

“QUICK LOOK” SUMMARY: THE DOD/INDUSTRY/CALS STANDARD SYSTEM FOR IDENTIFYING DRAWINGS AND ITEMS

1. **DRAWING IDENTIFICATION**: EVERY DRAWING IS IDENTIFIED BY A **COMBINATION OF NUMBERS CONSISTING OF THE ASSIGNED CAGE CODE AND THE ASSIGNED DRAWING NUMBER**. Example: “CAGE Code 12345 and drawing number 29000” uniquely identifies a specific drawing.

- a. MYTH: Drawings are assigned a drawing number only.
 FACT: Drawings are assigned a combination of numbers for identification consisting of the permanently assigned CAGE code and drawing number. **This has been mandatory for 39 years.**
- b. MYTH: Each time a drawing changes ownership, the drawing’s CAGE code must be changed to that of the new owner.
 FACT: Once a CAGE code is assigned to a drawing, it never changes. **This has been mandatory for 31 years.**
- c. QUESTION: Where is the “assigned CAGE code” found on a drawing?
 ANSWER: In the drawing’s title block. See below:

ACME ENGINEERING CO COLUMBUS, OH	
CAGE	DRAWING NUMBER
12345	29000

ASSIGNED CAGE CODE (ASSIGNED DRAWING NR)

2. **ITEM IDENTIFICATION**: EVERY ITEM IS IDENTIFIED BY A **COMBINATION OF NUMBERS CONSISTING OF THE ASSIGNED CAGE CODE AND THE ASSIGNED PART NUMBER**. Example: “CAGE Code 12345 and part number 29000-01” uniquely identifies a specific item.

--	29000-01	BRACKET
-01	PART NR	NOUN
QTY		
ACME ENGINEERING CO COLUMBUS, OH		
CAGE	DRAWING NUMBER	
12345	29000	

ASSIGNED CAGE CODE ASSIGNED PART NR

NOTE: **This system of item identification has been mandatory for 33 years** (since MIL-STD-100, 1965). This system is used in all configuration, engineering, technical manual, and technical data actions. The system is essential for use in CALS and DoD information systems.

DOD, INDUSTRY, AND CALS STANDARD IDENTIFICATION OF DRAWINGS AND ITEMS

1. **INTRODUCTION:** All acquisition, engineering, and logistics personnel in the Department of Defense (DoD) need to be aware of the DOD/Industry/CALS standard system for identifying drawings and items. As DoD increasingly uses data bases and digital information systems, it becomes increasingly important that all in DoD be aware of how drawings and items are identified. Failure to understand how drawings and items are identified will produce “garbage in -- garbage out” in our information systems, weaken our national defense, impede competition, supply wrong parts to DoD customers, and increase the cost of maintaining a defense system.

2. THE IDENTIFICATION SYSTEM IN BRIEF:

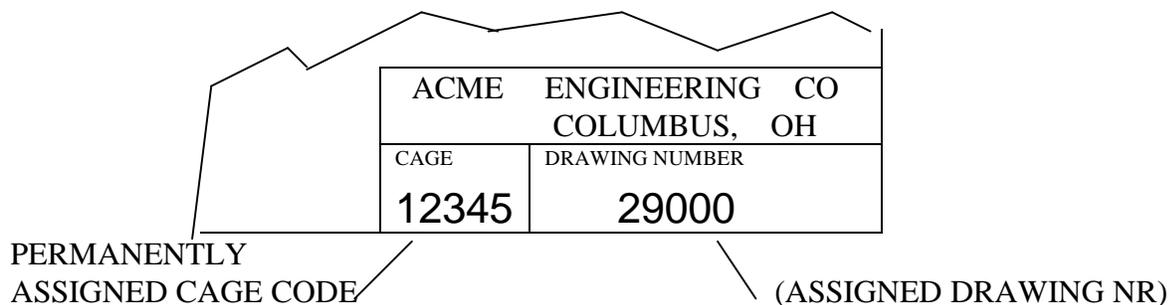
a. **DRAWINGS:** Drawings are identified by using the originally assigned CAGE code and drawing number in some form of combination. *This has been mandatory for 39 years.*

b. **ITEMS:** Items are identified by using the originally assigned CAGE code and part number in some form of combination. The item’s CAGE code and part number are established, documented, and assigned solely on the drawing or engineering document. *This has been mandatory for 33 years.* (The Federal Stock Number System has no assigned role of the CAGE code to part numbers in that system.)

