



PRODUCT BROCHURE

RASHTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
VISAKHAPATNAM
ANDHRA PRADESH, INDIA

www.vizagsteel.com



RASHTRIYA ISPAT NIGAM LIMITED (RINL), the corporate entity of Visakhapatnam Steel Plant, is a Navratna Company under the Ministry of Steel, Govt. of India.

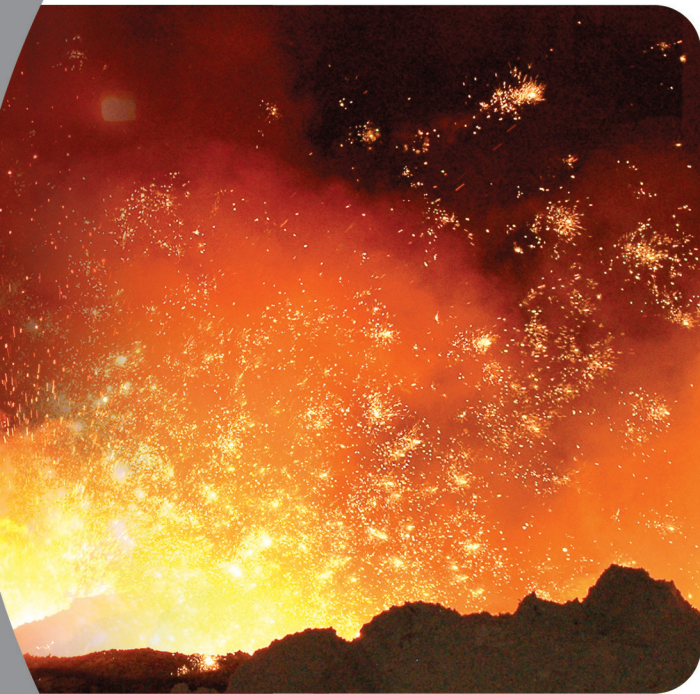
Visakhapatnam Steel Plant-popularly known as “Vizag Steel”, is the first shore-based Integrated Steel Plant in India, One of the leading companies in “Long” steel products, it caters to the requirements of the Construction, Infrastructure, Manufacturing & Automobile sectors.

RINL-VSP is the first integrated steel plant to be certified for ISO 9001:2008, ISO 14001, ISO 50001, ISO 27001 & OHSAS 18001 standards.

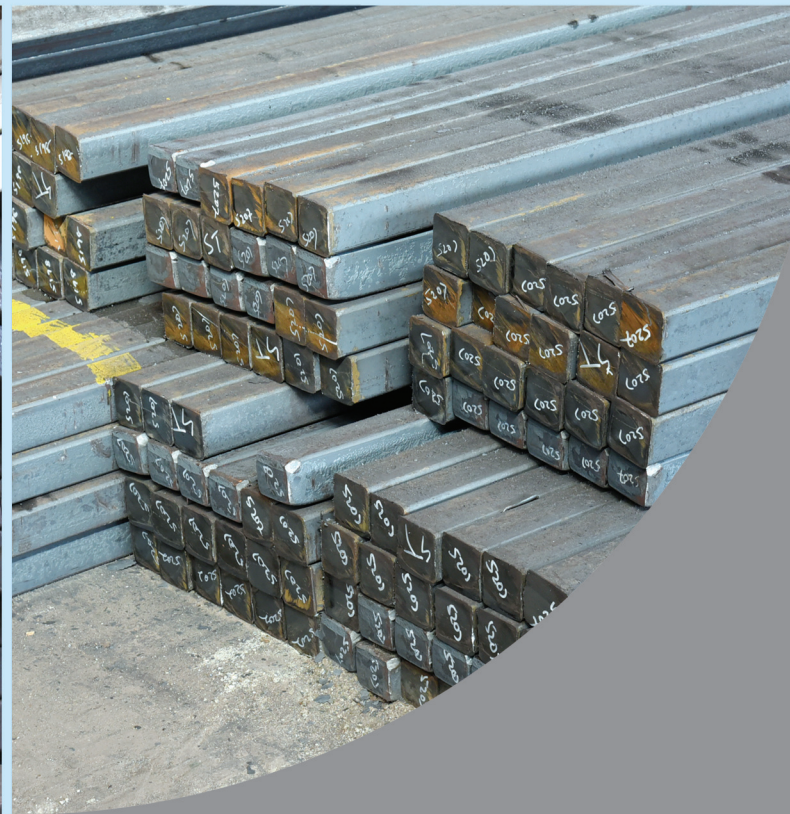
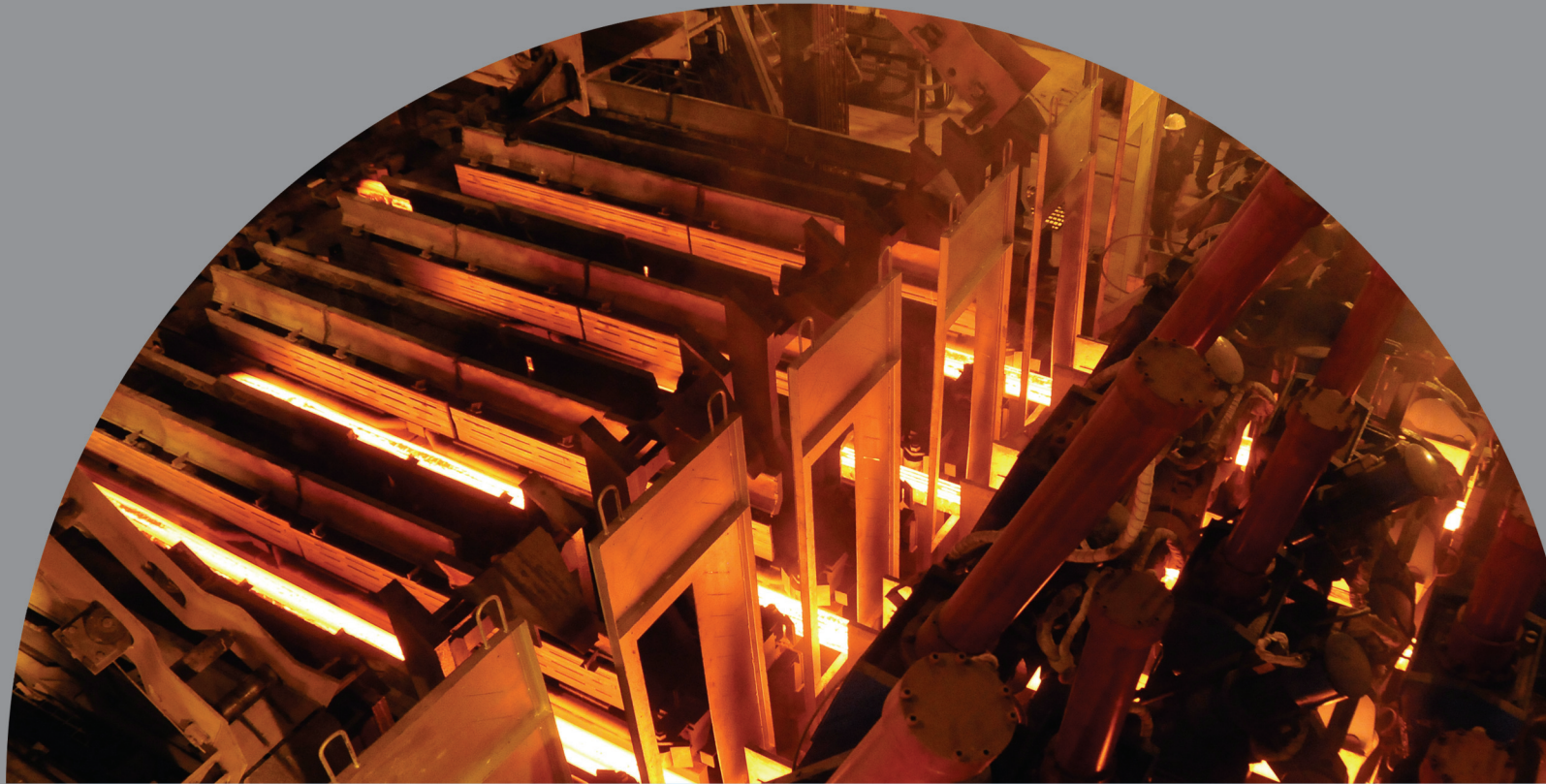
RINL's products have wide acceptance in the market as they are made from 100% virgin steel, with stringent specifications in both physical & chemical properties, and it is the preferred steel maker for a wide array of customers. With more than 75% of value added products in its basket, RINL has a wide marketing network spread across the country.



Presenting 'Quality' steel



VIZAG STEEL





Blooms & Billets

All Products are produced from Virgin Steel

Section	Dimension (mm)	Source	Length (m)	Bundle Weight /t	Available Grades	Application
Blooms	320x250	SMS 1	6 to 7	Loose / specific grade on order & availability	IS 2830 ,IS2830Cu, IS2831, SAE1008, SAE1010, SAE1015, SAE1016, SAE1018, SAE1018AL, SAE1023S, A105, SAE1029S, SAE1030, 27C15, 37C15, 35C8, EN15B, 1541, EN8, EN8D,En8DCr, EN9, CK45, CK45Cr, SAE1049, IS1875-CLASS IV, SAE1029S, SAE1541, SAE1524CR, 55Si7, 60Si7, 65Si7,SUP-9, SUP-10, SUP-11A, 40Cr4, 41Cr4, 31CrV3	Rerolling, Forging
	250x250	SMS 1	6 to 7			
	200x200	SMS 2	12			
	150x150	SMS 2	12			
Billets	125X125	LMMM	9.8 to 12.4			
	55X55	MMSM	12	9.0 to 9.5		
Round Cornered Squares Billets	65X65	MMSM	12	9.0 to 9.5		
	75X75	MMSM	12	9.0 to 9.5		
	90X90	MMSM	12	9.0 to 9.5		



