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SPECIAL REPORT

ON THE

CONSUMPTION OF REFRACTORIES

IN

CANADA

1942 AND 1943



OTTAWA
1945

Price 50 cents

OFFICE OF THE ATTORNEY GENERAL
OF THE PROVINCE OF ONTARIO

ONTARIO

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THE

ATTORNEY GENERAL

SPECIAL REPORT

ON THE

CONSTITUTION OF COMPANIES

IN

ONTARIO

1911 AND 1912

OTTAWA
1913

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Special Report

on the

CONSUMPTION OF REFRACTORIES IN CANADA, 1942 and 1943

Purchases of refractories by Canadian users amounted to \$9,577,059 in 1942 and \$9,835,747 in 1943, according to a special survey made by the Dominion Bureau of Statistics. The primary iron and steel industry accounted for about 58 per cent of all purchases, non-ferrous smelters accounted for 21 per cent, iron foundries for 7 per cent, and glass, petroleum refining, coke, pulp and paper, potteries and other such industries accounted for 14 per cent. Acid refractories made up about 60 per cent of the total consumption, basic refractories about 29 per cent, neutral refractories about 6 per cent and special refractories about 5 per cent.

Production of refractories in Canada was valued at \$3,460,252 in 1942 and \$5,312,071 in 1943 at factory prices, and imports in these years amounted to \$6,659,597 and \$5,920,417 respectively.

About 1,300 firms submitted reports on purchases of refractories in connection with this special survey and it is estimated that these returns accounted for about 97 per cent of the total consumption. A few concerns could not give tonnage figures under the various headings but gave the number of pieces instead, and in such cases the figures have been recorded separately in the tables which follow.

Table 1 - TOTAL PRODUCTION IN CANADA OF REFRACTORY SHAPES, 1932-1943

Year	From Domestic Clays			Other (x)			Total selling value at works
	Fireclay blocks and shapes	Firebrick	Silica Brick	Rigid fire-brick and stove linings			
	\$	M	\$	M	\$	\$	\$
1932	75,209	1,580	71,757	95	4,304	212,858	364,108
1933	80,625	1,547	73,226	656	23,185	210,484	397,520
1934	62,398	2,109	101,219	2,528	85,945	275,472	525,024
1935	71,344	1,817	90,149	2,461	96,194	314,825	572,512
1936	65,171	2,548	118,923	2,395	97,285	330,602	611,981
1937	75,431	2,950	142,327	3,744	181,126	441,341	840,725
1938	73,512	2,213	113,581	1,788	100,403	448,494	735,990
1939	95,256	2,331	119,346	2,493	124,907	640,376	979,785
1940	85,127	3,167	165,525	3,438	182,796	892,072	1,325,510
1941	190,497	3,643	183,897	4,111	238,433	1,186,805	1,798,632
1942	210,246	3,816	197,830	4,273	263,006	1,753,245	2,432,416
1943	262,154	3,644	192,618	4,165	295,505	1,461,484	2,211,761

(x) Includes shapes made from imported clays, from magnesitic dolomite, etc., amounting in all to 32,600 tons in 1941; 54,800 tons in 1942, and 31,341 tons in 1943.

Table 2 - TOTAL PRODUCTION IN CANADA OF REFRACTORY CEMENTS AND PLASTIC FIREBRICK, 1932-1943

Year	Quantity	Selling Value at Works
	Tons	\$
1932 .....	...	118,402
1933	1,405	101,488
1934	2,119	142,290
1935	3,506	179,161
1936	3,784	212,607
1937	5,303	260,883
1938	7,155	377,687
1939	5,094	271,106
1940	10,915	630,450
1941	16,379	933,398
1942	18,458	1,027,836
1943	18,619	1,100,310

Refractories

Table 3 - IMPORTS INTO CANADA OF FIREBRICK AND REFRACTORY SHAPES, BY COUNTRIES OF ORIGIN, 1942 and 1943

	1942	1943
Firebrick, chrome -		
From: United States	517,894	256,995
Total	517,894	256,995
Firebrick, magnesite -		
From: United States	1,175,015	1,111,754
Total	1,175,015	1,111,754
Firebrick, containing not less than 90% silica -		
From: United Kingdom	4,808	5,785
United States	1,130,600	841,675
Total	1,135,408	847,456
Firebrick, other, valued at not less than \$100 per M, rectangular shaped, the dimensions of each not to exceed 125 cubic inches, for the construction or repair of a furnace, kiln or other equipment -		
From: United Kingdom .....	...	1,300
United States	117,940	68,829
Total	117,940	70,129
Firebrick, n.o.p., of a class or kind not made in Canada, for the construction or repair of a furnace, kiln or other equipment -		
From: United Kingdom	118,314	58,789
United States	2,077,680	1,914,167
Total	2,195,994	1,972,956
Firebrick, n.o.p. -		
From: United Kingdom	77,052	55,427
United States	1,640,094	1,605,702
Total	1,717,146	1,661,129
TOTAL FROM UNITED KINGDOM	200,174	121,299
TOTAL FROM UNITED STATES	6,459,223	5,799,118
TOTAL FROM ALL COUNTRIES	6,659,397	5,920,417

Note: N.O.P. means "Not otherwise provided for".

Table 4 - CONSUMPTION OF REFRACTORIES IN CANADA, 1942 and 1943 (As Reported by Consumers)

Note: In the tables which follow, the quantity figures for some items are recorded in both 'tons' and in 'number of pieces (M)'. This is because some users could not give tonnage figures as purchases were made in terms of 'pieces', and factors for converting same to the tonnage basis were not available. There is no duplication involved; the values should be added together to get the total consumption, and the quantities should be added also after converting same to like units of measure.

	Purchased During the Calendar Year				
	1942		1943		
	Quantity	Cost at plant	Quantity	Cost at plant	
1. Acid Refractories					
Fireclay—Bricks	(tons)	56,507	1,410,146	54,105	1,390,734
	(M)	1,875	187,237	1,755	177,489
Shapes	(tons)	50,580	1,121,610	28,249	1,027,220
	(M)	58	29,070	156	38,285
Cements	tons	3,843	185,601	3,744	228,980
Fireclay, crude or calcined	tons	57,683	507,195	100,169	820,995
Insulating firebrick	(tons)	1,462	147,651	981	90,991
	(M)	74	11,391	103	11,397
Other products	tons	12,146	348,561	10,009	295,165

Refractories

Table 4 - CONSUMPTION OF REFRACTORIES IN CANADA, 1942 and 1943 (As Reported by Consumers) (Continued)

