COMPRESSED SYMBOLOGY MARKING PROGRAM DATA SHEET

Report Number: 024

PART 1. **MATERIAL DESCRIPTION**		
Material Family: Nickle and nickle alloys		
Material Type: N200 (Commercially Pure Ni Alloy) - cold rolled, annealed, and pickeled		
UNS Number: N02200	Coupon S/N: 003 (practice)	
Lot: HT H550	Hardness: RF 86	Machinability: 55
Coupon Size: 3/4-inch wide x 2-inch long x 1/8-inch thick		
Cross Reference Specification(s): No **AMS, FED** or **MIL SPEC's** Identified - **ASME** SB160; SB161; SB162; SB163 **ASTM** B160; B161; B162; B163; B366; B725 and B730		
Mill: Inco		

PART 2. **MARKING OPERATIONS**	
Marking Specification(s): MIL-STD-130 and MA0104-301	
Cleaning Procedure: MA0110-303	
Symbol Type: Vericode	Symbol Size: 0.300-inch square
Number of Characters: 7	Number of Data Cells: 11
Information Encoded into Symbol: AB12345	
Marking Method (Check appropriate block and attach completed data sheets): A. Computer Driven Dot Peen . . . . . X B. Computer Driven Machine Engraving . . . . . X C. Computer Driven Micro-sandblaster . . . . . X D. Computer Driven High Resolution Laser . . . . . X E. Computer Driven Embroidery . . . . . N/A	
Corrosion Protection Method Used: Coated with MIL-L-7870A general purpose lubricating oil.	

DOT PEEN MARKING METHOD DATA SHEET

Report Number: 024

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Wetzel Tool Company, Division of Dapra Corp. 66 Granby Street, Bloomfield, CT 06002	
Name: Mark 5 Multidot Peen Marking System	
Model Number: 119RMK5	Serial Number: 11940212
Computer: IBM PS/2 Model 30 with Hard Drive	
Software: Vericode Symbol Generation (V-Gen) Revision 1	

PART 2. **MARKING OPERATIONS**	
Nose Piece: Std - 11941020	Stylus: Standard - 1194MST
Marking Unit: 2 X 2 (4 cells)	Size Factor: 1
Marking Gap (mm): 1.50	Marking Force: 5
Vericode Size: .25" x .25"	Avg. Marking Depth: 0.00413"
Marking Location: Check position of marking on material test coupon	[X] [ ] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes X No	Backfill Material: Dry erase ink
Inspection Verification: Stamp	Date 09-15-92

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 16		Focus Setting: 1	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/8"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple tries) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 09-15-92	

MACHINE ENGRAVING MARKING METHOD DATA SHEET

Report Number: 024

PART 1. **MARKING DEVICE DESCRIPTION**			
Manufacturer: Newing-Hall, Inc., 2019 Monroe Street, Toledo, Ohio 43624 (419) 255-8805 or (800) 521-2615			
Name: Computer Controlled Engraving System			
Model Number: NH-300 NPC		Serial Number: 1056902	
Computer: IBM PS/2 Model 70 - 386			
Software: Vericode Symbol Generation (V-Gen) Revision 1			
PART 2. **MARKING OPERATIONS** (Nickle)			
Spindle Type: Rotary		Cutter Type: Micro-Carbite	
Cutter Size: .005"	Speed: 40%	Feed Rate: 05%	
Dwell Time: 35%	Micrometer: 3	Air Pressure: 15	
Cutting Fluid: Tapfree, mfg'd. by Winfield Brooks Co., Inc.			
Vericode Size: .25" x .25"		Depth of Marking: .00350"	
Marking Location: Check position of marking on material test coupon	[ ] [X] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4		
Backfill: Yes X No		Backfill Material: Black Lacquer	
Inspection Verification: Stamp		Date 01/13/93	
PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 8		Focus Setting: 0.25	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 01/13/93	

MICRO-SANDBLAST MARKING METHOD DATA SHEET

Report Number: 024

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Comco, Inc., 2151 North Lincoln Street, Burbank, CA 91504 (818) 841-5500	
Name: Micro Abrasive Profiler	
Model Number: PR1101-3	Serial Number: 030
Computer: PC/AT Computer with Comco Bus and VGA Monitor	
Software: Vericode Symbol Generation (V-Gen) Revision 2.1	

PART 2. **MARKING OPERATIONS** (NICKLE)	
Tank Orifice Size: MB1020-4 (0.018-inch diameter)	
Nozzle Type: Rectangular	Nozzle Size: MB1500-26 (Orange)
Abrasive: Aluminum Oxide	Abrasive size: 25 Microns
Air Pressure: 60 PSIG	Power Flow: Maximum
Vector Speed: 75	Nozzle to work distance: .60 mm
Marking Location: Check position of marking on material test coupon	[ ] [ ] [X] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes No X	Backfill Material:
Inspection Verification: Stamp	Date: 03/10/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 12		Focus Setting: 0.30	
Control Unit: Pulnex CCU-84		Camera Distance: 3 1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 03/10/93	

