

# CAMCODE MARKING TECHNOLOGIES


TECHNOLOGY	CHARACTERISTICS	APPLICATIONS
<p><b>PHOTOSENSITIVE ANODIZED ALUMINUM</b></p> 	<p>Sub-surface, inorganic image is extremely durable and meets the wide-set variety of performance requirements. Best for high to medium volume requirements – poor for small volumes or on-site marking.</p> <p>Flexible size, thickness and attachment options.</p>	<ul style="list-style-type: none"> <li>Small Arms / Weapon Ancillaries</li> <li>Ships / Marine</li> <li>Aircraft / Aerospace</li> <li>Engines / Components</li> <li>Complex / Crew Served Weapons Systems</li> <li>Communications Equipment</li> <li>Chemical / Heat / Sunlight Exposure*</li> </ul>
<p><b>LASER MARKABLES</b></p> 	<p>Steel, BlackPlus, or acrylic. Etched or bonded image is durable (depending upon substrate), but laser marking is slow/labor intensive – best for low-volume, on-site applications when real-time marking is required.</p> <p>Flexible size, thickness, attachment options available, but may require on-site fabrication if pre-cut blanks unavailable.</p>	<ul style="list-style-type: none"> <li>Small Arms</li> <li>Weapon Ancillaries</li> <li>Aircraft / Aerospace</li> <li>Engines / Components</li> <li>Complex / Crew Served Weapons Systems</li> <li>Communications Equipment</li> <li>Chemical / Heat / Sunlight Exposure*</li> </ul>
<p><b>THERMAL TRANSFER</b></p> 	<p>Ink transfer image may have limited durability depending upon material.*</p> <p>Can meet moderate to high demand volume. On-site printing possible when real-time marking is required.</p> <p>Limited size, thickness, attachment options.</p>	<ul style="list-style-type: none"> <li>Soft and Hard Armor</li> <li>Hospital Equipment</li> <li>Direct Circuit Board Marking</li> <li>General Asset Tracking</li> <li>Suppressor Marking</li> <li>Extreme Heat 500°C -1200°C (Thermal Bonded Glass)*</li> </ul>
<p><b>INK JET</b></p> 	<p>Ink jet printed image may have limited durability depending upon material/overlay.</p> <p>Can meet moderate to high demand volume.</p> <p>Limited size, thickness, attachment options.</p>	<ul style="list-style-type: none"> <li>Soft And Hard Armor</li> <li>Ballistic/Bump Helmets</li> <li>Hospital Equipment</li> <li>General Asset Tracking</li> </ul>
<p><b>CUT THROUGH</b></p> 	<p>CNC punched plates – good durability, but most suitable for low quantities.</p> <p>Can present readability issues in certain applications. Size, thickness, attachment options limited by material.</p>	<ul style="list-style-type: none"> <li>Heavy Equipment</li> <li>Ships / Marine</li> <li>Chassis Marking</li> </ul>
<p><b>WOVEN FABRIC</b></p> 	<p>Sewn tags offer moderate durability and limited attachment options (heat seal or sewn).</p> <p>Ideal for fabric marking.</p>	<ul style="list-style-type: none"> <li>Parachutes</li> <li>Apparel</li> <li>Other Woven / Fabric Assets</li> </ul>
<p><b>DIRECT PART MARK</b></p> 	<p>Laser etched or dot peen direct mark is durable although the marking process is slow/labor intensive.</p> <p>Ideal for applications where affixing a label is not possible.</p>	<ul style="list-style-type: none"> <li>Bridging</li> <li>Harsh Chemical Environments</li> <li>Surgical Tools</li> <li>Aircraft Components</li> </ul>
<p><b>NFC</b></p> 	<p>NFC is a passive radio frequency identification protocol that requires the reading device to be within 4cm of the tag. In addition to the proximity requirement, NFC also has the added benefit of being read by most smartphones.</p> <p>Ideal for applications where a barcode cannot be affixed or when the system requires alternate actions upon each scan.</p>	<ul style="list-style-type: none"> <li>Communications Equipment</li> <li>Hospital Equipment</li> <li>General Asset Tracking</li> </ul>

\*Operating environments and attachment surfaces must be defined prior to selecting a marking technology.