Chemical Composition of Grades

Elements (%)							
Grade	C	Mn	P(max)	S(max)	Si	Cr	Others
IS2879	0.08 max	0.40-0.60	0.025	0.025	0.03 max	0.05 max	Al 0.012mx
CAQ	0.07 max	0.50 max	0.035	0.035	0.050 max	0.05 max	
SAE1006	0.06 max	0.25-0.40	0.035	0.035	0.30 max	0.05 max	Al .020 min
SAE1008DQ	0.07 Max	0.30-0.45	0.040	0.040	0.20 max	0.05max	Al=0.019max
SAE1008	0.08 max	0.30-0.45	0.040	0.040	0.20 max	0.05 max	Al=0.020 min
SAE1008IBR	0.10 max	0.30-0.50	0.035	0.035	0.25 max	0.05 max	Al 0.020 min
SAE1010	0.08-0.13	0.30-0.50	0.040	0.040	0.20 max	0.05 max	Al=0.020 min
SAE1010W	0.08-0.12	0.75-0.90	0.040	0.040	0.30 max	0.05 max	Al=0.020-0.050
SAE1010IBR	0.08-0.13	0.30-0.60	0.035	0.035	0.20 max	0.05 max	Al 0.020 min
IS7887	0.13 max	0.30-0.60	0.050	0.050	0.35 max	0.05 max	#
CHQ1010	0.08-0.13	0.30-0.60	0.030	0.035	0.10 max	0.05 max	Al=0.020-0.050
CHQ1018	0.15-0.20	0.60-0.90	0.030	0.035	0.10 max	0.05 max	Al=0.020-0.050
SAE1012S	0.10-0.15	0.50-0.80	0.035	0.035	0.20 max	0.05 max	Al=0.020 min
SAE1015	0.13-0.17	0.30-0.60	0.040	0.040	0.30 max	0.05 max	Al=0.020 min
1015IBR	0.13-0.17	0.30-0.60	0.035	0.035	0.30 max	0.05 max	Al=0.020 min
SAE1015S	0.13-0.18	0.50-0.80	0.030	0.030	0.15-0.35	0.05 max	Al=0.020min
SAE1016	0.13-0.18	0.60-0.90	0.040	0.040	0.15-0.35	0.05 max	Al=0.020 min
SAE1018	0.15-0.20	0.60-0.90	0.040	0.040	0.30 max	0.05 max	Al=0.010 min
SAE1018AI	0.15-0.20	0.60-0.90	0.040	0.040	0.30 max	0.05 max	Al=0.020 min
SAE1018IBR	0.15-0.20	0.60-0.90	0.035	0.035	0.30 max	0.05 max	Al=0.020 min
SAE1019IBR	0.15-0.20	0.90-1.10	0.035	0.035	0.15-0.35	0.05 max	Al=0.020 min
SAE1020	0.18-0.22	0.30-0.60	0.040	0.040	0.35 max	0.05 max	Al=0.020 min
SAE1020IBR	0.18-0.22	0.30-0.60	0.035	0.035	0.35 max	0.05 max	Al=0.020 min
IS2830	0.13-0.22	0.40-1.50	0.045	0.045	0.40 max	0.05 max	
IS2830M	0.13-0.22	0.40-1.50	0.050	0.050	0.40 max	0.05 max	
IS2830Cu	0.12-0.23	0.30-1.50	0.045	0.045	0.40 max		Cu.20-0.35,CE:0.41max
C18HMN *	0.15-0.20	1.10-1.40	0.040	0.040	0.15-0.35	0.08 max	Al.015 min ,V.030-.08,CE:0.45 Max
C18HMN #	0.15-0.20	1.10-1.40	0.040	0.040	0.15-0.35	0.08 max	Al.040 max , V.030-.08,CE:0.45 Max
SAE1524S	0.16-0.21	1.35-1.65	0.040	0.040	0.15-0.35	0.05 max	Al=0.020-0.050
C20MMn	0.17-0.22	0.65-1.00	0.045	0.045	0.15-0.35	0.05 max	Al 0.040 max, CE 0.28-0.42
C20MMnB	0.17-0.23	0.60-1.00	0.045	0.045	0.15-0.35	0.05 max	*Al-0.015 Min, #Al-0.040 Max
C20MMnC	0.17-0.23	0.60-1.00	0.040	0.040	0.15-0.35	0.05 max	Al=0.040 max
C20HMnB	0.17-0.22	1.20-1.50	0.045	0.045	0.15-0.30	0.05 max	Al=0.010Min, Ti=0.028-0.050, Ni=0.03Max, Mo=0.005 Max, B=0.004 Max, Cu=0.030Max
SAE1023S	0.20-0.25	0.80-1.10	0.040	0.040	0.15-0.35	0.05 max	Al=0.020-0.050
A105	0.18-0.23	0.90-1.20	0.035	0.035	0.15-0.35	0.05 max	Al=0.020-0.050
27C15	0.25-0.30	1.40-1.70	0.035	0.035	0.15-0.35	0.05 max	Al=0.020-0.050
SAE1029S	0.23-0.28	0.70-0.90	0.040	0.040	0.15-0.35	0.05 max	Al=0.020-0.050
SAE1030	0.28-0.34	0.60-0.90	0.030	0.030	0.15-0.35	0.05 max	Al=0.020-0.05
37C15	0.32-0.42	1.40-1.70	0.035	0.035	0.15-0.35	0.05 max	Al=0.020-0.050
35C8	0.33-0.38	0.60-0.90	0.040	0.035	0.15-0.35	0.05 max	Al=0.020 min
En15B	0.35-0.40	1.10-1.30	0.040	0.035	0.05-0.35	0.05 max	Al=0.020-0.050
SAE1541	0.36-0.44	1.35-1.65	0.040	0.035	0.15-0.35	0.05 max	Al=0.020-0.050
SAE1541S	0.40-0.44	1.35-1.65	0.040	0.035	0.15-0.35	0.05 Max	Al=0.020-0.050
En8	0.39-0.45	0.60-1.00	0.040	0.040	0.05 - 0.35	0.05 max	Al=0.015 min
En8D	0.41-0.45	0.70-0.90	0.040	0.040	0.05-0.35	0.05 max	Al=0.020-0.050
En8DCR	0.40-0.45	0.70-0.90	0.040	0.040	0.10-0.35	0.15-0.25	Al=0.020-0.050
EN8DS	0.40-0.45	0.70-0.90	0.045	0.045	0.15-0.35	0.05 max	AL=0.010min
Class IV	0.40-0.50	0.60-0.90	0.040	0.040	0.15-0.35	0.30 max	Al=0.010 to 0.050 min



Chemical Composition of Grades

Elements (%)							
Grade	C	Mn	P(max)	S(max)	Si	Cr	Others
CK45	0.43-0.48	0.60-0.80	0.035	0.035	0.15-0.35	0.05 max	Al=0.020-0.050
CK45Cr	0.44-0.48	0.70-0.90	0.040	0.040	0.15-0.35	0.15-0.25	Al=0.020-0.050
SAE1049	0.47-0.51	0.60-0.90	0.040	0.040	0.15-0.35	0.05 max	Al=0.020-0.050
En9	0.50-0.60	0.60-0.80	0.040	0.040	0.05-0.35	0.05 max	Al=0.015 min
C70	0.65-0.75	0.60-0.90	0.040	0.040	0.15-0.35	0.05 max	
16MnCr5	0.14-0.19	1.00-1.30	0.035	0.035	0.15-0.35	0.80-1.10	Al=0.020-0.050
SUP9	0.52-0.60	0.65-0.95	0.035	0.035	0.15-0.35	0.65-0.95	Al=0.020-0.050
SUP11A	0.56-0.64	0.70-1.00	0.035	0.035	0.15-0.35	0.70-1.00	Al:0.020-0.050;B=0.0005-0.003
SUP10	0.50-0.55	0.65-0.95	0.035	0.035	0.15-0.35	0.80-1.10	V=0.10-0.20;Al:0.020-0.050
41Cr4	0.38-0.44	0.60-0.90	0.035	0.030	0.15-0.35	1.00-1.20	Al=0.020-0.050
40Cr4	0.35-0.37	0.60-0.90	0.035	0.030	0.15-0.35	0.90-1.20	Al=0.020-0.050
20MnCr5	0.17-0.22	1.10-1.40	0.035	0.035	0.15-0.35	1.00-1.30	Al=0.020-0.050
SAE1524Cr	0.23-0.28	1.35-1.65	0.040	0.040	0.15-0.35	0.20-0.30	Al=0.020-0.050
IS7904 HC70/HCTBQ	0.68 - 0.72	0.50-0.80	0.035	0.035	0.35 max	0.05 max	
IS7904 HCT1130Cr/PC115	0.76-0.80	0.60-0.80	0.035	0.035	0.15-0.30	0.06-0.13	
IS7904 HC82	0.81-0.85	0.55-0.80	0.035	0.035	0.15-0.30	0.09 max	
IS7904 HC78	0.76-0.80	0.55-0.80	0.035	0.035	0.15-0.30	0.09 max	
IS7904 HC72Cr	0.71-0.75	0.60-0.80	0.035	0.035	0.15-0.30	0.06-0.20	
IS7904 HC72	0.71-0.75	0.55-0.80	0.035	0.035	0.15-0.30	0.09 max	
IS7904 HC68	0.66-0.70	0.55-0.80	0.035	0.035	0.15-0.30	0.05 max	
IS7904 HC62	0.61-0.65	0.55-0.80	0.035	0.035	0.15-0.30	0.05 max	
IS7904 HC58	0.56-0.60	0.55-0.80	0.035	0.035	0.15-0.30	0.05 max	
IS7904 HC52	0.51-0.55	0.55-0.80	0.035	0.035	0.15-0.30	0.05max	
SWRH 62A	0.60-0.65	0.40-0.55	0.030	0.030	0.15-0.35	0.05 Max	
55Si7	0.50-0.60	0.80-1.00	0.030	0.030	1.50-2.00	0.05 max	
60Si7	0.55-0.65	0.80-1.00	0.040	0.040	1.50-2.00	0.05 max	
65Si7	0.60-0.70	0.80-1.00	0.040	0.040	1.50-2.00	0.05 max	

*SMS-1

#SMS-2

GRADES UNDER DEVELOPMENT							
10B21	0.18-0.23	0.80-1.20	0.030	0.030	0.05-0.15	0.20 max	Al=0.020-0.040,B=0.0005-0.003
15B25	0.23-0.28	0.90-1.30	0.030	0.030	0.05-0.15	0.20 max	Al=0.020-0.040,B=0.0005-0.003
15B41	0.36-0.41	1.35-1.65	0.030	0.030	0.35 max	0.20 max	Al=0.020-0.040,B=0.0005-0.003
CO2	0.06-0.08	1.40 - 1.55	0.025	0.025	0.80-0.95	0.05 max	