	Purchased During the Calendar Year				
	1 9 4 2		1 9 4 3		
	Quantity	Cost at plant	Quantity	Cost at plant	
1. Acid Refractories					
(Concluded)					
High alumina refractories (50%-80% Al ₂ O ₃) except electrically fused alumina -					
Bricks	(tons	5,569	187,535	10,338	425,057
	(M	40	5,534	67	7,357
Shapes	tons	14,303	557,087	6,557	269,712
Cements	tons	629	34,518	647	32,517
Other products	tons	522	5,574	217	5,587
Silica--Bricks					
	(tons	17,867	612,019	16,592	568,450
	(M	509	34,959	1,515	122,530
Shapes	(tons	7,068	278,880	5,135	209,416
	(M	96	27,415	98	25,815
Cements	tons	1,485	55,300	1,286	45,830
Other products	tons	11,971	89,568	11,054	80,450
2. Neutral Refractories					
Chrome--Bricks, burned					
	(tons	2,766	231,597	1,876	153,885
	(M	24	5,568	9	576
Bricks, chemically bonded	tons	1,688	129,295	1,677	123,284
Shapes, burned	tons	308	30,698	137	15,755
Shapes, chemically bonded	tons	79	12,509	777	83,465
Cements	tons	1,804	116,869	1,687	113,220
Other products		1,110	73,567	1,056	61,876
3. Basic Refractories					
Magnesite, brucite and magnesitic dolomite -					
Bricks	(tons	10,141	939,156	9,603	1,064,427
	(M	154	29,247	54	23,566
Shapes	tons	3,999	525,794	3,209	435,628
Clinker	tons	10,521	417,914	8,182	328,563
Caustic calcined	tons	3,318	94,563	2,549	72,646
Cements	tons	5,624	352,092	6,499	403,968
Other products	tons	2,908	108,612	11,552	256,333
Dolomite--Dead-burned					
	tons	8,594	150,834	7,202	125,560
Caustic calcined	tons	100	2,305	75	1,812
Raw, crushed	tons	74,914	133,527	76,133	147,423
4. Special Refractories					
Electrically fused alumina -					
Bricks, 9" series	pieces	6,512	3,389	3,913	1,405
Other shapes	(tons	105	5,019	23	1,167
	(pieces	5,373	17,778	2,639	33,894
Dry mixed cements	tons	5	895	7	1,054
Silicon carbide -					
Bricks, 9" series	pieces	6,267	8,229	5,589	5,242
Other shapes	(tons	...	...	27	2,750
	(pieces	8,937	53,390	9,430	44,352
Dry mixed cements	tons	103	13,616	94	12,661
Electrically fused magnesia (periclase) -					
Bricks, 9" series	(pieces	11,450	8,420	300	384
	(tons	27	7,139	7	758
Other shapes	(pieces	26,987	40,391	35,705	52,938
	(tons	2	484	7	1,800
Dry mixed cements and pebbles	tons	1,199	150,368	1,835	233,268

Refractories

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Table 4 - CONSUMPTION OF REFRACTORIES IN CANADA, 1942 and 1943 (As Reported by Consumers) (Concluded)

		Purchased During the Calendar Year			
		1 9 4 2		1 9 4 3	
		Quantity	Cost at plant	Quantity	Cost at plant
			\$		\$
4. Special Refractories					
(Concluded)					
Mullite—Bricks, 9" series	Pieces	12,995	8,930	18,022	10,446
Other shapes	(tons)	...	...	2	271
	(pieces)	3,391	10,970	7,359	38,553
Dry mixed cements	tons	121	23,421	248	46,681
Fused mullite -					
Bricks, 9" series	pieces	323	365	780	663
Other shapes	(tons)	5	513	10	1,055
	(pieces)	282	2,373	154	2,477
Dry mixed cements	tons	1	150	1	146
Kyanite—Shapes	(tons)	103	6,277	204	14,026
	(pieces)	18	164	36	241
Dry mixed cements	tons	14	786	7	880
Sillimanite -					
Bricks, 9" series	pieces	826	575	2,399	4,125
Other shapes	(tons)	34	1,748	100	5,660
	(pieces)	4,492	22,612	4,010	19,402
Dry mixed cements	tons	80	15,754	65	12,974
Zircon—Bricks, 9" series	pieces	24	46	...	...
Other shapes	pieces	6,208	1,958	...	...
Dry mixed cements	tons	4	703	17	2,534
TOTAL ACID REFRACTORIES .....	...	...	6,001,005	...	6,052,156
TOTAL NEUTRAL REFRACTORIES .....	...	...	600,103	...	552,061
TOTAL BASIC REFRACTORIES .....	...	...	2,754,044	...	2,859,926
TOTAL SPECIAL REFRACTORIES .....	...	...	406,463	...	551,807
TOTAL ALL REFRACTORIES .....	...	...	9,761,615	...	10,015,950
Per cent of total — Acid refractories			60.7		59.8
Neutral refractories			6.3		5.6
Basic refractories			28.7		29.0
Special refractories			4.3		5.6

Table 5 - CONSUMPTION OF REFRACTORIES IN THE MARITIME PROVINCES, 1942 and 1943

		Purchased During the Calendar Year			
		1 9 4 2		1 9 4 3	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
1. Acid Refractories					
Fireclay—Bricks	(tons)	1,624	45,359	1,425	36,282
	(M)	6	541	24	2,256
Shapes	tons	224	9,404	283	12,978
Cements	tons	93	8,587	81	8,679
Fireclay, crude or calcined	tons	280	7,470	337	9,358
Insulating firebrick	tons	59	3,010	2	360
Other products	tons	6	346	19	1,137
High alumina refractories (50%—80% Al ₂ O ₃) except electrically fused alumina -					
Bricks	tons	3,405	79,272	5,575	171,069
Shapes	tons	13,347	472,775	5,845	219,866
Cements	tons	306	7,694	428	12,864
Other products	tons	157	3,465	205	4,457

Refractories

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Table 5 - CONSUMPTION OF REFRACTORIES IN THE MARITIME PROVINCES, 1942 and 1945 (Concluded)

	Purchased During the Calendar Year				
	1942		1945		
	Quantity	Cost at works	Quantity	Cost at works	
1. Acid Refractories					
(Concluded)					
Silica—Bricks	(tons)	152	5,570	57	2,045
	(M)	20	1,900	12	1,301
Shapes	tons	55	1,640	111	2,240
Cements	tons	254	17,190	346	16,895
Other products	tons	7	704	48	2,720
2. Neutral Refractories					
Chrome—Cements	tons	29	5,217	15	1,479
Other products	tons	172	8,414	258	14,180
3. Basic Refractories					
Magnesite, brucite and magnesian dolomite -					
Bricks	tons	1,175	9,400	1,296	107,718
Cements	tons	54	4,885	53	4,754
Dolomite—Raw, crushed	tons	...	...	10,262	22,189
4. Special Refractories					
Electrically fused alumina -					
Bricks, 9" series .....	...	...	...	...	...
Other shapes	tons	105	5,019	23	1,167
Silicon carbide -					
Bricks, 9" series .....	...	...	...	...	...
Other shapes	tons	...	...	27	2,750
Electrically fused magnesia (periclase) -					
Bricks, 9" series .....	...	...	...	...	...
Other shapes	tons	...	...	1	150
Mullite -					
Bricks, 9" series .....	...	...	...	...	...
Other shapes	tons	...	...	2	271
Fused mullite -					
Bricks, 9" series .....	...	...	...	...	...
Other shapes	tons	5	513	10	1,055
Kyanite—Shapes	tons	105	6,277	204	14,026
Sillimanite -					
Bricks, 9" series .....	...	...	...	...	...
Other shapes	tons	54	1,748	100	5,660
TOTAL ACID REFRACTORIES .....	...	...	662,927	...	505,007
TOTAL NEUTRAL REFRACTORIES .....	...	...	11,651	...	15,659
TOTAL BASIC REFRACTORIES .....	...	...	14,285	...	154,661
TOTAL SPECIAL REFRACTORIES .....	...	...	15,557	...	25,059
TOTAL ALL REFRACTORIES .....	...	...	702,400	...	680,366
Per cent of Dominion Total -					
Acid refractories			11.4		8.6
Neutral refractories			2.0		2.8
Basic refractories			0.7		4.7
Special refractories			5.4		4.5
ALL REFRACTORIES			7.2		6.8

