

Year	VALQUA's Technical History
1927	Founded NIPPON BRAKE LINING SEISAKUSHO for manufacturing of brake linings for automobiles and various high-speed machines.
1929	Started research of Compressed Asbestos Sheet and various gaskets.
1930	Started manufacturing of clutch facings.
1931	Started manufacturing of asbestos braided gaskets. Started manufacturing of high-test lining.
1932	Started manufacturing of asbestos spiral gaskets. Started research and prototype manufacturing of cloth-inserted rubber molds. Started manufacturing of laminated compressed sheets.
1933	Received a request from the Imperial Japanese Navy Technical Department to research special high-temperature and high-pressure metal gaskets. Started manufacturing of laminated Compressed Asbestos Sheet (No. 902, 305, and 1000).
1934	Completed research on special high-temperature and high-pressure gaskets (No. 1250). Registered special high-temperature and high-pressure gaskets in the Navy Purchasing List.
1935	Installed Japan's first manufacturing equipment for large Compressed Asbestos Sheet (for 120-inch sheets). Started manufacturing of prototypes of large Compressed Asbestos Sheet.
1936	Started research work on fabrication of synthetic rubber.
1937	Had synthetic rubber gaskets installed in KAMIKAZE as the first Japanese product in a round-the-world flight. Started manufacturing of grease (No. 1).
1939	Obtained polysulfide synthetic rubber, HITACOLE,*1 and started research work on oil resistance gaskets.
1941	Started manufacturing of synthetic rubber gaskets for aircraft and asbestos compression sheets.
1943	Appointed by the Army Fuel Plant for research on gaskets for oil refining equipment. Started manufacturing of aircraft gaskets. Following the National General Mobilization Law (Article 25), ordered to conduct research tests for power-generating high-temperature and high-pressure gaskets. Started manufacturing of metal gaskets for fuel and industrial use.
1947	Started manufacturing of piston valves.
1949	Completed a molding processing method for polyvinyl chloride resin and started sales. Started research work on a new braiding method for asbestos mole-braided gaskets. Commissioned by the Ministry of International Trade and Industry for research on high-temperature, high-pressure, and superheated steam gaskets.
1950	Successfully completed research work on new braiding methods and started manufacturing mole-braided (latticing) gaskets. Completed research work on high-temperature, high-pressure, and superheated steam gaskets commissioned by the Ministry of International Trade and Industry.
1951	Completed research work on synthetic rubber oil seals for bearing oil prevention. Started research work on silicon rubber processing. Imported Teflon powder*2 from the United States and started research work on the Teflon molding method. Started research work on O-rings.
1952	Completed research work on the fabrication of Teflon and started sales as VALFLON®. Started manufacturing of synthetic rubber oil seals. Completed research work on metal spiral gaskets and started manufacturing and sales as VALQUATIGHT™.
1953	Completed MECHANICAL SEAL for rotators and started manufacturing and sales. Received subsidiary aid from the Ministry of International Trade and Industry for research on the performance of aircraft gaskets made mainly of silicon or Teflon.
1954	Started manufacturing and sale of O-rings.

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1955	Received subsidiary aid from Ministry of International Trade and Industry for fabrication and manufacturing technology of polytetrafluoroethylene.
1956	Started manufacturing and sale of Teflon-coated adhesive tape. Imported Teflon extruders and started research work on thin-walled tubes, hoses, and coated cables. Started manufacturing and sale of fluorocarbon rubber. Synthetic rubber gaskets used for fighter jets (F-86) for the first time in Japan.
1957	Completion of industrialization tests for fabrication and manufacturing technology of polytetrafluoroethylene approved by the Ministry of International Trade and Industry. Released technical report, VALQUA REVIEW.
1958	Started manufacturing and sale of Combined Drip-Ring Gaskets (No. 2800).
1959	Started manufacturing and sale of screw joint seals, TAPE SEAL™.
1960	Started manufacturing and sale of VALFLON® glass cloths (No. 7920). Started manufacturing and sale of ball valves.
1962	Started manufacturing and sale of ultrahigh molecular weight polyethylene (HOSUTAREN GUR*3) products. Product name: VALREN.
1963	Started manufacturing and sale of Teflon grease SPRAY WAX (UNON S).
1964	Developed Japan's first Teflon fiber and started manufacturing and sale. Completed the world's largest (400 mm) VALFLON® large-diameter pipes.
1965	Founded NIPPON ELASTON, CO. as a joint venture with the German company ELASTOMER AG and started manufacturing and sale of thermoplastic polyurethane, ELASTORUN.*4 Started manufacturing and sales of Cordseal<Soft>™.
1966	Entered a technologically cooperation with the American company DURA METALLIC and started manufacturing and sale of DURA SEAL.
1967	Newly developed fire-resistant coating material, REF-LIGHT, received certification by the Ministry of Construction. Jointly developed valve seals with the American company DINNER CO. Started manufacturing and sale of high-temperature metal coating, VALFLON® BELLOWS.
1968	Started manufacturing and sale of carbon fiber-braided gaskets (No. 97-CT, Current No. 6232). Completed standardization of mechanical seals for mixers and started manufacturing and sales.
1969	Started manufacturing and sale of PURE VALFLON® PASTE. Started manufacturing and sale of flexible duct connectors, FLECTOR™.
1970	Started manufacturing and sale of metal hollow O-rings.
1971	Started manufacturing and sale of VALFLON® powder gaskets, PHLOROTIGHT. Received approval to display the API (American Petroleum Inst.) certification mark for ball valves meeting API Standard 6D. Started manufacturing and sale of VALFLON® Lining Ball Valve. Started sale of DOH and MS-type gas removal apparatuses. Started manufacturing and sale of heat transfer spiral gaskets with twigs, HEAT TRANSFER VALQUATIGHT™ WITH TWIG. Started manufacturing and sale of fire-safe ball valves.
1972	Started sale of flexible tubes for air conditioners, VALFLC. Started manufacturing and sale of ELASTORUN Laminated Films. Started manufacturing and sale of Gasket Cutter in new design. Started manufacturing and sale of VALFLON® FLAWLESS GASKET.
1973	Developed completely wet spraying VALQUA WET and started accepting orders. Started sale of gasket tools in new design. Started manufacturing and sale of VALFLON® THERMAL CONTRACTION TUBE.
1974	Started manufacturing and sale of gland gaskets with braided carbon fibers, CHEMSEAL™.

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1974	Started manufacturing and sale of soundproofing construction material, NOISE DAMPER.
1975	Started manufacturing and sale of Japan's first completely unlubricated gasket, NORPACK™. Received development subsidiary paid from the Ministry of International Trade and Industry, Agency of Industrial Science and Technology for research on non-contact seal applications. Developed anti-corrosive Compressed Asbestos Sheet (No. 1500AC, No. 1501AC, and No. 921AC) and started manufacturing and sales. Jointly developed steel-fiber-mixed lightweight concrete slabs with Kajima Corporation. Entrusted by the Research Development Corp. of Japan with the development of manufacturing technology for heat and alkali-resistant glass fibers.
1976	Developed acid-proof Compressed Asbestos Sheet made from chrysotile (No. 1000) and started manufacturing and sales. As an important technology research and development project, received subsidiary aid from the Ministry of International Trade and Industry, Agency of Industrial Science and Technology for industrialization tests for manufacturing of heat-resistant and fireproof building materials with Shirasu glass fibers. Terminated contract with the British company TBA INDUSTRIAL PRODUCTS LTD. for technical cooperation for dust laying asbestos cloth.
1978	Terminated contract with the American company FLUOROWARE INC. for cross-licensing of fluorocarbon resin PFA injection molding, transfer and compressing molding techniques.
1979	Started manufacturing and sale of fused fluorocarbon resin PFA wafer carrier containers and jigs for semiconductor manufacturing.
1982	Started manufacturing and sale of Compressed Non-Asbestos Sheet. Started sale of metal-coated spring gaskets, TRYPACK™.
1983	Started sale of Oil Sheet. Started sale of gland gaskets for aramid fiber rotation shafts.
1984	Started sale of VALFLON CRYSTAL RUBBER™.
1985	Promoted development of various non-asbestos products. Started sale of GREENTIGHT.
1990	Started sale of VALFLON® Semi-rigid Coaxial Cable.
1993	Received the Plunket Award from the American company DU PONT for ALL FLUOROCARBON RESIN BAR CODE. Established Nara Works in Gojo, Nara, and started manufacturing of highly functional rubber products.
1994	Started sale of CLEANTIGHT®.
1995	Received the Plunket Award from the American company DU PONT for PFA tubes for copying machine rolls. Started sale of large-capacity, site-construction-type VALFLON® Sheet Lining Tank.
1997	Received the Plunket Award from the American company DU PONT for site-construction-type VALFLON® Sheet Lining Large-Capacity Tank.
1998	Started sale of high-purity fluorocarbon rubber seals for liquid crystal/semiconductor devices, ARMOR® series (4 types).
1999	Started sale of rectangular gate valves for semiconductor or FPD manufacturing device manufacturers.
2001	Started publishing quarterly issues of VALQUA Technology News to pass down most of the roles of the VALQUA REVIEW.
2002	Received the Plunket Award from the American company DU PONT for electrode films of electric double-layer capacitors.
2004	Started sale of heat-resistant non-asbestos sheet gaskets, BLACKHYPER®. Founded the Fluorocarbon Resin Search Institute and VALQUA Seal Research Institute in Shanghai, China.
2005	Completely terminated manufacturing of asbestos products.
2006	Completely terminated sale of asbestos products.

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2006	Started sale of high-temperature VALFLON® jacket gaskets, No. N7030 (H) SERIES.
2008	Integrated the Fluorocarbon Resin Search Institute and VALQUA Seal Research Institute into the VALQUA China Research Institute (newly established in Shanghai).
2010	Founded J/V VALMEI Corporation (headquartered in Tokyo) to reinforce Expanded Fluoroplastics (sa-PTFE™) business. Founded China Membrane Institute in VALQUA China Research Institute in Shanghai, China. Launched enhanced China operations through an operational and capital tie up with Daikin Industries, Ltd. Started sale of PTFE sheet gaskets with white filler, BRIGHTHYPER®.
2011	Established the China Functional Resin Research Institute in Shanghai VALQUA Fluoroplastics Corp. Ltd. as a technological development base.
2012	Started sale of CRYSTALLINE SILICA FREE SERIES using amorphous silica instead of crystalline silica as an environmental measure.
2013	Founded ADVANCE FLON TECHNOLOGIES (SHANGHAI) CO., LTD. as a joint venture with Guarniflon S.p.A., Italian company, in China. Started sale of PTFE sheet gaskets with filler, UNIVERSALHYPER®. Started sale of earthquake-proof countermeasure gaskets No. 6596A.
2015	Published "New Gaskets and Gasketing Technology" (by Takahito Nishida, senior fellow at VALQUA).
2016	Started sale of RCF FREE SERIES using materials other than ceramic fibers as an environmental measure. Opened APPLIED R&D INSTITUTE in South Korea. Started sales of improved seal paste, classified as non-dangerous goods with a safe, environmental, carcinogen-free combination.

* 1 HITACOLE is the name of a product manufactured by HITACHI, LTD.

* 2 Teflon is the name of a fluorocarbon resin product manufactured by DU PONT.

* 3 HOSUTAREN GUR is the name of a product manufactured by HOECHST.

* 4 ELASTORUN is a trademark of BASF Polyurethanes GmbH (Gesellschaft mit beschränkter Haftung).