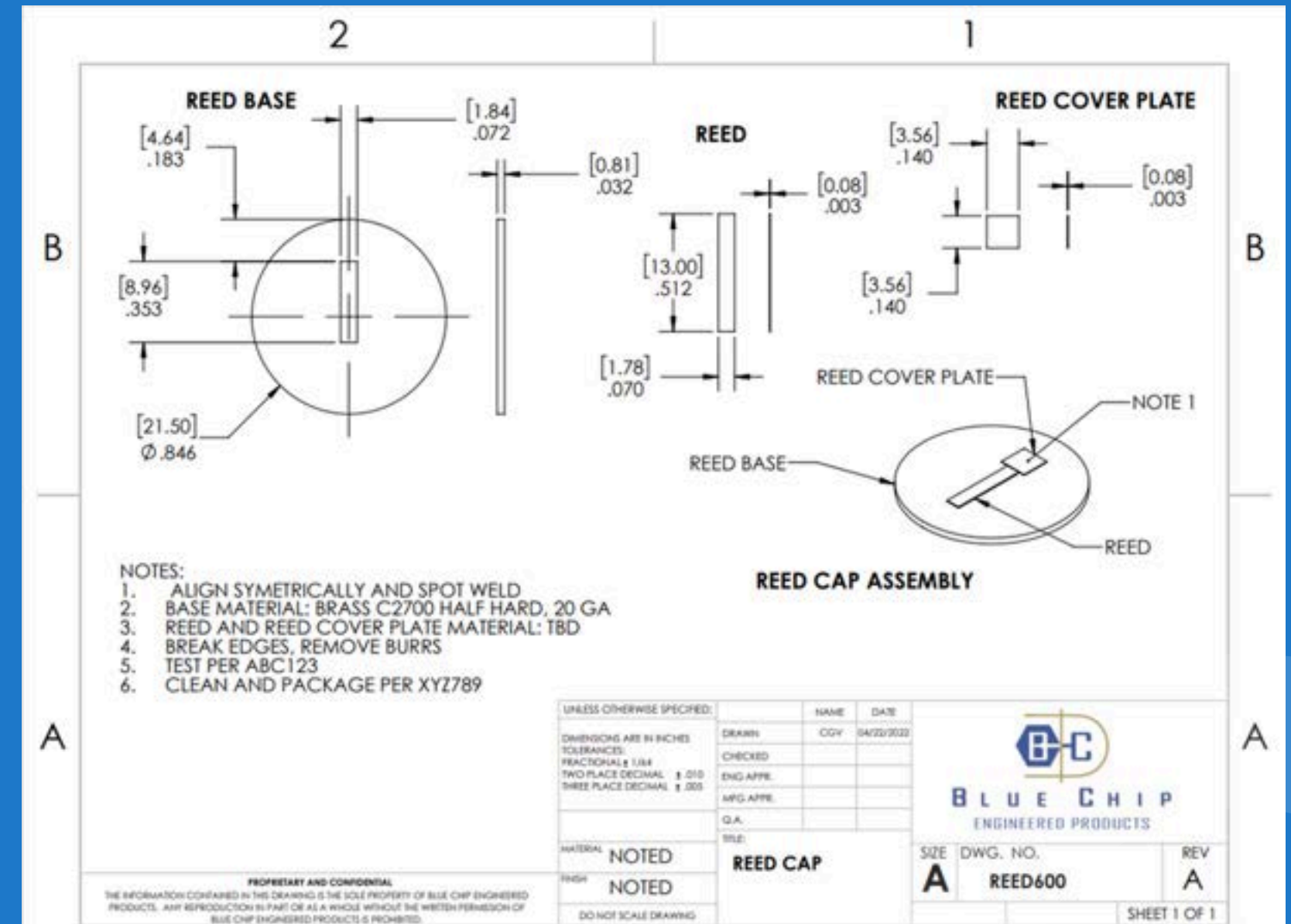
Full spectrum testing performed on all parts to identify material chemical composition

