



# WELCOME TO UPI MANUFACTURING

## CAPABILITIES BRIEFING



DEEDS. NOT WORDS.

# UPI Manufacturing Day

GOVERNOR SCOTT WALKER PROCLAIMS  
NOVEMBER 1, 2012 AS UPI MANUFACTURING DAY!



PRESENTED BY  
LT. GOVERNOR REBECCA KLEEFISCH



# UPI's History

UPI Manufacturing was founded by brothers, Jeff and Norb Dretzka in response to the September 11<sup>th</sup> attacks. With 20 years of successful management expertise in their construction business, Jeff and Norb responded with their skills to assist in our country's safety.

UPI Manufacturing was created to provide our Warfighters with quality components and turn-key fabrications helping soldiers to survive and win the most difficult of missions.

UPI Manufacturing's dedication and tenacity in this mission has made UPI one of the most reliable manufacturers of its' kind.





# Capabilities and Core Competencies

- Rapid Manufacturing
- Engineering Services
- Fabrication
- Welding
- Service and Production Parts
- Turn-key services including: heat treating, plating, paint (E-coat, powder and liquid; including CARC)
- Product Development
- CNC Machining
- 3-D Machining
- Water Jet / Laser Cutting
- Complex Assembly
- Mil-Spec Packaging





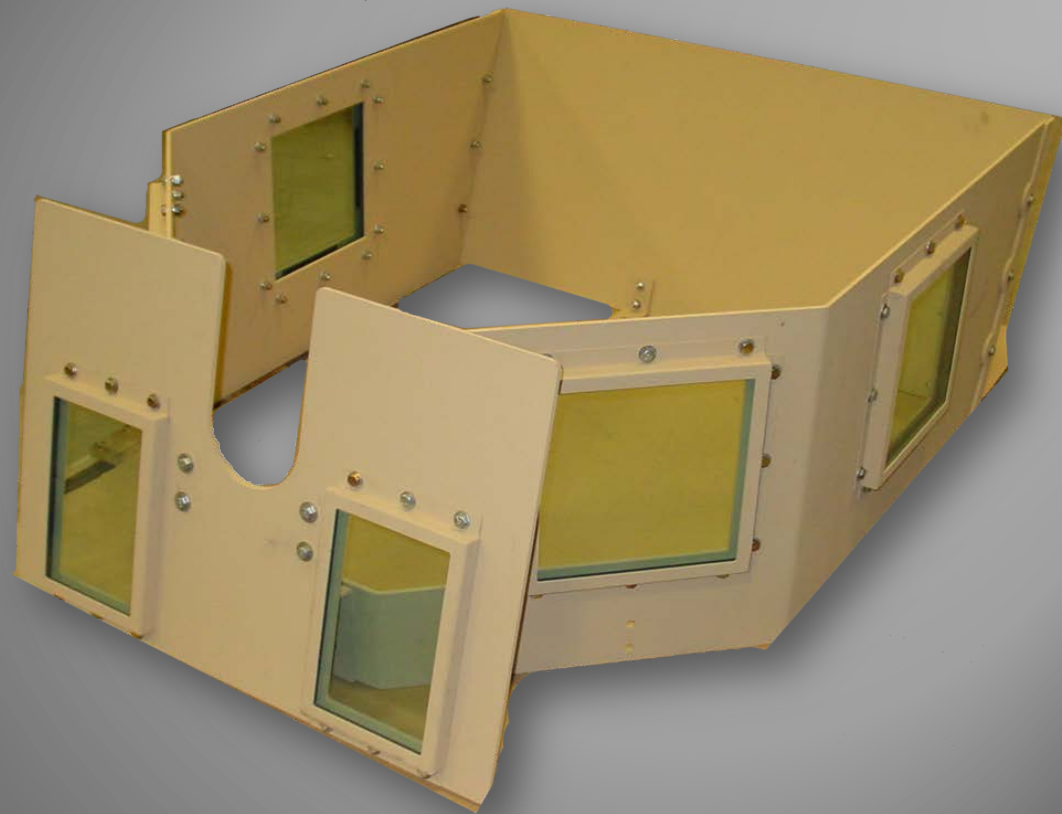
The background features a large, stylized feather in shades of tan and brown, positioned vertically behind the text. To the left of the feather, there is a smaller, detailed illustration of a feather with a quill. A solid brown horizontal line spans the width of the image, positioned below the word 'MANUFACTURING'. In the bottom-left corner, there is a decorative orange and black geometric shape.