LASER ETCH MARKING METHOD DATA SHEET

Report Number: 024

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: AB Lasers, 4 Craig Road, Action, Massachusetts 01720 (508) 635-9100	
Name: Landmark Laser Marking System	
Model Number: LBI-6000	Serial Number: 6000858
Computer: Motorola 68000 (VME) 32 bit Micro-processer	
Software: Vericode Symbol Generation (V-Gen) Revision 2.1	

PART 2. **MARKING OPERATIONS** (Nickle)	
Marking Mode: Continuous Wave	Current Setting: LS-180
Speed Setting: G0 50	Frequency setting: Q3,000
Vericode Size: .25" x .25"	Depth of Marking: Surface Mark
Marking Location: Check position of marking on material coupon	[ ] [ ] [ ] [X] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes X No	Backfill Material: Paint Stick
Inspection Verification: Stamp	Date 01/14/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 16		Focus Setting: 1.00	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16 inch	
Enhance: N/A	Gamma: N/A	Pedestal: N/A	Gain: 7.5

Decoding Successful (first try) X
Decoding Successful (multiple trys) . . . . . .
Misread . . . . . .
No Read . . . . . .

Inspection Verification: Stamp Date 01/14/93

COMPRESSED SYMBOLOGY MARKING PROGRAM DATA SHEET

Report Number: 025

PART 1. **MATERIAL DESCRIPTION**		
Material Family: Nickle and nickle alloys		
Material Type: Inconel 601 (Ni-Cr Alloy Solid Solution Strengthened) - cold rolled, annealed and pickeled		
UNS Number: N06601	Coupon S/N: 003 (practice)	
Lot: HT 0849	Hardness: RB 80	Machinability: 55
Coupon Size: 3/4-inch wide x 2-inch long x 1/8-inch thick		
Cross reference Specification(s): **AMS** 5715 and 5870		
Mill: Huntington		

PART 2. **MARKING OPERATIONS**	
Marking Specification(s): MIL-STD-130 and MA0104-301	
Cleaning Procedure: MA0110-303	
Symbol Type: Vericode	Symbol Size: 0.300-inch square
Number of Characters: 7	Number of Data Cells: 11
Information Encoded into Symbol: AB12345	
Marking Method (Check appropriate block and attach completed data sheets): A. Computer Driven Dot Peen . . . . . X B. Computer Driven Machine Engraving . . . . . X C. Computer Driven Micro-sandblaster . . . . . X D. Computer Driven High Resolution Laser . . . . . X E. Computer Driven Embroidery . . . . . N/A	
Corrosion Protection Method Used: Coated with MIL-L-7870A general purpose lubricating oil.	

DOT PEEN MARKING METHOD DATA SHEET

Report Number: 025

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Wetzel Tool Company, Division of Dapra Corp. 66 Granby Street, Bloomfield, CT 06002	
Name: Mark 5 Multidot Peen Marking System	
Model Number: 119RMK5	Serial Number: 11940212
Computer: IBM PS/2 Model 30 with Hard Drive	
Software: Vericode Symbol Generation (V-Gen) Revision 1	

PART 2. **MARKING OPERATIONS**	
Nose Piece: Std - 11941020	Stylus: Standard - 1194MST
Marking Unit: 2 X 2 (4 cells)	Size Factor: 1
Marking Gap (mm): 1.50	Marking Force: 5
Vericode Size: .25" x .25"	Avg. Marking Depth: 0.00401"
Marking Location: Check position of marking on material test coupon	[X] [ ] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes X No	Backfill Material: Dry erase ink
Inspection Verification: Stamp	Date 09-15-92

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 16		Focus Setting: 1	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/8"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple tries) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 09-15-92	

MACHINE ENGRAVING MARKING METHOD DATA SHEET

Report Number: 025

PART 1. **MARKING DEVICE DESCRIPTION**			
Manufacturer: Newing-Hall, Inc., 2019 Monroe Street, Toledo, Ohio 43624 (419) 255-8805 or (800) 521-2615			
Name: Computer Controlled Engraving System			
Model Number: NH-300 NPC		Serial Number: 1056902	
Computer: IBM PS/2 Model 70 - 386			
Software: Vericode Symbol Generation (V-Gen) Revision 1			
PART 2. **MARKING OPERATIONS** (Inc 601)			
Spindle Type: Rotary		Cutter Type: Micro-Carbite	
Cutter Size: .005"	Speed: 40%	Feed Rate: 05%	
Dwell Time: 30%	Micrometer: 3	Air Pressure: 25	
Cutting Fluid: Tapfree, mfg'd. by Winfield Brooks Co., Inc.			
Vericode Size: .25" x .25"		Depth of Marking: .00390"	
Marking Location: Check position of marking on material test coupon	[ ] [X] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4		
Backfill: Yes X No		Backfill Material: Black Lacquer	
Inspection Verification: Stamp		Date 01/14/93	
PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 12		Focus Setting: 0.50	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 01/14/93	

MICRO-SANDBLAST MARKING METHOD DATA SHEET

Report Number: 025

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Comco, Inc., 2151 North Lincoln Street, Burbank, CA 91504 (818) 841-5500	
Name: Micro Abrasive Profiler	
Model Number: PR1101-3	Serial Number: 030
Computer: PC/AT Computer with Comco Bus and VGA Monitor	
Software: Vericode Symbol Generation (V-Gen) Revision 2.1	

PART 2. **MARKING OPERATIONS** (Inc 601)	
Tank Orifice Size: MB1020-4 (0.018-inch diameter)	
Nozzle Type: Rectangular	Nozzle Size: MB1500-26 (Orange)
Abrasive: Aluminum Oxide	Abrasive size: 25 Microns
Air Pressure: 75 PSIG	Power Flow: Maximum
Vector Speed: 75	Nozzle to work distance: .60 mm
Marking Location: Check position of marking on material test coupon	[ ] [ ] [X] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes No X	Backfill Material:
Inspection Verification: Stamp	Date: 03/10/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 12		Focus Setting: 0.30	
Control Unit: Pulnex CCU-84		Camera Distance: 3 1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5

Decoding results:

Decoding Successful (first try) X
Decoding Successful (multiple trys) . . . . . .
Misread . . . . . .
No Read . . . . . .

Inspection Verification: Stamp Date 03/10/93

LASER ETCH MARKING METHOD DATA SHEET

Report Number: 025

PART 1. **MARKING DEVICE DESCRIPTION**			
Manufacturer: AB Lasers, 4 Craig Road, Action, Massachusetts 01720 (508) 635-9100			
Name: Landmark Laser Marking System			
Model Number: LBI-6000		Serial Number: 6000858	
Computer: Motorola 68000 (VME) 32 bit Micro-processer			
Software: Vericode Symbol Generation (V-Gen) Revision 1			
PART 2. **MARKING OPERATIONS** (INC-601)			
Marking Mode: Continuous Wave		Current Setting: LS-150	
Speed Setting: G0 50		Frequency setting: Q30,000	
Vericode Size: .25" x .25"		Depth of Marking: Surface Mark	
Marking Location: Check position of marking on material coupon	Pos 1: ☐ Pos 2: ☐ Pos 3: ☐ Pos 4: X		
Backfill: Yes No X		Backfill Material: N/A	
Inspection Verification: Stamp		Date 02/01/93	
PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 16		Focus Setting: 1.0	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: N/A	Gamma: N/A	Pedestal: N/A	Gain: 7.5
Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 02/01/93	

COMPRESSED SYMBOLOGY MARKING PROGRAM DATA SHEET

Report Number: 026

PART 1. **MATERIAL DESCRIPTION**		
Material Family: Nickle and nickle alloys		
Material Type: Inconel 625 (Ni-Cr Alloy Solid Solution Strengthened)		
UNS Number: N06625	Coupon S/N: 003 (practice)	
Lot: HT H233	Hardness: RB 95	Machinability:
Coupon Size: 3/4-inch wide x 2-inch long x 1/8-inch thick		
Cross Reference Specification(s): **AMS** 5401; 5402; 5581; 5599; 5666; 5837; 7490 and **MIL SPEC** MIL-E-21562		
Mill: VDM		

PART 2. **MARKING OPERATIONS**	
Marking Specification(s): MIL-STD-130 and MA0104-301	
Cleaning Procedure: MA0110-303	
Symbol Type: Vericode	Symbol Size: 0.300-inch square
Number of Characters: 7	Number of Data Cells: 11
Information Encoded into Symbol: AB12345	
Marking Method (Check appropriate block and attach completed data sheets): A. Computer Driven Dot Peen . . . . . X B. Computer Driven Machine Engraving . . . . . X C. Computer Driven Micro-sandblaster . . . . . X D. Computer Driven High Resolution Laser . . . . . X E. Computer Driven Embroidery . . . . . N/A	
Corrosion Protection Method Used: Coated with MIL-L-7870A general purpose lubricating oil.	

