

### 创造创新的综合阀门制造商

# Creating Innovation





# 对信赖的无极限挑战



总经理 President and CEO

河西 聪

# 作为一家拥有独立开发能力的综合阀门专业制造商, 我们一直致力于为产业界提供最新的创新理念。

As a comprehensive manufacturer specializing in valve products with unique development capabilities, we will continue to create and innovate for industry.

### Message from the President

株式会社HAMAI自1927创立以来,一直以市场占有率业界首屈一指的家用液化石油气容器用阀门为业务支柱,为人们的生活和产业的发展做出自己的贡献。此外,我们的业务范围还扩展到工业用高压气体容器用阀门和管道用球阀领域。现在,我们正在向全球不同行业的客户提供高质量的产品。

近来,在本公司业务主轴之一的能源领域,基于地球环境保护和资源有效利用的考量,清洁能源的发展受到了国际社会的关注。为响应这个时代的需求,我们在世界上首先成功开发出符合全球标准的氢燃料电池汽车(FCV)用的安全栓。为公司未来的业务发展打下扎实的基础。

今后,我们将继续秉持多年来一直坚守的"安全""放心""高品质"的发展理念,潜心于先进技术领域的钻研,不断创新,为业界的发展贡献自己的力量。

Since our foundation in 1927, Hamai has contributed to people's lives and industrial development with valves for household LP gas cylinders for which we have captured the top market share in the industry as a core of our business. Furthermore, we have expanded our business domain to valves for industrial high-pressure gas cylinders and ball valves for the control of fluids, and we are now providing our high-quality products to customers in diverse industries all over the world.

Recently, in the energy field, which is one of our main business fields, shifting to clean energy has internationally gained attention concerning global environment protection and effective resource utilization. In order to respond to these needs of the times, we have succeeded in developing pressure relief devices for hydrogen fuel cell vehicles (FCV), which comply with the global standards for the first time in the world. We are steadily promoting the construction of future business bases.

We will steadfastly maintain the safety, security and high quality that we have kept for a long time, devote ourselves to studying in advanced technology fields and contribute to the development of the industrial world through creation and innovation.

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# 业务介绍 Business Overview

### 液化石油气阀门业务

### LPG valve business



液化石油气容器用阀门 LPG cylinder valve

日本全国各地的家庭和事业所都在使用液化石油气瓶。该液化石油气瓶的约40%均使用是本公司产的液化石油气容器用阀门,再加上国内大型汽车制造商生产的出租车也采用本公司产的液化石油气汽车容器用阀门等,本公司多项产品在业内均占有顶级的市场份额。此外,我们还生产大型容器用阀门和液化石油气散装装置用阀门等,利用丰富的业绩和经验来应对液化石油气领域的广泛需求。

LPG cylinders are used in households and business facilities all over Japan. Approximately 40 percent of such gas cylinders use our LPG cylinder valves; LPG taxis manufactured by leading domestic automobile manufacturers use our cylinder valves for LPG vehicle. We have many products with the top market share in the industry. In addition, we meet a wide variety of needs in the LPG industry by making good use of our technology

and know-how such as valves for large LPG cylinders



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大型容器用阀门 Valves for large LPG cylinders



液化石油气散装装置用阀门 Cylinder valves for LPG bulk system

### 球阀业务

### Ball valve business



黄铜制球阀业务 Brass ball valve

球阀在各种不同的领域都是不可或缺的,从工厂生产线到建筑机械、食品机械、水处理装置、以及半导体制造设备等。我们注重高质量的国内生产,广泛应对从球阀的设计到制造、组装、检测、完成。此外,我们还根据客户的要求提供全定制服务,制造最适合客户使用环境的高性能、高品质球阀。

Ball valves are essential in every field including factory lines, construction machinery, food industry machinery, water treatment equipment and semiconductor manufacturing equipment. We are particular about high-quality and domestic production and capable of managing a wide range of issues such as design, manufacturing, assembly, inspection and completion. Moreover, we offer fully custom-made products to meet customers' special orders; we provide our customers with the high-performance and high-quality ball valves that are best for every operating environment.



无油球阀 Oil-free ball valve



带锁球阀 Ball valve with locking mechanism



自动球阀 Automatic ball valve

### 高压气体阀门业务

### High-pressure gas valve business

valves and cylinder valves for LPG bulk system.



