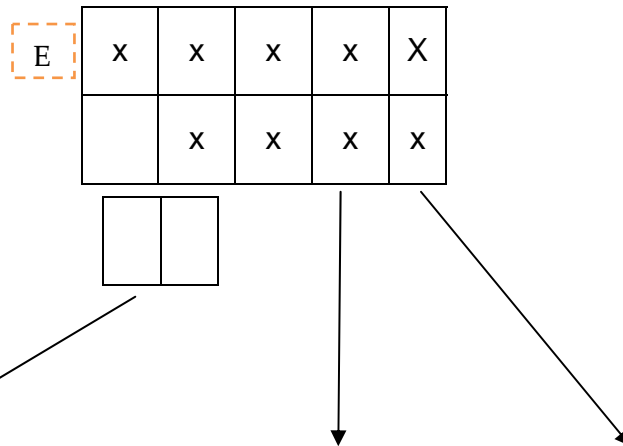


AWS Classification SFA 5.1

A four or A five digit coding



Indicates the minimum UTS Of the undiluted weld metal In KSI can be 60,70,80 90,100,110 etc.	Indicates Welding position	Indicates the type of Coating and current condition
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AWS Classification	Type of Covering	Type of Current
E6010	High cellulose sodium	DC (+)
E6011	High cellulose potassium	AC / DC (+)
E6012	High titania sodium	AC / DC (-)
E6013	High titania potassium	AC / DC
E6020	High iron oxide	AC / DC
E6022	High iron oxide	AC / DC (-)
E6027	High iron oxide iron powder	AC / DC (-)
E7014	Iron powder titania	AC / DC
E7015	Low hydrogen sodium	DC (+) E 7015
E7016	Low hydrogen potassium	AC / DC (+)
E7018	Low hydrogen Potassium iron powder	AC / DC (+)
E7024	Iron powder titania	AC / DC
E7027	High iron oxide iron powder	AC / DC (-)
E7028	Low hydrogen potassium iron powder	AC / DC (+)
E7048	Low hydrogen potassium iron powder	AC / DC (-)