DOT PEEN MARKING METHOD DATA SHEET

Report Number: 026

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Wetzel Tool Company, Division of Dapra Corp. 66 Granby Street, Bloomfield, CT 06002	
Name: Mark 5 Multidot Peen Marking System	
Model Number: 119RMK5	Serial Number: 11940212
Computer: IBM PS/2 Model 30 with Hard Drive	
Software: Vericode Symbol Generation (V-Gen) Revision 1	

PART 2. **MARKING OPERATIONS**	
Nose Piece: Std - 11941020	Stylus: Standard - 1194MST
Marking Unit: 2 X 2 (4 cells)	Size Factor: 1
Marking Gap (mm): 1.50	Marking Force: 6
Vericode Size: .25" x .25"	Avg. Marking Depth: 0.00393"
Marking Location: Check position of marking on material test coupon	[X] [ ] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes X No	Backfill Material: Dry erase ink
Inspection Verification: Stamp	Date 09-15-92

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 16		Focus Setting: 1	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/8"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple tries) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 09-15-92	

MACHINE ENGRAVING MARKING METHOD DATA SHEET

Report Number: 026

PART 1. **MARKING DEVICE DESCRIPTION**			
Manufacturer: Newing-Hall, Inc., 2019 Monroe Street, Toledo, Ohio 43624 (419) 255-8805 or (800) 521-2615			
Name: Computer Controlled Engraving System			
Model Number: NH-300 NPC		Serial Number: 1056902	
Computer: IBM PS/2 Model 70 - 386			
Software: Vericode Symbol Generation (V-Gen) Revision 1			
PART 2. **MARKING OPERATIONS** (INC-625)			
Spindle Type: Rotary		Cutter Type: Micro-Carbite	
Cutter Size: .005"	Speed: 40%	Feed Rate: 05%	
Dwell Time: 30%	Micrometer: 3	Air Pressure: 25 PSI	
Cutting Fluid: Tapfree, mfg'd. by Winfield Brooks Co., Inc.			
Vericode Size: .25" x .25"		Depth of Marking: .0039"	
Marking Location: Check position of marking on material test coupon	[ ] Pos 1 [X] Pos 2 [ ] Pos 3 [ ] Pos 4		
Backfill: Yes X No		Backfill Material: Black lacquer	
Inspection Verification: Stamp		Date 02/23/93	
PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 12		Focus Setting: 0.50	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date: 02/23/93	

MICRO-SANDBLAST MARKING METHOD DATA SHEET

Report Number: 026

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Comco, Inc., 2151 North Lincoln Street, Burbank, CA 91504 (818) 841-5500	
Name: Micro Abrasive Profiler	
Model Number: PR1101-3	Serial Number: 030
Computer: PC/AT Computer with Comco Bus and VGA Monitor	
Software: Vericode Symbol Generation (V-Gen) Revision 2.1	

PART 2. **MARKING OPERATIONS** (Inc 625)	
Tank Orifice Size: MB1020-4 (0.018-inch diameter)	
Nozzle Type: Rectangular	Nozzle Size: MB1500-26 (Orange)
Abrasive: Aluminum Oxide	Abrasive size: 25 Microns
Air Pressure: 85 PSIG	Power Flow: Maximum
Vector Speed: 75	Nozzle to work distance: .60 mm
Marking Location: Check position of marking on material test coupon	[ ] Pos 1 [ ] Pos 2 [X] Pos 3 [ ] Pos 4
Backfill: Yes No X	Backfill Material:
Inspection Verification: Stamp	Date: 03/10/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 12		Focus Setting: 0.30	
Control Unit: Pulnex CCU-84		Camera Distance: 3 1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5

Decoding results:

Decoding Successful (first try) X
Decoding Successful (multiple trys) . . . . . .
Misread . . . . . .
No Read . . . . . .

Inspection Verification: Stamp Date 03/10/93

LASER ETCH MARKING METHOD DATA SHEET

Report Number: 026

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: AB Lasers, 4 Craig Road, Action, Massachusetts 01720 (508) 635-9100	
Name: Landmark Laser Marking System	
Model Number: LBI-6000	Serial Number: 6000858
Computer: Motorola 68000 (VME) 32 bit Micro-processer	
Software: Vericode Symbol Generation (V-Gen) Revision 1	

PART 2. **MARKING OPERATIONS** (INC-625)	
Marking Mode: Continuous Wave	Current Setting: LS-150
Speed Setting: G0 50	Frequency setting: Q30,000
Vericode Size: .25" x .25"	Depth of Marking: Surface Mark
Marking Location: Check position of marking on material coupon	[ ] [ ] [ ] [X] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes No X	Backfill Material: N/A
Inspection Verification: Stamp ANA 174	Date 02/01/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 16		Focus Setting: 1.0	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: N/A	Gamma: N/A	Pedestal: N/A	Gain: 7.5

Decoding Successful (first try) X
Decoding Successful (multiple trys) . . . . . .
Misread . . . . . .
No Read . . . . . .

