

# Tenaris Steel Grades

We manufacture a wide range of steel grades for all well designs.

## API GRADES MANUFACTURED BY TENARIS

SMYS (KSI)	45	55	65	80	90	95	110	125
<b>Group 1</b>	H40	J55, K55		N80.1, N80.Q		R95		
<b>Group 2</b>			M65	L80.1, L80 13Cr	C90.1	T95.1	C110	
<b>Group 3</b>							P110	
<b>Group 4</b>								Q125

## SEAMLESS MARTENSITIC STAINLESS STEELS FOR CO<sub>2</sub> CORROSION

SMYS (KSI)	80	85	95	110
<b>Martensitic</b>	TN 80 Cr13	TN 85 Cr13	TN 95 Cr13	TN 110 Cr13M
<b>Modified Martensitic</b>			TN 95 Cr13M	TN 110 Cr13S
<b>Super Martensitic</b>			TN 95 Cr13S	

## PROPRIETARY STEEL GRADES BY TENARIS

SMYS (KSI)	45	55	60	70	75	80	90	95	100	110	125	135	140	150
<b>Sour Service</b>						TN 80 S	TN 90 S	TN 95 S						
<b>Severe Sour Service</b>						TN 80 SS	TN 90 SS	TN 95 SS	TN 100 SS	TN 110 SS	TN 125 SS			
<b>High Collapse Service</b>						TN 80 HC		TN 95 HC		TN 110 HC	TN 125 HC		TN 140 HC	
<b>High Collapse &amp; Sour Service</b>						TN 80 HS		TN 95 HS	TN 100 HS	TN 110 HS				
<b>Deep Well Service</b>												TN 135 DW	TN 140 DW	TN 150 DW
<b>Critical Service</b>		TN 55 CS		TN 70 CS	TN 75 CS	TN 80 Cr3		TN 95 Cr3		TN 110 Cr3				
<b>Low Temperature Service</b>		TN 55 LT				TN 80 LT		TN 95 LT		TN 110 LT	TN 125 LT			
<b>High Ductility</b>		TN 45 HD		TN 60 HD	TN 70 HD									
<b>Thermal Service</b>		TN 55 TH				TN 80 TH								

## CORROSION RESISTANT ALLOYS

GRADE	ISO 13680 GROUP AND CATEGORY	UNS NUMBER	YIELD STRENGTH KSI	TENSILE STRENGTH KSI	MIN. ELONGATION	MAX HARDNESS HRC
<b>SAF 2205</b>	2; 22-5-3	S31803	65-90	90	25	26
			140-160	145	9	38
<b>SAF 2507</b>	2; 27-5-4	S32750	80-105	110	20	28
			125-150	130	10	37
			140-160	145	9	38
<b>Sanicro 28</b>	3; 27-31-4	N08028	110-140	115	11	35
			125-150	130	10	37
<b>Sanicro 29</b>	3; 27-31-4	NA	110-140	115	11	35
			125-150	130	10	37