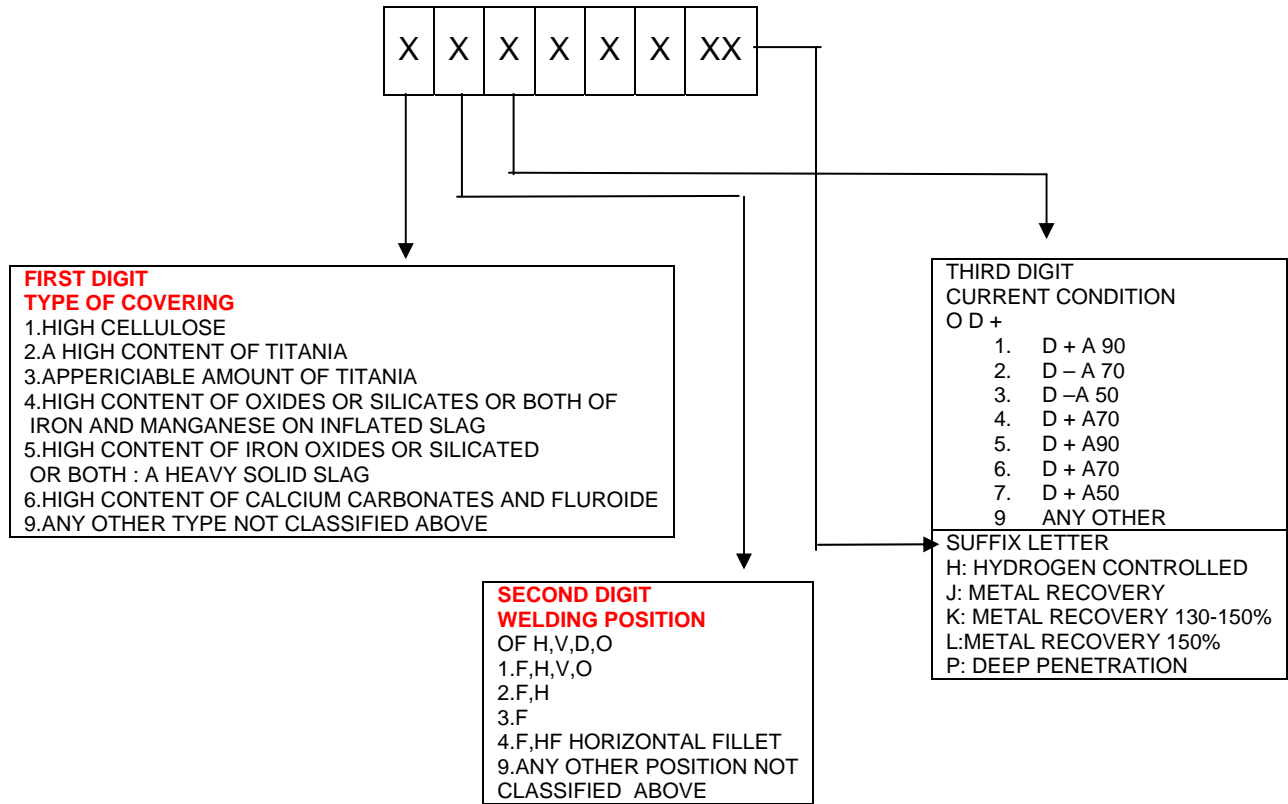
LAST THREE DIGITS MECHANICAL PROPERTIES

ELECTRODE Classification	Range of tensile strength	Combination of percentage Elongation and impact value		
		Minimum yield stress N/mm ²	Minimum elongation on a gauge length of 5.65	Temperature for minimum impact value of 47J (4.8 kgf.m)
EXXX-410	410 -510	330	--	--
EXXX-411	410 – 510	330	20	+27
EXXX-412	410 – 510	330	22	0
EXXX-413	410 – 510	330	24	-20
EXXX-414	410 – 510	330	24	-30
EXXX-415	410 – 510	330	24	-40
EXXX-510	510 – 610	360	--	--
EXXX-511	510 – 610	360	18	+27
EXXX-512	510 – 610	360	18	0
EXXX-513	510 – 610	360	20	-20
EXXX-514	510 – 610	360	20	-30
EXXX-515	510 – 610	360	20	-40

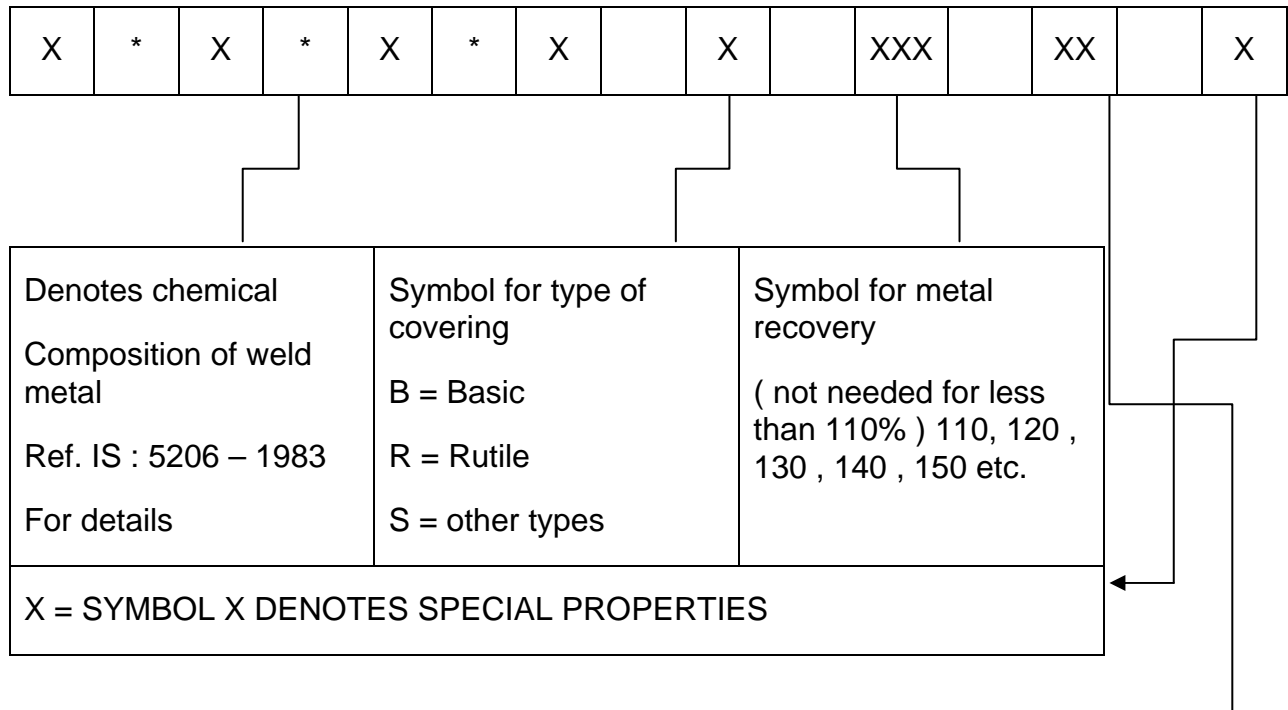
IS CLASSIFICATION A PREFIX LETTER & SIX DIGIT CODING

PREFIX LETTER :- E – DENOTES EXTRUSION (SOLID)

R – DENOTES EXTRUSION (WITH REINFORCEMENT)



IS CLASSIFICATION (FOR STAINLESS STEEL ELECTRODES)



SYMBOLS FOR WELDING CHARACTERISTICS			
FIRST DIGIT		SECOND DIGIT	
DENOTES WELDING POSITION		DENOTES CURRENT CONDITION	
DENOTES WELDING POSITION	DIGIT	DC, POLARITY	AC MIN OCV
1= ALL POSITION			
2= ALL POSITION EXCEPT VERTICAL WELDING	0	+	--
3 = FLAT BUTT WELD , FLAT FILLER WELD, HORIZONTAL / VERTICAL FILLET WELD	1	+ OR -	50
	2	-	50
	3	+	50
4 = FLATE BUTT WELD FLATE BUTT WELD	4	+ OR -	70
	5	-	70
	6	+	70
5= SAME AS 3 AND RECOM.FOR VERTICAL DOWNWARD	7	+ OR -	90
	8	-	90
	9	+	90