Inspection Verification: Stamp ANA 174	Date 02/01/93

COMPRESSED SYMBOLOGY MARKING PROGRAM DATA SHEET

Report Number: 027

PART 1. **MATERIAL DESCRIPTION**		
Material Family: Nickle and nickle alloys		
Material Type: Inconel 718 (Ni-Cr Alloy Precipitation Hardenable)		
UNS Number: N07718	Coupon S/N: 003 (practice)	
Lot: HT E339	Hardness: RB 94	Machinability: 12-20
Coupon Size: 3/4-inch wide x 2-inch long x 1/8-inch thick		
Cross Reference Specification(s): **AMS** 5383; 5589; 5590; 5596; 5597; 5662; 5663; 5664 and 5832		
Mill: Inco		

PART 2. **MARKING OPERATIONS**	
Marking Specification(s): MIL-STD-130 and MA0104-301	
Cleaning Procedure: MA0110-303	
Symbol Type: Vericode	Symbol Size: 0.300-inch square
Number of Characters: 7	Number of Data Cells: 11
Information Encoded into Symbol: AB12345	
Marking Method (Check appropriate block and attach completed data sheets): A. Computer Driven Dot Peen . . . . . X B. Computer Driven Machine Engraving . . . . . X C. Computer Driven Micro-sandblaster . . . . . X D. Computer Driven High Resolution Laser . . . . . X E. Computer Driven Embroidery . . . . . N/A	
Corrosion Protection Method Used: Coated with MIL-L-7870A general purpose lubricating oil.	

DOT PEEN MARKING METHOD DATA SHEET

Report Number: 027

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Wetzel Tool Company, Division of Dapra Corp. 66 Granby Street, Bloomfield, CT 06002	
Name: Mark 5 Multidot Peen Marking System	
Model Number: 119RMK5	Serial Number: 11940212
Computer: IBM PS/2 Model 30 with Hard Drive	
Software: Vericode Symbol Generation (V-Gen) Revision 1	

PART 2. **MARKING OPERATIONS**	
Nose Piece: Std - 11941020	Stylus: Standard - 1194MST
Marking Unit: 2 X 2 (4 cells)	Size Factor: 1
Marking Gap (mm): 1.00	Marking Force: 6
Vericode Size: .25" x .25"	Avg. Marking Depth: 0.00405"
Marking Location: Check position of marking on material test coupon	[X] [ ] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes X No	Backfill Material: Dry erase ink
Inspection Verification: Stamp	Date 09-15-92

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 16		Focus Setting: 1	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/8"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple tries) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 09-15-92	

MACHINE ENGRAVING MARKING METHOD DATA SHEET

Report Number: 027

PART 1. **MARKING DEVICE DESCRIPTION**			
Manufacturer: Newing-Hall, Inc., 2019 Monroe Street, Toledo, Ohio 43624 (419) 255-8805 or (800) 521-2615			
Name: Computer Controlled Engraving System			
Model Number: NH-300 NPC		Serial Number: 1056902	
Computer: IBM PS/2 Model 70 - 386			
Software: Vericode Symbol Generation (V-Gen) Revision 1			
PART 2. **MARKING OPERATIONS** (INC-625)			
Spindle Type: Rotary		Cutter Type: Micro-Carbite	
Cutter Size: .005"	Speed: 40%	Feed Rate: 05%	
Dwell Time: 30%	Micrometer: 3	Air Pressure: 25 PSI	
Cutting Fluid: Tapfree, mfg'd. by Winfield Brooks Co., Inc.			
Vericode Size: .25" x .25"		Depth of Marking: .0039"	
Marking Location: Check position of marking on material test coupon	[ ] [X] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4		
Backfill: Yes X No		Backfill Material: Black lacquer	
Inspection Verification: Stamp		Date 02/23/93	
PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 12		Focus Setting: 0.50	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date: 02/23/93	

MICRO-SANDBLAST MARKING METHOD DATA SHEET

Report Number: 027

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Comco, Inc., 2151 North Lincoln Street, Burbank, CA 91504 (818) 841-5500	
Name: Micro Abrasive Profiler	
Model Number: PR1101-3	Serial Number: 030
Computer: PC/AT Computer with Comco Bus and VGA Monitor	
Software: Vericode Symbol Generation (V-Gen) Revision 2.1	