Table 6 - CONSUMPTION OF REFRACTORIES IN QUEBEC, 1942 and 1943

		Purchased During the Calendar Year			
		1942		1943	
		Quantity	Cost at works	Quantity	Cost at works
1. Acid Refractories					
Fireclay--Bricks	(tons	10,008	272,575	9,411	269,217
	(M	501	49,436	440	41,891
Shapes	(tons	6,128	287,627	6,076	272,497
	(M	12	14,012	11	16,770
Cements	tons	1,659	56,070	1,453	70,506
Fireclay, crude or calcined	tons	4,772	55,349	3,396	42,162
Insulating firebrick	(tons	551	27,482	352	30,744
	(M	42	7,255	40	3,994
Other products	tons	1,328	177,533	755	118,557
High alumina refractories (50%-80% Al ₂ O ₃) except electrically fused alumina -					
Bricks	(tons	546	22,430	272	10,696
	(M	11	2,163	6	688
Shapes	tons	30	4,251	21	3,198
Cements	tons	46	3,465	41	2,786
Other products	tons	...	11	3	243
Silica--Bricks					
	(tons	611	26,260	1,017	53,943
	(M	198	20,846	191	23,820
Shapes	(tons	909	41,971	458	19,690
	(M	21	10,749	20	7,840
Cements	tons	317	13,196	91	5,967
Other products	tons	627	9,906	517	4,768
2. Neutral Refractories					
Chrome--Bricks, burned	(tons	180	11,282	72	6,372
	(M	24	5,392	3	342
Shapes, burned	tons	6	549	37	3,067
Cements	tons	510	35,654	391	29,202
Other products	tons	856	55,463	716	39,849
3. Basic Refractories					
Magnesite, brucite and magnesitic dolomite -					
Bricks	(tons	1,467	151,297	1,660	151,056
	(M	21	10,358	7	3,000
Shapes	tons	178	14,069	86	7,033
Clinker	tons	1,253	47,004	1,080	40,969
Cements	tons	279	18,303	478	27,383
Other products	tons	1,373	54,680	1,271	50,612
Dolomite--Dead-burned					
	tons	228	5,382	222	5,269
Caustic calcined	tons	100	2,305	75	1,812
Raw, crushed	tons	...	...	1,101	2,210
4. Special Refractories					
Electrically fused alumina -					
Bricks, 9" series	pieces	1,000	123	1,000	123
Other shapes	pieces	518	13,960	626	29,733
Dry mixed cements	tons	4	754	3	719
Silicon carbide -					
Bricks, 9" series	pieces	2,287	3,038	4,308	2,963
Other shapes	pieces	1,523	8,192	854	4,929
Dry mixed cements	tons	1	654	11	1,396

Table 6 - CONSUMPTION OF REFRACTORIES IN QUEBEC, 1942 and 1945

	Purchased During the Calendar Year				
	1 9 4 2		1 9 4 5		
	Quantity	Cost at works	Quantity	Cost at works	
4. Special Refractories					
(Concluded)					
Electrically fused magnesia (periclase) -					
Bricks, 9" series	pieces	150	188	...	...
Other shapes	pieces	155	170	256	2,465
Dry mixed cements and pebbles	tons	...	44	...	5
Mullite—Bricks, 9" series	pieces	...	...	5,200	5,604
Other shapes	pieces	14	591	678	15,599
Dry mixed cements	tons	68	12,745	169	51,951
Fused mullite -					
Bricks, 9" series	pieces	98	159	...	...
Other shapes	pieces	8	209	5	150
Dry mixed cements	tons	1	150	1	112
Kyanite—Dry mixed cements	tons	12	712	4	300
Sillimanite -					
Bricks, 9" series	pieces	822	552	695	304
Other shapes	pieces	5,665	19,582	3,420	16,950
Dry mixed cements	tons	36	6,789	25	4,482
Zircon—Dry mixed cements	tons	...	9	6	1,085
TOTAL ACID REFRACTORIES .....		...	1,102,565	...	999,977
TOTAL NEUTRAL REFRACTORIES .....		...	108,540	...	78,852
TOTAL BASIC REFRACTORIES .....		...	305,598	...	289,544
TOTAL SPECIAL REFRACTORIES .....		...	68,621	...	114,648
TOTAL ALL REFRACTORIES .....		...	1,582,924	...	1,482,801
Per cent of Dominion Total -					
Acid refractories			19.0		17.0
Neutral refractories			18.0		14.0
Basic refractories			11.0		10.1
Special refractories			16.9		20.8
ALL REFRACTORIES			16.7		15.5

Table 7 - CONSUMPTION OF REFRACTORIES IN ONTARIO, 1942 and 1945

	Purchased During the Calendar Year				
	1 9 4 2		1 9 4 5		
	Quantity	Cost at works	Quantity	Cost at works	
1. Acid Refractories					
Fireclay—Bricks	(tons	41,451	991,415	40,110	947,825
	(M	1,218	125,553	1,150	122,412
Shapes	(tons	22,278	761,010	18,899	697,875
	(M	19	9,414	46	12,425
Cements	tons	1,482	105,099	1,658	104,510
Fireclay, crude or calcined	tons	51,202	412,030	94,887	721,298
Insulating firebrick	(tons	835	95,597	518	55,501
	(M	15	1,520	51	5,222
Other products	tons	10,467	154,742	8,445	158,708
High alumina refractories (50%–80% Al₂O₃)					
(except electrically fused alumina) -					
Bricks	(tons	1,474	69,128	2,115	107,075
	(M	29	5,171	54	6,056
Shapes	tons	807	52,670	577	25,178
Cements	tons	178	15,267	115	9,292
Other products	tons	164	2,052	9	878

Table 7 - CONSUMPTION OF REFRACTORIES IN ONTARIO, 1942 and 1943 (Continued)

	Purchased During the Calendar Year				
	1 9 4 2		1 9 4 3		
	Quantity	Cost at works	Quantity	Cost at works	
1. Acid Refractories					
(Concluded)					
Silica—Bricks	(tons	16,074	547,694	14,728	484,625
	(M	70	7,525	1,091	94,179
Shapes	(tons	5,986	229,906	4,268	172,446
	(M	4	8,257	5	9,554
Cements	tons	624	14,709	654	14,450
Other products	tons	10,520	69,538	9,668	65,402
2. Neutral Refractories					
Chrome—Bricks, burned	(tons	2,576	219,653	1,768	144,777
	(M	...	176	...	176
Bricks, chemically bonded	tons	1,541	118,703	1,542	99,854
Shapes, burned	tons	301	29,994	99	12,403
Shapes, chemically bonded	tons	79	12,509	777	85,465
Cements	tons	1,219	72,985	1,215	74,717
Other products	tons	64	8,409	74	7,158
3. Basic Refractories					
Magnesite, brucite and magnesian dolomite -					
Bricks	(tons	7,007	698,680	6,124	731,577
	(M	118	9,708	35	11,016
Shapes	tons	3,628	489,598	3,041	421,554
Clinker	tons	9,268	370,910	7,082	287,594
Canstic calcined	tons	3,518	94,563	2,549	72,646
Cements	tons	5,184	320,022	5,915	366,947
Other products	tons	895	23,262	9,671	176,459
Dolomite—Dead-burned	tons	6,780	125,794	5,388	100,398
Raw, crushed	tons	72,911	128,224	63,571	119,567
4. Special Refractories					
Electrically fused alumina -					
Bricks, 9" series	pieces	5,512	3,266	2,913	1,282
Other shapes	pieces	486	2,088	2,013	4,161
Dry mixed cements	tons	1	141	4	535
Silicon carbide -					
Bricks, 9" series	pieces	5,360	4,455	733	1,464
Other shapes	pieces	6,800	44,297	8,424	38,614
Dry mixed cements	tons	83	9,189	65	7,511
Electrically fused magnesia (periclase) -					
Bricks, 9" series	(pieces	11,300	8,232	300	384
	(tons	27	7,159	7	758
Other shapes	(pieces	28,852	40,221	35,449	50,473
	(tons	2	484	6	1,670
Dry mixed cements and pebbles	tons	1,199	150,324	1,835	253,265
Mullite—Bricks, 9" series	pieces	12,995	8,930	12,822	6,842
Other shapes	pieces	3,377	10,379	6,681	25,154
Dry mixed cements	tons	53	10,676	79	14,730
Fused mullite -					
Bricks, 9" series	pieces	250	208	780	663
Other shapes	pieces	274	2,164	149	2,327
Dry mixed cements	tons	...	...	...	34
Kyanite—Shapes	pieces	18	184	36	241
Dry mixed cements	tons	2	74	3	580

