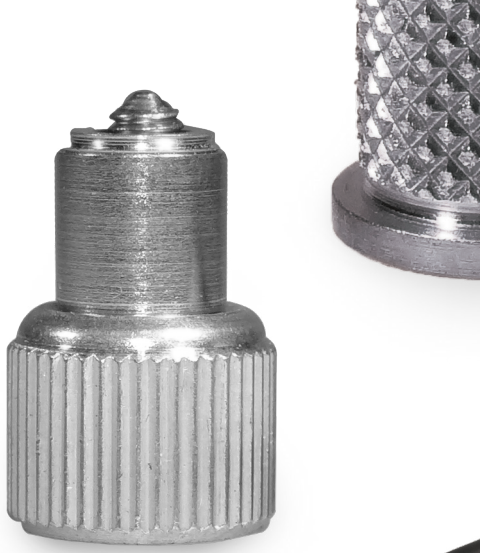
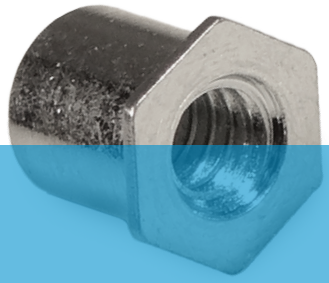
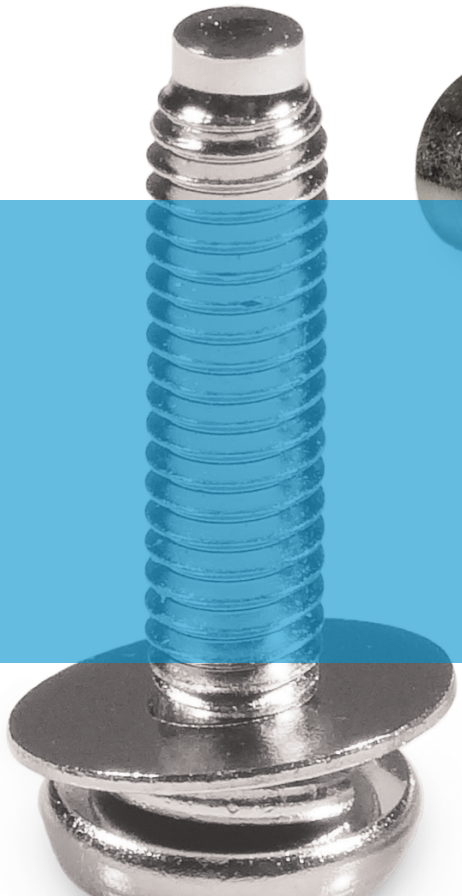
PENCOM™
PENINSULA COMPONENTS







# GLOBAL CAPABILITIES

# PENCOM OVERVIEW

PENCOM's mission is to be the world's leading SOLUTIONS PROVIDER to OEM design engineers in the fields of mechanical and fabricated components, and to provide INVENTORY MANAGEMENT SOLUTIONS that localizes inventory, increases inventory turns, lowers inventory exposure, and reduces inventory management costs.

## History

Founded in 1982 by William A. Gardiner, PENCOM employs more than 400 people globally and has over 200,000 square feet of manufacturing and logistics space world wide.

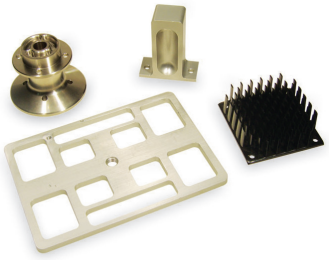
From its founding, PENCOM's staff worked with design engineers, providing solutions for product designs. With each new design, PENCOM built a reputation as a company that can solve difficult design problems. From drawing board to manufacturing, PENCOM's design solutions have been purchased by factories around the world. By adding local logistics centers, and our "SOLUTIONS" approach to meeting customers needs, PENCOM is able to provide customers with a higher level of service and support. Today, PENCOM has over 25 logistics sites in North America, Central America, South America, Europe, and Asia.

In 1999 PENCOM purchased its first manufacturing site, Accuracy Screw Machine in Hayward, California. Today, with plants in Hayward, California; Nogales, Mexico and Dongguan, China; PENCOM provides a full range of precision machining, turning, milling, and high volume production turning. These plants also manufacture PENCOM Captive Screws, Standoffs, Spacers, Press-in Sheet Metal Fasteners (Zins) and Inserts for Plastics (Zerts).

With the purchase of Visible Inventory in 2005, PENCOM became the leader in the field of INVENTORY AUTOMATION. Now our customers no longer need to actively manage inventory, instead; Visible Inventory remotely monitors it.

