



Deep Blue

WHERE THOUGHTS BECOME THINGS

CAPABILITY BRIEF

PRECISION MACHINING • MANUFACTURING • PRODUCT DESIGN • ENGINEERING SUPPORT



WHO WE ARE

- **DEEP BLUE CONCEPTS, INC. DBA “DEEP BLUE”**
- **WE WERE ESTABLISHED IN 2012, FULLY FUNDED IN OCTOBER 2013, AND COMMENCED PRODUCTION IN FEBRUARY 2014.**
- **WE OPERATE TWO LOCATIONS: OUR HEADQUARTERS AND ENGINEERING OFFICE IN MADISON, AL, AND OUR DESIGN CENTER AND FACTORY IN HALEYVILLE, AL.**

WHAT WE DO

- WE FOCUS ON BRINGING QUALITY PRODUCTS TO OUR CUSTOMERS THROUGH:
 - CUTTING EDGE MACHINING AND ASSEMBLY TECHNOLOGY
 - CONTINUOUS TRAINING ENHANCED BY BROAD INDUSTRY INVOLVEMENT
 - SUPERIOR EFFICIENCY RESULTING FROM THE LATEST LEAN PROCESSES
- WE UTILIZE OUR EXPERIENCE AND INGENUITY TO PROVIDE OUR CUSTOMERS WITH UNPARALLELED ENGINEERING SUPPORT
- WE PROVIDE EXCEPTIONAL DESIGN THROUGH A COMBINATION OF EDUCATION AND ACADEMIC INVOLVEMENT

CORPORATE PROFILE

- **SERVICE-DISABLED, VETERAN-OWNED SMALL BUSINESS**
- **HUBZONE CERTIFIED SMALL BUSINESS CONCERN**
- **DUNS: 032644989 (MADISON) AND
079289456 (HALEYVILLE)**
- **CAGE: 6Z7B7 (MADISON)
72NNO (HALEYVILLE)**
- **ITAR REGISTERED (M34723)**
- **PRIMARY NAICS: 332710 – MACHINE SHOP
541330 – ENGINEERING SERVICES**

KEYS TO OUR SUCCESS

• PEOPLE

• DOUG SAMPSON; FOUNDER AND PRESIDENT

• CAREER SUBMARINE OFFICER

- COMMANDING OFFICER, USS LA JOLLA
- CHIEF ENGINEER, USS FLORIDA (BLUE)

• BACHELOR AND MASTER OF MECHANICAL ENGINEERING, AUBURN UNIVERSITY

• LEAN SIX SIGMA BLACKBELT CERTIFICATE, VILLANOVA UNIVERSITY

• GUEST LECTURER AND SENIOR DESIGN PROJECT REVIEWER (UAH)

• DAVID KNIGHT; MACHINING OPERATIONS MANAGER

- 24 YEARS EXPERIENCE IN THE MACHINING INDUSTRY

• JOSE HERNANDEZ; MECHANICAL DESIGNER AND QUALITY ENGINEER

- 23 YEARS EXPERIENCE IN GOVERNMENT CONTRACTING AT ALL LEVELS
- CURRENT SBIR

• 5 ADDITIONAL CNC MACHINIST AND PROGRAMMERS

• PROCESSES

• ISO 9001-2008 COMPLIANT

• LEAN PROCESSES IMPLEMENTED THROUGHOUT

CAPABILITY

- **CAPACITY**

- MILLING VOLUME: 40" x 20" x 20"
- TURNING VOLUME: 37.4" x 13.4"

- **SPEED & PRECISION**

- INDUSTRY LEADING MATERIAL REMOVAL RATES
- CAPABLE OF ACHIEVING A REPEATABLE ACCURACY OF LESS THAN 8 MICRONS

- **SOFT AND HARD MATERIALS**

- ALUMINUM
- STEEL (STAINLESS, CARBON-STEEL, ETC.)
- TITANIUM

- **THROUGHPUT**

- PROTOTYPES
- MILLING: CAPABLE OF PRODUCING HUNDREDS OF PIECES PER MONTH
- LATHE: CAPABLE OF PRODUCING THOUSANDS OF PIECES PER MONTH



PRODUCTS

- **MACHINED PARTS AND ASSEMBLIES**
 - AEROSPACE
 - CRITICAL COMMERCIAL
 - SEA SYSTEMS
- **COMPLEX SHAPES**
 - 3-DIMENSIONAL SHAPES AND SURFACES
 - SHAPES REQUIRING COMPLEX TOOL PATHS
- **MEDIUM-SIZED RUNS**
 - LIGHTS-OUT, AUTOMATED PRODUCTION
 - NOVEL FIXTURING APPROACHES



MANUFACTURING FACILITY

- LOCATED IN HALEYVILLE, AL
- FORMER FURNITURE MANUFACTURING SPACE
- 33,000 TOTAL SQUARE FEET OF CLIMATE CONTROLLED SPACE
- 3,000 SQUARE FEET OF OFFICE SPACE INCLUDED
- LOCATED ON 28 ACRES OF PRIVATE LAND ALLOWING FOR ADEQUATE EXPANSION



CNC MACHINERY

- **CNC MILLING:**

- **OKUMA M-560V**

- 15,000 RPM, 30HP SPINDLE
- MACHINING VOLUME: 40" x 20" x 20"

- **HARDINGE GX 1000 OSP**

- 10,000 RPM, 25HP SPINDLE
- MACHINING VOLUME: 40" x 20" x 20"

- **CNC TURNING:**

- **OKUMA: LB3000EX-II-MYW**

- 5,000 RPM, 40HP MAIN SPINDLE
- 6,000 RPM, 15HP SUB-SPINDLE
- Y-AXIS, LIVE TOOLING
- TURNING VOLUME: 37.4" x 13.4"



MANUAL MACHINERY

- MILLING (KINGSTON)
- TURNING (KINGSTON)
- BANDSAW (WELLSAW)
- AUTOMATIC SURFACE GRINDER (VICTOR)



ASSOCIATED CAPABILITIES

- **COORDINATE MEASURING FOR QUALITY CONTROL**
 - BROWN & SHARPE CMM (40" x 28" x 20")
- **ENGINEERING & DESIGN TOOLS**
 - SOLIDWORKS CAD AND SIMULATION
 - MASTERCAM MACHINE CODE GENERATION
 - MATLAB MODELING AND ANALYSIS
- **WELDING**
 - MIG
 - TIG
 - STICK

CONTACT INFORMATION

LOCATIONS

HEADQUARTERS

206 AVIAN LANE
MADISON, AL 35758
256-970-8908

FACTORY

111 NORTH STAR DRIVE
HALEYVILLE, AL 35565
205-385-7908

POINTS OF CONTACT

DOUG SAMPSON PRESIDENT & CEO

DAVID KNIGHT MACHINING OPERATIONS MANAGER

JOSE HERNANDEZ MECHANICAL DESIGNER & QUALITY ENGINEER

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