Table 7 - CONSUMPTION OF REFRACTORIES IN ONTARIO, 1942 and 1943 (Concluded)

		Purchased During the Calendar Year			
		1942		1943	
		Quantity	Cost at works	Quantity	Cost at works
4. Special Refractories (Concluded)					
Sillimanite -					
Bricks, 9" series	pieces	...	...	1,702	3,811
Other shapes	pieces	827	2,675	588	2,283
Dry mixed cements	tons	44	8,911	42	8,455
Zircon-Dry mixed cements	tons	4	433	11	1,449
TOTAL ACID REFRACTORIES .....	...	...	5,672,255	...	3,790,855
TOTAL NEUTRAL REFRACTORIES .....	...	...	462,407	...	422,510
TOTAL BASIC REFRACTORIES .....	...	...	2,260,561	...	2,287,758
TOTAL SPECIAL REFRACTORIES .....	...	...	514,448	...	406,484
ALL REFRACTORIES .....	...	...	6,709,671	...	6,907,605
Per cent of Dominion Total -					
Acid refractories			65.1		64.6
Neutral refractories			77.0		76.8
Basic refractories			82.0		80.0
Special refractories			77.4		75.7
ALL REFRACTORIES			70.2		70.1

Table 8 - CONSUMPTION OF REFRACTORIES IN MANITOBA, 1942 and 1943

		Purchased During the Calendar Year			
		1942		1943	
		Quantity	Cost at works	Quantity	Cost at works
1. Acid Refractories					
Fireclay-Bricks	tons	968	27,776	763	22,502
	M	5	345	3	413
Shapes	tons	342	11,438	126	5,216
	M	1	179	1	165
Cements	tons	77	6,211	52	6,181
Fireclay, crude or calcined	tons	631	8,793	767	11,626
Insulating firebrick	tons	2	464	...	156
	M	8	1,230	10	1,869
Other products	tons	242	10,024	724	27,119
High alumina refractories (50%-80% Al ₂ O ₃) (except electrically fused alumina) -					
Bricks	tons	228	10,491	31	2,109
Shapes	tons	10	1,218	70	5,586
Cements	tons	23	2,409	20	2,214
Silica-Bricks					
Shapes	tons	987	31,157	715	23,424
	(tons	110	4,853	268	11,161
	M	25	2,830	32	5,730
Cements	tons	14	912	13	666
2. Neutral Refractories					
Chrome-Bricks, burned	(tons	4	190	7	400
	M	...	...	6	58
Bricks, chemically bonded	tons	147	10,592	335	23,450
Cements	tons	28	2,435	23	2,580
Other products	tons	13	936	6	474

Table 8 - CONSUMPTION OF REFRACTORIES IN MANITOBA, 1942 and 1943 (Concluded)

	Purchased During the Calendar Year				
	1 9 4 2		1 9 4 3		
	Quantity	Cost at works	Quantity	Cost at works	
3. Basic Refractories					
Magnesite, brucite and magnesian dolomite -					
Bricks	(tons	546	74,355	488	71,587
	(M	15	9,181	14	9,550
Shapes	tons	141	17,074	66	5,289
Cements	tons	87	7,385	47	4,504
Other products	tons	582	27,599	600	28,418
Dolomite—Dead-burned	tons	1,586	19,658	1,592	19,895
Raw crushed	tons	2,003	5,503	1,199	3,457
4. Special Refractories					
Silicon carbide -					
Dry mixed cements	tons	4	645	3	540
Sillimanite -					
Bricks, 9" series	pieces	4	25	2	10
Other shapes	pieces	2	355	2	189
Dry mixed cements	tons	...	54	...	59
TOTAL ACID REFRACTORIES .....	...	...	120,350	...	124,155
TOTAL NEUTRAL REFRACTORIES .....	...	...	14,153	...	26,762
TOTAL BASIC REFRACTORIES .....	...	...	160,355	...	142,498
TOTAL SPECIAL REFRACTORIES .....	...	...	1,077	...	778
TOTAL ALL REFRACTORIES .....	...	...	295,915	...	294,173
Per cent of Dominion Total -					
Acid refractories			2.1		2.1
Neutral refractories			2.3		4.8
Basic Refractories			5.8		5.0
Special refractories			0.2		0.1
ALL REFRACTORIES			5.0		2.9

Table 9 - CONSUMPTION OF REFRACTORIES IN SASKATCHEWAN AND ALBERTA, 1942 and 1943

	Purchased During the Calendar Year				
	1 9 4 2		1 9 4 3		
	Quantity	Cost at works	Quantity	Cost at works	
1. Acid Refractories					
Fireclay—Bricks	(tons	489	17,852	714	63,156
	(M	10	829	22	1,669
Shapes	(tons	18	2,957	14	2,485
	(M	2	104	1	58
Cements	tons	39	2,522	37	2,533
Fireclay, crude or calcined	tons	55	1,707	45	1,483
Insulating firebrick	tons	19	1,966	5	607
Other products	tons	18	1,258	42	3,166
High alumina refractories (50%-80% Al ₂ O ₃) (except electrically fused alumina) -					
Bricks	tons	1	325	39	1,524
Shapes	tons	42	1,514	57	2,151
Cements	tons	...	78	2	285
Silica—Bricks	M	1	144	1	144
Shapes	M	2	279	2	279
TOTAL ACID REFRACTORIES .....	...	...	31,495	...	79,318
Per cent of Dominion Total -					
Acid Refractories			0.5		1.5
ALL REFRACTORIES			0.5		0.8

