



CANADA SCIENCE AND
TECHNOLOGY MUSEUM
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DU CANADA



Roy Belshaw Waterous Collection

WAT
Accession AS0095

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IngeniumCanada.org

Roy Belshaw Waterous Collection

WAT

AS0095

Identifier: WAT

Title: Roy Belshaw Waterous Collection

Creator: Waterous Engine Works Co., Roy Belshaw

Dates: 1837-2009, predominantly 1890-1970.

Extent: 6.6 metres of textual records and other material

Scope and Content: Fonds consist of engineering drawings, photographic material, company records, employee records, product catalogues, company research, and other material relating to Waterous equipment, plant operations, and the employees of the Waterous Engine Works Co. 1874-1926, Waterous Ltd. 1926-1953 and Koehring-Waterous Ltd. 1953-1992. Textual records consist of corporate history, directors and shareholder's minutes, order books, insurance appraisals, letters patents, deeds and mortgages, financial ledgers, stocks and bond issues, and brochures. There is also research by Roy Belshaw and his related correspondence. The engineering plans consist of 1773 drawings 1894-1931, mostly 1908-1931. Graphic material consists of 402 glass plate negatives, 171 negatives, 384 photographic prints, 1880-1960.

Company History: The predecessor of the various Waterous companies was a foundry established by P. C. Van Brocklin in Brantford, Ontario in 1844. The foundry made stoves and plows until Charles H. Waterous (1814-1892) joined in 1848. Waterous, with his experience as a machinist and founder, enlarged the product line to include sawmills, which became the standard products of the Brantford Engine Works Co. Waterous was the first company to introduce the straight line sawmill, thousands of which were put into operation around the world. Waterous also manufactured portable steam engines. In 1874 Waterous and his sons become the sole owners of the foundry which they renamed the Waterous Engine Works Co. In 1877 Waterous received the right to manufacture the Champion Vertical steam engine which was very popular for agricultural work. Waterous developed a traction engine version of this engine, but in 1890 the company started to build conventional horizontal-boilered traction engines. They were a popular product until demand fell off and the company ceased making them in 1911. By 1887, the company has an office in Winnipeg, and two Waterous sons established a factory in St. Paul Minnesota for the manufacture of fire engines for North-American cities. In 1929 the company bought the Edmonton Iron Works which became the Waterous headquarters for the Canadian West.

The company prospered throughout the early and mid-twentieth century by adding road making equipment to its portfolio. It also acquired patents for pulp-wood grinders, which gave the company an important role, along with screens, beaters, and vats, in the pulp and paper industry. After World War Two, the Waterous family sold their controlling interest in the company to Modern Tool Works based in Toronto. The Koehring Co., an American manufacture of construction and forestry equipment, purchased the Waterous Company in Sept 1953, which became Koehring-Waterous Ltd. In 1988, Koehring-Waterous was acquired by Timberjack Ltd., a forest harvesting equipment manufacturer in Woodstock, Ontario. The final years of the Waterous plant was spent in the production of log skidders, winches and other related tree harvesting equipment. In 1991, Timberjack was purchased by Rauma Repola, a Finnish conglomerate with interests in construction machinery and woodland equipment. On October 6, 1992 an announcement was made of the closure of the

Written by Larry McNally, 2012.

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Koehring-Waterous plant. The plant's equipment was auctioned off in February 1993 and the buildings razed in 1994.

Sources :

Hand, Mike. (2000). *Iron, Steam and Wood: 150 Years with the Waterous Engine Works Company*. St. George, Ont.: M. Hand.

Custodial History: In 1993, while the contents of Koehring-Waterous Ltd. were being auctioned off, the numerous surviving records of the company were thrown into a dumpster. Life-long Waterous and Koehring-Waterous employee Roy Belshaw received permission from Timberjack Ltd. to rescue the documents, drawings, glass plates and photos that had been thrown out. Roy Belshaw kept the collection at his home in Brantford Ontario, servicing numerous requests for photographs, drawings and other historical information over the next 15 years. Mr. Belshaw made various further acquisitions over the years. Mr. Belshaw died in 2008 and the collection became the property of his daughter, Linda Beatty of Uxbridge Ontario. Ms. Beatty offered the collection to the Canada Science and Technology Museum in March of 2009. The Collection was certified as Cultural Property in 2015.