不锈钢制自动容器用阀门
Stainless steel
automatic cylinder valve

高压气体阀门应用于压力远高于液化石油气的气体。可应用于从普通的工业用气体到半导体制造专用的特殊气体等各种类型的气体。我们通过合适的选材和高精度加工,开发制造具有优异耐压性和耐久性的高压气体阀门。此外,我们还提供各种设备用阀门、灭火器、灭火设备用、以及医疗气体用阀门等,为各种不同的领域提供高性能的产品。

High-pressure gas valves can be used at much higher pressures than those for LPG valves. Our high-pressure gas valves can handle various types of gas from general industrial gas to the special gas used in semiconductor manufacturing. We are developing and manufacturing high-pressure gas valves with excellent pressure resistance and durability through optimal material selection and high-precision processing. We provide high-performance products for diversified fields such as valves for all kinds of facilities, valves for fire extinguishers and fire extinguishing equipment, and valves for medical gas.



普通高压气体容器用阀门 Cylinder valve for industrial inert gases



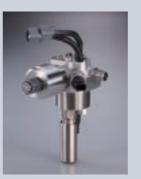
设备管道用阀门 Line valve



医疗气体用轭阀 Yoke valve for medical gas

### 清洁能源相关的机器业务

### Clean energy business



H35MPa 储罐阀门 35 MPa in-tank valve for hydrogen FCV

清洁能源正在全世界范围内迅速普及。氢燃料电池汽车(FCV)也是其中之一。FCV是通过氢燃料与空气中的氧气发生反应来进行发电和行驶的,因此不会排放废气和二氧化碳,有望减少环境负荷。本公司以多年来积累的高压气体阀门制造技术为基础,致力于以FCV为首的清洁能源领域的各种产品的开发。我们通过实施150MPa超高压气体测试和低温测试等,提供符合国际标准的产品。

Clean energy continues to spread worldwide. The hydrogen fuel cell vehicle (FCV) is one such step into the future. FCVs do not emit exhaust fumes or carbon dioxide because they generate electricity and run by reacting hydrogen fuel with oxygen in the air; therefore, they are expected to reduce the environmental load. We are developing many kinds of products for the clean energy field including FCVs on the basis of the technology for manufacturing high-pressure gas valves that we have developed over a long period of time. Our lineup of products available compliant with international standards includes products for conducting the ultrahigh pressure (150 MPa) gas test and the low-temperature test.



H70MPa 安全栓(不锈钢制/铝制) 70 MPa pressure relief device (stainless steel and aluminum versions)



45MPa 氢能源拖车容器用阀门 45 MPa valve for hydrogen trailer cylinders



天然气汽车用手动阀门 Manual valve for natural gas vehicles

III HAMAI INDUSTRIES LTD.

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### 应用本公司独有的先进高压气体阀门技术, 参与氢燃料电池汽车(FCV)用设备的开发

### 开发出符合燃料电池汽车实用化趋势的氢气阀

本公司拥有多年的液化石油气汽车用阀门生产业绩,在出租车用阀门领域也拥有很高的市场份额。在以前的天然气(CNG)汽车 用阀门的开发中,我们与容器、气体、汽车厂商共同合作,成功开发了新的阀门。

在日本国内,液化石油气用阀门类的制造商很多,但能够生产高压气体阀门的厂家屈指可数。在此背景下,我们基于先进的技术 力量和业绩,与大型汽车制造商共同努力致力于FCV实用化的研究,并在世界上首次开发成功储罐阀门。

### We developed hydrogen valves in line with the movement for practical use of FCVs.

We have a long history of technology and experience in manufacturing valves for LPG vehicles and continue to maintain a large share in the market of valves for taxis. With regard to valves for natural gas (CNG) vehicles, we have developed new valves in cooperation with cylinder, gas and automobile manufacturers.

Japan has many manufacturers of LPG valves, but only a few can manufacture high-pressure gas valves. Against this background, we became the first manufacturer worldwide to successfully develop in-tank valves in line with working on the practical use of FCVs by leading automobile manufacturers on the basis of our advanced technologies and experience.

### 首款商用 FCV 搭载的就是本公司产的储罐模块

2001年发布的第一代车型搭载的就是由本公司产的各种阀门组合成一体的储罐模块。

该款车型于次年2002年被送到首相官邸,并由当时的小泉首相亲自乘坐。此外,该车型还首次作为FCV先导车在箱根驿传中登 场,作为一款清洁能源车,因其无废气排而放受了广泛的关注。



### Our in-tank module was mounted on the first commercially available FCV.

The first model released in 2001 was equipped with an in-tank module integrating our various valves. The car was delivered to the Prime Minister's official residence in the following year, 2002, and Mr. Koizumi, the prime minister at that time, road in the car. This model was also selected as the first FCV leading car for the Hakone Ekiden relay race, and the car attracted attention as a clean vehicle free of exhaust fumes.