Table 10 - CONSUMPTION OF REFRACTORIES IN BRITISH COLUMBIA, 1942 and 1943

		Purchased During the Calendar Year			
		1 9 4 2		1 9 4 3	
		Quantity	Cost at works	Quantity	Cost at works
1. Acid Refractories					
Fireclay--Bricks	(tons	1,967	55,193	1,680	51,754
	(M	135	10,553	116	8,848
Shapes	(tons	1,390	49,174	851	36,175
	(M	24	5,361	77	8,881
Cements	tons	147	9,112	469	36,571
Fireclay, crude or calcined	tons	763	21,846	749	34,566
Insulating firebrick	(tons	196	19,132	104	5,625
	(M	11	1,386	2	512
Other products	tons	91	4,678	66	4,476
High alumina refractories (50%-80% Al ₂ O ₃) (except electrically fused alumina) -					
Bricks	(tons	115	5,689	2,306	152,764
	(M	...	...	7	615
Shapes	tons	67	4,679	167	13,755
Cements	tons	76	7,605	43	5,076
Other products	tons	1	66	...	9
Silica--Bricks	(tons	63	3,338	75	4,415
	(M	20	4,544	20	3,086
Shapes	(tons	8	510	50	3,879
	(M	44	5,300	37	4,432
Cements	tons	276	9,293	202	7,872
Other products	tons	817	9,418	821	9,560
2. Neutral Refractories					
Chrome--Bricks, burned	tons	6	492	29	2,336
Shapes, burned	tons	1	155	1	285
Cements	tons	18	2,580	45	5,442
Other products	tons	5	345	2	255
3. Basic Refractories					
Magnesite, brucite and magnesitic dolomite -					
Bricks	tons	76	5,424	35	2,489
Shapes	tons	52	5,253	16	1,752
Cements	tons	20	1,497	6	580
Other products	tons	58	3,271	10	844
4. Special Refractories					
Electrically fused alumina -					
Shapes	pieces	4,569	1,730	...	...
Silicon carbide -					
Bricks, 9" series	pieces	620	736	548	815
Other shapes	pieces	614	901	172	809
Dry mixed cements	tons	15	3,128	15	5,214
Zircon--Bricks, 9" series	pieces	24	46	...	...
Other shapes	pieces	6,208	1,958	...	...
Dry mixed cements .....	...	...	261	...	...
TOTAL ACID REFRACTORIES .....	...	...	226,877	...	572,663
TOTAL NEUTRAL REFRACTORIES .....	...	...	5,572	...	8,518
TOTAL BASIC REFRACTORIES .....	...	...	15,445	...	5,665
TOTAL SPECIAL REFRACTORIES .....	...	...	8,760	...	4,838
TOTAL ALL REFRACTORIES .....	...	...	254,654	...	591,484
Per cent of Dominion Total -					
Acid refractories			3.9		6.4
Neutral refractories			0.7		1.6
Basic refractories			0.5		0.2
Special refractories			2.1		0.9
ALL REFRACTORIES			2.6		3.9

Table 11 - CONSUMPTION OF REFRACTORIES IN CANADA BY THE PRIMARY IRON AND STEEL (Pig iron, steel and ferro-alloys) INDUSTRIES, 1942 and 1943

	Purchased During the Calendar Year				
	1942		1943		
	Quantity	Cost at works \$	Quantity	Cost at works \$	
1. Acid Refractories					
Fireclay—Bricks	(tons	26,622	595,150	28,806	653,520
	(M	512	42,816	491	40,368
Shapes	(tons	18,503	584,408	15,684	555,301
	(M	27	11,580	71	12,093
Cements	tons	351	26,765	302	25,732
Fireclay, crude or calcined	tons	46,197	364,108	89,165	667,756
Insulating firebrick	(tons	205	30,104	71	12,198
	(M	52	9,020	33	5,151
Other products	tons	6,453	128,110	5,734	125,989
High alumina refractories (50%–80% Al ₂ O ₃) (except electrically fused alumina) -					
Bricks	(tons	3,395	85,291	5,535	171,096
	(M	54	3,584	59	6,245
Shapes	tons	13,272	469,265	5,815	218,369
Cements	tons	291	6,517	416	11,821
Other products	tons	157	3,635	208	4,733
Silica—Bricks	(tons	15,961	549,460	14,117	471,874
	(M	277	29,771	233	34,023
Shapes	(tons	5,493	202,583	4,408	174,688
	(M	90	18,879	89	16,002
Cements	tons	1,095	40,356	959	30,165
Other products	tons	10,587	74,925	9,196	63,355
2. Neutral Refractories					
Chrome—Bricks, burned	(tons	2,430	208,270	1,655	129,894
	(M	7	3,710	6	58
Bricks, chemically bonded	tons	1,682	128,628	1,677	123,284
Shapes, burned	tons	256	23,337	51	5,158
Shapes, chemically bonded	tons	71	10,515	126	16,434
Cements	tons	1,460	88,259	1,330	79,550
Other products	tons	652	57,800	542	42,621
3. Basic Refractories					
Magnesite, brucite and magnesitic dolomite-					
Bricks	(tons	4,458	303,843	3,188	308,718
	(M	45	23,215	46	22,992
Shapes	tons	311	25,554	192	18,393
Clinker	tons	10,249	402,328	7,936	317,161
Caustic calcined	tons	3,318	94,563	2,549	72,646
Cements	tons	5,115	314,052	5,713	352,998
Other products	tons	2,785	102,007	11,389	250,416
Dolomite—Dead-burned	tons	8,594	150,834	7,202	125,560
Caustic calcined	tons	100	2,305	75	1,812
Raw crushed	tons	73,717	129,572	73,893	140,047
4. Special Refractories					
Electrically fused alumina -					
Bricks, 9" series	pieces	12	5	10	10
Other shapes	(pieces	38	92	46	217
	(tons	105	5,019	23	1,167

Table 11 - CONSUMPTION OF REFRACTORIES IN CANADA BY THE PRIMARY IRON AND STEEL (Pig iron, steel and ferro-alloys) INDUSTRIES, 1942 and 1943 (Concluded)

	Purchased During the Calendar Year			
	1942		1943	
	Quantity	Cost at works	Quantity	Cost at works
4. Special Refractories (Concluded)				
Silicon carbide -				
Bricks, 9" series	pieces	...	2,500	500
Other shapes	(pieces tons)	200 ...	100 27	276 2,750
Dry mixed cements	tons	...	8	600
Electrically fused magnesia (periclase)				
Bricks, 9" series	pieces	11,000	7,848	...
Other shapes	(pieces tons)	26,400 ...	59,832 ...	54,534 1
Dry mixed cements and pebbles	tons	1,169	147,805	1,824 251,816
Fused mullite -				
Shapes	tons	5	518	10 1,055
Mullite -				
Shapes	(pieces tons)	600 ...	750 ...	358 2
Dry mixed cements	tons	5	1,000	5 555
Kyanite-Shapes	tons	103	6,277	204 14,026
Sillimanite -				
Shapes	(pieces tons)	... 34	... 1,748	8 100
Dry mixed cements	tons	10	2,000	7 1,600
TOTAL ACID REFRACTORIES .....	...	...	5,276,107	...
TOTAL NEUTRAL REFRACTORIES .....	...	...	520,519	...
TOTAL BASIC REFRACTORIES .....	...	...	1,548,275	...
TOTAL SPECIAL REFRACTORIES .....	...	...	215,587	...
TOTAL ALL REFRACTORIES .....	...	...	5,558,086	...
Per cent of Dominion Total -				
Acid refractories			56.5	56.2
Neutral refractories			86.7	71.9
Basic refractories			56.2	56.5
Special refractories			52.5	56.4
ALL REFRACTORIES			58.0	57.1