Notes:

Finding Aids: A file or item-level inventory for each series is available upon request.

Physical Description: Fonds includes approximately 6.6 linear metres of textual records, 1481 photographs, and 1900 drawings.

Related Materials: CSTM Archives also preserves the Waterous Engineering Drawings collection, which primarily consists of drawings of fire fighting vehicles.

Associated Materials: Roy Belshaw loaned some materials to the Archives of Ontario for copying in 1979. See Fonds 220 Waterous Engine Works Company fonds:

<http://ao.minisisinc.com/scripts/mwimain.dll/144/PROV/PROV/REFD+F+220?SESSIONSEARCH>

Access points:

Waterous Engine Works Co.

Belshaw, Roy, 1930-2008

Fire engines

Fire extinction – Equipment and supplies

Incendies – Extinction

Véhicules d'incendie

French Translation

Identifiant : WAT

Titre : Collection Waterous de Roy Belshaw

Créateur : Waterous Engine Works Co., Roy Belshaw

Dates: 1837-2009, surtout 1890 à 1970

Étendue : 6.6 mètres de documents textuels et autre documents

Portée et contenu : Le fonds renferme des dessins techniques, des photos, des dossiers d'entreprise, des dossiers de personnel, des catalogues de produits, des documents de recherche et d'autres documents relatifs aux équipements Waterous, aux activités de l'usine et aux employés des sociétés Waterous Engine Works Co. (1874 à 1926), Waterous Ltd. (1926 à 1953) et Koehring-Waterous Ltd. (1953 à 1992). Les documents textuels comprennent des historiques de l'entreprise, des procès-verbaux des réunions du

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conseil d'administration et des assemblées d'actionnaires, des carnets de commandes, des évaluations aux fins d'assurance, des lettres patentes, des titres de propriété et documents bancaires, des livres comptables, des documents d'émissions d'actions et d'obligations et des brochures. On y trouve aussi du matériel de recherche produit par Roy Belshaw et de la correspondance. Les plans d'ingénierie comprennent 1 773 dessins produits entre 1894 et 1931, surtout de 1908 à 1931. Les documents iconographiques comprennent 402 négatifs sur plaque de verre, 171 négatifs et 384 photographies (1880 à 1960).

Historique de l'entreprise : C'est une fonderie établie en 1844 par P.C. Van Brocklin à Brantford, en Ontario, qui a donné lieu aux diverses entreprises Waterous. Cette fonderie fabriquait des poêles et des charrues jusqu'à l'arrivée de Charles H. Waterous (1814-1892), machiniste et fondeur, qui a tôt fait d'élargir la gamme de produits pour y inclure des scieries, lesquelles sont devenues le produit phare de la Brantford Engine Works Co. Waterous a été le premier à introduire la scierie en ligne droite, un outillage qui a été vendu par milliers partout dans le monde. La compagnie fabriquait également des machines à vapeur portatives. En 1874, Waterous et ses fils sont devenus propriétaires de la scierie, qu'ils ont renommée Waterous Engine Works Co. En 1877, Waterous a obtenu le droit de fabriquer la machine à vapeur verticale Champion, qui était très populaire auprès des agriculteurs. Bien que Waterous avait mis au point une version de l'appareil avec moteur de traction, en 1890, l'entreprise a commencé à fabriquer des moteurs de traction plus conventionnels (très populaires jusqu'à ce que la demande chute et que la compagnie cesse de les fabriquer, en 1911). En 1887, la compagnie avait un bureau à Winnipeg, et deux des fils Waterous ont établi une usine à St. Paul, au Minnesota, pour la fabrication de matériel de pompiers pour les villes de l'Amérique du Nord. En 1929, la compagnie a acheté la société Edmonton Iron Works, dont les installations sont devenues le siège social de la Waterous pour tout l'ouest du Canada.