Parts & Assemblies

Produced by:

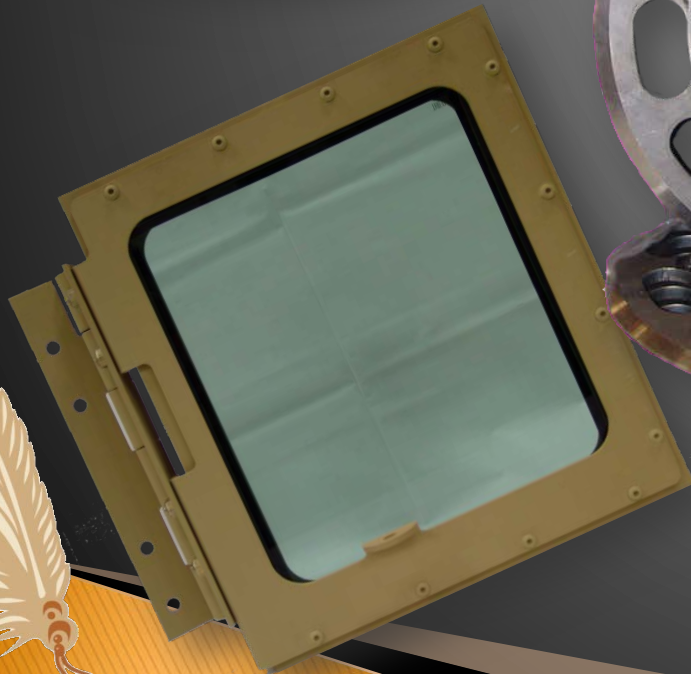
**UPI**  
**MANUFACTURING**



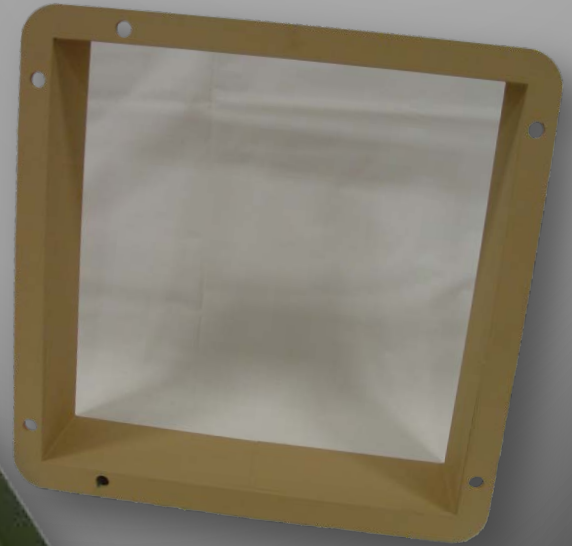
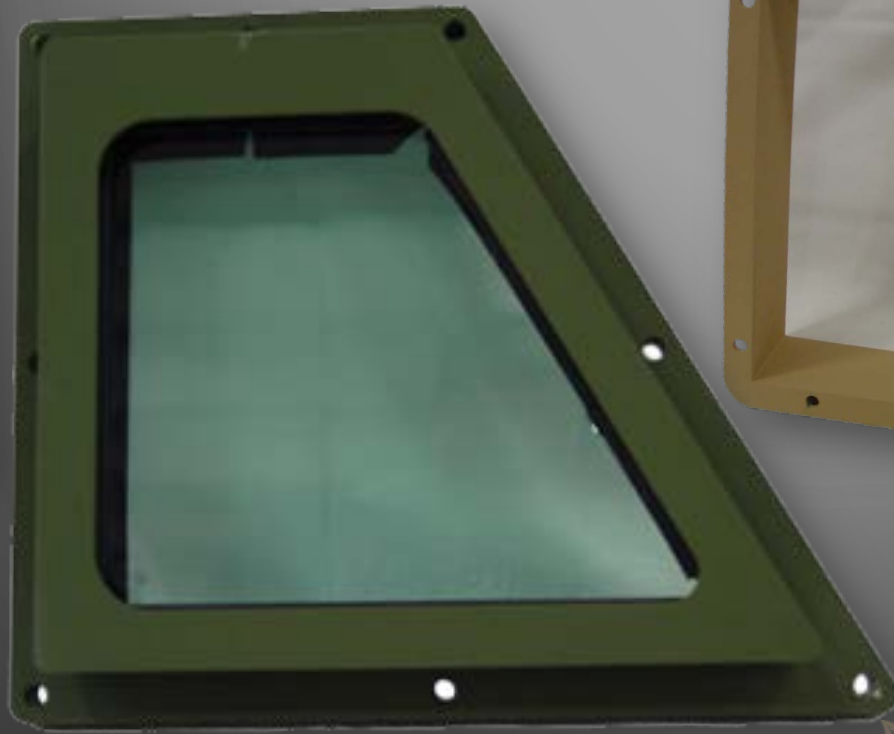




# Armor Components



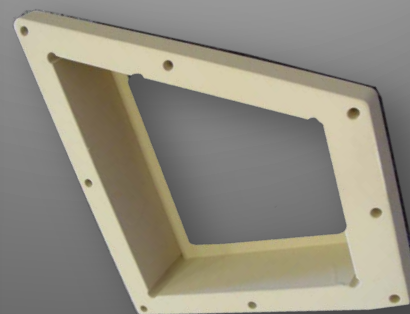
# Proven Expertise in Turn-key Ballistic Windows



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# Expertise With Complex Window Frames





# Complex Fabrications



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UPI Manufacturing contracted with Rock  
Island Arsenal provided 38,456  
HMMWV Door Kits. Each door consists  
86 components.



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# The Octopus

## Custom Assembly Station

### Engineered to meet Customer Requirements



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# RAPID MANUFACTURING

Total Project Management  
from concept to completion

Complete Engineering Services

Degreed Engineers on Staff

Fast Development

&

Delivery



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BEFORE



AFTER

# Rapid Manufacturing

## Concept to Completion



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*Deeds Not Words*



# Complete Project Maintenance

Complete Retro-fit to Meet  
Customers Custom Requirements



Turn-Key Responsibility

On Going End User Involvement

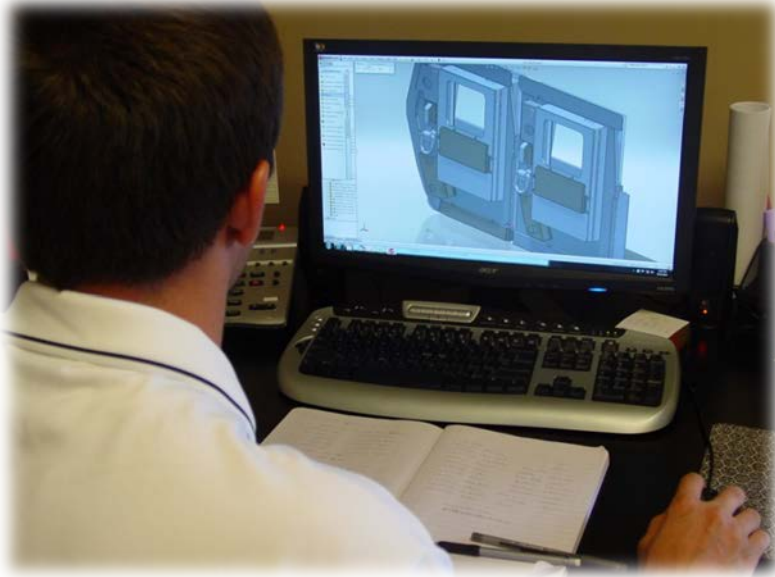
Design Development on the Fly



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# UPI Manufacturing utilizes Solidworks CAD software and can convert a variety of other software.

- GibbsCAM version 9.5.1 programs CNC machines. MasterCAM is also used.
- Allows full 4-Axis programs in any machining center.
- Includes full turning center capabilities including C-Axis milling/drilling.
- Compatible with other CAD systems.



# First Article Testing

ISIRs

PPAPs

“The Key”: Thorough Documentation and Paperwork



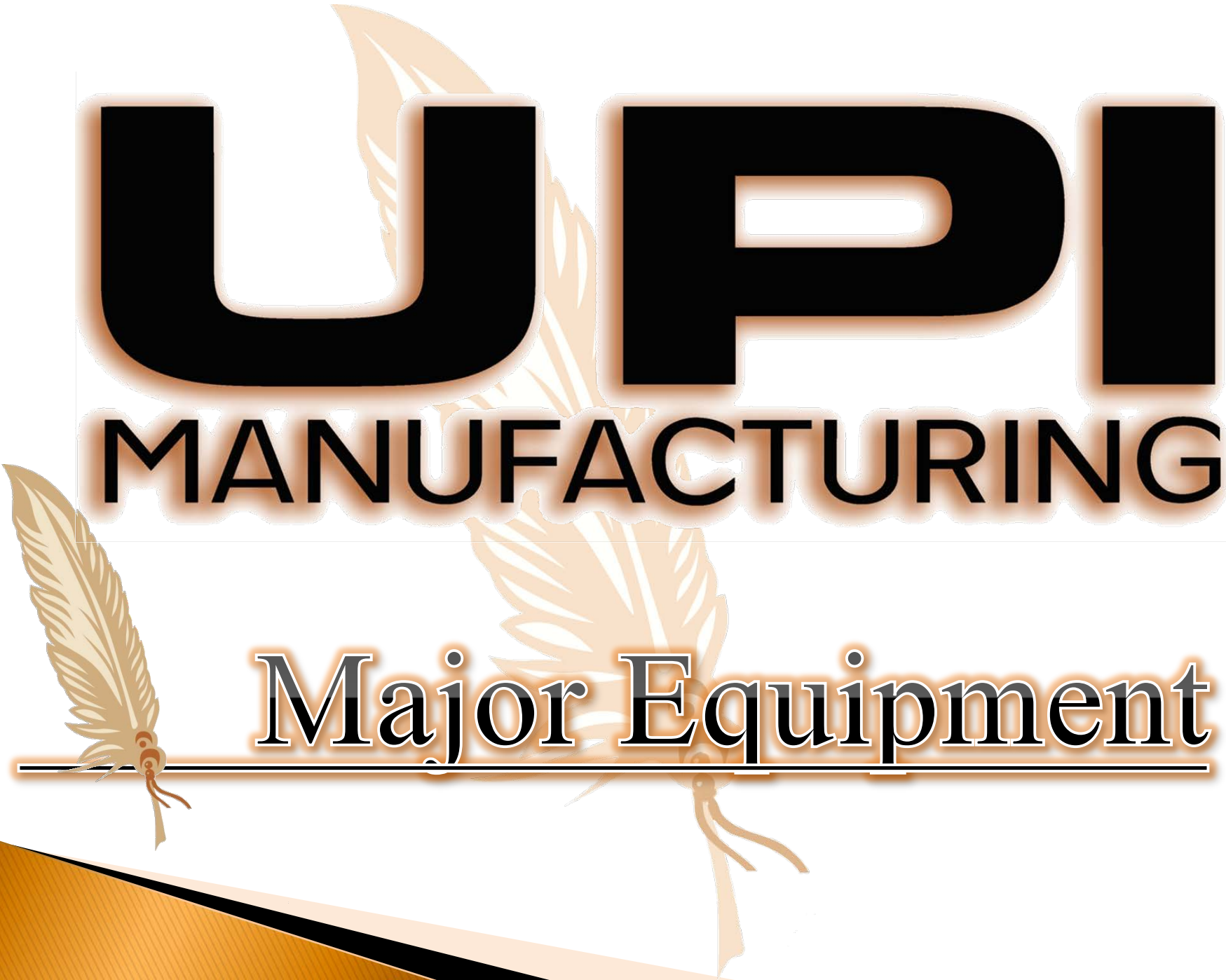


# Versatile Material Capabilities

- Mil A 12560 – Armor Steel
- Mil A 46100 – Armor Steel
- Mil DTL 46177 – Armor Steel
- MIL DTL 46027 – Aluminum Armor
- Mil DTL 46063 – Aluminum Armor
- Steel (Carbon)
- Stainless Steel
- Cast Iron
- Aluminum
- Rubber
- Plastics
- Composite
- Glass
- Inconel
- Monel





The background features a large, stylized feather in shades of orange and yellow, positioned behind the main text. A horizontal line with a small feather tied to its left end spans the width of the image. The bottom left corner has a diagonal orange and black gradient.

# UFI

## MANUFACTURING

# Major Equipment

# Bystronic BySpeed Pro

Fastest laser on the market !



BYSTRONIC  
BYTOWER  
(11) SHEET  
STORAGE  
LOCATIONS



BYSTRONIC BYTRANS  
EXTENDED  
SHEET HANDLING ROBOT



# Bystronic Xpert 320 Press Brake

Most Accurate Press Brake on Market



## Bystronic Xpert 320

- \* 350 Working Tons
- \* 14 foot Bed
- \* 6-axis Back Gauge
- \* Proportion Hydraulic Crowning
- \* Hydraulic Tool Clamping
- \* Fast Bend Safety System
- \* Optical Bend Guiding System

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# Zeiss CMM

(Coordinate Measuring Machine)

Amazingly Fast and Accurate to .0001"



## ZEISS Accura II

- Measuring Area: 95 x 48 x 40"
- Travel Speed (x&y): 800 mm/s
- Acceleration (x&y): 2000 mm/s/s
  - CNC Drive –  
program and walk away
  - Scanning Probe
  - Calypso Software
- ViScan Camera Vision System



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# TOYODA AF 1000

CNC Vertical Machining Center

3 Axis

20 HP

Cat 40 taper

24 tool Cap

Renishaw Probe



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# “FLOW 3-AXIS”

UPI's Water Jet is equipped with the latest Eco-Friendly cutting technology and provides unbeatable accuracy, speed and flexibility.