Table 12 - CONSUMPTION OF REFRACTORIES IN CANADA BY THE IRON FOUNDRIES, 1942 and 1943

	Purchased During the Calendar Year			
	1942		1943	
	Quantity	Cost at works	Quantity	Cost at works
1. Acid Refractories				
Fireclay-Bricks	(tons)	9,812	252,261	8,691
	(M)	809	95,586	665
Shapes	(tons)	2,187	72,825	2,178
	(M)	16	4,819	20
Cements	tons	901	46,127	1,071
Fireclay, crude or calcined	tons	9,104	95,621	8,995
Insulating firebrick	(tons)	545	24,272	379
	(M)	8	757	8
Other products	tons	1,542	25,585	1,268

Table 12 - CONSUMPTION OF REFRACTORIES IN CANADA BY THE IRON FOUNDRIES, 1942 and 1943 (Continued)

	Purchased During the Calendar Year				
	1 9 4 2		1 9 4 3		
	Quantity	Cost at works \$	Quantity	Cost at works \$	
1. Acid Refractories					
(Concluded)					
High alumina refractories (50%-80% Al ₂ O ₃) (except electrically fused alumina) -					
Bricks	(tons	153	4,565	51	2,045
	(M	1	423	1	499
Shapes	tons	17	2,583	19	1,999
Cements	tons	15	1,166	11	973
Other products	tons	6	616	3	442
Silica-Bricks	(tons	367	8,418	247	7,026
	(M	8	1,284	15	2,463
Shapes	(tons	161	9,821	233	13,109
	(M	6	2,936	7	4,563
Cements	tons	5	144	3	53
Other products	tons	1,145	9,548	1,638	13,042
2. Neutral Refractories					
Chrome-Bricks, burned	(tons	8	305	11	538
	(M	...	176	...	176
Shapes, burned	tons	4	2,400	3	1,900
Cements	tons	1	172	1	178
Other products	tons	...	40	...	...
3. Basic Refractories					
Magnesite, brucite and magnesitic dolomite -					
Bricks	(tons	43	2,613	104	5,196
	(M	109	6,032	8	574
Shapes	tons	...	120	...	180
Clinker	tons	41	1,914	104	4,355
Cements	tons	21	726	54	2,261
Other products	tons	18	1,571	13	904
Dolomite-Raw, crushed	tons	156	624	132	528
4. Special Refractories					
Electrically fused alumina -					
Bricks, 9" series	pieces	...	...	500	950
Other shapes	pieces	...	...	570	2,000
Dry mixed cements	tons	...	...	3	240
Silicon carbide -					
Bricks, 9" series	pieces	339	622	59	167
Other shapes	pieces	2,689	17,532	1,718	13,619
Dry mixed cements	tons	17	851	10	508
Electrically fused magnesia (periclase) -					
Dry mixed cements and pebbles	tons	26	2,055	8	1,016
Fused mullite -					
Bricks, 9" series	pieces	...	...	780	663
Other shapes	pieces	19	29	143	429
Dry mixed cements	tons	...	...	...	34
Mullite -					
Shapes	pieces	541	1,740	530	1,765
Dry mixed cements	tons	3	881	6	1,248
Sillimanite -					
Dry mixed cements	tons	7	1,373	7	1,363
Zircon-Dry mixed cements	tons	4	442	13	1,894

Table 12 - CONSUMPTION OF REFRACTORIES IN CANADA BY THE IRON FOUNDRIES, 1942 and 1943 (Concluded)

	Purchased During the Calendar Year			
	1 9 4 2		1 9 4 3	
	Quantity	Cost at works \$	Quantity	Cost at works \$
TOTAL ACID REFRACTORIES	653,357	...	651,127
TOTAL NEUTRAL REFRACTORIES	3,095	...	2,792
TOTAL BASIC REFRACTORIES	13,600	...	13,938
TOTAL SPECIAL REFRACTORIES	25,505	...	25,896
TOTAL ALL REFRACTORIES	695,555	...	693,813
Per cent of Dominion Total -				
Acid refractories		11.2		11.1
Neutral refractories		0.5		0.5
Basic refractories		0.5		0.5
Special refractories		6.2		4.6
ALL REFRACTORIES		7.3		7.1

Table 13 - CONSUMPTION OF REFRACTORIES IN CANADA BY OTHER IRON AND STEEL INDUSTRIES, 1942 and 1943

	Purchased During the Calendar Year				
	1 9 4 2		1 9 4 3		
	Quantity	Cost at works \$	Quantity	Cost at works \$	
1. Acid Refractories					
Fireclay--Bricks	(tons	1,723	57,059	1,310	46,529
	(M	25	3,355	31	4,396
Shapes	tons	245	11,915	308	16,555
Cements	tons	172	12,046	317	31,479
Fireclay, crude or calcined	tons	196	3,508	395	19,367
Insulating firebrick	(tons	142	13,133	105	8,914
	(M	3	505	30	1,534
Other products	tons	69	2,108	113	2,539
High alumina refractories (50%-80% Al ₂ O ₃)- (Except electrically fused alumina) -					
Bricks	tons	124	3,929	2,216	129,486
Shapes	tons	...	...	116	9,423
Cements	tons	1	101	1	106
Other products	tons	155	1,144	...	...
Silica--Bricks	tons	7	414	17	887
Shapes	tons	20	907	22	1,060
Cements	tons	...	104	1	106
2. Neutral Refractories					
Chrome--Bricks, burned	tons	11	992	35	2,781
Shapes, burned	tons	1	155	1	285
Shapes, chemically bonded	tons	1	1,415	...	...
Cements	tons	45	5,537	75	8,775
Other products	tons	2	36	...	...
3. Basic Refractories					
Magnesite, brucite and magnesian dolomite -					
Bricks	tons	346	13,985	257	9,513
Cements	tons	32	1,252	24	998
Other products	tons	43	1,643	6	623
Dolomite--Raw, crushed	tons	1,041	3,331	947	2,938

Table 13 - CONSUMPTION OF REFRACTORIES IN CANADA BY OTHER IRON AND STEEL INDUSTRIES, 1942 and 1945
(Concluded)

		Purchased During the Calendar Year			
		1942		1945	
		Quantity	Cost at works \$	Quantity	Cost at works \$
4. Special Refractories					
Electrically fused alumina -					
Bricks, 9" series	pieces	5,500	509	2,405	322
Dry mixed cements	tons	1	95	1	59
Silicon carbide -					
Bricks, 9" series	pieces	300	456	285	450
Other shapes	pieces	79	753	108	589
Dry mixed cements	tons	...	48	...	55
Mullite -					
Bricks, 9" series	pieces	4	4	50	327
Other shapes	pieces	12	87	...	...
Dry mixed cements	tons	...	...	2	344
Sillimanite -					
Bricks, 9" series	pieces	...	...	1,550	3,180
Other shapes	pieces	...	...	2	128
Dry mixed cements	tons	1	321	5	1,185
Zircon—Dry mixed cements	tons	...	...	4	640
TOTAL ACID REFRACTORIES	...	...	110,228	...	272,439
TOTAL NEUTRAL REFRACTORIES	...	...	8,135	...	11,839
TOTAL BASIC REFRACTORIES	...	...	20,211	...	14,122
TOTAL SPECIAL REFRACTORIES	...	...	2,273	...	7,279
TOTAL ALL REFRACTORIES	...	...	140,847	...	305,679
Per Cent of Dominion Total -					
Acid refractories			1.9		4.6
Neutral refractories			1.4		2.2
Basic refractories			0.7		0.5
Special refractories			0.5		1.3
ALL REFRACTORIES			1.5		3.1