PENCOM's ***"Manufactured globally, supplied locally"*** philosophy continues to provide customers with low cost global manufacturing and localized inventory.

Global Locations »
Manufacturing Facilities – Capabilities »
Mechanical Hardware »
Thermal Components »
Visible Inventory »



visible inventory

# GLOBAL LOCATIONS

PENCOM's global logistics network currently consists of 25+ sites on 4 continents. It is through these logistics centers that we support the needs of the local customers.

These services are:

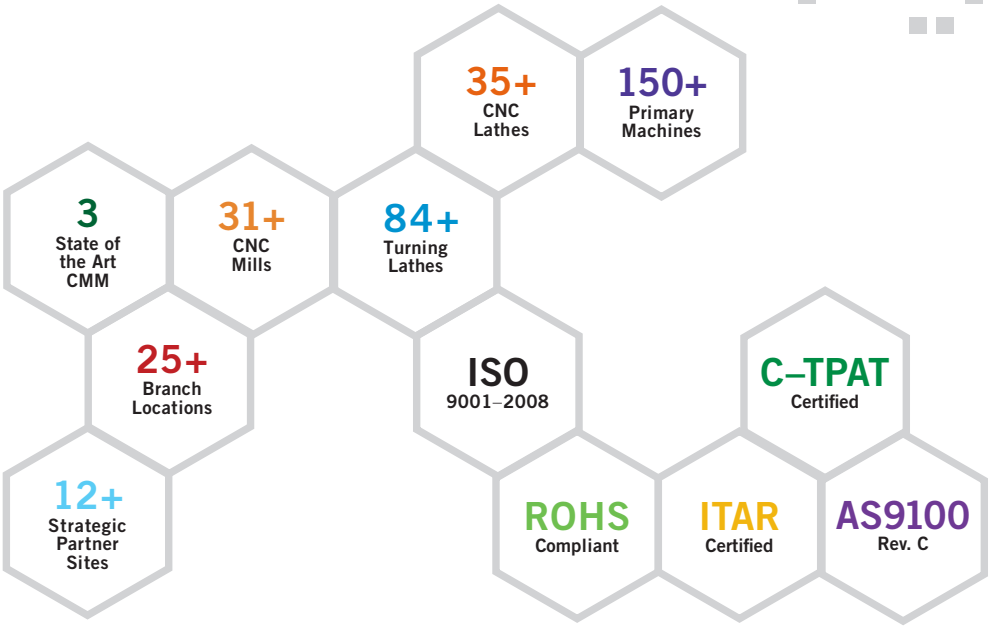
- Quoting Customer's Requirements
- Regular Visits to Customer Sites
- Local Account Manager
- Design Assistance to Engineers
- Inventory Support
- Just-in-time Delivery
- Production Engineering Assistance
- Consolidated Shipments
- VMI Programs
- Automated Inventory Systems
- Consigned Inventory Programs
- Cost Savings Through Application Evaluation
- Local Part Quality Inspection
- Quick Response to Quality Issues
- Kitting of Components
- Prototype and Sample Support

PENCOM's global logistics network and manufacturing sites, allows PENCOM to "*Manufacture Globally,*" while customers are *"Supplied Locally."* This system provides our customers with the flexibility to obtain components on a just-in-time basis, maintaining a ramp-up safety stock at PENCOM, with the advantage of global low cost manufacturing.

**Europe**
Birmingham, UK
Czech Republic (Future)
Hungary (Future)

**Asia**
Dongguan, China
Hong Kong, China
Shanghai, China
Penang, Malaysia
Bangkok, Thailand
Taipei, Taiwan
Singapore
India (Future)

**Strategic Partner Sites**
USA (3 Sites)
Shenzhen, China (3 Sites)
Kunshan, China (3 Sites)
Taiwan (3 Sites)



# MANUFACTURING FACILITIES

**Capabilities–Production Turning**
**PENCOM** Hayward, California USA

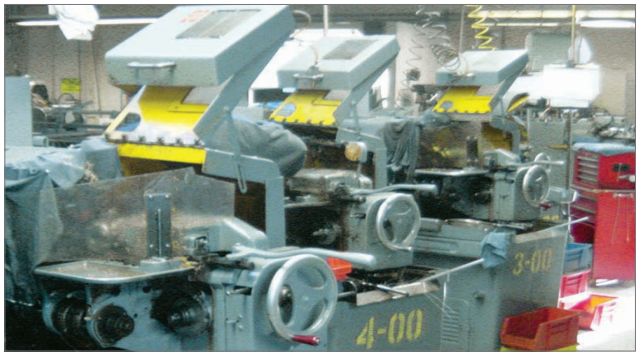
PENCOM Accuracy is located in Hayward, California. The plant specializes in low and high volume quick turn parts. Using Davenport multi-spindle automatic screw machines, PENCOM is able to fulfill customer requirements for USA made parts in high volume. For smaller volumes, Brown & Sharpe single-spindle screw machines are used.