La société Waterous a prospéré pendant tout le début et le milieu du vingtième siècle grâce à l'ajout au portefeuille de matériel de construction de routes. Elle a également fait l'acquisition de brevets visant des broyeurs de pulpe de bois, ce qui, avec la fabrication de filtres, de triturateurs et de cuves, lui a conféré une place prédominante dans l'industrie des pâtes et papiers. Après la Seconde Guerre mondiale, la famille Waterous a vendu sa participation majoritaire dans la compagnie à la Modern Tool Works, à Toronto. La société Koehring Co., un fabricant américain de matériel de construction et de foresterie, a acheté la Waterous Company en septembre 1953, qui est alors devenue la Koehring-Waterous Ltd. En 1988, Koehring-Waterous a été acquise par la société Timberjack Ltd., un fabricant de matériel de récolte forestière situé à Woodstock, en Ontario. Les dernières années de production de l'usine Waterous ont été consacrées à la fabrication de débusqueuses, de treuils et d'autre équipement d'exploitation forestière. En 1991, Timberjack a été achetée par Rauma Repola, un conglomérat finlandais ayant des intérêts commerciaux dans l'équipement de construction et le matériel forestier. Le 6 octobre 1992, la fermeture de l'usine Koehring-Waterous est annoncée. Tout le matériel d'usine a été vendu aux enchères en février 1993, et les bâtiments ont été rasés en 1994.

Historique de conservation :

En 1993, si tout le contenu des bâtiments Koehring-Waterous se liquidait aux enchères, les documents de l'entreprise ont toutefois été jetés dans une décharge. Roy Belshaw, un employé de longue date à Waterous/Koehring-Waterous, a été autorisé par la TimberJack Ltd. à récupérer les documents mis aux ordures, y compris des dessins techniques, des plaques de verre et des photographies. Belshaw a conservé les documents chez lui, à Brantford, en Ontario, répondant favorablement aux diverses demandes de consultation pendant les 15 années subséquentes, et ajoutant même d'autres documents à la collection au fil du temps. Belshaw est décédé en 2008, et la collection a été léguée à sa fille, Linda Beatty, habitant à Uxbridge, en Ontario. Mme Beatty a offert la collection au Musée des sciences et de la technologie du Canada en mars 2009. La collection a été désignée en tant que bien culturel en 2015.

Notes :

Instruments de recherche : Un inventaire au niveau de dossier/pièce est disponible sur demande.

Collation : Comprend environ 6.6 mètres de documents textuels, 1481 photographies, et 1900 dessins techniques

Documents connexes : Le MSTC conserve également une collection de dessins techniques de Waterous qui comprend principalement des plans de véhicules de lutte contre les incendies.

Documents reliés : Roy Belshaw a prêté une partie de sa collection aux Archives de l'Ontario pour faire des reproductions en 1979. Voir le fonds F 220 «Waterous Engine Works Company fonds » :

<http://ao.minisisinc.com/scripts/mwimain.dll/144/PROV/PROV/REFD+F+220?SESSIONSEARCH>

Series Descriptions

Series 01 - Minutes

Dates: 1874-1981

Extent: 1.2 m of textual records.

Scope and Content: Series consists minutes of the Directors of the Waterous Engine Works Co. 1874-1926, Waterous Ltd. 1926-1953 and Canadian Koehring-Waterous Co. Ltd. 1953-1957. Early volumes include information concerning shareholders and shareholders' minutes. Also the minutes and other inserted documents relating to shareholders meetings of the Waterous Ltd. 1926-1953 and Koehring-Waterous Ltd. 1953-1981.

Physical Description: Series consists of 11 albums of various shapes and sizes, with inserted documents of various kinds and two bound albums of different sizes of shareholders minutes.

Series 02 - Order Books

Dates: 1890-1946.

Extent: 20 cm textual records.

Scope and Content: Series consists of an order book containing data on Waterous' orders 1890-1905 as well as five books containing orders and specifications for boiler construction 1912-1946. Also two order books for McEwen stationary steam engines manufactured by Waterous 1898-1924.

Physical Description: The six equipment and boiler books are very large.

Series 03 - Insurance Appraisals

Dates: 1912-1956.

Extent: 15 cm of textual records

Scope and Content: Series includes bound volumes, covering the appraisals in 1912, 1941, 1947 and 1955. Each assessment includes a complete inventory as well as an assessment of the value of the building, machinery and other items in the Waterous factory in Brantford.

Series 04 - Account Books, Ledgers, Stock Certificates and other Financial Reports

Dates: 1874-1967.

Extent: 1.9 metres of textual records

Scope and Content: Series contains 13 financial ledgers, audits, and annual reports for the Waterous Engine Works Co., Waterous Ltd. and Koehring-Waterous Ltd. Also cheque books, seven stock certificate books, bond issues and cancelled coupons relating to the Waterous companies 1874-1959 and the Bear River Pulp Co. 1924-1944.