Mechanical testing performed to identify hardness

Dimensional performed to complete drawing

## Result:

Provided complete drawing and prototype samples



# Cost reduction VA/VE initiatives

## Project Scope:

Customer's machine shop, used for over 10 years, going out of business

Needed to find someone to manufacture the latch

Had no drawings

Wanted to explore possible cost reduction on latch

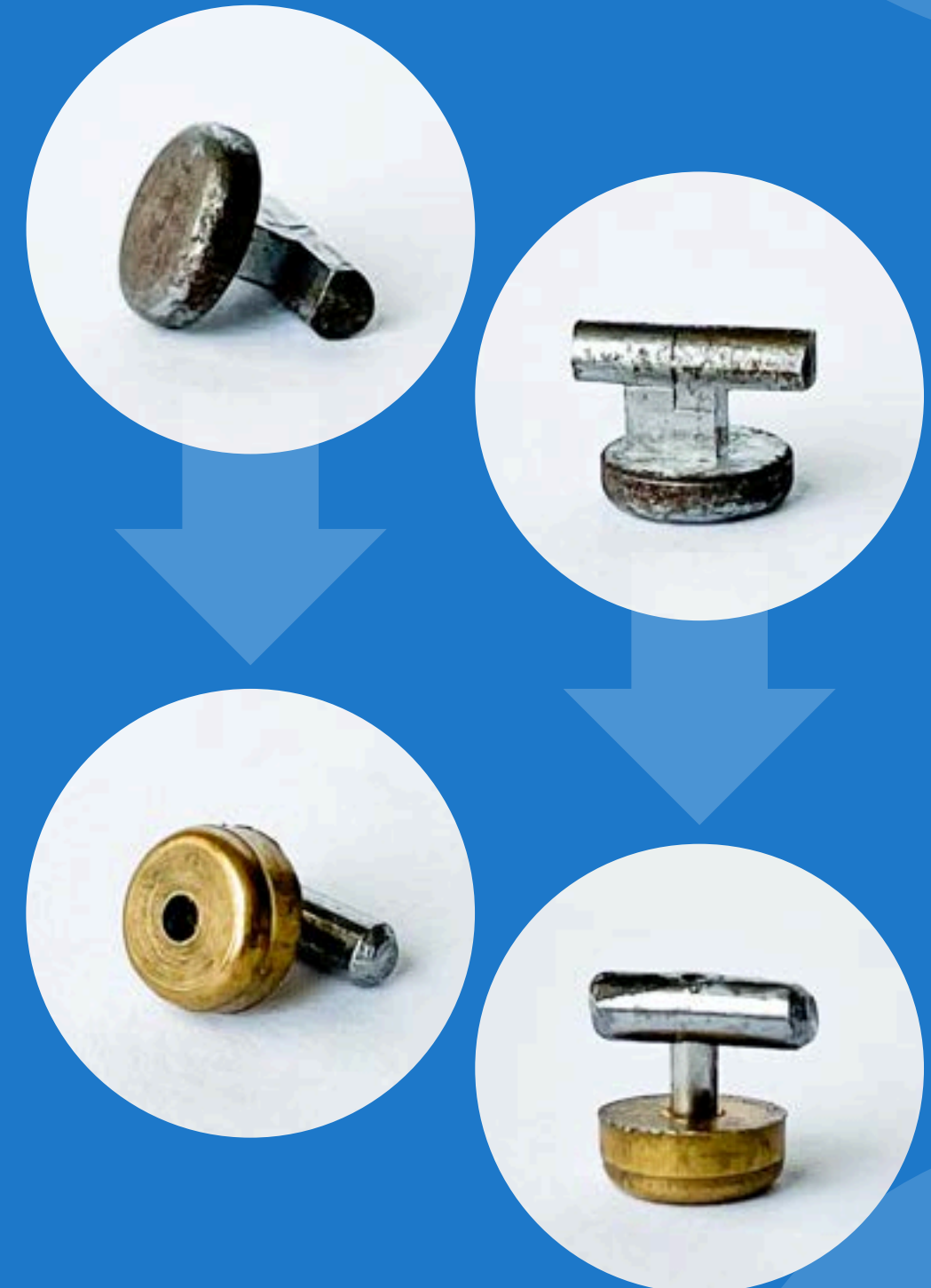


## Result:

3-piece lever converted to one piece

All parts requoted to explore areas for savings