90,000psi  
100 HP  
1800 mph  
Twin Bed

Capable. Quick.  
Green. 



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# Doosan Puma 240 M CNC Lathe



LIVE TOOL WITH COOLANT THROUGH

# Kitamura Spark Changer CNC Vertical Mill



4 Axis  
15000 RPM  
Twin Pallet  
30 HP Geared Head  
Cat 40 taper  
30 tool Cap  
Blum Laser  
Renishaw Probing



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# Toyoda FH450S Horizontal Mill

## CNC Vertical Mill



**4 Axis**  
**Twin Pallet**  
**30 HP**  
**Cat 40 taper**  
**61 tool Cap**  
**Hydraulic Clamping**  
**Renishaw Probing**





# (4) OTC DP-400 Welding Systems

Welds Aluminum, Armor, and Steel



400 and 500  
amp  
Wire Feed  
MIG Welding

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# OKK HP500S

## Horizontal Machining Center

4 Axis  
Twin Pallet  
30 HP  
Cat 40 taper  
60 tool Cap



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# Samsung MCV80

## CNC VERTICAL MACHINING CENTER

**Huge Bed**  
**67"x 32"x26"**  
**3 Axis**  
**25HP geared**  
**Cat 50 taper**  
**24 tool Cap**



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# **Welding Capabilities & Equipment**

## **Welding Capabilities**

**AWS Certified: D 1.1 / D 1.2 / D1.3 / B2.1**

**UPI Manufacturing has managed welding requirements for  
US Government Ground Combat Vehicle Welding Codes  
12479550 (Steel) for Non-Critical, Critical and Ballistic  
along with 12472301 (Aluminum)**

**Mil-STD 1941 Metal Arc Welding of Homogenous Armor,  
In-house certifying capabilities.**

**We also have our own in house CWI.**





# Certifications/Quality Systems

- ISO 9001-2008 Certified and Registered.
  - Six Sigma Continuous Improvement (Black & Green Belt.)
  - Mutually defined requirements and conformance to specifications.
- Multiple Awards won for defect free and on-time deliveries.





# Verisys Registrars®

*Helpful Auditing*

## Certificate of Registration

*The Quality Management System of*

# UPI Manufacturing

S87 W35670 Godfrey Lane  
Eagle, Wisconsin 53119 USA

has been assessed and certified by Verisys Registrars as meeting the requirements of

## ***ISO 9001:2008***

for the following scope of registration:

UPI Manufacturing is an innovative manufacturer of high quality components used by the United States Military and other commercial organizations.

Certificate Number:

**U082809**

Original Approval	8/28/2009
Certificate Issued	8/28/2012
Certificate Expires	9/25/2015

The use of this certification mark  
indicates accreditation in respect to  
those activities covered by registration  
Certificate Number: U082809

On behalf of Verisys Registrars – Rick Breden, President

This approval is subject to the company maintaining its management system to the required standards which will be monitored by Verisys Registrars.



# Award Winning

## CONSISTENTLY ON-TIME

## 100% Defect-Free



# Classifications:

▣ Native American-owned. Lac Court Oreille tribe is one of the seven Wisconsin bands Ojibwa (aka: Chippewa.)

▣ Small Disadvantaged Business.

**UPI is a reliable partner for companies meeting government-mandated requirements for minority firms.**

**We perform to keep our commitments and never lose sight of the Warfighters we assist in the field.**

**DFARS / ITAR / CCR / JCP / ORCA Registered**



# UPI MANUFACTURING KEY PERSONNEL

- JEFF J. DRETZKA “CHIEF” – CEO
- JEFF D. DRETZKA – VICE PRESIDENT
- TERRY PAPE – VICE PRESIDENT OF SALES
- ANGELA MATTSON – DIRECTOR OF SALES
- MICK MILLER – DIRECTOR OF OPERATIONS
- JUSTIN TREUER – QUALITY MANAGER
- MICHAEL SHOWALTER – PRODUCTION MANAGER







MOTIVATED BY PATRIOTISM.  
EMPOWERED BY GOD.  
COMMITTED TO VICTORY.



# DEEDS. NOT WORDS.



## CONTACT US TODAY!

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