# CAMCODE MARKING SPECIFICATIONS

Is published for MoD within CTU.

ITEM: HMNVS		NSN: 5855015154436			
<b>Drawn By</b>	MATTHAN KESERICH	<i>Photos</i>			
<b>Date Drawn</b>	8/19/2013				
<b>Approved By</b>	JEFF LUBICH				
<b>Date Approved</b>	8/19/2013				
<b>Assessed Loc</b>	UK MOD				
<i>Form is Proprietary to Camcode, recognising UK MOD free User Rights</i>					
<i>For Direct Part Marking Only</i>					
<b>Laser Type</b>	<b>Power (%)</b>				
<b>Wattage</b>	<b>Pulses/in</b>				
<b>Speed (in/min)</b>	<b>Jig #</b>				
E	ADD NOTE TO MS FROM MOD			9/27/2016	3129
D	CHANGE TO 49P CODE USML1			4/22/2016	2864
C	CHANGE DB AS ALTERNATE MATERIAL TO AM BLACK +			1/17/2014	1453
B	CHANGE TO 3M S915 & SANDSHIELD			11/13/2013	734
<b>Item Descriptor</b>	HMNVS	<b>Marking Method</b>	0.012" MP (0.012" AMBLACK+)		
<b>Common Name</b>	INTENTIONALLY LEFT BLANK	<b>Attachment Method</b>	CCGA01		
<b>MFR CAGE Code</b>	13567	<b>Overlaminates</b>	SANDSHIELD		
<b>Part Number</b>	275119-3	<b>Mark Size</b>	0.9" X 0.4" 10.2MM X 22.9MM		
		<b>Mark Design</b>	RECTANGLE (SLV/BLK)		
<b>NSN</b>	5855015154436	<b>HRI Includes</b>	SERIAL		
<b>Special Controls</b>	Y	<b>Application Surface</b>	PLASTIC		
<b>ECI Code</b>	USML1	<b>Op. Environment</b>	HARSH		
<b>Imaged Proof</b>	UKMOD75	<b>COSHH</b>	N		
<b>Blank Proof</b>	UKMOD83	<b>#Tags/Asset</b>	1		
<b>Serial # Format</b>	NO RULES	<small>Any special characters within the part number have been removed from the UI.</small>			
<b>Notes</b> RECONCILE ASSETS, MPN 275119-3, NOT WHAT IS SEEN ON ASSET.					
<b>Approved, Signature Here</b>					
<b>Print Name</b>	EMMA FOWLER	<b>Rank</b>	EO/D		
<b>Date Approved</b>	10/7/2016	<b>Appointment</b>	DES LE STSP-DCC-STA SCM ID		
<b>Rev</b>	<b>ECN Reason</b>	<b>ECN Date</b>	<b>ECN</b>		

Shows where mark is applied.

Defines recommended marking technology.

Specifies attachment method/adhesive.

## EXISTING CAMCODE MARKING SPECIFICATIONS

- ◆ Small Arms
- ◆ Weapon Ancillaries
- ◆ Night Vision Goggles
- ◆ Ballistic Protection Equipment
- ◆ Communications Equipment
- ◆ Electronics / Circuit Boards

- ◆ Ships / Marine
- ◆ Aircraft / Aerospace
- ◆ Complex Weapon Systems
- ◆ AFV, IFV, MBT Operational Safety Signs & Data Plates
- ◆ Tool Kits

- ◆ Medical Equipment
- ◆ Hydraulic Components
- ◆ Bridging
- ◆ Vehicle Sub-Assemblies
- ◆ Parachutes
- ◆ Shipping Containers