

## REINFORCING BAR IDENTIFICATION

There are a number of important ways to identify reinforcing bar from the production mill to the fabrication shop to the job site. This documentation and marking system will help provide a wealth of useful information about the manufacturing and composition of each bar of reinforcing steel.

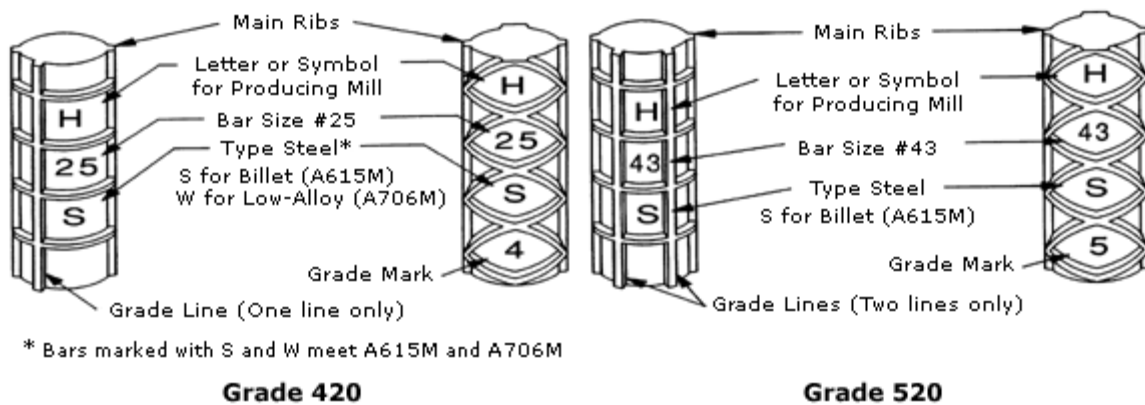
Each individual reinforcing bar is manufactured with a series of individual markings:

The top letter or symbol identifies the producing mill and deformation pattern.

The next marking is the bar size.

The third marking symbol designates the manufacturing material — usually either "S" for carbon-steel (ASTM A615) or "W" for low-alloy steel (ASTM A706).

Finally, there will be a grade marking (4 or 5, for 420 or 520) or by the addition of one line (420) or two lines (520) that must be at least five deformations long.



Generally, reinforcing steel bars are either carbon-steel (conforming to ASTM A615) or low-alloy steel (conforming to ASTM A706).

### ASTM International (ASTM)

Originally known as the American Society for Testing and Materials



Bar tags provide the key to identifying rebar. A typical bar tag shows the number of pieces in a shipment of each bar. It also shows that the materials used to manufacture the bar conform to ASTM standards for reinforcing steel.

6-07		QTY	SIZE	GRADE	BC	602
JOB 95-123		TYPE	25			
RELEASE 24		1-04				
CC TLB		1-023				
QTY 32		1-05				
SIZE 4		0-092				
LENGTH 6-07				1. 90°/F		
MARK 4A231		JOB 95-123		RELEASE 24		2. 90°/F
GRADE 60		CUSTOMER OR JOB NAME XYZ CONTRACTORS				3. 90°/R
TYPE 25		REFERENCE ALLEGHENY W.W.T.P.		v7.4.5		4. 90°/R
M.B. 2D		LIST/TAG	***	BIN	RUN	PAGE/ITEM
TAGS 1		2/1	2D	4,10	081002	1/3
PAGE/ITEM 1/3		<b>TLB</b>				MARK
WEIGHT 141						4A231
RUN 081002		DESCRIPTION		WEIGHT		
SHIP DATE		BOTTOM MAT REINF. & DOWELS		141		
PRINT SEQ. 2		MARK	LENGTH	DRAWING	TAGS	
		4A231	6-07		1	

11-06		QUANTITY	SIZE	LENGTH	MARK	GRADE
		4	22mm	11-07	22A3	420
JOB: 682-1010		TYP: 3				
REL: 12		PIN:				
CC: TLB		BC: 4				
COLOR:		RUN: 101403				
QTY: 4		ID: 0003	1: 180°/F			
SIZE: 22mm				2: 30°/F		
LNTH: 11-07				3: 30°/FF		
MARK: 22A3		JOB: 682-1010		REL: 12		
GRADE: 420		TRAINING CENTER		JONES CONSTRUCTION		
TYPE: 3		FOUNDATION AND WALLS		DRAWING: R-1		
BC: 4		REFERENCE: PO#971010-12		CTRL CODE: TLB		
BNDL: 1 OF 1		BNDL: 1 OF 1		PAGE: 1		
PAGE: 1		PAGE: 1		ITEM: 5		
ITEM: 5		ITEM: 5		MB: 2D		STOP: TAGS
MB: 2D		ITEM: 5		WGT: 95		BIN: ONLY
WGT: 95		ITEM: 5		SHIP: DEC 14		LIST: 2
RUN: 101403		ITEM: 5				TAG: 1
ID: 0003		ITEM: 5				
SHIP: DEC 14		ITEM: 5				
PRINT: 3		ITEM: 5				
VER: 9.6.8		ITEM: 5				
		<b>TLB</b>				

Reinforcing bars typically come in two primary grades: Grade 60, which has minimum yield strength of 60,000 psi, and Grade 75, which has yield strength of 75,000 psi. The metric equivalents for these are Grade 420, which has equivalent yield strength of 420 MPa (megapascals) and Grade 520, which has equivalent yield strength of 520 MPa.