PART 2. **MARKING OPERATIONS** (Inc 718)	
Tank Orifice Size: MB1020-4 (0.018-inch diameter)	
Nozzle Type: Rectangular	Nozzle Size: MB1500-26 (Orange)
Abrasive: Aluminum Oxide	Abrasive size: 25 Microns
Air Pressure: 85 PSIG	Power Flow: Maximum
Vector Speed: 75	Nozzle to work distance: .60 mm
Marking Location: Check position of marking on material test coupon	[ ] [ ] [X] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes No X	Backfill Material:
Inspection Verification: Stamp	Date: 03/10/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 8		Focus Setting: 0.30	
Control Unit: Pulnex CCU-84		Camera Distance: 3 1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 03/10/93	

LASER ETCH MARKING METHOD DATA SHEET

Report Number: 027

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: AB Lasers, 4 Craig Road, Action, Massachusetts 01720 (508) 635-9100	
Name: Landmark Laser Marking System	
Model Number: LBI-6000	Serial Number: 6000858
Computer: Motorola 68000 (VME) 32 bit Micro-processer	
Software: Vericode Symbol Generation (V-Gen) Revision 1	

PART 2. **MARKING OPERATIONS** (INC-718)	
Marking Mode: Continuous Wave	Current Setting: LS-150
Speed Setting: G0 50	Frequency setting: Q25,000
Vericode Size: .25" x .25"	Depth of Marking: Surface Mark
Marking Location: Check position of marking on material coupon	[ ] [ ] [ ] [X] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes No X	Backfill Material: N/A
Inspection Verification: Stamp	Date 02/09/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 16		Focus Setting: 1.0	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: N/A	Gamma: N/A	Pedestal: N/A	Gain: 7.5
Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 02/09/93	

COMPRESSED SYMBOLOGY MARKING PROGRAM DATA SHEET

Report Number: 027A

PART 1. **MATERIAL DESCRIPTION**		
Material Family: Nickle and nickle alloys		
Material Type: RENE 88 - Defect Tolerant		
UNS Number: Unknown	Coupon S/N:	
Lot:	Hardness:	Machinability:
Coupon Size: 3/4-inch wide x 2-inch long x 1/8-inch thick		
Cross Reference Specification(s):		
Mill: Material furnished by General Electric - Aircraft Engines		

PART 2. **MARKING OPERATIONS**	
Marking Specification(s): MIL-STD-130 and MA0104-301	
Cleaning Procedure: MA0110-303	
Symbol Type: Vericode	Symbol Size: 0.300-inch square
Number of Characters: 7	Number of Data Cells: 11
Information Encoded into Symbol: AB12345	

Marking Method (Check appropriate block and attach completed data sheets):

A. Computer Driven Dot Peen X

B. Computer Driven Machine Engraving X

C. Computer Driven Micro-sandblaster X

D. Computer Driven High Resolution Laser X

E. Computer Driven Embroidery . . . . . N/A

Corrosion Protection Method Used: Coated with MIL-L-7870A general purpose lubricating oil.

DOT PEEN MARKING METHOD DATA SHEET

Report Number: 027A

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Wetzel Tool Company, Division of Dapra Corp. 66 Granby Street, Bloomfield, CT 06002	
Name: Mark 5 Multidot Peen Marking System	
Model Number: 119RMK5	Serial Number: 11940212
Computer: IBM PS/2 Model 30 with Hard Drive	
Software: Vericode Symbol Generation (V-Gen) Revision 1	

PART 2. **MARKING OPERATIONS** (RENE-88DT)	
Nose Piece: Std - 11941020	Stylus: Standard - WTC-1194MST
Marking Unit: 2 X 2 (4 cells)	Size Factor: 1
Marking Gap (mm): 1.50	Marking Force: 6
Vericode Size: .25" x .25"	Avg. Marking Depth: .00195"
Marking Location: Check position of marking on material test coupon	[X] [ ] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes X No	Backfill Material: Dry Erase Ink
Inspection Verification: Stamp	Date 04/15/92

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 12		Focus Setting: 0.50	
Control Unit: Pulnex CCU-84		Camera Distance: 3-3/8"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple tries) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 04/15/92	

MACHINE ENGRAVING MARKING METHOD DATA SHEET

Report Number: 027A

PART 1. **MARKING DEVICE DESCRIPTION**			
Manufacturer: Newing-Hall, Inc., 2019 Monroe Street, Toledo, Ohio 43624 (419) 255-8805 or (800) 521-2615			
Name: Computer Controlled Engraving System			
Model Number: NH-300 NPC		Serial Number: 1056902	
Computer: IBM PS/2 Model 70 - 386			
Software: Vericode Symbol Generation (V-Gen) Revision 1			
PART 2. **MARKING OPERATIONS** (RENE-88DT)			
Spindle Type: Rotary		Cutter Type: Micro-Carbite	
Cutter Size: .005"	Speed: 40%	Feed Rate: 05%	
Dwell Time: 30%	Micrometer: 3	Air Pressure: 25	
Cutting Fluid: Tapfree, mfg'd. by Winfield Brooke Co., Inc.			
Vericode Size: .25" x .25"		Depth of Marking: .00312"	
Marking Location: Check position of marking on material test coupon	[ ] [X] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4		
Backfill: Yes X No		Backfill Material: Paint Marker	
Inspection Verification: Stamp		Date 04/15/93	
PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 12		Focus Setting: 0.50	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date: 04/15/93	

MICRO-SANDBLAST MARKING METHOD DATA SHEET

Report Number: 027A

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Comco, Inc., 2151 North Lincoln Street, Burbank, CA 91504 (818) 841-5500	
Name: Micro Abrasive Profiler	
Model Number: PR1101-3	Serial Number: 030
Computer: PC/AT Computer with Comco Bus and VGA Monitor	
Software: Vericode Symbol Generation (V-Gen) Revision 2.1	

PART 2. **MARKING OPERATIONS** (RENE-88DT)	
Tank Orifice Size: MB1020-4 (0.018-inch diameter)	
Nozzle Type: Rectangular	Nozzle Size: MB1500-26 (Orange)
Abrasive: Aluminum Oxide	Abrasive size: 25 Microns
Air Pressure: 90 PSIG	Power Flow: Maximum
Vector Speed: 75	Nozzle to work distance: .60 mm
Marking Location: Check position of marking on material test coupon	[ ] [ ] [X] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes No X	Backfill Material: N/A
Inspection Verification: Stamp	Date: 04/15/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 12		Focus Setting: 0.50	
Control Unit: Pulnex CCU-84		Camera Distance: 3 1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple tries) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 04/15/93	

LASER ETCH MARKING METHOD DATA SHEET

Report Number: 027A

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: AB Lasers, 4 Craig Road, Action, Massachusetts 01720 (508) 635-9100	
Name: Landmark Laser Marking System	
Model Number: LBI-6000	Serial Number: 6000858
Computer: Motorola 68000 (VME) 32 bit Micro-processer	
Software: Vericode Symbol Generation (V-Gen) Revision 2.1	

PART 2. **MARKING OPERATIONS** (RENE-88DT)	
Marking Mode: Continuous Wave	Current Setting: LS-180
Speed Setting: G0 50	Frequency setting: Q32,000
Vericode Size: .25" x .25"	Depth of Marking: Surface Mark
Marking Location: Check position of marking on material coupon	[ ] [ ] [ ] [X] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes No X	Backfill Material: N/A
Inspection Verification: Stamp	Date 04/15/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 16		Focus Setting: 1.00	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16 inch	
Enhance: N/A	Gamma: N/A	Pedestal: N/A	Gain: 7.5
Decoding Results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 04/15/93	

COMPRESSED SYMBOLOGY MARKING PROGRAM DATA SHEET

Report Number: 027B

PART 1. **MATERIAL DESCRIPTION**		
Material Family: Nickle and nickle alloys		
Material Type: RENE 95		
UNS Number: Unknown	Coupon S/N:	
Lot:	Hardness:	Machinability:
Coupon Size: 3/4-inch wide x 2-inch long x 1/8-inch thick		
Cross Reference Specification(s):		
Mill: Material furnished by General Electric - Aircraft Engines		

PART 2. **MARKING OPERATIONS**	
Marking Specification(s): MIL-STD-130 and MA0104-301	
Cleaning Procedure: MA0110-303	
Symbol Type: Vericode	Symbol Size: 0.300-inch square
Number of Characters: 7	Number of Data Cells: 11
Information Encoded into Symbol: AB12345	

Marking Method (Check appropriate block and attach completed data sheets):

A. Computer Driven Dot Peen X

B. Computer Driven Machine Engraving X

C. Computer Driven Micro-sandblaster X

D. Computer Driven High Resolution Laser X

E. Computer Driven Embroidery . . . . . N/A

Corrosion Protection Method Used: Coated with MIL-L-7870A general purpose lubricating oil.

DOT PEEN MARKING METHOD DATA SHEET

Report Number: 027B

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Wetzel Tool Company, Division of Dapra Corp. 66 Granby Street, Bloomfield, CT 06002	
Name: Mark 5 Multidot Peen Marking System	
Model Number: 119RMK5	Serial Number: 11940212
Computer: IBM PS/2 Model 30 with Hard Drive	
Software: Vericode Symbol Generation (V-Gen) Revision 1	

PART 2. **MARKING OPERATIONS** (RENE-95)	
Nose Piece: Std - 11941020	Stylus: Standard - WTC-1194MST
Marking Unit: 2 X 2 (4 cells)	Size Factor: 1
Marking Gap (mm): 1.00	Marking Force: 6
Vericode Size: .25" x .25"	Avg. Marking Depth: .00351"
Marking Location: Check position of marking on material test coupon	[X] [ ] [ ] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes X No	Backfill Material: Dry Erase Ink
Inspection Verification: Stamp	Date 04/15/92

