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THE COAL TAR DISTILLATION INDUSTRY

1958



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PUBLICATIONS

The results of the annual Census of Industry are published by the Dominion Bureau of Statistics in a series of industry reports which are released each year as the compilations are completed. Reports for industries classified to the **Chemicals and Allied Products** Major Group are listed below, along with current and annual publications of related interest. Similar reports are issued for other industries. A complete catalogue of publications of the Bureau is available on request from the Information Services Division, Dominion Bureau of Statistics, Ottawa, or from the Queen's Printer, Ottawa.

	A - Annual	B - Biennial	M - Monthly	S.C. - Special Compilation	
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or to the Queen's Printer, Ottawa, Canada.*

EXPLANATORY NOTES

This report is one in a series of about 130 publications which present the results of the 1958 Census of Manufactures. Most reports in this series refer to specific industries, but there are summary reports for Canada and the provinces and for major industry groups. An annual Census of Manufactures has been carried out by the Dominion Bureau of Statistics since 1916.

Industry statistics given in these reports refer to number of establishments, employees, salaries and wages, cost of materials, supplies, fuel and electricity, gross value of shipments, inventories and value added by manufacturing. Details of materials used and products shipped are also given. Descriptions of the principal industry statistics, with special reference to 1958, are as follows:

Period Covered

Firms are asked to submit figures for the calendar year, if at all possible, and most reports are on this basis. Financial year reports for periods differing from the calendar year are accepted in instances where the firms find it impossible to supply calendar year data from accounting records. However the data on employees, salaries and wages are requested on a calendar year basis in all cases.

Establishment

Data for the annual census is collected on an establishment basis. A firm with more than one plant is required to file a report for each plant. In most cases an establishment is a complete factory. Sometimes, however, a plant is divided into two or more establishments when it carries out operations classifiable to different industries and when separate accounting records are available. Usually the statistics for an establishment relate only to the manufacturing activities. Other activities such as construction at the plant by its own employees, wholesale or retail activities carried on at the plant location, etc., are not included. Plants engaged solely in repair work (except in the case of furniture, shipbuilding, boat building, aircraft and railway rolling stock industries) are not included but plants occupied in assembling parts into complete units are included.

Employees

Administrative and office employees include all executives and supervisory officials such as presidents, vice-presidents, secretaries, treasurers, etc., together with managers, professional and technical employees, superintendents and factory supervisors above the working foremen level and clerical employees. Working owners and partners are also included in this category.

Production and related workers include all other factory workmen whether paid on a monthly, weekly, hourly or piece-work basis. Working foremen doing work similar to that of the employees they supervise are included, as are maintenance, warehousing and delivery staffs. Employees on new construction work, in retail or wholesale operations, on outside piece work etc., are not included.

Production workers are reported by months, an average for the year being obtained by summing the monthly figures and dividing by twelve. This procedure is followed even though the plant did not operate in all months. Figures on employment refer to calendar years whether or not some establishments reported other data on a financial year basis.

Salaries and Wages

Salaries and wages refer to gross earnings of the employees described above, including salaries, wages, commissions, bonuses, the value of room and board where provided, deductions for income tax and social services such as sickness and unemployment insurance, pensions, etc., as well as any other allowances forming part of the employees' wages. Payments for overtime are included.

Salaries refer to amounts paid to administrative and office employees. Withdrawals by working owners or partners for normal living expenses for self and family are included but not their withdrawals for income tax. Wages refer to the amounts paid to production and related workers as defined above. Data on earnings refer to the calendar year whether or not some establishments reported other data on a financial year basis.

Cost of Fuel and Electricity

Figures for fuel refer to amounts actually used, (including fuel used in cars and trucks), not to purchases unless the quantities are the same. Values refer to the laid-down cost at the works, including freight, duty, etc.

Materials and Supplies Used

Figures represent quantities and laid-down cost values, at the works, of materials and supplies actually used during the year whether purchased from others or received as transfers from other plants of the reporting company. Amounts paid to other manufacturers for work done on materials owned by the reporting company are included. Returnable containers or any other items charged to capital account are not included. Fuels are not included. Goods bought from others or received as transfers from other plants of reporting companies

for resale without further processing are not included. Maintenance and repair supplies not chargeable to capital account are included.

Factory Shipments

Factory shipments refer to shipments of goods made from own materials either in the reporting plant or by other manufacturers on the basis of a charge to the reporting plant for work done. All products and by-products shipped from the establishment are included whether for domestic use, export, or for government departments. Transfer shipments to sales outlets, distributing warehouses or to other manufacturing units of the reporting firm are included. Goods bought or received as transfers and resold without further processing are not included. Values are computed on f.o.b. plant or plant warehouse basis, and do not include sales tax or excise duties. Values of containers not returnable are included. Amounts received in payment for work done on materials owned by others are included.

In a few industries such as shipbuilding, aircraft, etc., where work on principal products extend over a relatively long period, the value of production is recorded rather than the value of shipments. For those industries production is computed from the value of deliveries of complete units during the year plus the value of work done during the year on unfinished units less the value of work done in previous years on finished units delivered in the year under review.

Inventories

Values represent the book values of manufacturing inventories owned and held at the reporting plant. Figures include inventories held in warehouses or selling outlets which have been included with plant operations for purposes of reporting shipments.

Value Added by Manufacturing

Figures are computed from value of shipments plus or minus changes in inventories of finished

goods and goods in process less cost of materials, fuel and electricity. This figure is sometimes referred to as net production.¹

Standard Industrial Classification

The Standard Industrial Classification Manual, prepared by the Dominion Bureau of Statistics, provides for 135 three-digit industries in the manufacturing sector, arranged in 17 major groups. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

Short Forms

Prior to 1949 all manufacturing firms, regardless of size, were required to complete a standard form annually covering all census details, but for later years an effort was made to ease the reporting burden for smaller firms which usually do not maintain regular records in the required detail. A modified or short form was introduced in 1949 asking for the total value of shipments only, or in industries with a large number of small firms, for total value of shipments and quantities and values of a few principal products. Using the ratio of value of shipments in the current year to value of shipments in the base year, 1948, estimates of other census data were made for each plant for inclusion in the regular compilations. In general, the cut-off point for short forms was set at \$50,000 gross value of shipments annually, but there were lower cut-offs for a number of industries in which the small firms accounted for a larger share of total shipments. About 40 per cent of the total number of establishments reported on the modified or short form. They accounted for less than 3 per cent of the total value. In 1958, to establish a new base year, the small firms were again asked to report data on employees, salaries and wages, and other principal statistics together with some detail on material and products.

¹ To arrive at the National Accounts concept of "gross domestic product at factor cost", it would be necessary to subtract also the cost of office supplies used, advertising, insurance and other goods and services obtained from other businesses. Data on these inputs are not collected on the annual Census of Manufactures. Value added figures for "The primary industries and construction" are published in D.B.S. publication 61-202, *Survey of Production*.

THE COAL TAR DISTILLATION INDUSTRY

1958

Output from the Coal Tar Distillation Industry in 1958 was valued at \$12,018,034 a decrease of 12 per cent from the \$13,663,996 reported in 1957. Factory shipments of creosote oils totalled 9,576,092 gallons valued at \$2,635,062 in 1958; refined tars amounted to 3,213,996 gallons at \$700,338 and pitch totalled 114,498 tons at \$4,707,497. Phenols, cresols, cresylic acid, xylenols, phthalic anhydride, coal tar paints, pitch coke, tar and asphalt cements, disinfectants and asphalt saturants were other principal products.

Ten plants operated in 1958 there being 1 in Nova Scotia, 2 in Quebec, 6 in Ontario and 1 in British Columbia. These works afforded employment to 572 people who were paid \$2,761,000 in salaries and wages.

Materials for manufacturing cost \$7,611,604 in 1958 including 36,446,673 gallons of crude tars at \$5,344,623. In addition an amount of \$744,488 was paid for fuel and electricity.

TABLE 1. Principal Statistics of the Coal Tar Distillation Industry, Significant Years, 1929-58

Year	Estab-lish-ments	Em-ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture ¹	Gross selling value of products ¹
	number		dollars				
1929	10	242	353,970	123,019	2,658,555	1,036,476	3,818,050
1933	10	183	272,439	74,186	1,076,277	521,836	1,672,299
1937	10	254	357,744	170,910	2,189,237	1,039,394	3,399,541
1939	11	302	393,522	163,950	2,108,544	1,375,586	3,648,080
1943	10	424	789,335	326,448	4,059,598	2,154,239	6,540,285
1946	11	410	740,619	341,182	3,116,167	2,052,078	5,509,727
1949	11	415	1,166,863	549,310	4,786,640	3,996,837	9,332,787
1954	11	544	2,101,870	655,821	7,417,777	4,752,227	12,878,275
1955	11	528	2,080,557	611,810	7,010,908	4,802,463	11,892,812
1956	11	537	2,458,014	703,832	8,048,543	4,549,278	13,221,192
1957	11	530	2,600,013	770,891	8,200,347	4,809,942	13,663,996
1958	10	572	2,761,006	744,488	7,611,604	3,463,246	12,018,034

¹ Due to lack of inventory data, figures for "Value added by manufacture" prior to 1954 were obtained by subtracting the cost of materials used, including fuel and electricity, from the total value of factory shipments. In 1954 and 1955 the "Value added" adjustment incorporated the increase or decrease to shipments values resulting from changes in the value of inventories over the period. For these two years, the adjustments that were made used only the change in finished product inventory owned by manufacturers. Beginning with 1956 the calculation of the "Value added" figure was further adjusted to take into account the "Goods in process" as well as the finished goods held at plant or plant warehouse.

Note: Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

TABLE 2. Inventories,¹ 1958

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	dollars			
Opening	920,623	138,375	1,503,907	2,562,905
Closing	737,686	113,907	1,329,679	2,181,272

¹ (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.

(b) Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Coal Tar Distillation Industry for the year under review are shown in the above table.

(c) The opening inventory for the current year may not necessarily agree with the closing inventory published the previous year because of changes in the composition of the industry such as: the addition of new establishments, the disappearance of old ones, or the transfer of establishments to other industries for statistical purposes. The figure for value added by manufacture for the previous year does not need to be altered because of such changes in the composition of the industry.

TABLE 3. Products of the Coal Tar Distillation Industry, 1957 and 1958

Product	1957		1958	
	Quantity	Value of factory shipments	Quantity	Value of factory shipments
		\$		\$
Refined tar Imp. gal.	2,976,469 ²	672,733	3,213,996	700,338
Pitch ton	120,660	5,354,758	114,498	4,707,497
Creosote oils Imp. gal.	11,984,155	3,188,592	9,576,092	2,635,062
All other products ¹	—	4,447,913	—	3,975,137
Total	—	13,663,996	—	12,018,034

¹ Includes coal tar paints, cements and disinfectants; also asphalt cements, asphalt saturant, pitch coke, phenol, cresol, orthocresol, metaparacresol, cresylic acid, phthalic anhydride, etc. Figures cannot be shown for these items as each was made by only one or two companies.

² Revised.

TABLE 4. Materials Used in the Coal Tar Distillation Industry, 1957 and 1958

Material	1957		1958	
	Quantity	Cost at plant	Quantity	Cost at plant
		\$		\$
Crude coal tar Imp. gal.	39,907,201	5,963,177	36,200,225	5,315,877
Crude water-gas tar "	1,038,317	140,296	246,448	28,746
Asphalt "	140,959	23,871	149,937	25,985
Containers and packing materials	—	526,920	—	510,515
All other materials	—	1,546,083	—	1,730,481
Total	—	8,200,347	—	7,611,604

TABLE 5. Production¹ of Creosote Oils, Pitch and Refined Tars, 1949-58

Year	Creosote and other oils	Pitch	Refined tar, tarvia, etc.
	Imp. gal.	tons	Imp. gal.
1949	12,556,889	92,291	3,542,989
1950	11,728,014	113,510	4,324,803
1951	11,726,520	112,141	4,377,223
1952	11,608,114	131,742	3,976,884
1953	13,750,179	132,737	4,742,967
1954	10,959,458	135,912	4,641,583
1955	10,240,525	119,649	3,559,726
1956	9,630,724	134,195	3,816,392
1957	11,984,000	120,660	2,976,000 ²
1958	9,576,092	114,498	3,214,000

¹ Factory shipments since 1953.

² Revised.

TABLE 6. Crude Tar Used in Tar Distilleries, 1949-58

Year	Imp. gal.	Year	Imp. gal.
1949	32,428,300	1954	38,542,083
1950	41,324,989	1955	39,746,903
1951	40,260,705	1956	43,141,887
1952	43,037,000	1957	40,946,000
1953	45,401,000	1958	36,447,000

TABLE 7. Employees and their Earnings in the Coal Tar Distillation Industry, 1954 - 58

Year	Employees					Earnings		
	Supervisory and office		Production and related workers		Total	Supervisory and office	Production and related workers	Total
	Male	Female	Male	Female				
number					dollars			
1954	132	35	370	7	544	805,866	1,296,004	2,101,870
1955	136	30	356	6	528	807,533	1,273,024	2,080,557
1956	124	30	377	6	537	1,046,763	1,411,251	2,458,014
1957	128	33	365	4	530	1,160,986	1,439,027	2,600,013
1958	165	40	364	3	572	1,318,112	1,442,894	2,761,006

TABLE 8. Production Workers, by Months, 1957 and 1958

Month	1957			1958		
	Male	Female	Total	Male	Female	Total
number						
January	365	4	369	371	3	374
February	370	4	374	367	3	370
March	369	4	373	364	3	367
April	373	4	377	363	3	366
May	350	4	354	375	3	378
June	366	4	370	371	3	374
July	387	4	391	385	3	388
August	377	4	381	371	3	374
September	366	4	370	358	3	361
October	358	4	362	346	3	349
November	349	4	353	342	3	345
December	345	4	349	354	3	357
Average	365	4	369	364	3	367

TABLE 9. Capital and Repair Expenditures in the Coal Tar Distillation Industry, 1954 - 58

Year	Capital expenditures			Repair and maintenance expenditures			Total capital and repair expenditures
	Construction	Machinery and equipment	Sub-total	Construction	Machinery and equipment	Sub-total	
thousands of dollars							
1954	2	2	214	2	2	612	826
1955	2	2	190	2	2	617	807
1956	2	2	227	2	2	699	926
1957	2	2	776	2	2	678	1,454
1958 ¹	2	2	1,980	2	2	708	2,688

¹ Preliminary.² Not available separately - see sub-total.



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TABLE 10. Imports and Exports of Coal Tar, Pitch, etc., 1957 and 1958

Item	1957		1958		
	Quantity	Value	Quantity	Value	
		\$		\$	
Imports					
Coal, tar, crude	Imp. gal.	1, 186, 232	201, 149	670, 489	142, 803
Coal pitch	lb.	138, 939, 900	2, 666, 172	123, 577, 000	2, 412, 111
Carbolic or heavy oil	Imp. gal.	4, 165, 969	888, 075	2, 925, 280	557, 344
Exports					
Coal tar and pitch	Imp. gal.	1, 880, 203	303, 246	1, 189, 647	120, 122
Creosote oil	"	2, 024, 154	443, 228	540	142
Coal tar oils, other	"	1, 698, 096	499, 080	1, 088, 500	300, 490

TABLE 11. Fuel and Electricity Used in the Coal Tar Distillation Industry, 1957 and 1958

Kind	1957		1958		
	Quantity	Cost at works	Quantity	Cost at works	
		\$		\$	
Bituminous coal—Canadian	ton	1, 374	19, 920	1, 168	17, 520
—Imported	"	15, 125	172, 792	14, 958	179, 496
Sub-bituminous coal	"	57	374	—	—
Anthracite coal		—	—	—	—
Gasoline (including gasoline used in cars and trucks)	Imp. gal.	41, 483	17, 220	38, 000	16, 000
Fuel oil	"	3, 526, 421	393, 483	3, 130, 390	356, 014
Gas—Manufactured	M cu. ft.	268, 686	70, 550	290, 000	80, 828
Electricity purchased	kwh.	14, 028, 941	96, 024	13, 600, 300	94, 630
Other fuel		—	528	—	—
Total		—	770, 891	—	744, 488

TABLE 12. Power Equipment in Use or Available for Use at the End of 1958

Type of equipment	Driving generators	Not driving generators
	horsepower	
A. Prime movers:		
Steam engines	—	120
Steam turbines	24	111
Gasoline, gas and oil engines, other than diesel engines	—	5
Total	24	236
B. Electric motors (one-quarter horsepower and over)	—	4, 328

List of Firms in the Coal Tar Distillation Industry, 1958

Name	Head office address	Location of plant
Dominion Tar & Chemical Company Limited ..	2240 Sun Life Building, Montreal, Quebec	Sydney, Nova Scotia Ville LaSalle, Quebec Sault Ste. Marie, Ontario Toronto, Ontario Hamilton, Ontario
The Barrett Company Limited	5551 St. Hubert Street, Montreal, Quebec	Montreal, Quebec Toronto, Ontario Vancouver, British Columbia
Currie Products Limited	87 Sheaffe Street, Hamilton, Ontario	Hamilton, Ontario
Northern Tar & Chemical Company Limited	P.O. Drawer 310, Port Arthur, Ontario	2nd Avenue, Port Arthur, Ont.