3. **BACKGROUND:** Every drawing and every part requires a unique identification. The problem is that every entity that prepares drawings and establishes parts can, and frequently does, assign the exact same drawing and part numbers as other entities. For example, all entities can begin issuing drawing numbers and part numbers starting with the number “1”, but the drawing “1” and part “1” of one entity is completely different from those of all other entities. For example, the Army and the Air Force today issue the exact same drawing numbers. For another example, there are 89 different part numbers “123” in the stocklist alone, with thousands more in the commercial world. In the 1950s, these duplications presented severe problems to military logistics when the DoD began using the “new” technology of microfilmed drawings on IBM cards. There was no way to store and retrieve copies of drawings accurately in the DoD without some additional means of identification. This led to a new system of unique drawing identification, which was established in 1959 in MIL-STD-31 and continues in force in all superseding issues of MIL-STD-100. This system required that each and every drawing be permanently assigned a combination of numbers, consisting of a Commercial and Government Entity Code (CAGEC) number and drawing number.

4. **DRAWING IDENTIFICATION:** All drawings are assigned an original design activity CAGE code and a drawing number. Both are permanent and can never be changed. Every drawing is identified by using the combination of its assigned CAGE code and drawing number.

a. **LOCATION OF DRAWING IDENTIFICATION:** The assigned CAGE code and drawing number is found in the title block of a drawing in the following locations. Example:



b. HOW THE “COMBINATION” SYSTEM OF IDENTIFICATION WORKS. The “combination of numbers” system of uniquely identifying drawings compares with the “combination of city and state” method of uniquely identifying cities within the US. For example, there are 11 different “Hollywood”s in the US, but only one “Hollywood, Florida”, one “Hollywood, Maine”, etc. In the example above, there may be thousands of drawings in the US with a drawing number of 29000, but there is only one drawing with the combination of numbers “CAGE Code 12345 and drawing nr. 29000”.

5. ITEM IDENTIFICATION: Every item is assigned a part number and a CAGE code. Item identification consists of the original CAGE code assigned to the drawing and the part number assigned by that original CAGE code entity. Example: “*CAGE Code 12345 and part number 29000-01*” uniquely identifies a specific item.

--	29000-01	BRACKET
-01	PART NR	NOUN
QTY	ACME ENGINEERING CO COLUMBUS, OH	
	CAGE	DRAWING NUMBER
	12345	29000

ASSIGNED CAGE CODE

ASSIGNED PART NR

6. FORMS OF IDENTIFICATION: There are two forms of identification for items:

a. **DESIGN DISCLOSURE ITEM IDENTIFICATION:** This combination of CAGE and part number is assigned to a fixed design. All items with this identification are substantially identical. A set of design disclosure or manufacturing drawings establishes the design.

b. **PERFORMANCE BASED ADMINISTRATIVE CONTROL NUMBER IDENTIFICATION:** (Also called “generic item identification”, “performance specification item identification”, and “administrative control number identification”.) This combination consists of the CAGE code and administrative control part number assigned by a performance specification, commercial item description (CID), or drawing to the **item** (not to the drawing or specification). The administrative control part number is a number assigned by the CAGE code entity and performance document to establish a performance or “salient characteristics” criteria to control and administer a specific group of interchangeable items. The items which meet the control number retain their own item identification and are not re-identified, unless the specification requires re-identification, such as a source controlled item on a source control drawing. The generic identification provides a “cradle to grave” means of identifying and controlling the group of interchangeables, regardless of the status or quantity of the different vendor items which may be active, canceled, superseded, to be developed, “part-numberless”, or too numerous to list.
EXAMPLE: “CAGE Code 98748 and administrative control number 950005-1.”