**Capabilities–Precision and Production Turning and Milling**
**PENCOM** Nogales, Mexico

PENCOM CSS is located in Nogales, Mexico, within 5 miles of the US/Mexico border. This plant specializes in supplying low cost, high precision CNC turned and milled parts. Additional equipment includes Davenport multi-spindle screw machines for high volume, low cost parts.

**Capabilities–Precision and Production Turning and Milling**
**PENCOM** Dongguan, China

PENCOM Dongguan is located 60 miles north of Hong Kong in southern China. It is a full service manufacturing plant capable of producing over 250,000 parts daily. Located in China's southern industrialized zone, there is excellent infrastructure support for heat treating, plating, tooling, and raw material.




**Part Specifications:**

**Production Turning**

| | |
|---|---|
| Diameter | :0.010 – 1.688" |
| Length | :0.010 – 3ft |
| | |
| Tolerance: | |
| Length | +/-0.001 |
| O.D. | +/-0.001 |
| I.D. | +/-0.001 |

**Part Specifications:**

**CNC Turning**

| | |
|---|---|
| Diameter | : 0.010 – 13.8" |
| Length | : 0.020 – 21.1" |
| | |
| Tolerance: | |
| Length | +/-0.0005 |
| O.D | +/-0.0003 |
| I.D. | +/-0.0003 |

**CNC Milling**

| | |
|---|---|
| Width | 15" max |
| Length | 27" max |
| Height | 12" max |
| Tolerance: | |
| Positioning | +/-0.0002" |
| Repeatability | +/-0.0001" |
| Dimensional | +/-0.0003" |

**Part Specifications:**

**CNC Turning**

| | |
|---|---|
| Diameter | : 0.010 – 11.0" |
| Length | : 0.020 – 15" |
| | |
| Tolerance: | |
| Length | +/-0.0005 |
| O.D. | +/-0.0003 |
| I.D. | +/-0.0003 |

**CNC Milling**

| | |
|---|---|
| Width | 20" max |
| Length | 40" max |
| Height | 20" max |
| Tolerance: | |
| Positioning | +/-0.0002" |
| Repeatability | +/-0.0001" |
| Dimensional | +/-0.0003" |

# MANUFACTURING CAPABILITIES

From the Aerospace industry to the Toy industry, PENCOM is recognized as a global manufacturer with the ability to tackle difficult parts successfully. Our parts range from spacers and standoffs for general industry to DNA testing plates for medical use. PENCOM can also supply upper level assemblies requiring welding, riveting, and/or fastening, eliminating multiple part management for its customers.

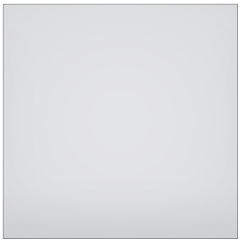
PENCOM currently has 31 CNC Milling Centers, 33 CNC Precision Turning Centers, 84 Production Multi-spindle and Single Spindle Screw Machines and continues to acquire machines as we grow. Support equipment includes EDM, stamping presses, centerless grinders, thread rollers, and multi-blade cut-off saws.

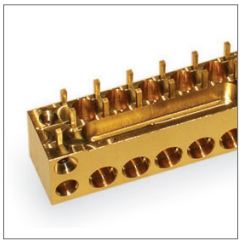
All plants are ISO certified and have an active continuous quality improvement program in place.

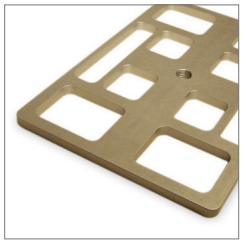
**Material Examples:**

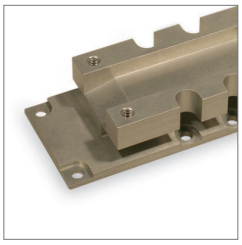
| | |
|---|---|
| Steel | 12L14, 1215, 1144, 1020, 41L40 |
| Brass | 360, 353 |
| Aluminum | 6061, 2011, 2024, 7075 |
| Stainless Steel | 303, 316, 304, 416 |

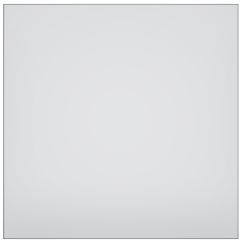
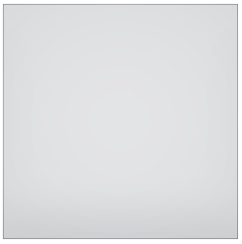
**CNC Milling**





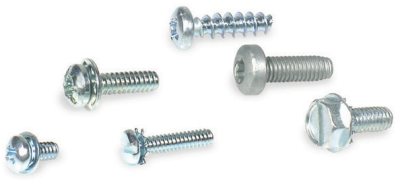




# MECHANICAL HARDWARE

Since its inception, PENCOM has been a *"Solutions Provider"* for mechanical components. Today, PENCOM supplies a complete range of standard and custom mechanical hardware. PENCOM's ability to evaluate an application and provide a "Cost Effective Design Solution" makes it an invaluable asset to design engineers. By offering a complete line of mechanical components, PENCOM provides a *"One Stop Solution"* to manufacturing locations. Coupled with its *"Global Logistics Network,"* PENCOM is the **"GLOBAL SUPPLY CHAIN LEADER."**



» Screws

Self-Clinching Hardware–**Zins** «

» Ball Studs & Clips

Fan Screws «

» Standoffs

Plastics «

» Handles

Compression Connectors «

» Inserts For Plastics–**Zerts**

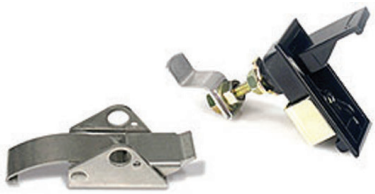
Captive Screws «

» Thumb Screws

Guide Pins «

» Nuts

Washers «



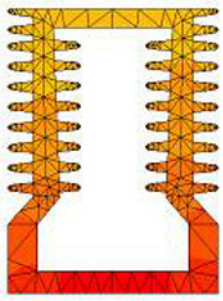
» Latches

Ejectors «

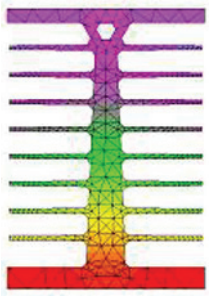
# THERMAL COMPONENTS

PENCOM provides a complete thermal solution, from design to final product assembly. Capable of providing heat sinks from a simple milled-from-solid part to a complex stamped stacked fin heat pipe assembly with active cooling; PENCOM can provide a solution for all applications. Our thermal engineers assist designers in developing a thermal solution for each application. When required, thermal modeling software is used to validate the design solution. Once a design is finalized, PENCOM quickly fabricates prototypes for product testing. As parts move into production, PENCOM chooses its most cost effective manufacturing site to produce the part. Finally, parts are staged at our “Global Logistics Sites” for “Demand Pull” delivery.

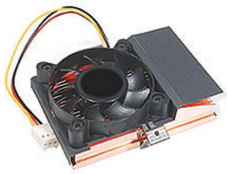
**Original Design**



**Performance Enhanced Design**

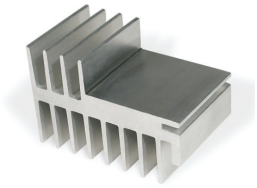


» Active Fan Sink

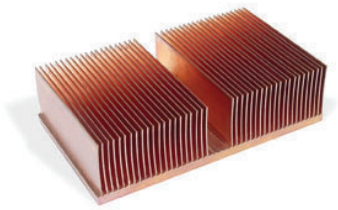


AGP & Chipset «

» Forged Fin

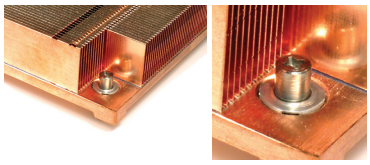


Extrusions «



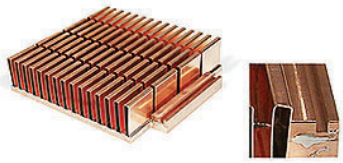
Skived

Cross Cut



Custom Systems

Mounting Screws



Folded Fin

Clips

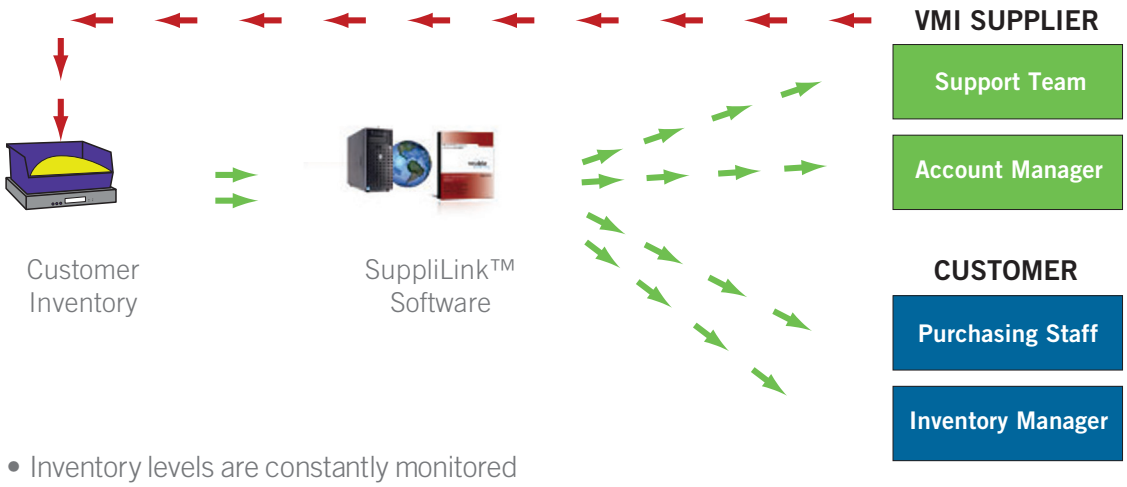
visible inventory

## What is Visible Inventory?

Visible Inventory is a system that AUTOMATES the inventory management process. Using piece weight, a VI sensor calculates how many parts are in each bin location. SuppliLink™ software takes the sensor information and converts it into actions, such as sending replenishment e-mails to vendors.

## Taking the M out of VMI +

**INVENTORY AUTOMATION SYSTEM THAT TAKES CONTROL OF YOUR PROGRAM**




- Inventory levels are constantly monitored
- Inventory data is transferred to SuppliLink™
- Inventory changes are continuously monitored
- SuppliLink™ determines when a replenishment level has been reached
- E-mails are sent to the support team
- Changes are recorded in a transaction log

## How does Visible Inventory change a VMI program?

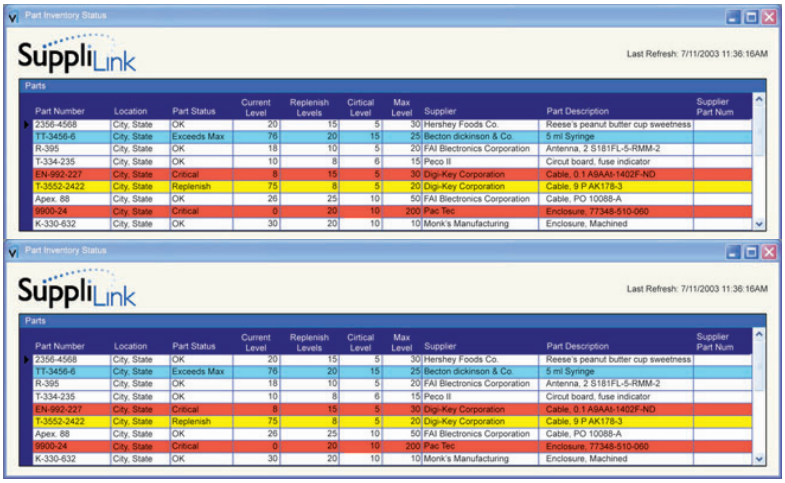
Visible Inventory constantly monitors inventory, eliminating the need to manually inspect each part location. SuppliLink™ determines when a part has reached a replenishment limit and notifies the supplier via e-mail. The guess work of a traditional VMI program is eliminated.

Part Weight – .024567 lbs.
Bin Weight / Part Weight = # Of Parts

## SuppliLink™ software keeps you in touch with your inventory

SuppliLink™ keeps you in touch with your inventory wherever you are. With Visible Inventory's patent pending system, you can view your inventory from any global location at any time. Up to the minute inventory changes are recorded and the SuppliLink™ data screen instantly refreshes to show the new inventory level. When changes in inventory cross one of the four preset limits, a notification can be sent to a cell phone, PDA, or transmitted via e-mail.

Color coded data enables fast inventory status checks. Data can be filtered to show inventory for a specific program, warehouse, or other attributes. SuppliLink™ shows both customer and VMI supplier the same inventory data, putting both on the same page.




## PRODUCTS

### iBin

Capacity: 0 – 30 pounds

Dimensions: 5" x 14"
11" x 12"

### iShelf

Capacity: 0 – 300 pounds

Dimensions: 24" x 18"

### iPallet

Capacity: 0 - 5000 pounds

Dimensions: 48" x 48"

"Manufactured globally, supplied locally"

**www.pencomsf.com**
For inquiries please contact: sales@pencomsf.com