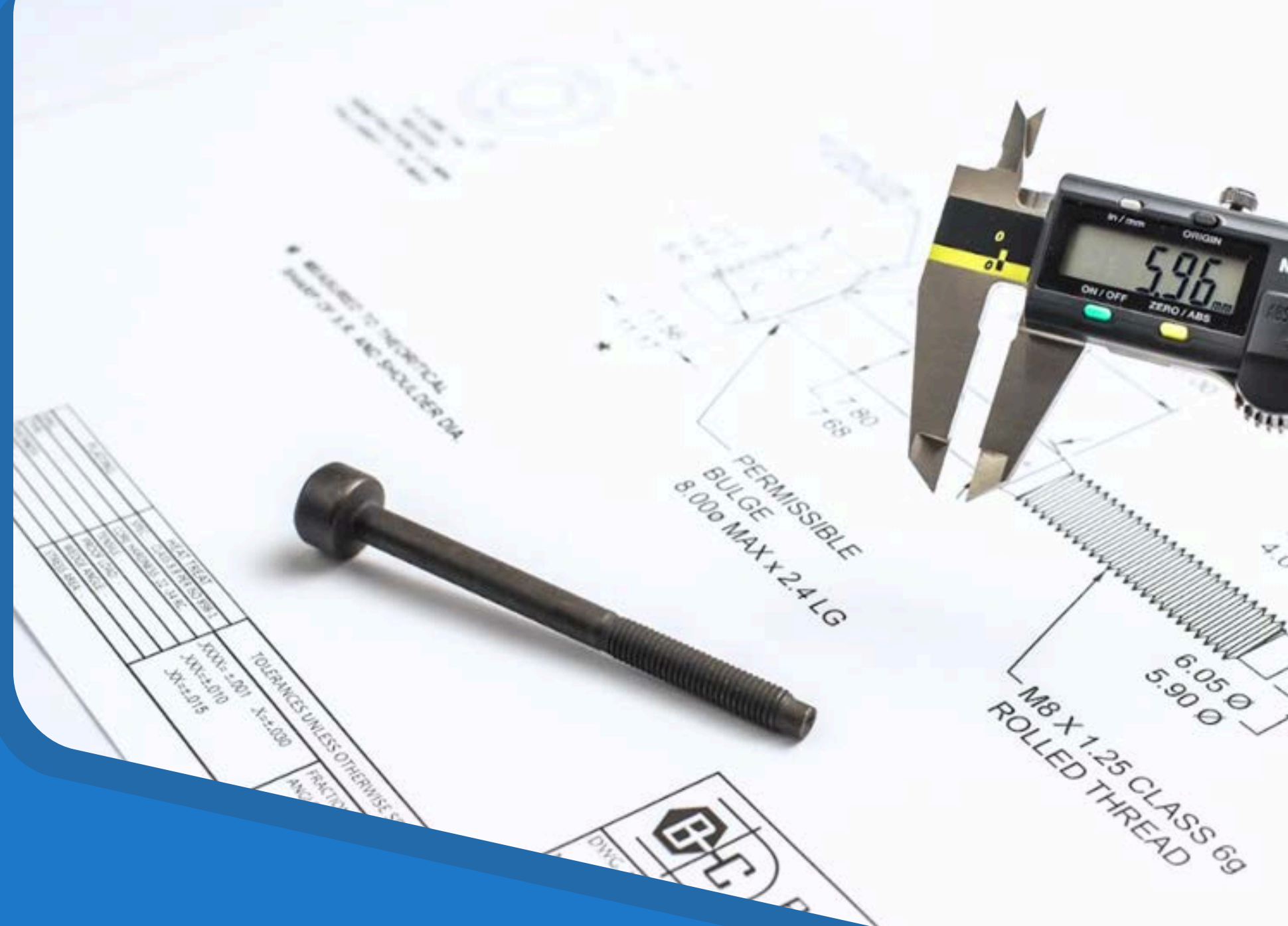
Latch assembled in house and inventoried



# Technical Support

## Engineering Drawings

Working from a sample part, an existing or obsolete blue print, or even just a description of the part, we can produce a detailed drawing



*We can also assist you with the design and assembly for your parts.*

# Technical Support

## Lab Testing

### **Coatings and Corrosion Testing:**

Thickness and Salt Spray Testing

### **Hydrogen Embrittlement Testing**

### **Mechanical Testing:**

Tensile, Hardness, Shear, Impact, Fatigue, etc.