Written by Larry McNally, 2012.

Slight revisions and draft French translation, Adele Torrance, 2018.

French proofreading Céline Mongeau, Linda Larocque Linguistic Services, 06-2018.

Related Materials: Some similar material is found in the Series 001, Minutes, and in Series 05, Legal Agreements.

Series 05 - Legal Agreements, Charters, Deeds, Mortgages, and Wills

Date: 1837-1965.

Extent: 1 m of textual records

Scope and Content: Series consists of a large number of legal documents relating to the company's various charters, patents, deeds, mortgages and other articles of agreement. There are many loose documents and items of correspondence. The material has been sorted into general categories for mortgages, deeds, etc.

Physical Description: Some documents are oversize.

Series 06 - Product Catalogs, Manuals and Price Lists

Dates: 1875-1967.

Extent: 50 cm of textual records

Scope and Content: The series includes a rare illustrated catalogue of the Waterous product range circa 1875. Other illustrated product catalogs are from 1890-1892, many of them annotated by their original owners, as well as loose product sheets and cards. Products covered range from sawmills to steam engines and boilers. Also 5 manuals and 6 brochures relating to excavators, cranes, and pulp grinders, built by the Koehring Co., 1954-1967.

Related Materials: There are prints and negatives relating to these products in the Late Waterous and Koehring-Waterous Negatives Series.

Series: 07 - Employee Related Material

Series Date: 1910 -1995

Series Extent: 20 cm of textual records

Series Scope and Content: Three minute books of the Brantford Lodge 1105 of the International Association of Machinists 1945-1956, Waterous/AMCA Quarter Century Club 1946-1981 and Waterous Employees Credit Union 1952, 1991. A file on M. Helen Straith, Waterous' first draftsman, as well as newspaper clippings, seniority lists and other textual material on Waterous employees.

Series: 08 – Roy Belshaw & Family

Series Date: 1921 -2009

Series Extent: 50 cm of textual records and graphic material

Series Scope and Content: Series consists of Waterous employment files for Samuel, Wilfred and Roy Belshaw 1921-1969. Roy Belshaw's apprenticeship papers 1941-1944 and 25 year certificates 1971. Belshaw's correspondence and research files show him as the unofficial historian of the Waterous companies and its products 1966-2009. Also his photo album of the empty Waterous factory, its demolition and site redevelopment 1992-1995.

Series: 09 - Company History

Series Date: 1927 -1969

Series Extent: 95 cm of textual records and graphic material

Series Scope and Content: Series consists of a box of historical articles, photos and newspaper clippings about the Waterous companies. A binder containing histories of Koehring subsidiaries 1966-1969. A scrapbook covering the Waterous centennial in July 1944 and a photo album of Waterous war production 1939-1945. Two copies of the *Brantford Expositor* for the semi-centennial of the City of Brantford in 1927.

Series: 10 - Waterous Glass Plate Negatives

Written by Larry McNally, 2012.

Slight revisions and draft French translation, Adele Torrance, 2018.

French proofreading Céline Mongeau, Linda Larocque Linguistic Services, 06-2018.

Series Date: 1880-1925

Series Extent: 402 photographs : glass plate negatives ; 20.3 x 25.4 cm

Series Scope and Content: Series consists of 8 x 10 inch glass plate negatives of Waterous road equipment, ranging from steam traction engines to fire trucks, ladder and hose trucks and road rollers. The photo numbers start at 236 and go to 3954, with one additional plate numbered 5329.

Series Physical Description: The plates are 8 by 10 inches or slightly smaller. Some of the items captured in these photographs can be identified in the order books. **Copies and Originals:** There are copies of these images in the Large Negative, Small Negative and Print Series **Series Notes:** There are three binders listing Waterous and Koehring-Waterous photos with captions and dates. The information on photos before Photo 2801 (October 1927) was lost in a fire.

Series: 11 - Waterous Large Negatives

Series Date: 1900-1955

Series Extent: 126 photographs: negatives ; 20.3 x 25.4 cm

Series Scope and Content: The series consists of 8 x 10 negatives of Waterous Company products ranging from fire equipment to road rollers, **Series Physical Description:** These are all 8 by 10 negatives. **Copies and Originals:** Some of the negatives are copies of images with the same number in the Glass Plates Series **Series Notes:** There are three binders: one has only Waterous numbers, a second seems to have only K-W numbers from the 1950s, and third is divided by subject but contains numbers from both the Waterous and the K-W series of photos. This indicates that KW started a number sequence somewhere in the 5 or 6 thousands, but the entries in the book make it clear that there are identical numbers for photos that are actually a decade apart in date. So some care has to be used in using this list to identify the images. 6600 number are listed as being in both 1945 and 1955. There are a large number of unidentified negatives in this series.