7. REFERENCES:

MIL-STD-31	1 April 1959	Numbering and Coding of Engineering Drawings, Associated Lists, and Documents
MIL-STD-100	1 March 1959	Engineering Drawing Practices
MIL-STD-100A	1 October 1967	Engineering Drawing Practices
MIL-STD-100B	15 October 1975	Engineering Drawing Practices
DOD-STD-100C	22 December 1978	Engineering Drawing Practices
MIL-STD-100E	30 September 1991	Engineering Drawing Practices

8. QUOTES FROM APPLICABLE STANDARDS:

a. *MIL-STD-31 (1959), paragraph 4.1: “**Identification requirements.** Except as otherwise stated in the contract or order, *all* drawings, associated lists, or documents procured, prepared by, or furnished to, Department of Defense activities shall be identified by a ****code identification number and drawing number** in conformance with 5.1 and 5.2 of this standard.”

* (MIL-STD-31 is superseded by MIL-STD-100).

** (“Code identification” is now “CAGE Code”).

b. MIL-STD-100 (1965), paragraph 1-401.2: “**Identification requirements.** *All* drawings, associated lists, or documents procured, prepared by, or furnished to, Department of Defense activities shall be identified by a **code identification number and drawing number** in conformance with 1-402.4 and 1-402.5 of this section.”

c. MIL-STD-100 (1965), paragraph 1-402.10: “**Code identification and part numbering.** Part numbers identifying items shall be preceded by the code identification numbers of the design activity assigned”

d. MIL-STD-100A (1967), paragraph 1-302.9: “**Transferring design responsibility to another activity.** When the design responsibility for engineering drawings is transferred from one design activity to another, the drawing number(s) and part number(s) shall be transferred to the new design activity for administration. The new assignee may add his code identification number on the drawing by revision action to identify change in design responsibility. ***In no case shall the original drawing identity be changed or relocated to indicate a new code identification.***”

e. MIL-STD-100A (1967), paragraph 1-302.10: “**Item identification and part numbering.** Each item (e.g., detail part, assembly, etc.) shall be identified as follows: ... d. Design activities using items other than their design without alteration and selection shall identify such items by the **original design activity part number and code identification.**”

f. MIL-STD-100E (1991), paragraph 3-44 (definition): “**Item identification.** The combination of the part or identifying number and the original design activity CAGE code.”

g. MIL-STD-100E (1991), paragraph 403: “**Drawing number.** The drawing number consists of letters and numbers, which may or may not be separated by dashes. ***The number assigned to a particular drawing and the CAGE code represent a unique drawing identification.*** The drawing number shall be assigned from numbers controlled by the design activity ***whose CAGE is assigned*** to the drawing.”

h. MIL-STD-100E (1991), paragraph 404: “**Part or identifying number.** The Part or Identifying Number (PIN) shall consist of letters, numbers or combinations of letters and numbers, which may or may not be separated by dashes or slashes that are assigned to uniquely identify a specific item. The PIN shall be or shall include the design activity drawing number, and may include a suffix identifier (if applicable). (See 406.6) *The PIN assigned to a specific item and the CAGE Code assigned to the drawing of the item provide a unique item identification.*”

i. MIL-STD-100E (1991), paragraph 406.10: “**Item identification and PIN.** Each item (detail part or assembly) shall be identified as follows: ... c. Design activities using items other than their design without alteration and selection shall identify such items by the **original design activity item identification.**”

8. **ILLUSTRATION:** As stated earlier, there are many entities (contractors, subcontractors, manufacturers, etc.) that establish drawings and parts that use the exact same numbers as other entities. The Army and Air Force (and others) issue the same drawing numbers, with examples as shown:

