

32 Dolomite

Dolomite ($\text{CaCO}_3 \cdot \text{MgCO}_3$) theoretically contains CaCO_3 54.35% and MgCO_3 45.65% or CaO 30.4%, MgO 21.9% and CO_2 47.7%. However, in nature, dolomite is not available in this exact proportion. Hence, in commercial parlance, the rock containing 40-45% MgCO_3 is usually called dolomite. It is grouped under flux and construction minerals and is important for iron & steel and ferro-alloys industries.

RESOURCES

Dolomite occurrences are widespread in almost all parts of the country. As per UNFC system, as on 1.4.2005 total resources of dolomite are placed at 7,533 million tonnes, out of which 985 million tonnes are placed under reserves category and the balance; i.e., 6,548 million tonnes under remaining resources category. Gradewise, BF/sintering grade accounts for 30% resources followed by SMS (20%), refractory (6%), BF & SMS mixed (4%) and glass (3%). Others, unclassified, not known and BF, SMS & refractory mixed grades together account for the remaining 37%. Major share of about 90% resources was distributed in seven states: namely Madhya Pradesh (26%), Andhra Pradesh (15%), Chhattisgarh (11%), Orissa (11%), Karnataka (8%), Gujarat and Rajasthan (7% each) and Maharashtra (5%). The remaining 10% resources are distributed in West Bengal, Uttarakhand, Uttar Pradesh, Arunachal Pradesh, Jharkhand, Haryana, Sikkim and Tamil Nadu. Gradewise and Statewise reserves/resources are given in Table-1.

EXPLORATION & DEVELOPMENT

In 2006-07, the Directorates of Geology & Mining, Governments of Andhra Pradesh, Chhattisgarh, Madhya Pradesh Rajasthan and Mysore Minerals Ltd conducted exploration for

dolomite. In 2007-08, DGM, Madhya Pradesh conducted exploration activities for dolomite in Udainagar area in Dewas district. Details of exploration activities are furnished in Table- 2.

PRODUCTION, STOCKS AND PRICES

The production of dolomite in 2007-08 at 5,117 thousand tonnes registered decreased nominally due to rainy season as compared to that in the previous year.

There were 103 reporting mines in 2007-08 as against 124 in the previous year. About 81% of total production was contributed by 14 principal producers operating 15 mines in India. About 29% production of dolomite was reported as an associated mineral primarily with limestone, soapstone, steatite and clay (others). Ten mines alongwith 5 associated mines producing more than 5 lakh tonnes annually accounted for 79% of the total production in 2007-08.

The share of public sector in 2007-08 was 48% as against 49% in the previous year. Orissa, the leading producing state of dolomite accounted for 32% of total production in 2007-08, followed by Andhra Pradesh (25%), Chhattisgarh (23%), Karnataka (7%) and Jharkhand (6%). The remaining 7% was jointly shared by Gujarat, Madhya Pradesh, Maharashtra and Rajasthan.

Mine-head stocks of dolomite at the end of the year 2007-08 was 1,595 thousand tonnes as against 1,473 thousand tonnes at the beginning of the year (Tables-3 to 7).

The average daily employment of labour in 2007-08 was 2,528 as against 3,089 in the previous year. Prices of dolomite are furnished in Table-8.

DOLOMITE

**Table – 1 : Reserves/Resources of Dolomite as on 1.4.2005
(By Grades/States)**

(In '000 tonnes)

Grade/State	Reserves				Remaining resources					Total resources (A+B)			
	Proved STD111	Probable		Total (A)	Feasibility STD211	Pre-feasibility		Measured STD331	Indicated STD332		Inferred STD333	Reconnaissance STD334	
		STD121	STD122			STD221	STD222						
All India : Total	407794	187077	390286	985156	11193	327152	152446	191266	392699	5356870	116327	6547952	7533108
By Grades													
B.F./Sintering	139907	76548	156225	372680	0	177123	9706	59126	197676	1454860	20484	1918974	2291653
S.M.S.(O.H.)	30244	2563	17783	50590	5580	1299	12286	10136	44737	846620	63	920720	971310
S.M.S.(L.D.)	23553	16401	64057	104011	0	1643	7859	44307	644	67817	0	122270	226281
S.M.S. (O.H.& L.D. Mixed)	26928	36758	6034	69720	0	28550	2838	8360	4000	184625	0	228373	298093
B.F. & S.M.S. Mixed	56027	757	21464	78249	0	16400	24693	1000	27296	187804	0	257193	335442
Refractory	53334	15354	35353	104041	0	62442	24952	44700	0	195897	0	327992	432033
B.F., S.M.S. & Refractory	0	3259	2354	5614	0	0	1749	0	0	8659	0	10408	16022
Glass	6751	14477	8613	29841	5371	20513	37406	2093	1297	135773	0	202453	232294
Others	37005	20042	41490	98537	242	1748	2186	20259	46734	102169	0	173338	271876
Unclassified	23903	770	23590	48263	0	15850	10073	745	50991	596673	0	674332	722595
Not known	10142	147	13322	23611	0	1583	18697	541	19326	1575972	95780	1711899	1735510
By States													
Andhra Pradesh	78933	8077	36411	123422	0	0	0	0	130654	892349	0	1023003	1146425
Arunachal Pradesh	0	0	0	0	0	0	0	0	204	77633	0	77837	77837
Chhattisgarh	52108	64526	27972	144606	242	190795	6499	19840	33670	449108	1950	702105	846711
Gujarat	28096	119	26085	54300	0	30716	62435	20263	63780	293000	0	470194	524494
Haryana	0	0	0	0	5371	5149	3722	0	0	15257	0	29500	29500
Jharkhand	21918	1897	9674	33489	0	0	0	0	0	17606	0	17606	51094
Karnataka	84865	35916	23929	144710	0	0	0	9360	17578	461377	484	488800	633509
Madhya Pradesh	36284	25644	54063	115990	5580	62704	42243	91178	37403	1506850	113830	1859788	1975779
Maharashtra	12907	2644	6889	22440	0	265	1915	0	17800	335654	0	355633	378074
Orissa	34821	18577	113845	167243	0	12733	985	43136	15496	596423	63	668836	836079
Rajasthan	57862	54	43417	101333	0	24069	34299	33	1772	338798	0	398970	500304
Sikkim	0	0	0	0	0	0	0	0	0	2756	0	2756	2756
Tamil Nadu	0	0	0	0	0	0	0	2010	135	0	0	2145	2145
Uttar Pradesh	0	17094	0	17094	0	0	0	3500	0	66230	0	69730	86824
Uttarakhand	0	0	0	0	0	721	349	1946	981	199553	0	203549	203549
West Bengal	0	12528	48000	60528	0	0	0	0	73226	104275	0	177501	238029

Figures rounded off.

DOLOMITE

Table – 2 : Details of Exploration Activities for Dolomite, 2006-07 and 2007-08

Agency/ State/ District	Location/ Area/ Block	Mapping		Drilling		Sampling (No.)	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage (m)		
2006-07							
DGM							
Andhra Pradesh							
Khammam	Bonakal, Chintakani & Kamepalli	-	-	-	-	-	Reconnaissance Survey were Carried out and reserves are not being assessed as the investigation is under progress.
Chhattisgarh							
Kabirdham	Kawardha & Pandaria Tehsil	1:50,000	1770	-	-	279	About 1.77 million tonnes of dolomite resources estimated.
Madhya Pradesh							
Dewas	Udainagar Bagli area	1:50,000	205	21	840	270	Depth persistence of dolomite deposits in the vicinity of village Pipalpati has been conformed up to 51.30 m depth. A total of about 19 million tonnes resources were estimated.
		1:4,000	2	-	-	-	
Jabalpur	Ritteri area	1:50,000	510	24	820	210	Analytical results awaited.
		1:4,000	2.13				
Rajasthan							
Udaipur	Jhalan-ka- guda & Piprach	1:50,000	50	-	-	180	1.5 km long and 75 to 150 m. wide dolomite band identified.
		1:10,000	10				
		1:2,000	2.50				
Mysore Mineral Ltd							
Karnataka							
Bagalkote	Kotagere	-	-	-	-	-	A total of about 100 million tonnes of dolomite resources were estimated.
	Naralakere	-	-	-	-	-	A total of about 10 million tonnes of dolomite resources were estimated.
2007-08							
Madhya Pradesh							
Dewas	Udainagar Bagli area	1:50,000	228	40	1020.35	258	Areal extension and depth persistence of dolomite deposits demarcated and total of about 108.6 million tonnes of resources were estimated.
		1:4,000	2	-	-	-	

DOLomite

**Table – 3 : Principal Producers of Dolomite
2007-08**

Name & address of producer	Location of mine	
	State	District
Steel Authority of India Ltd Ispat Bhavan, P. B. No. 3049, Lodhi Road, New Delhi-110 003.	Chhattisgarh Jharkhand	Bilaspur Garwah
Rastriya Ispat Nigam Ltd Visakhapatnam-530 031, Andhra Pradesh.	Andhra Pradesh	Khammam
*Bisra Stone Lime Co. Ltd P. O. Birmitrapur, Dist. Sundergarh Orissa.	Orissa	Sundergarh
Tata Iron & Steel Co. Ltd Bombay House, 24, Homy Modi Street, Mumbai-400 001.	Orissa	Sundergarh
South West Mining Ltd P. O. Vidyanagar, Dist. Bellary, Karnataka.	Andhra Pradesh	Khammam
* Vijay Kishan Lal. Plot No H-1, 7 & 8 Area, Civil Township, Rourkela-769 004, Orissa.	Orissa	Sundergarh
A. N. Patnaik H-12, Development Area, Raurkela-769 004, Dist. Sundergarh, Orissa.	Orissa	Sundergarh

(Contd.)

Table – 3 (Concl'd.)

Name & address of producer	Location of mine	
	State	District
A. Sekhar Reddy, 20-1-2, Kondepeta, Dhone Mandal, Dist. Karnool-518 222, Andhra Pradesh.	Andhra Pradesh	Kurnool
Manish Agarwal, Lajpat Rai Nagar, Bilaspur-495 001, Chhattisgarh.	Chhattisgarh	Bilaspur
Associate Mining Co., Saigal Bldg., Bilaspur-495 001, Chhattisgarh.	Chhattisgarh	Bilaspur
Manish Singh Banafar, P.O. Akaltara, Dist. Janjgir-Champa, Chhattisgarh.	Chhattisgarh	Janjgir- Champa
Sangameshwar Mines & Minerals, Bagalkot-587 101, Karnataka.	Karnataka	Bagalkot
Dolomite Mining Corpn., Khamaria Shakti Road, Janjgir-Champa, Chhattisgarh.	Chhattisgarh	Janjgir- Champa
Mysore Minerals Ltd 39, M. G. Road, Banglore-560 001, Karnataka.	Karnataka	Bagalkot

* Associated mine with limestone.

**Table – 4 : Production of Dolomite, 2005-06 to 2007-08
(By States)**

(Qty. in tonnes; value in Rs. '000)

State	2005-06		2006-07		2007-08 (p)	
	Quantity	Value	Quantity	Value	Quantity	Value
India	4750512	1162833	5171449	1125676	5117461	1266670
Andhra Pradesh	1071940	230038	1076354	191582	1285891	254798
Chhattisgarh	1109277	252402	1120261	261689	1191958	286654
Gujarat	47516	5297	146395	22662	79032	10203
Jharkhand	300351	239791	268214	201110	307826	233354
Karnataka	321339	42408	397130	51456	348690	46019
Madhya Pradesh	129045	18630	166825	18705	163778	18275
Maharashtra	133065	18858	201971	23909	53616	8188
Orissa	1404577	327401	1576617	325403	1619988	395560
Rajasthan	233402	28008	217882	29160	66682	13619

DOLOMITE

**Table – 5 : Production of Dolomite, 2006-07 and 2007-08
(By Sectors/States/Districts)**

(Qty. in tonnes; value in Rs.'000)

State/District	2006-07			2007-08 (p)		
	No. of mines	Quantity	Value	No. of mines	Quantity	Value
India	124(54)	5171649	1125676	103(44)	5117461	1266670
Public sector	7 (1)	2550597	739005	6 (1)	2448230	839674
Private sector	117(53)	2621052	386671	97(43)	2669231	426996
Andhra Pradesh	16(14)	1076354	191582	14 (0)	1285891	254798
Anantapur	2 (2)	61849	5282	2 (2)	51961	5289
Cuddapah	2	910	63	2	720	48
Khammam	2	657047	156373	1	664746	189454
Kurnool	10(12)	356548	29864	9 (8)	568464	60007
Chhattisgarh	21	1120261	261689	19	1191958	28654
Bilaspur	14	1084477	255340	12	1049403	268130
Durg	3	2935	439	3	11150	1448
Janjgir-Champa	3	27339	5304	3	126145	16497
Raipur	1	5510	606	1	5260	579
Gujarat	17(1)	146395	22662	12	79032	10203
Bhavnagar	(1)	5483	439	-	-	-
Vadodara	17	140912	2223	12	79032	10203
Jharkhand	1 (1)	300351	239790	1(1)	268214	201111
Garwah	1	243585	198278	1	283197	230522
Singhbhum (West)	(1)	24629	2832	(1)	24629	2832
Karnataka	14(6)	397130	51456	12(7)	348690	46019
Bagalkot	10(2)	323834	43110	9(3)	281943	37423
Belgaum	4 (1)	53797	5810	3 (1)	56959	7384
Tumkur	(3)	19499	2536	(3)	9788	1212
Madhya Pradesh	43(6)	166825	18705	35(6)	163778	18275
Balaghat	3	4055	489	3	4791	491
Chhindwara	3	1724	242	2	767	104
Jabalpur	2(3)	2790	359	2(4)	12389	1317
Jhabua	12	49102	4740	11	53441	5226
Katni	4(3)	19390	1969	2(2)	9937	965
Mandla	15	83082	10112	10	66206	8197
Seoni	4	6682	794	5	16247	1975
Maharashtra	8(3)	201971	20909	6(2)	53616	8188
Chandrapur	1	218	23	1	410	43
Nagpur	6	45869	8705	5	21630	3830
Yavatmal	1(3)	155884	15181	(2)	31576	4315
Orissa	4(11)	1576617	325403	4(10)	1619988	395560
Sundergarh	4(11)	1576617	325403	4(10)	1619988	395560
Rajasthan	(12)	217882	29160	(8)	66682	13619
Rajsamand	(8)	99024	13060	(5)	50309	7251
Sikar	-	-	-	(1)	670	67
Udaipur	(4)	118858	16100	(2)	15703	6301

Figures in parentheses indicate the number of associated mines with soapstone/steatite, limestone and clay (others).

DOLOMITE

Table – 6 : Production of Dolomite, 2006-07 and 2007-08 (p)
(By Frequency Groups)

(Qty in tonnes)

Production group	No. of mines		Production for the group		Percentage in total production		Cumulative percentage	
	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
All Groups	124(54)	103(44)	5171649	5117461	100.0	100.0	-	-
Up to 1000	30(13)	15(9)	19574	7188	0.4	0.2	0.4	0.2
1001-5000	35(10)	39(13)	116273	132005	2.2	2.6	2.6	2.7
5001-10000	20 (14)	10(8)	248930	127711	4.8	2.5	7.4	5.2
10001-50000	28(12)	29(9)	1008959	820209	19.5	16.0	26.9	21.2
50001-200000	7(4)	6(3)	954866	816053	18.5	15.9	45.4	37.2
Above-200000	4 (1)	4(2)	2823047	3214295	54.6	62.8	100.0	100.0

Figures in parentheses indicate number of associated mines with soapstone/steatite, limestone and clay (others).

Table – 7 : Mine-head Stocks of Dolomite, 2007-08(p)
(In tonnes)

State	At the beginning of the year	At the end of the year
India	1472989	1595063
Andhra Pradesh	260239	291212
Chhattisgarh	15102	165051
Gujarat	19975	15442
Jharkhand	16187	35446
Karnataka	109258	124221
Madhya Pradesh	59611	48780
Maharashtra	23493	24234
Orissa	782281	712394
Rajasthan	186843	178283

Table – 8 : Prices of Dolomite, 2005-06 to 2007-08
(Domestic Markets)

(In Rs. per tonne)

Grade	Market	2005-06	2006-07	2007-08 (p)
+149 300 mm	Ex-mine MML (Karnataka)	161	211	155
80 to 149 mm	Ex-mine MML (Karnataka)	161	211	211
40 to 79 mm	Ex-mine MML (Karnataka)	210	165	165
10 to 39mm	Ex-mine MML (Karnataka)	202	215	215
Below 10 mm (fines)	Ex-mine MML (Karnataka)	50	50	75
SMS Grade Lump (10-80mm)	f.o.r. Baradwar (Chhattisgarh)	369	367	456
SMS Grade Chips (1-10mm)	f.o.r. Baradwar (Chhattisgarh)	516	650	650
Dolo Fines	Ex-mine Banki (Orissa)	230	230	230
BF- Dolo	Ex-mine Banki (Orissa)	276	310	310
Dolo chips	Ex-mine Banki (Orissa)	305	325	325
Sp Grade	Ex-mine Banki (Orissa)	675	850	850

DOLomite

USES

Dolomite after calcination is used for refractory purposes (as a substitute of magnesite refractories) in linings of furnaces like basic open-hearth steel furnaces and basic Bessemer converters. Like limestone, dolomite is used as a flux in iron, steel, ferro-alloys and glass works and for the production of carbon dioxide (required for the manufacture of beverages). It is useful in the recovery of magnesia and also in the manufacture of magnesium metal; for the manufacture of basic magnesium carbonate (termed 'technical carbonate'), 'block magnesia' or 'magnesia alba' used in pipe and boiler coverings and for other heat insulation, in pharmaceutical, rubber and chemical industries, and in the manufacture of paper, leather, glass, potteries and high-magnesium limes. In agriculture, it is used as a soil conditioner to correct acidity. It finds use as a filler in fertilizers, paints & varnishes, in coal mines (to prevent dust explosions), and also as a building stone.

MINING AND MARKETING

Dolomite mines are generally worked by opencast method of mining. Manual working is in vogue in most mines. However, a few mines are semi-mechanised.

Steel plants draw major supplies of dolomite for use as a flux and also as a refractory material. The requirement of low silica dolomite is increasing in steel plants at Bhilai, Rourkela, Visakhapatnam and Jamshedpur. However, the supply of such materials from indigenous sources is posing a problem. Therefore, Bokaro, Rourkela, Durgapur and Jamshedpur steel plants are drawing supplies of low silica dolomite from Bhutan for use in tar-bonded refractory bricks required for lining of LD furnaces and also for fluxing purposes.

Bhilai, Bokaro, Rourkela, Jamshedpur, Visakhapatnam and Bhadravati steel plants have captive mines. Besides, these plants draw supplies from private parties. Dolomite produced from Tulsidamar mine in Garhwa district, Jharkhand, is used mainly by Bokaro Steel Plant.

Dolomite produced in Tumkur district of Karnataka is supplied to the ferro-manganese plants at Dandeli, Uttar Kannad district. The VISP's steel plant at Bhadravati receives its supplies from Nerelekere mine in Bagalkot area, Bijapur district, Karnataka.

Dolomite of Baradwar and Hirri areas in Chhattisgarh is supplied to the steel plants at Bhilai, Bokaro and Rourkela besides foundry and glass manufacturing units. Birmitrapur, Panposh and Gomardih areas of Sundergarh district, Orissa, supplied dolomite to iron and steel plants at Durgapur, Rourkela, Burnpur and Jamshedpur. Dolomite from this region is also used by the ferro-manganese plants at Joda and Rayagada in Orissa. Low-silica dolomite from Jayanti area in Jalpaiguri district of West Bengal is supplied mainly to steel plants at Durgapur and Jamshedpur.

In Orissa and Rajasthan dolomite is supplied to the foundry and grinding units. The production from Vadodara district, Gujarat, is used for making chips and tiles. In Gujarat and Maharashtra, dolomite is used for making potteries and in ferro-alloys industry.

Dolomite produced in Jhabua district, Madhya Pradesh, is utilised by fertilizer, tile-making and grinding units. Dolomite of Jabalpur and Mandla districts is supplied to chips manufacturing units at Katni and Bhilai, respectively.

CONSUMPTION

Dolomite is consumed by iron & steel, ferro-alloys, fertilizer, glass, alloy steel and other industries. The total consumption of dolomite in 2007-08 was 4.66 million tonnes. It decreased by 0.45 million tonnes from that in the year 2006-07, mainly in iron & steel industry. Iron & steel industry was the major consumer of dolomite in 2007-08 accounting 82%, followed by refractory 8%, sponge iron 3% and ferro-alloys & glass (2% each). The remaining quantity was utilised by other industries, such as fertilizer, alloy steel, foundry, cosmetics, etc. (Table - 9).

DOLOMITE

**Table – 9 : Reported Consumption of Dolomite, 2005-06 to 2007-08
(By Industries)**

Industry	2005-06(R)	2006-07	2007-08(p)
All Industries	4495900	5110300	4663100
Alloy steel	25600(13)	25600(13)	25600(13)
Cement	20100(3)	9100(3)	73200(4)
Ceramic	6900(6)	6800(6)	6800(6)
Cosmetics	35300(2)	35300(2)	35300(2)
Ferro-alloys	63000(18)	80800(20)	82600(20)
Fertilizers	8900(6)	10000(6)	12600(6)
Foundry	1900(6)	1900(6)	1900(6)
Glass	82300(37)	82300(37)	82300(37)
Iron & steel I_/	3741600(19)	4336500(20)	381800(20)
Paint	4100(10)	4100(10)	4100(10)
Refractories	372700(4)	372700(4)	372700(4)
Sponge iron	132900(14)	144600(16)	147300(16)
Others (Chemicals, electrical, electrode, rubber)	600(6)	600(6)	600(6)

Figures rounded off. Data collected on non-statutory basis.

Figures in parentheses denote the number of units in the organised sector reporting industrial consumption.

I_/ Some iron & steel units consume dolomite for captive refractory manufacture and consumption.

SPECIFICATIONS

Generally, insolubles like SiO₂, Fe₂O₃ and Al₂O₃ are considered deleterious constituents of dolomite for any industrial use. It is essential that these insolubles should be as low as possible. High purity dolomite with less than one percent insolubles is preferred for making refractory bricks which are used in the lining of LD furnaces.

Similarly, high-grade dolomite containing as low iron as possible (less than 0.15%) is required in glass industry. The IS specifications of dolomite for use in glass industry are given in Table - 10. The general specifications of dolomite consumed in different steel plants are given in Table-11. Specifications for dolomite for use in iron & steel industry have been revised and are prescribed in IS : 10346 - 1991 (reaffirmed 2003).

**Table – 10 : Specifications of Limestone and Dolomite for Glass Industry
(IS : 997-1973; First Revision; Reaffirmed 1998)**

Constituent	Requirement on dry basis (percent)
Lime (as CaO)	53.00 (min)*
Total lime and magnesia (as CaO + MgO)	54.50 (min)
Silica (as SiO ₂)	2.50 (max)
Total iron (as Fe ₂ O ₃)	
(a) Calcite or marble	0.05 (max)
(b) Limestone	0.10 (max)
(c) Dolomitic limestone and dolomite	0.15 (max)

** In case of dolomitic limestone and dolomite, requirement of lime as CaO may be fixed by mutual agreement between the purchaser and supplier.*

DOLOMITE

Table – 11 : General Specifications of Dolomite Consumed in Different Steel Plants

(In percent)

Plant	Constituent	SP/BF	SMS	Refractory
Bhilai Steel Plant	MgO	19 (min)	19 (min)	19 (min)
	CaO	29 (min)	29 (min)	29 (min)
	SiO ₂	4 (max)	3.5 (max)	3.5 (max)
	Size	0-60 mm	10 to 30 mm	15 mm
Bokaro Steel Plant	MgO	1.65-22.0	-	-
	CaO	23.2-34.8	-	-
	SiO ₂	1.0-20.0	-	-
	Size	(-)25-75 mm	30-50 mm	5 to 25 mm
Rourkela Steel Plant	MgO	19 (min)	20 (min)	21 (min)
	CaO	-	-	-
	SiO ₂	-	2.5 (max)	1.5 (max)
	Al ₂ O ₃	-	1.5 (max)	0.75 (max)
	Fe ₂ O ₃	-	1.0 (max)	1.0 (max)
	AI	8 (max)	-	-
	Size	up to 6 mm	40 to 80 mm	-
Durgapur Steel Plant	MgO	18 (min)	20 (min)	-
	CaO	-	30-35	-
	SiO ₂	6 (max)	2.5 (max)	-
	Al ₂ O ₃	-	0.8 (max)	-
	Fe ₂ O ₃	-	1.0 (max)	-
	AI	10 (max)	-	-
	Loss on ignition	-	44.0	-
Size	-	3 to 16 mm	-	
IISCO Steel Plant	MgO	19.5 (min)	20.0 (min)	-
	SiO ₂	-	1.5 (max)	-
	Size	(-)25 to 75 mm	(-)3 to 20 mm	-
Tata Steel Ltd	MgO	20 (min)	20 (min)	20 (min)
	SiO ₂	-	3.45	1.7 (max)
	AI	6 (max)	6 (max)	1.5 (max)
	Size	20 to 75 mm	25 to 50 mm	5 to 25 mm
Visvesvaraya Iron & Steel Plant	MgO	-	21-22	-
	CaO	-	30-31	-
	SiO ₂	-	1.70 (max)	-
	Size	-	10 to 50 mm	-
Visakhapatnam Steel Project	MgO	19.81 (min)	21.20 (min)	-
	CaO	29.04 (min)	30.50 (min)	-
	SiO ₂	3.81 (max)	0.90 (max)	-
	Loss on ignition	44.95	46.00	-
	Size	6 to 80 mm	25-50 mm & 5 to 25 mm	-
JSW Steel Ltd	CaO + MgO	-	>45	-
	MgO	-	->19	-
IDCOL, Kalinga Iron Works	MgO	19.50 (min)	-	-
	AI	8.00 (max)	-	-
	Size	25-75 mm	-	-
Kirloskar Ferrous Industries Ltd	MgO	19 (min)	-	-
	CaO	28 (min)	-	-
	SiO ₂	3 (max)	-	-
	Al ₂ O ₃	1 (max)	-	-
	P	0.05 (max)	-	-
	Size	10 to 40 mm	-	-

Note : SP: Sinter plant; BF: Blast furnace; SMS: Steel melting shop; AI: Acid insolubles

DOLOMITE

FOREIGN TRADE

Exports

Exports of dolomite increased to 14,674 tonnes in 2007-08 from 11,892 tonnes in 2006-07. Exports were mainly to neighbouring countries; viz, Nepal (38%), Bangladesh (32%) and UAE (6%) in 2006-07 (Table - 12).

Imports

In 2007-08, imports of dolomite decreased sharply to 7,833 tonnes from 52,921 tonnes in 2006-07. Imports were mainly Greece (54%) and Italy (34%) (Table - 13).

**Table – 12 : Exports of Dolomite
(By Countries)**

Country	2006-07		2007-08	
	Qty (t)	Value (Rs. '000)	Qty (t)	Value (Rs. '000)
All Countries	11892	29719	14674	41139
Nepal	5680	7695	5558	8348
Bangladesh	2470	4634	4753	7379
UAE	1066	6735	851	5116
Kuwait	214	745	680	4948
Malaysia	658	2573	693	3767
UK	-	-	515	3459
Tanzania	46	221	454	2217
Australia	-	-	192	1210
Sri Lanka	161	597	125	920
Yemen Rep.	488	2013	27	139
Other countries	1109	4506	826	3636

**Table - 13 : Imports of Dolomite
(By Countries)**

Country	2006-07		2007-08	
	Qty (t)	Value (Rs. '000)	Qty (t)	Value (Rs. '000)
All Countries	52921	141058	7833	120739
Greece	4285	61711	4259	66751
Italy	1539	27683	2640	43135
Egypt	45698	43368	362	3104
Austria	-	-	110	2141
Spain	19	100	206	1925
USA	-	-	92	1905
UK	138	1267	158	1717
Malaysia	340	318	-	-
Turkey	517	4443	-	-
Vietnam	119	1888	-	-
Other countries	266	280	6	61

FUTURE OUTLOOK

The resources of the refractory grade dolomite in the country are meagre and this type of material is in short supply but very much required for making tar-bonded dolomite bricks. Therefore, intensive search is needed in non-Himalayan regions for locating deposits of massive non-crystalline dolomite, containing less than 2.5% R_2O_3 for use in tar-dolomite bricks required for lining of LD steel furnaces.