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CHEMICALS AND ALLIED PRODUCTS

THE ACIDS, ALKALIES AND SALTS INDUSTRY, 1932.

Production from the Acids, Alkalies and Salts Industry in 1932 was valued at $11,357,649, an increase of 3.7 per cent from the 1931 value of $10,952,497. In 1932 this group covered 10 operating firms with 14 separate factories, 8 of which were located in Ontario, 3 in British Columbia, 2 in Quebec and 1 in Nova Scotia. These plants employed a capital of $44 millions, of which $30.7 millions were invested in factory sites, buildings, machinery, tools and other equipment. The average number of persons employed was 1,679 and they were paid $2,211,467 in salaries and wages.

Production of sulphuric acid, 66° Be, amounted to 136,846 tons of which 57,390 tons valued at $759,553 were intended for sale and 79,473 tons were used in the producers' own acid plants or in associated works.

The directory appended to this report indicates the chemicals manufactured in each of the works in this group. Owing to the fact that each of these commodities, excepting sulphuric acid, was made in only one or two plants it is necessary to omit detailed figures of production. The main materials used in manufacturing are listed in Table 8. The total cost at the works of these materials was $2,283,076 in 1932.

Table 1 - PRINCIPAL STATISTICS OF THE ACIDS, ALKALIES AND SALTS INDUSTRY, 1928-1932.

Years	No. of plants	Capital employed	Average number of employees	Salaries and wages	Cost of materials at works	Selling value of products at works	Value added by manufacturing
		$		$	$	$	$
1928	16.	40,024,624	2,517	3,490,409	4,998,086	21,256,286	16,258,198
1929	15	49,417,431	2,897	4,338,686	6,301,121	28,021,972	21,720,851
1930	17	52,314,567	2,409	3,502,834	4,712,471	20,111,602	15,399,131
1931	14	44,994,828	1,694	2,426,880	2,407,682	10,952,497	8,544,815
1932 -							
Ontario	8	26,511,227	950	1,328,314	1,353,341	7,948,508	6,595,167
Other provinces	6	17,555,967	729	883,153	929,735.	3,409,141	2,479,406
CANADA	14	44,067,194	1,679	2,211,467	2,283,076	11,357,649	9,074,573

Table 2 - CAPITAL EMPLOYED, 1928-1932.

Years	Capital employed as represented by:				
	Value of lands, buildings, machinery, tools and other equipment	Inventory value of materials on hand, stocks in process, fuel and other supplies	Inventory value of finished products	Operating capital (cash, bills and accounts receivable, etc.	TOTAL CAPITAL EMPLOYED
	$	$	$	$	$
1928	30,644,348	3,270,108		6,110,168	40,024,624
1929	35,461,088	5,294,456		8,661,887	49,417,431
1930	38,064,081	5,054,885		9,195,601	52,314,567
1931	31,608,809	2,483,133	902,586	10,000,300	44,994,828
1932 -					
Ontario	15,950,301	1,283,146	832,393	8,445,387	26,511,227
Other provinces	14,795,873	1,113,613	574,197	1,072,284	17,555,967
CANADA	30,746,174	2,396,759	1,406,590	9,517,671	44,067,194

Table 3 - EMPLOYEES, SALARIES AND WAGES, 1928-1932.

Years	On salaries Male	On salaries Female	On wages Male	On wages Female	Total Employees	Salaries	Wages	Total Salaries and Wages
						$	$	$
1928	332	27	2,152	6	2,517	781,403	2,709,006	3,490,409
1929	354	26	2,509	8	2,897	820,290	3,518,396	4,338,686
1930	351	37	2,017	4	2,409	888,220	2,614,614	3,502,834
1931	341	26	1,324	3	1,694	771,271	1,655,609	2,426,880
1932 -								
Ontario .	188	18	739	5	950	393,537	934,777	1,328,314
Other provinces	124	15	590	..	729	353,189	529,964	883,153
CANADA	312	33	1,329	5	1,679	746,726	1,464,741	2,211,467

Table 4 - WAGE-EARNERS, BY MONTHS, 1931 and 1932.

Months	1931 Male	1931 Female	1931 TOTAL	1932 Male	1932 Female	1932 TOTAL
January	1,441	4	1,445	1,197	3	1,200
February	1,441	4	1,445	1,201	3	1,204
March	1,446	4	1,450	1,242	3	1,245
April	1,299	4	1,303	1,256	3	1,259
May	1,253	4	1,257	1,342	3	1,345
June	1,269	3	1,272	1,348	3	1,351
July	1,268	3	1,271	1,380	3	1,383
August	1,308	3	1,311	1,364	3	1,367
September	1,288	3	1,291	1,372	3	1,375
October	1,291	3	1,294	1,434	6	1,440
November	1,312	3	1,315	1,438	11	1,449
December	1,271	3	1,274	1,358	14	1,372
AVERAGE	1,324	3	1,327	1,329	5	1,334

Table 5 - NUMBER OF WAGE-EARNERS IN MONTH OF HIGHEST EMPLOYMENT, CLASSIFIED ACCORDING TO REGULAR HOURS PER WEEK, 1932. (Overtime not included)

Regular hours worked per week	Number of wage-earners	Regular hours worked per week	Number of wage-earners
40 hours or less	485	51 - 53 hours	12
41 - 43 hours	310	54 hours	176
44 hours	105	55 hours	27
45 - 47 hours	82	56 - 59 hours	157
48 hours	139	60 hours	32
49 - 50 hours	60	Over 60 hours	35
		Total	1,620

Table 6 - FUEL AND ELECTRICITY USED, 1931 and 1932.