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 12		Focus Setting: 0.25	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple tries) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 04/15/92	

MACHINE ENGRAVING MARKING METHOD DATA SHEET

Report Number: 027B

PART 1. **MARKING DEVICE DESCRIPTION**			
Manufacturer: Newing-Hall, Inc., 2019 Monroe Street, Toledo, Ohio 43624 (419) 255-8805 or (800) 521-2615			
Name: Computer Controlled Engraving System			
Model Number: NH-300 NPC		Serial Number: 1056902	
Computer: IBM PS/2 Model 70 - 386			
Software: Vericode Symbol Generation (V-Gen) Revision 1			
PART 2. **MARKING OPERATIONS** (RENE-95)			
Spindle Type: Rotary		Cutter Type: Micro-Carbite	
Cutter Size: .005"	Speed: 40%	Feed Rate: 05%	
Dwell Time: 30%	Micrometer: 3	Air Pressure: 25	
Cutting Fluid: Tapfree, mfg'd. by Winfield Brooke Co., Inc.			
Vericode Size: .25" x .25"		Depth of Marking: .00420"	
Marking Location: Check position of marking on material test coupon	[ ] Pos 1 [X] Pos 2 [ ] Pos 3 [ ] Pos 4		
Backfill: Yes X No		Backfill Material: Black Lacquer	
Inspection Verification: Stamp		Date 04/15/93	
PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: Tamron 08001	
Aperture Setting: 12		Focus Setting: 0.50	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: AB12345 Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date: 04/15/93	

MICRO-SANDBLAST MARKING METHOD DATA SHEET

Report Number: 027B

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: Comco, Inc., 2151 North Lincoln Street, Burbank, CA 91504 (818) 841-5500	
Name: Micro Abrasive Profiler	
Model Number: PR1101-3	Serial Number: 030
Computer: PC/AT Computer with Comco Bus and VGA Monitor	
Software: Vericode Symbol Generation (V-Gen) Revision 2.1	

PART 2. **MARKING OPERATIONS** (RENE-95)	
Tank Orifice Size: MB1020-4 (0.018-inch diameter)	
Nozzle Type: Rectangular	Nozzle Size: MB1500-26 (Orange)
Abrasive: Aluminum Oxide	Abrasive size: 25 Microns
Air Pressure: 90 PSIG	Power Flow: Maximum
Vector Speed: 75	Nozzle to work distance: .60 mm
Marking Location: Check position of marking on material test coupon	[ ] [ ] [X] [ ] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes No X	Backfill Material:
Inspection Verification: Stamp	Date: 03/29/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 12		Focus Setting: 1.00	
Control Unit: Pulnex CCU-84		Camera Distance: 3 1/16"	
Enhance: Off	Gamma: Off	Pedestal: Off	Gain: 7.5
Decoding results: Decoding Successful (first try) . . . . . X Decoding Successful (multiple tries) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 03/29/93	

LASER ETCH MARKING METHOD DATA SHEET

Report Number: 027B

PART 1. **MARKING DEVICE DESCRIPTION**	
Manufacturer: AB Lasers, 4 Craig Road, Action, Massachusetts 01720 (508) 635-9100	
Name: Landmark Laser Marking System	
Model Number: LBI-6000	Serial Number: 6000858
Computer: Motorola 68000 (VME) 32 bit Micro-processer	
Software: Vericode Symbol Generation (V-Gen) Revision 2.1	

PART 2. **MARKING OPERATIONS** (RENE-95)	
Marking Mode: Continuous Wave	Current Setting: LS-180
Speed Setting: G0 50	Frequency setting: Q3,500
Vericode Size: .25" x .25"	Depth of Marking: Surface Mark
Marking Location: Check position of marking on material coupon	[ ] [ ] [ ] [X] Pos 1 Pos 2 Pos 3 Pos 4
Backfill: Yes No X	Backfill Material:
Inspection Verification: Stamp	Date 03/29/93

PART 3. **DECODING OPERATIONS**			
Camera: Pulnex model TM-745		Lens: 08001	
Aperture Setting: 16		Focus Setting: 1.00	
Control Unit: Pulnex CCU-84		Camera Distance: 3-1/16 inch	
Enhance: N/A	Gamma: N/A	Pedestal: N/A	Gain: 7.5
Decoding Successful (first try) . . . . . X Decoding Successful (multiple trys) . . . . . . Misread . . . . . . No Read			
Inspection Verification: Stamp		Date 03/29/93	