We have participated in the planning and development of the equipment for hydrogen fuel cell vehicles (FCV) by utilizing our dedicated proprietary sophisticated high-pressure gas valve technology.

### 实现高稳定性、无蠕变和高耐久性

本公司在世界上率先成功开发储罐阀门。今后我们将继续锤炼技术,凭借本公司独特的设计理念,致力于任何情况下都能保证 其安全性的产品开发。例如,在FCV用安全栓(PRD)的开发中,我们实施安全设计,使可溶合性合金不会受到氢气容器内部压力 的影响,实现了无蠕变(疲劳)无变形,从而实现了极高的耐久性和长久的运行稳定性。此外,该款可兼容87.5MPa的铝制和不锈 钢制双款式的PRD,在世界上首次通过国际标准"UN-R134"认证。在激烈的FCV开发国际竞争中获得的"世界第一"称号,此称 号展现了本公司的卓越的技术实力,在全球范围内获得高度评价。

### High stability, creep-free and high-durability have been achieved.

Hamai became the first manufacturer worldwide to successfully develop in-tank valves. We are still moving forward with our technology, working on developing products that exhibit reliable safety on the basis of our original design philosophy under all circumstances. With regard to pressure relief devices (PRD) for FCVs, for example, safety design is conducted so that the fusible alloy remains unaffected by the internal pressure of the hydrogen cylinder. The devices are free of creep and deformation; we accordingly ensure extremely high durability and stable operation for years. These two aluminum and stainless steel versions of the PRDs supporting 87.5 MPa have acquired the world's first global standards: the UN-R134 certification. In the international FCV development race, acquiring the title of the world's first is highly regarded all over the world as a demonstration of Hamai's outstanding technological capability.

### 确立高压 + 低温环境下的密封技术

本公司的高压阀门制造基地府中工厂(东京都)配备了超高压、最大增压能力可达150MPa的高压气体测试设备。本公司充分利 用这个高性能的测试机器,成功开发出各种高压阀门设备。此外,本公司还根据零下40℃低温充填氢燃料的特性,在低温环境下 实施低温测试。确立了氢气用阀门在"高压+低温"环境下的密封技术。



### We have established sealing technology under high pressure and at low temperature.

Our Fuchu Plant in the Tokyo Metropolis that is the base of our high-pressure valve manufacturing is equipped with high-pressure gas test facilities proudly supporting ultrahigh pressure and 150 MPa of the maximum boost capability. We have put these high-performance test facilities to full use and have developed high-pressure valves for various uses. Considering the property of hydrogen fuel that is filled at the temperature of minus 40° C, we conduct low-temperature tests at much lower temperatures. We have established sealing technology under the conditions of high pressure and low temperature that are simultaneously imposed on hydrogen valves.

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# 进军全球市场 Supplying the Global Market

### 立足于公司90余年的历史, 不断为世界提供新价值。

We continue to provide new value for the world on the basis of our history of over 90 years since our foundation.

### 发展全球业务

自1927年公司成立以来,我们以在生产高质量阀门中积累的独特技术为核心,为全球各地的客户提供高质量产品,帮助客户解决各种课题,从而实现了公司可持续发展。其中,高压黄铜/不锈钢容器阀不仅在日本国内拥有优秀的业绩,其品质在东南亚等国也得到认可。

### Global business expansion

Since our foundation in 1927, we have continuously grown by providing products to customers all over the world, helping them to solve their problems, with our proprietary technological capabilities obtained through focusing on manufacturing high-quality valves. Our high-pressure brass and stainless cylinder valves with which we have domestically had a number of pioneering results have especially been recognized as Hamai quality in countries including Southeast Asia.

### 在全球领先的半导体生产国——韩国设立公司法人

2013年2月,由本公司全资出资的半导体制造设备用阀门生产工厂——HAMAI KOREA CO.,LTD.在韩国釜山成立。目标是成为覆盖韩国乃至整个东南亚的生产和出口基地。

We established a local subsidiary in South Korea that is the world's leading semiconductor producing country.

We established Hamai Korea Co., Ltd., which we own 100 percent, in Busan, South Korea in February 2013 to manufacture valves for semiconductor manufacturing equipment. The company operates to be a production and export base that covers South Korea and all of East Asia.