### **Screw Performance Testing:**

Torsional Strength, Drill Time, Drive Performance, Drivability, Ductility, Pull-Out, Pull-Over, Locking Element Performance, etc

### **Metallurgy:**

Case Depth, Decarb, Grain Flow, Coating Thickness, etc.

### **Sealing Fastener Leak and Pressure Testing**

### **Torque-Tension Testing:**

K-Factor determination, Torque-angle, Tightening Strategies, Lock Nut Testing

### **Chemistry:**

XRF Positive Material Identification, OES Full Spectrum Chemistry, Mill Test Report Examination for Fastener Specification Compliance

### **Vibration Resistance:**

Junkers Vibration Test Machine and Shaker Table

### **Dimensional Inspection**

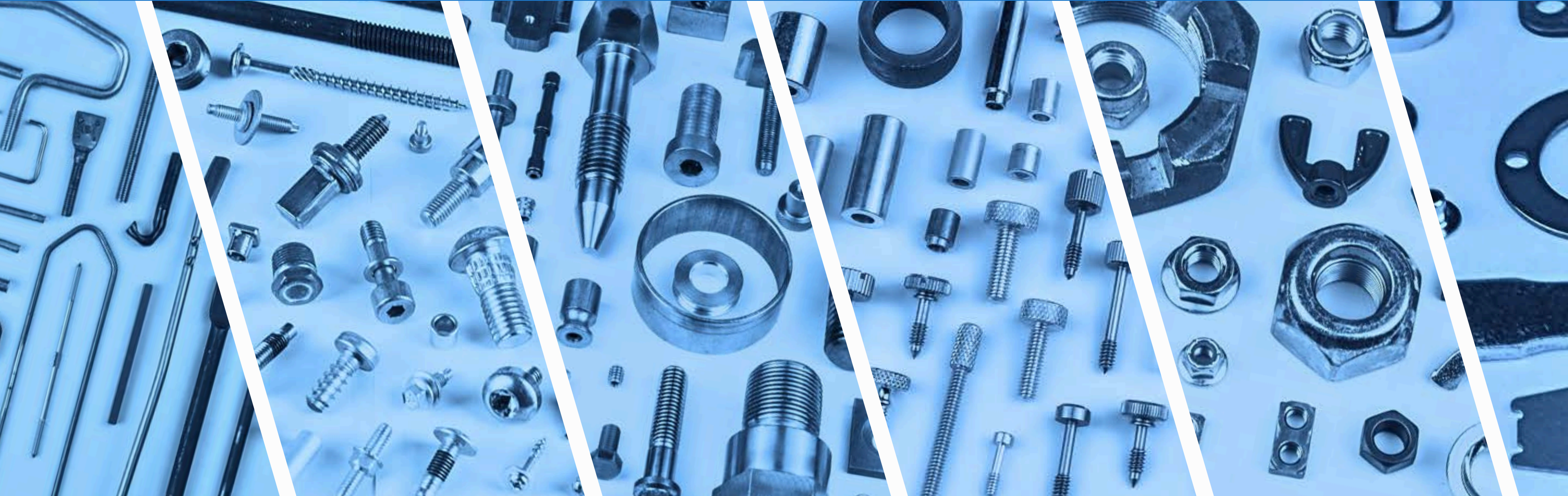


# Product Line:

Screw Machine  
Assemblies  
Stamping

Weld Product  
Molded Parts  
Wire Forms

Nuts  
Cold Heading  
Electronic Hardware



# BCEPI Contacts

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