Table 14 - CONSUMPTION OF REFRACTORIES IN CANADA BY THE NON-FERROUS SMELTERS, 1942 and 1945

		Purchased During the Calendar Year			
		1942		1945	
		Quantity	Cost at works \$	Quantity	Cost at works \$
1. Acid Refractories					
Fireclay—Bricks	tons	7,696	217,909	5,742	166,914
Shapes	tons	7,883	364,078	6,702	295,564
Cements	tons	1,244	37,000	781	44,481
Fireclay, crude or calcined	tons	757	13,790	556	6,465
Insulating firebrick	tons	340	40,338	204	23,511
Other products	tons	24	517	39	5,551
High alumina refractories (50%–80% Al ₂ O ₃) (Except electrically fused alumina) -					
Bricks	tons	1,536	74,858	2,104	106,407
Shapes	tons	693	41,946	308	20,340
Cements	tons	99	9,879	75	8,171
Silica—Bricks	tons	784	31,010	975	43,947
Shapes	tons	761	41,626	102	5,026
Cements	tons	57	3,332	59	5,380

Table 14 - CONSUMPTION OF REFRACTORIES IN CANADA BY THE NON-FERROUS SMELTERS, 1942 and 1943 (Concluded)

		Purchased During the Calendar Year			
		1942		1943	
		Quantity	Cost at works	Quantity	Cost at works
2. Neutral Refractories					
Chrome--Bricks, burned	tons	140	11,553	109	13,628
Bricks, chemically bonded	tons	8	667	...	...
Shapes, burned	tons	28	2,324	28	3,540
Shapes, chemically bonded	tons	7	779	651	67,031
Cements	tons	205	15,745	200	16,075
Other products	tons	17	1,305	16	1,523
3. Basic Refractories					
Magnesite, brucite and magnesian dolomite -					
Bricks	tons	5,065	598,341	5,644	708,554
Shapes	tons	3,687	499,960	3,010	416,349
Clinker	tons	231	15,672	121	6,979
Cements	tons	454	35,823	699	46,871
Other products	tons	2	94	5	369
4. Special Refractories					
Electrically fused alumina -					
Shapes	pieces	4,569	1,730	...	...
Silicon carbide -					
Bricks, 9" series	pieces	620	736	548	815
Other shapes	pieces	589	444	219	922
Dry mixed cements	tons	6	174	3	87
Electrically fused magnesia (periclase) -					
Bricks, 9" series	tons	27	7,139	7	758
Other shapes	tons	2	484	6	1,670
Dry mixed cements and pebbles	tons	...	...	...	78
Kyanite--Dry mixed cements	tons	...	...	3	580
Sillimanite--Bricks, 9" series	pieces	...	...	152	651
Zircon--Bricks, 9" series	pieces	24	46	...	...
Other shapes	pieces	6,208	1,958	...	...
Dry mixed cements	tons	...	261	...	...
TOTAL ACID REFRACTORIES .....	...	...	876,283	...	729,757
TOTAL NEUTRAL REFRACTORIES .....	...	...	30,373	...	101,597
TOTAL BASIC REFRACTORIES .....	...	...	1,147,790	...	1,179,122
TOTAL SPECIAL REFRACTORIES .....	...	...	12,972	...	5,541
TOTAL ALL REFRACTORIES .....	...	...	2,067,418	...	2,016,017
Per Cent of Dominion Total -					
Acid refractories			15.1		12.5
Neutral refractories			5.0		18.4
Basic refractories			41.7		41.3
Special refractories			3.2		0.9
ALL REFRACTORIES			21.6		20.5

Table 15 - CONSUMPTION OF REFRACTORIES IN CANADA BY THE PULP AND PAPER INDUSTRY, 1942 and 1943

		Purchased During the Calendar Year			
		1942		1943	
		Quantity	Cost at works	Quantity	Cost at works
1. Acid Refractories					
Fireclay--Bricks	(tons	2,181	74,608	2,016	70,108
	(M	3	489	90	4,360
Shapes	(tons	767	37,444	488	22,243
	(M	...	...	29	2,332
Cements	tons	112	8,556	118	9,015
Fireclay, crude or calcined	tons	183	7,117	205	11,545

Table 15 - CONSUMPTION OF REFRACTORIES IN CANADA BY THE PULP AND PAPER INDUSTRY, 1942 and 1943 (Concluded)

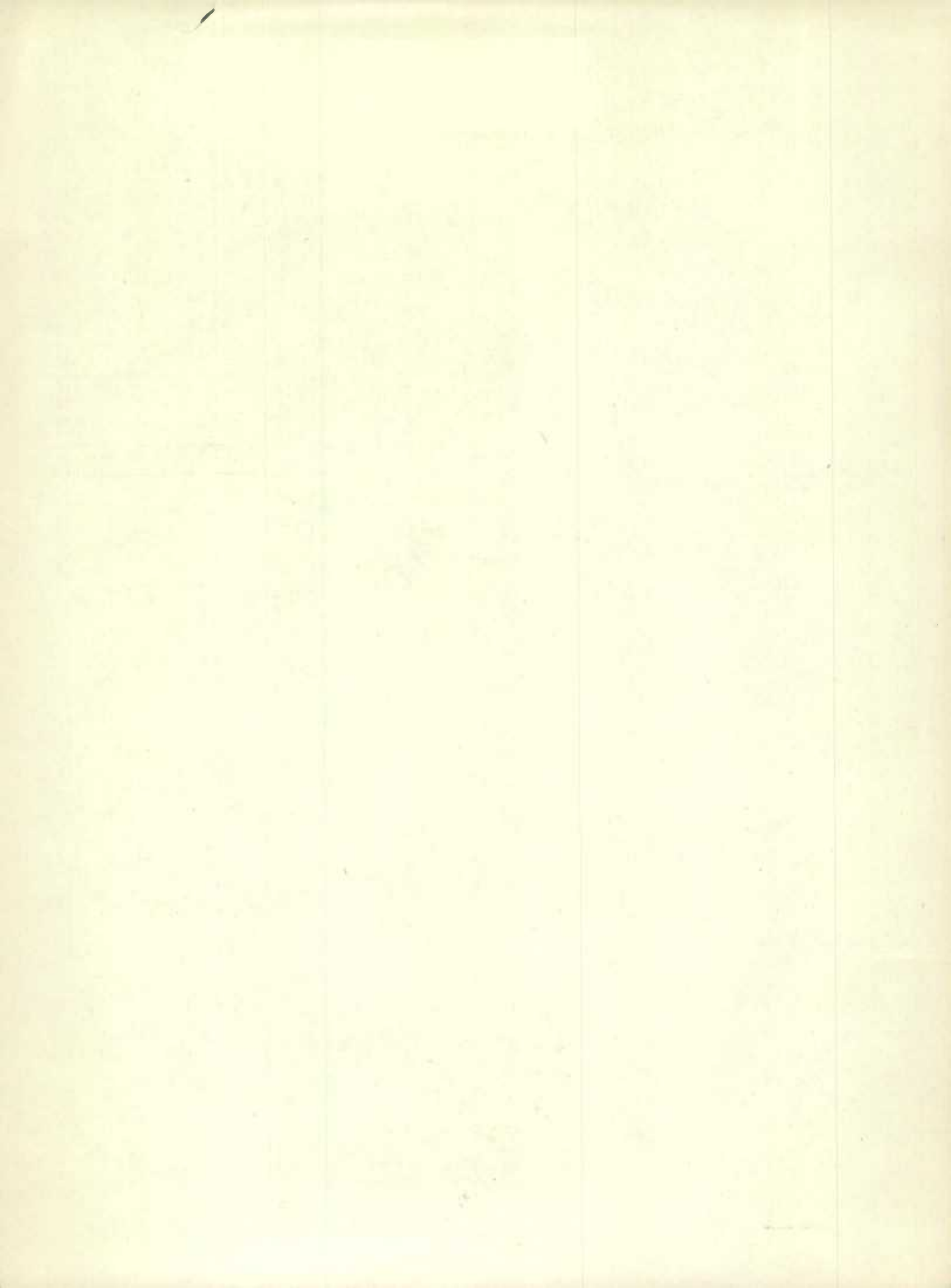
		Purchased During the Calendar Year			
		1 9 4 2		1 9 4 3	
		Quantity	Cost at works \$	Quantity	Cost at works \$
1. Acid Refractories					
(Concluded)					
Fireclay—Insulating firebrick	(tons	120	6,503	75	3,336
	(M	6	184	16	495
Other products	tons	136	7,177	77	6,396
High alumina refractories (50%-80% Al ₂ O ₃) - (Except electrically fused alumina) -					
Bricks	tons	42	998	153	5,711
Shapes	tons	85	4,319	57	4,371
Cements	tons	12	919	10	796
Other products	tons	4	168	5	378
Silica—Bricks	(tons	9	717	29	1,868
	(M	20	1,900	1,062	85,301
Shapes	(tons	21	1,426	22	1,665
	(M	...	5,600	...	5,250
Cements	tons	275	8,528	188	4,656
Other products	tons	63	2,007	23	447
2. Neutral Refractories					
Chrome—Bricks, burned	(tons	40	1,636	37	1,367
	(M	10	940	3	302
Shapes, burned	tons	...	404	30	2,121
Cements	tons	49	4,336	41	4,238
Other products	tons	434	13,839	464	15,498
3. Basic Refractories					
Magnesite, brucite and magnasitic dolomite -					
Bricks	tons	106	7,356	172	12,261
Other products	tons	5	296	3	190
4. Special Refractories					
Electrically fused alumina -					
Bricks, 9" series	pieces	1,000	123	1,000	123
Silicon carbide -					
Bricks, 9" series	pieces	380	560	100	136
Other shapes	pieces	571	2,840	63	146
Dry mixed cements	tons	...	77	...	9
TOTAL ACID REFRACTORIES .....	...	...	168,660	...	240,273
TOTAL NEUTRAL REFRACTORIES .....	...	...	21,155	...	23,526
TOTAL BASIC REFRACTORIES .....	...	...	7,652	...	12,451
TOTAL SPECIAL REFRACTORIES .....	...	...	3,600	...	414
TOTAL ALL REFRACTORIES .....	...	...	201,067	...	276,664
Per Cent of Dominion Total -					
Acid refractories			2.9		4.1
Neutral refractories			3.5		4.2
Basic refractories			0.3		0.4
Special refractories			1.0		0.1
ALL REFRACTORIES			2.1		2.8

Table 16 - CONSUMPTION OF REFRACTORIES IN CANADA BY ALL OTHER INDUSTRIES, 1942 and 1943

		Purchased During the Calendar Year			
		1942		1943	
		Quantity	Cost at works	Quantity	Cost at works
1. Acid Refractories					
Fireclay--Bricks	(tons	8,473	213,179	7,538	215,913
	(M	526	46,991	478	46,135
Shapes	(tons	795	50,940	889	54,804
	(M	15	12,671	16	18,654
Cements	tons	1,083	55,107	1,155	62,362
Fireclay, crude or calcined	tons	1,246	25,051	1,055	23,634
Insulating firebrick	(tons	310	35,301	147	17,595
	(M	5	925	16	3,487
Other products	tons	4,122	187,064	2,778	132,220
High alumina refractories (50%-80% Al ₂ O ₃) (Except electrically fused alumina) -					
Bricks	(tons	319	17,694	279	10,292
	(M	5	1,327	7	615
Shapes	tons	236	18,974	222	15,210
Cements	tons	211	15,936	134	10,650
Other products	tons	...	11	1	34
Silica--Bricks	(tons	739	22,000	1,207	42,848
	(M	4	2,004	5	743
Shapes	tons	612	22,717	348	13,868
Cements	tons	53	2,836	76	5,470
Other products	tons	176	3,086	197	3,606
2. Neutral Refractories					
Chrome--Bricks, burned	(tons	137	8,841	49	5,677
	(M	7	742	...	40
Shapes, burned	tons	21	2,078	24	2,951
Cements	tons	44	4,820	40	4,406
Other products	tons	5	547	34	2,234
3. Basic Refractories					
Magnesite, brucite and magnesian dolomite -					
Bricks	tons	163	15,018	258	20,185
Shapes	tons	1	260	7	706
Clinker	tons	...	...	1	68
Cements	tons	2	239	9	840
Other products	tons	55	3,001	136	3,831
Dolomite--Raw, crushed	tons	...	...	1,161	3,860
4. Special Refractories					
Electrically fused alumina -					
Bricks, 9" series	pieces	...	2,752	...	...
Other shapes	pieces	766	15,956	2,023	31,677
Dry mixed cements	tons	4	800	3	755
Silicon carbide -					
Bricks, 9" series	pieces	4,628	5,855	2,097	3,375
Other shapes	(pieces	4,809	31,321	7,222	28,800
Dry mixed cements	(tons	80	12,486	73	11,402
Electrically fused magnesia (periclase) -					
Bricks, 9" series	pieces	450	572	300	384
Other shapes	pieces	587	559	1,371	3,270
Dry mixed cements and pebbles	tons	4	510	3	358
Fused mullite -					
Bricks, 9" series	pieces	328	365	...	...
Other shapes	pieces	263	2,344	11	2,048
Dry mixed cements	tons	1	150	1	112
Mullite -					
Bricks, 9" series	pieces	12,991	8,926	17,972	10,119
Other shapes	pieces	2,238	8,393	6,471	36,259
Dry mixed cements	tons	113	21,540	237	44,554

Table 16 - CONSUMPTION OF REFRACTORIES IN CANADA BY ALL OTHER INDUSTRIES, 1942 and 1943 (Concluded)

		Purchased During the Calendar Year			
		1942		1943	
		Quantity	Cost at works \$	Quantity	Cost at works \$
4. Special Refractories					
(Concluded)					
Kyanite -					
Shapes	pieces	18	164	36	241
Dry mixed cements	tons	14	786	4	300
Sillimanite -					
Bricks, 9" series	pieces	826	575	697	514
Other shapes	pieces	4,492	22,612	4,000	19,258
Dry mixed cements	tons	62	12,060	46	8,826
TOTAL ACID REFRACTORIES .....	...	...	731,814	...	677,918
TOTAL NEUTRAL REFRACTORIES .....	...	...	17,028	...	15,308
TOTAL BASIC REFRACTORIES .....	...	...	16,518	...	29,490
TOTAL SPECIAL REFRACTORIES .....	...	...	148,726	...	202,051
TOTAL ALL REFRACTORIES .....	...	...	914,086	...	924,767
Per Cent of Dominion Total -					
Acid refractories			12.6		11.5
Neutral refractories			2.9		2.8
Basic refractories			0.6		1.0
Special refractories			36.6		36.7
ALL REFRACTORIES			9.5		9.4



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