### 事业所一览

#### **Business offices**

### 株式会社 HAMAI 公司总部 HAMAI INDUSTRIES LIMITED

〒141-8512

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通过ISO9001认证/通过ISO14001认证

SG Square 2F, 7-7-7 Nishi-Gotanda, 141-8512 Shinagawa-Ku, Tokyo (Switchboard number of Sales Division)
Phone: +81-3-3492-6655, Fax: +81-3-3492-6660
(Switchboard number of Administrative Division)
Phone: +81-3-3492-6711, Fax: +81-3-3492-6646
Acquisition of ISO 9001 and 14001 certification

### 府中工厂 Fuchu Plant

〒183-0046 东京都府中市西原町1-3 电话:042-334-5801 传真:042-365-1415 通过ISO9001认证/通过ISO14001认证 "大臣认定试验者"认定工厂 日本消防设备安全中心认定品制造工厂

1-3 Nishihara-Cho, 183-0046 Fuchu, Tokyo Phone: +81-42-334-5801, Fax: +81-42-365-1415 Acquisition of ISO 9001 and 14001 certification

### 大多喜工厂 Otaki Plant

〒298-0206 千叶县夷隅郡大多喜町横山880 电话:0470-82-3377 传真:0470-82-3953 通过ISO9001认证/通过ISO14001认证 "大臣认定试验者"认定工厂

880 Yokoyama, 298-0206 Otaki Isumi, Chiba Phone: +81-470-82-3377, Fax: +81-470-82-3953 Acquisition of ISO 9001 and 14001 certification

### 大阪营业所 Osaka Sales Office

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### 仙台营业所 Sendai Sales Office

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### 仓敷办事处 Kurashiki Branch Office

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Boulvard 102, 107 Ikusaka, 710-0002 Kurashiki, Okayama Phone: +81-86-464-2722, Fax: +81-86-464-2733

### 北陆 HAMAI 株式会社 Hokuriku Hamai Ltd.

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### 四国 HAMAI 株式会社 Shikoku Hamai Ltd.

〒769-0103 香川县高松市国分寺町福家甲3146-22 电话:087-874-3515 传真:087-874-3579

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### Hamai Korea Co., Ltd.

114, Mieumsandan 1-ro 15 beon-gil, Gangseo-gu, Busan, Korea 电话:+82-51-316-6516 传真:+82-51-316-6515 http://www.hamaikorea.com/



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## Corporate Information

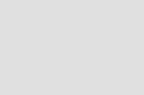
February	1927	滨井荣以生产气体阻断装置为目的,创立了个人作坊"滨井制作所"。————————————————————————————————————
December	1939	由个人经营改组为无限公司。 Reorganized from private management to a general partnership company.
January	1943	公司总部从西大崎一丁目迁往西五反田五丁目 (现为提供介护服务的收费制老人院) Moved the Headquarters from 1-Nishi-Osaki to 5-Nishi-Gotanda (Today a nursing home).
August	1953	开始制造丙烷气体容器用阀门。 Started manufacturing valves for propane gas cylinders.
October	1958	无限公司合并重组为股份公司,公司改名为"株式会社滨井制作所"。 公司逐渐退出气体阻断装置的生产制造。 Merged the general partnership company and incorporated the company as Hamai Manufacturing Co., Ltd. Downsized and then withdrew from manufacturing gas cutting equipment.
November	1960	在东京都府中市设立府中工厂。 与总部工厂组成双工厂体制,成为以液化石油气容器用阀门为主力产品的生产基地。 Newly constructed Fuchu Plant at Fuchu City, Tokyo. Established the production base of valves for LPG cylinders that were our key product using a two-plant system consisting of the Headquarters Plant and Fuchu Plant.
June	1962	销售部门与公司分离,并成立独立的销售公司"MISUJI SHOJI LTD.",向全国扩展销售网。 Separated the sales division, made the division independent and established it as MISUJI SHOJI LTD. to expand the sales network nationwide.
June	1972	在日本证券业协会的店头市场注册公司股票。 Registered the company's shares for over-the-counter trading with the Japan Securities Dealers Association.
May	1974	在千叶县夷隅郡大多喜町设立大多喜工厂,开始生产管道用球阀。  Newly constructed the Otaki Plant in Otaki Cho, Isumi County, Chiba Prefecture and started manufacturing line ball valves.
April	1976	关闭总部工厂,总部迁往府中工厂。 Moved the Headquarters Plant to Fuchu Plant and closed it.
July	1984	MISUJI SHOJI LTD.合并重组,编入本公司营业部。 Merged MISUJI SHOJI LTD. and turned it into the Sales Department.
July	1989	液化石油气容器用阀门的生产基地从府中迁往大多喜。 府中工厂转为生产高压气体容器用阀门、特殊气体用阀门及其外部设备产品。 Moved the production base of valves for LPG cylinders from Fuchu to Otaki. Shifted the production of Fuchu Plant to valves for high-pressure gas cylinders, valves for special gases and their peripheral equipment.
April	1991	公司改名为株式会社HAMAI。 Changed the company name to HAMAI INDUSTRIES LIMITED.
August	2002	公司启动主打项目"氢燃料电池用阀门"的开发。 Started the project focused on developing valves for hydrogen fuel cells.
December	2004	公司股票在JASDAQ证券交易所上市。 Listed the stock on the JASDAQ Securities Exchange, Inc.
October	2005	液化石油气容器用阀门的生产量累计达2亿个。 Reached production of 200 million valves in total for LPG cylinders.
February	2013	在韩国成立Hamai Korea Co., Ltd. (100%出资)。 Established HAMAI KOREA Co., Ltd. (100 percent owned) in South Korea.
July	2013	因东京证券交易所和大阪证券交易所合并, 公司股票在东京证券交易所(JASDAQ市场)上市。 Listed the stock on the Tokyo Stock Exchange, Inc. (JASDAQ market) because the Tokyo Stock Exchange, Inc. and Osaka Exchange, Inc. were combined.
October	2015	公司总部迁移到品川区西五反田七丁目7-7 SG广场2F。 Moved the Headquarters to SG Square 2F 7-7-7 Nishi-Gotanda, Shinagawa-Ku
April	2017	提供介护服务的收费制老人院"NICHII老人院"在本公司总部的旧址上建成开业。————————————————————————————————————















