

## Historical Filo Copy

DEPARTMENT OF TRADE AND COMmERCE
DOMINION BUREAU OF STATISTICS
CENSUS OF INDUSTRY
MINING, METALLURGICAL AND CHEMICAL BRANCH
OTTAWA - CANADA


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## ANNUAL INDUSTRY REPORT

## IRON AND STEEL AND THEIR PRODUCTS GROUP

THE SHIPBUILDING INDUSTRY, 1937.

The value of work done in shipyards in Canada during 1937 amounted to $\$ 10,360,686$ compared with $\$ 6,205,127$ in 1936 and $\$ 7,124,474$ in 1935. The 1937 total included 825,433 for work done on new vessel s completed during the year, $\$ 780,572$ for work done on unfinished vessels, $\$ 6,125,304$ for ship repairs, and $\$ 2,629,377$ for other products such as aircraft, industrial machinery, fabricated structural steel work, etc.. Only 36 new vessels were launched during 1937 and the finished value of these ships was $\$ 1,030,392$, including the value of work done on them in the previous year.

As reviewed in this report, the shipbuilding industry covers all shipyards in Canada which were regularly occupied on ship, repairs or in building new vessels of steel or wood. Factories which made small boats, such as, gasoline launches and rowboats have not been included as the operations of such establishments are reviewed in a separate report on the boat-building industry.

Forty shipyards were in operation in 1937, there being 16 in British Columbia, 8 in Nova Scotia, 8 in Ontario, 6 in Quebec, 1 in New Brunswick, and 1 in Manitoba. Capital employed in these works amounted to $\$ 29,163,717$, employees numbered 3,502 , salaries and wages totalled $\$ 4,411,910$, fuel and electrics ty cost $\$ 279,993$, and materials cost $\$ 3,204,905$. Twenty-five of the shipyards were occupied entirely with repairs in 1937.

Table 1 - PRINCIPAL STATISTICS OF THE SHIPBUILDING INDUSTRY, $1933=1937$.


Table 2 - PRINCIPAL STATISTICS, BY PROVINCES, 1936 and 1937.

| Province N | No. of plants | Capital employed | rerage <br> umber <br> f emoyees | Salaries and wages | Cost of fuel and electricity at works | Cost of materials at works | Gross selling value of products at works |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1936 |  | \$ |  | \$ | \$ | \$ | ¢ |
| Nova Scotia. | 7 | 4,212,643 | 415 | 462,391 | 55, 515 | 240,161 | 874,653 |
| Quebec | 6 | 6,942,359 | 1,235 | 1,299,589 | 88,233 | 666,462 | 2,451,044 |
| Ontario | 7 | $6,140,138$ | 405 | 442,568 | 43,697 | 216,193 | 1,092,743 |
| British Columbia | 15 | 6,453,800 | 596 | 766,120 | 48,749 | 329,704 | 1,439,849 |
| New Brunswick .. Manitoba ....... |  | 4,648,686 | 150 | 233,710 | 19,869 | 78,124 | 346,838 |
| CANADA | 37 | 28,397,626 | 2,801 | 3,204,578 | 235,863 | 1,530,644 | 6,205,127 |
| 1937 |  |  |  |  |  |  |  |
| Nova Scotia | 8 | 4,167,247 | 517 | 648,125 | 39,818 | 366,725 | 1,401,994 |
| Quebec | 6 | 8,443,437 | 1,555 | 1,879,884 | 99,160 | 1,794,684 | 4,926,014 |
| Ontario | 8 | 5,359,107 | 508 | 595,550 | 58,366 | 390,058 | 1,472,038 |
| British Columbia | 16 | 6,592, 367 | 720 | 1,050,089 | 60,043 | 570,662 | 2,193,751 |
| New Brunswick. |  | 4,601,559 | 202 | 238,262 | 22,606 | 82,776 | 366,889 |
| Manitoba . ..... |  | 4,601,559 | 202 | 238,262 | 22,606 | 82,776 | 366,889 |
| CANADA | 40 | $29,163,717$ | 3,502 | 4,411,910 | 279,993 | 3,204,905 | $10,360,686$ |

Table 3 - SIZE OF ESTABLISHMENTS ACCORDING TO PRODUCTION, NUMBER OF RMPLOYEES and CAPITAL EMPLOYED, 1937.

| - | Number of plants | Capital employed | Average number of employees | Gross selling value of products at works |
| :---: | :---: | :---: | :---: | :---: |
|  |  | \$ |  | \$ |
| (a) PRODUCTION |  |  |  |  |
| Under \$25,000 ... | 8 | 210,795 | 80 | 120,277 |
| \$25,000 to \$50,000 | 8 | 510,580 | 198 | 307,546 |
| \$50,001 to \$100,000 | 7 | 3,319,874 | 217 | 518,799 |
| \$100,001 to \$250,000 | 7 | 5,177,514 | 499 | 1,164,78\% |
| \$250,001 to \$500,000 | 4 | 5,483,839 | 402 | 1,159,958 |
| \$500,001 to \$1,000,000 | 3 | 4,522,690 | 585 | 2,204,421 |
| Over \$1,000,000 .... | 3 | 9,938,425 | 1,521 | 4,884,898 |
| TOTAL | 40 | 29, 163,717 | 3,502 | 10, 360,686 |
| (b) ENPLOYEES |  |  |  |  |
| Under 10 | 4 | 116,845 | 28 | 55,824 |
| 10 to 20 | 11 | 560,826 | 161 | 372,256 |
| 21 to 50 | 8 | 647,989 | 260 | 637,639 |
| 51 to 100 | 8 | 7,795,390 | 508 | 1,453,927 |
| 101 to 250 | 6 | 10,1.04,242 | 1,024 | 2,956,142 |
| Over 250 | 3 | 9,938,425 | 1,521 | 4,884,898 |
| TOTAL | 40 | 29,163,717 | 3,502 | 10,360,686 |
| (c) CAPITAL |  |  |  |  |
| Under \$25,000 | 7 | 94,192 | 105 | 177,205 |
| \$25,000 to \$100,000 | 14 | 659,127 | 329 | 855,169 |
| \$100,001 to \$500,000 | 8 | 2,187,242 | 449 | 1,229,139 |
| Over \$500,000 | 11 | 26, 223,156 | 2,619 | 8,099,173 |
| TOTAL ... | - 40 | 29,163,717 | 3,502 | 10,360,686 |

Table 4 CAPITAL PMPLOYED, 1936 and 1937.

| Province | Present value of land, buildings, machinery and equipment | Inventory value of matorials, fuel and finished products on havid and stocks in process | Operating capital (cash, bills and accounts receivable, prepaid expenses, etc. | TOTAL CAPITAL EMPLOYED |
| :---: | :---: | :---: | :---: | :---: |
| 1936 | \% | \$ | - ${ }^{\text {ºn }}$ | \$ |
| Nova Scotia | 3,797,749 | 171,871 | 243,023 | 4,212,643 |
| Quebec | 5,053,485 | 593,228 | 1,295,646 | 6,942,359 |
| Ontario | 4,818,704 | 413,866 | 907,568 | 6,140,138 |
| British Columbia. | 5,898,121 | 182,294 | 373,385 | 6,453,800 |
| Other provinces | 4,457,803 | 115,394 | 75,489 | 4,648,686 |
| TOTAL | 24,025,862 | 1,476,653 | 2,895,111 | 28,397,626 |
| 1937 |  |  |  |  |
| Nova Scotia | 3,736,647 | 212,997 | 217,603 | 4,167,247 |
| Quebec | 6,248,549 | 1,194,927 | 999,961 | 8,443,437 |
| Ontario | 2,385,281 | 477, 551 | 496,475 | 5,359,107 |
| British Columbia. | 5,808,620 | 243,925 | 539,822 | 6,592,367 |
| Other provinces. | 4,403,445 | 73,586 | 118,528 | 4,601,559 |
| TOTAL ........ | 22,582,542 | 2,208,786 | 2,372,389 | 29,163,717 |

Table 5 = BMPLOYEES, SALARIES AND WAGES, BY PYOVINCES, 1936 and 1937.

| Province | Average number of employees |  |  | Salaries | Wages | TOTALSALARIESand WAGES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | On Salaries Male Female | On Wages | TOTAL |  |  |  |
|  |  | Male Female |  |  |  |  |
|  |  |  |  | \$ | \$ |  |
| 1936 |  |  |  |  |  |  |
| Nove Scotia | $29 \quad 5$ | 3801 | 415 | 59,374 | 403,017 | 462,391 |
| Quebec | 9911 | 1,122 3 | 1,235 | 218,912 | 1,080,677 | 1,299,589 |
| Ontario | 358 | 361 . 1 | 405 | 90,962 | 351,606 | 442,568 |
| British Columbia. | 837 | 506 | 596 | 164,722 | 601,398 | 766,120 |
| Other provinces | $53-3$ | 94 ... | 150 | 113,513 | 120,197 | 233,710 |
| TOTAL | 29934 | $2,463 \quad 5$ | 2,801 | 647,483 | 2,556,895 | 3,204,378 |

## 1937

| Nova Scotia | 29 | 6 | 481 | 1 | 517 | 60,159 | 587,966 | 648,125 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quebec | 170 | 16 | 1,366 | 3 | 1,555 | 355,879 | 1,524,005 | 1,879,884 |
| Ontario | 49 | 11 | 447 | 1 | 508 | 119,713 | 475,837 | 595,550 |
| British Columbia. | 86 | 7 | 627 |  | 720 | 187,739 | 862,350 | 1,050,089 |
| Other provinces | 43 | 2 | 157 |  | 202 | 91,224 | 147,038 | 238,262 |
| TOTAL. | 377 | 42 | 3,078 | 5 | 3,502 | 814,714 | 3,597,196 | 4,411,910 |

Table 6 - WAGE-EARNERS, BY KONTHS, 1936 and 1937.

|  |  | $9 \quad 3$ | 6 |  | $9 \quad 3$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Male | Female | TOTAL | Male | Female | TOTAL |
| January | 2,084 | 3 | 2,087 | 2,780 | 4 | 2,784 |
| February | 1,968 | 3 | 1,971 | 2,875 | 3 | 2,878 |
| March | 2,556 | 3 | 2,559 | 2,925 | 3 | 2,928 |
| April | 2,767 | 5 | 2,772 | 3,531 | 5 | 3,536 |
| May | 2,565 | 4 | 2,569 | 3,159 | 4 | 3,163 |
| June | 2,801 | 4 | 2,805 | 3,036 | 5 | 3,041 |
| July | 2,628 | 7 | 2,635 | 3,036 | 4 | 3,040 |
| August | 2,592 | 8 | 2,500 | 2,959 | 4 | 2,963 |
| Sentember | 2,608 | 5 | 2,613 | 2,637 | 4 | 2,641 |
| October. | 2,770 | 5 | 2,775 | 3,102 | 4 | 3,106 |
| November | 2,090 | 5 | 2,095 | 3,519 | 4 | 3,523 |
| December | 2,138 | 5 | 2,143 | 3,372 | 4 | 3,576 |
| AVERAGE | 2.463 | 5 | 2,468 | 3,078 | 5 | 3,083 |

Table 7 - REGILAR HOURS FORKED PER WEEK, 1936 and 1937. (Overtime not included)

| Regular hours worked | Per cent of wage-earners |  | Regular hours worked per week | Per cent of wage-earners |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| per week | 1936 | 1937 |  | 1936 | 1937 |
| 40 hours or less | 19.4 | 2.0 | $51-55$ hours | 0.1 | 2.5 |
| $41-43$ hours | 0.3 | 0.2 | 54 hours | 8.1 | 16.0 |
| 44 hours | 30.2 | 30.6 | 55 hours | 5.5 | 10.0 |
| 45 - 47 hours | 10.8 | 18.1 | 56-59 hours | 0.9 | 1.2 |
| 48 hours | 10.3 | 11.5 | 60 hours and over | 3.6 | 2.9 |
| 49 hours . ...... | 10.8 | 5.0 |  |  |  |

Table 8 - FUEL AND ELECTPICITY USED, 1936 and 1937.

| Kind | $1 \begin{array}{llll}1 & 9 & 3 & 6\end{array}$ |  | 1.9 | 37 <br> Cost at works |
| :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Cost at works | Quantity |  |
|  |  | \$ |  | \$ |
| Bituminous coal - Canadian .. short ton | 4,745 | 34,522 | 3,762 | 30,169 |
| Imported . . short ton | 5,359 | 30,338 | 7,548 | 45,905 |
| Anthracite coal ............ short ton | 128 | 1,404 | 153 | 1,599 |
| Coke ....................... short ton | 450 | 5,291 | 851 | 10,599 |
| Gasoline ..................... Imp. gal. | 14,121 | 3,166 | 43,096 | 10,468 |
| Kerosene .................... Imp. gal. | 8,318 | 1,617 | 10,801 | 2,125 |
| Frel oll ..................... Imp. gal. | 280,943 | 17,693 | 456,157 | 30,175 |
| Tood ......................... cord | 389 | 1,995 | 374 | 1,865 |
| Gas - Manufactured .......... M M ${ }_{\text {cle }}$ ft. | 412 | 636 | 884 | 1,480 |
| Natural . . . . . . . . . . . . . M cu. ${ }^{\text {t. }}$ | -... | ... | 4 | 3 |
| Electricity purchased........... K . H . | 11,997,095 | 137,794 | 9,685,626 | 145,305 |
| Other fuel ................. \$ | - ... | 1,407 | ... | 300 |
| TOTAL . . . . ............. \$ | ... | 235,863 | $\cdots$ | 279,993 |
| Electricity generated for own use .................................W. H. | 96,200 | ... | 110,130 | ... |

Table 9 - POTFER EQUIPMENT, 1936 and 1937.

| Type | 19 | 36 | 1.9 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ber of nits | Total rated horse power | Nunber of units | Total rated horse power |
| Steam engines and turbines | 76 | 9,810 | 92 | 10,581 |
| Diesel engines | 4 | 94 | 6 | 185 |
| Gasoline, gas and oil engines | 10 | 209 | 15 | 446 |
| Hydraulin "rbines or water wheels | . | .. | 1 | 15 |
| Total Primary | 90 | 10,113 | 114 | 11,227 |
| Electric motors run by purchased power | 952 | 31,433 | 1,009 | 33,404 |
| TOTAL | 1,042 | 41,546 | 1,123 | 44,631 |
| Electric motors run by primary power. | 3 | 2,250 | 3 | 2,250 |
| Total Electric Motors .......... | 955 | 33,683 | 1,012 | 35,654 |
| Boilers | 83 | 10,409 | 95 | 14,034 |

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Table 10 - POWER EQUIPMENT, 1937, showing - ORDINARILI IN USE separately from IN RESERVE OR IDLE.

| Type |
| :--- | :--- | :--- | :--- | :--- | :--- |

Table 11 - MATERTALS USED, 1936 and 1937.

|  |  | 36 | 1 | $9 \quad 37$ |
| :---: | :---: | :---: | :---: | :---: |
| Materials $\begin{aligned} & \text { Unit of } \\ & \text { measure }\end{aligned}$ | Quantity | Cost at works | Quantity | Cost at works |
|  |  | \$ |  | \$ |
| Iron - |  |  |  |  |
| Pig iron ....................... long ton) |  |  | 126 | 3,398 |
| Iron castings of all kinds ......short ton) |  |  | 1,058 | 112,839 |
| Steel (other than special alloy) - ) |  |  |  |  |
| Steel castings ...................short ton) |  |  | 553 | 98,395 |
| Bars and rods ................... short ton) |  |  | 901 | 88,863 |
| Plates .........................short ton) |  |  | 11,601 | 633,519 |
| Sheets - plain ..................short ton) | 6,935 | 455,155 | 86 | 13,806 |
| - galvanized .............short ton |  |  | 52 | 5,762 |
| Strip ...........................short ton) |  |  | 8 | 466 |
| Structural shapes ..................short ton) |  |  | 3,000 | 199,243 |
| Wire ............................short ton) |  |  | 105 | 8,923 |
| Scrap iron and steel of all kindsshort ton) |  |  | 410 | 5,855 |
| Other 1ron and steel ............ \$ ) |  |  |  | 23,006 |
| Non-ferrous metals - |  |  |  |  |
| Aluminiun ........................ pounci |  |  | 83,019 | 80, 123 |
| Brass and bronze ................ pound | 140,000 | 49,209 | 187,002 | 49,591 |
| Copper . . . . . ...................... pound | ... | ... | 24,375 | 11,255 |
| Lead . . . . . . . . . . . . . . . . . . . . . . . . . pound | -.. | ... | 46,428 | 4,534 |
| Tin ............................. pound | ... | ... | 3,773 | 2,076 |
| zinc ............................. . pound | ... | -.. | 41,778 | 3,225 |
| Babbitt metals and solders ...... pound |  |  | 44,128 | 20,803 |
| Other metals ................... * |  |  |  | 13,583 |
| Other materials and supplies - |  |  |  |  |
| Iron and steel pipe and fittings. \$ | ... | 56,285 | ... | 50,481 |
| Bolts, nuts, rivets, spikes, etc. \$ | -•• | 102,924 |  | 167,010 |
| Boilers . . . . . . . ................... No.) | 13 | 65,380 | 5 | 9,378 |
| Engines . . . . . ..................... No.) |  | 65,500 |  | 176,461 |
| Electric motors and generators .. No. | 7 | 4,210 | -.. | 10,516 |
| Other electrical supplies ....... \$ |  | 38,795 |  | 70,836 |
|  | 4,306 | 168,578 | 5,073 | 257,468 |
| Timber . .......................... M $\mathrm{Mt}$. . $\mathrm{m}_{\text {.m. }}$ | 521 | 27,006 | 1,345 | 58,330 |
| Masts, spars, knees and blocks .. \$ | ... | 13,777 | ... | 28,374 |
| Sailcloth and sails ............. \$ | ... | 2,992 | ... | 7,398 |