Series: 12 - Waterous Small Negatives

Series Date: 1890-1921

Series Extent: 45 photographs : negatives ; 7.6 x 12.7 cm

Series Scope and Content: Series consists of 45 3 x 5 negative copies of selected images from the glass plate series covering fire fighting equipment and equipment demonstrations. Fifteen of the images have no negative number. These copies were made in 2005.

Copies and Originals: There are prints of these images in the Print Series.

Series: 13 - Koehring-Waterous Negatives

Series Date: 1957-1967

Series Extent: 555 photographs : negatives

Series Scope and Content: Photos of Koehring-Waterous Ltd. products relating to pulp and paper (grinders, chippers, beaters and screens) governors and asphalt plants. Also some photos of the company's machine shop and assembly floor.

Series: 14 - Waterous Photographic Prints

Series Date: 1880-1960

Series Extent: 332 photographs : positive prints and 12.5 cm of textual records

Scope and Content: Series includes two boxes of un-numbered and numbered photos of Waterous equipment, factory, yard, homes, and etc., mostly from the Waterous period, but with 27 prints from the Koehring-Waterous years. There is also an index listing Waterous and Koehring-Waterous photos with captions and dates. The information on photos before Photo 2801 (October 1927) was lost in a fire.

Copies and Originals: Most of these prints are copies of negatives in the glass plate series. Some have been printed from the the small negative series.

Series: 15 – Waterous Oversize Prints

Series Date: 1913-1982

Series Extent: 21 photographs: positive prints

Series Scope and Content: Some unidentified group photos of Waterous employees, five photos of members of the Waterous 25 Year Club 1944-1982. Three prints of Brantford sports teams “Homedale Tigers” 1913, “Waterous F.C.” 1936-1938 and “Waterous Ladies Basketball Club” 1945. Large prints of the Waterous factory, foundry, machine shop, tool room and assembly building.

Copies and Originals: Some factory and shop views have Waterous glass plate negative numbers.

Series: 16 - Waterous Engineering Drawings Microfilm

Series Date: 1905-1907, 1946-1948

Series Extent: 27 microfilm reels of drawings

Series Scope and Content: Series consists of 26 reels of 35 mm microfilm containing A, B, C, and D size technical drawings produced by the Waterous Engine Works between 1905 and 1907. Reel 27 contains a three part index.

Copies and Originals: Drawings correspond in part to the 1, 2, 3, and 4 size actual drawings in the CSTM and the Roy Belshaw Collecton. Many of the 1, 2, and 3 size drawings are earlier than those on the microfilm.

Series Notes: These microfilms were made in 1947 and early 1948. The films do not include the early drawings of the company, many of which are in the CSTM Waterous Drawings Collection. Not all of the drawings on the microfilms are legible.

Series 17 - Waterous Engineering Drawings

Series Date: n.d., 1892-1931

Series Extent: 1773 drawings : 1731 linens and 42 blueprints

Series Scope and Content: Series consists of engineering drawings produced by the Waterous drafting office for its internal needs and for external clients. Machinery includes circular and band sawmills including log handling equipment, power transmission systems and Big and later New Champion edgers. In the 1920s there are drawings for auxillary equipment for pulp and paper mills including log conveyors, log grinders, beaters, vats, tanks and Voith screens. Clients included large numbers of small sawmills as well as large wood producers including in Price Brothers, Dalhousie Lumber Co. J.R. Booth, James Maclaren Co. and many others across New Brunswick, Quebec and Ontario. Waterous also did heavy engineering work such as oil tanks for K.C. Irving and a coal plant for Quaker Mills in Peterborough, Ontario. Plans were prepared for clients in England, France, British East and West Africa, India, Japan as well as numerous pulp and paper mills in the northern United States. The plans are organized by plan number and generally give the name of the client, name of project/part name and date.

Written by Larry McNally.

Revised by Adele Torrance 2018-05.