### 株式会社HAMAI

HAMAI INDUSTRIES LIMITED Trade name

商号

公司总部 〒141-8512 东京都品川区西五反田7-7-7 SG广场2 F

电话: 03-3492-6655(营业本部总机) 传真: 03-3492-6711(管理本部总机) Headquarters

SG Square 2F, 7-7-7 Nishi-Gotanda, 141-8512 Shinagawa-Ku, Tokyo

Phone: +81-3-3492-6655 (Sales Division), Phone: +81-3-3492-6711(Administrative Division)

成立 1927年2月1日

February 1, 1927 Foundation

公司目的 精密机械设备的生产与销售 各种阀门的生产与销售 Objectives

高压气体关联设备的生产与销售

不动产租赁

上述项目所附随的所有业务

Manufacture and sale of precision machinery

Manufacture and sale of valves

Manufacture and sale of high-pressure gas-related equipment

Real estate rental

All work incidental to the business items mentioned above

股票和资本金 Stock and capital 已发行的股票总数: 7,424,140股

资 本 金: 3亿9,530万日元

上市证券交易所:东京证券交易所(JASDAQ市场)

证 券 代 码:6497

Total number of issued shares: 7,424,140 shares

Capital: 395,3 million yen

Stock exchange on which shares of the company are listed: Tokyo Stock Exchange, Inc. (JASDAQ market)

Securities code: 6497

决算期

12月 Accounting period

December

董 事 Officers

<b></b> 尽经埋		冲凸 跽	President and CEO	Salusiii Nasai
常务董事		渡边 宏幸	Managing director	Hiroyuki Watanabe
常务董事		河村 慎一	Managing director	Shinichi Kawamura
常务董事		吉村 真介	Managing director	Shinsuke Yoshimura
董	事	丸冈 信行	Director	Nobuyuki Maruoka
董	事	河内 茂	Director	Shigeru Kawauchi
董	事	川村 信之	Director	Nobuyuki Kawamura
董	事	冈田 信次郎	Director	Shinjiro Okada
董	事	手冢 幸一	Director	Koichi Tezuka
董	事	吉羽真一郎	Director	Shinichiro Yoshiba

资质认证 Qualification 通过ISO9001认证(总部(营业本部)、大多喜工厂、府中工厂) ※认证机构 TÜV Rheinland Japan Ltd.(TÜV莱茵日本株式会社) 通过ISO14001认证 ※认证机构 高压气体保安协会ISO审查中心

ISO 9001 certification (Headquarters (Sales Division), Otaki Plant, Fuchu Plant) (Certification authority: TÜV Rheinland Japan Ltd.) ISO 14001 certification(Certification authority: ISO Registration Center, High Pressure Gas Safety Institute of Japan)

大臣认证工厂(按类型)

日本消防设备安全中心认定品制造工厂

厚生劳动省医疗用品制造许可

东京都医疗用品制造许可

Ministerial certified factory by types

Factory manufacturing products certified by the Fire Equipment and Safety Center of Japan Ministry of Health, Labour and Welfare/medical equipment manufacturing approval

Tokyo Metropolis/medical equipment manufacturing license