Kinds	Unit of measure	1931 Quantity	1931 Cost at works	1932 Quantity	1932 Cost at works
			$		$
Bituminous coal - Canadian ..	short ton	785	5,382	...	...
Foreign ...	short ton	73,379	287,049	88,092	337,216
Anthracite coal	short ton	289	1,901	222	1,633
Coke	short ton	614	5,544	373	3,121
Gasoline	Imp. gal.	...	...	598	109
Fuel oil	Imp. gal.	132,648	12,621	51,833	3,718
Other fuel	xx	...	18,073	...	12,225
Electricity purchased	K.W.H.	758,632,752	1,837,015	727,131,543	1,745,653
TOTAL	xx	...	2,167,585	...	2,103,675
Electricity generated for own use	K.W.H.	66,044,027	...	71,578,732	...

Table 7 - POWER EMPLOYED, 1931 and 1932.

Kinds	1931 Number of units	1931 Total rated horse power	1932 Number of units	1932 Total rated horse power
Steam engines and steam turbines	37	11,535	41	11,568
Gasoline, gas and oil engines	2	360	1	135
Hydraulic turbines and water wheels .	5	8,250	5	8,250
Total Primary Power	44	20,145	47	19,953
Electric motors operated by purchased power	995	26,847	1,041	32,970
Total Power Employed	1,039	46,992	1,088	52,923
Electric motors operated by power generated in same plant	376	8,350	398	5,977
Total Electric Power Employed .	1,371	35,197	1,439	38,947
Boilers	32	10,338	32	10,338

Table 8 - MATERIALS USED IN MANUFACTURING, 1931 and 1932.

Materials	Unit of measure	1931 Quantity	1931 Cost at works	1932 Quantity	1932 Cost at works
			$		$
Aluminium sulphate (paper-makers' alum)	lb.	121,712	2,191	219,690	3,736
Ammonia liquor	lb.NH_3	152,982	9,384	214,397	8,683
Ammonia, anhydrous	lb.	25,367	4,592	10,350	1,847
Calcium carbonate (limestone)	ton	163,273	229,021	296,965	340,004
Calcium fluoride (fluorspar)	ton	934	20,823	1,853	25,137
Coke (not for fuel)	ton	39,904	321,997	66,425	442,434
Coal (not for fuel)	ton	18,669	115,780	18,228	112,117
Electrodes	ton	1,276	101,103	2,277	185,339
Iron sulphide (pyrites)	ton	8,908	58,379	12,465	85,823
Silica	ton	6,012	21,262	6,342	20,921
Sodium carbonate (soda ash)	ton	262	7,617	199	6,343
Sodium chloride (common salt) including brine (salt content)	ton	106,910	87,144	106,003	89,059
Sodium hydroxide (caustic soda)	ton	211	12,726	515	33,650
Sodium nitrate (Chile saltpetre)	ton	1,022	49,297	464	21,300
Sodium silicate (waterglass)	lb.	...	...	30,917	1,643
Sodium sulphate (salt cake)	ton	15,602	221,748	94	1,811
Sulphur (brimstone)	ton	15,308	327,281	9,101	180,269
Sulphuric acid, 66° Be	ton	1,602	30,829	1,753	35,151
Containers, etc.	xx	...	349,255	...	172,296
All other materials	xx	...	437,253	...	515,513
TOTAL	xx	...	2,407,682	...	2,283,076

LIST OF FIRMS INCLUDED IN THE ACIDS, ALKALIES AND SALTS INDUSTRY IN CANADA, 1932.

Name	Location of plant	Products made in 1932.
Dominion Steel & Coal Corp.Ltd.	Sydney, N.S.	Sulphuric acid.
Electric Reduction Co. Ltd.	Buckingham, P.Q.	Phosphorus, phosphoric acid and ferro-phosphorus, ammonium phosphate.
Shawinigan Chemicals Ltd.	Shawinigan Falls, P.Q.	Calcium carbide, acetylene, acetylene carbon black, glacial acetic acid, butyl acetate, ethyl acetate, paraldehyde, croton aldehyde, vinyl acetate, pentosol acetate, and hydrated lime.
American Cyanamid Company	Niagara Falls, Ont.	Calcium cyanamide, and sodium cyanide.
Brunner, Mond Canada, Ltd.	Amherstburg, Ont.	Sodium carbonate (soda ash), tanners' alkali and super-alkali.

LIST OF FIRMS INCLUDED IN THE ACIDS, ALKALIES AND SALTS INDUSTRY IN CANADA, 1932. concluded.

Name	Location of plant	Products made in 1932
Canadian Hanson & Van Winkle Co. Ltd.	15 Morrow Ave., Toronto, Ont.	Plating and galvanizing salts (copper cyanide, copper carbonate, zinc cyanide).
Canadian Industries Limited	Copper Cliff, Ont.	Sulphuric acid.
Canadian Industries Limited	Burlington St., Hamilton, Ont.	Acetic acid, hydrochloric acid, sulphuric acid, sodium sulphate (Glauber's salt), sodium sulphate (salt cake), cadmium anodes, soldering flux and sulphur dioxide (liquid).
Canadian Industries Limited	Sandwich, Ont.	Hydrochloric acid, liquid chlorine, sodium hydroxide (caustic soda), sodium hypochlorite, and synthetic anhydrous ammonia.
H. S. & T. Crystal Co. Ltd.	169 Yonge St. Toronto, Ont.	Satin white, solvent.
The Nichols Chemical Co. Ltd.	Sulphide, Ont.	Nitric acid, sulphuric acid, sodium bisulphate (nitre cake).
Canadian Industries Limited	New Westminster, B.C.	Sulphuric acid and hydrochloric acid.
Consolidated Mining & Smelting Co. of Canada, Ltd.	Trail, B.C.	Hydrofluosilicic acid, and sulphuric acid.
The Nichols Chemical Co. Ltd.	Barnet, B.C.	Sulphuric acid.

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