Table 11 - MATERIALS USED, 1936 and 1937. (continued)


Table 12 - PRODUCTS MADE IN THE SHIPBUILDING INDUSTRY, 1936 and 1937.


## Names of Firms

```
NOVA SCOTIA -
    Eastern Shipbuilding Corp. Ltd.
    Halifax Shipyards Limited
    Marine Railway Ship Repairing
    Mckay, N. C., & Sons Limited
    Meteghan Shipbuilding Co. Ltd.
    Purdy Brothers Limited
    Shelburne Shipbuilders Limited
Smith & Rhuland
NEW BRUNSHLCK -
    St. John Dry Dock & Shipbuilding Co. Ltd.
East Saint John
QUEBEC -
    Canada Marine Works (Estate A. K. Cantin)
    Canadian Vickers Limited
    Dane, Geo. T., & Sons
    Davie Shipbuilding & Repairing Co. Ltd.
    Marine Industries Limited
    Montreal Dry Docks Limited
ONTARIO -
    Burgley, W., & Son, Ltd.
    Collingwood Shipyards Limited, The
    Georgian Bay Shipbuilding & Wrecking Co.
    Heighton, H.E., & Son
    Kingston Shipbuilding Co. Ltd.
    Midland Shipbuilding Co. Ltd.
    Muir Bros. Dry Dock Co. Ltd.
    Port Arthur Shipbuilding Co. Ltd.
    2050 Notre Dame St. W., Montreal
    4 9 7 0 \text { Notre Dame St. E., Montreal}
    Lauzon
    Geo. Davie St., Lauzon
    Sorel
1151 M111 St., Montreal
Dry Dock, Cornwall
Huron St., Collingwood
Ship Yard, Midland
130 Mellanby Ave., Humberstono
Lower Union & Ontario Sts., Kingston
Foot of Manley St., Midland
Port Dalhousie
Port Arthur
MANITOBA -
    Department of Public Works (Dominion Govt.) Selkirk
BRITISH COLUNBIA -
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Beach Avenue Shipyards (1932) Ltd.
B.C. Lake \& River Service - Canadian

Pacific Railway
B.C. Marine Engineers \& Shipbuilders, Ltd.

British Yukon Navigation Co. Ltd.
Burrard Dry Dock Co. Ltd.
Burrard Shipyard \& Engineering Works Ltd.
Cranes Shipyards Limited
McCharles, $F$ 。R。
North Van Shin Repairs, Limited
Point Hope Shipyards Ltd.
Prince Fupert Dry Dock and Shipyard
Stanley Park Shipyards Ltd.
Star Shipyard (Mercers) Ltd.
Vancouver Shipyards Ltd.
West Coast Salvage \& Contracting Co. Ltd.
Yarrows Limited

944 Beach Ave., Vancouver
Nelson, Nakusp, Rosebery \& Okanagan Landing
Foot Victoria Drive, Vancouver
Whitehorse
Esplanade St. E., North Vancouver
1729 W. Georgia St., Vancouver
650 Denman St., Vancouver
6628 Sperling Rd., Vancouver
Ft. Rogers St., North Vancouver Victoria
Waterfront St., Prince Rupert
1969 W. Georgia St., Vancouver
61 Duncan St., New Westminster
660 Gilford St., Vancouver
2146 Alder St., Vancouver
Esquimalt

