

Tsuneichi Ichimaru, Founder of Ichimaru-Giken



The design office used by the founder is still preserved as the "Founder's Room".



### **Company Profile**

Company Name	ROCKY-ICHIMARU Co., Ltd.
	[former Ichimaru-Giken Co., Ltd.]
President & CEO	Hironobu Ichimaru
Company Address	601, Oaza Tsunemochi, Chikugo City,
	Fukuoka 833-0016, Japan
	TEL +81-942-53-7510
	FAX +81-942-52-8799
Establishment	November 1st, 1978
Capital	JPY 18,000,000
Main Business Activities	Designing and manufacturing of Industrial machinery and equipment
	• Valves and piping packages for tire curing press, ROCKY Valve & ROCKY Panel Unit
	Main equipment for tire curing press & tire building machine

www.rocky-ichimaru.co.jp/en/ URL



Tire curing machine valve no.1 (photograph from December 1978)





Constant, steadfast progress. Earning trust through methodical and persistent manufacturing. These are the sources of our strength. We have adopted this approach because we know there is value in things people don't immediately notice, and where people don't normally see. We seek to generate new value and create new innovations.

# The value in the invisible.



### Pursuing visible and invisible value

Hironobu Ichimaru President & CEO

#### Supplying niche-leading products to the world

Since the time this company was founded up to the present day, we have designed and manufactured a range of products such as tire curing machine valves, tire manufacturing equipment and high-pressure oil hydraulic machinery. One of these, the "Rocky Valve", a tire curing machine valve produced since our foundation, is the world market share leader with 90% of the Japanese market and 30% of the international market. It is renowned worldwide as the leading product in its niche globally.

After taking control of the high-pressure oil hydraulics machinery department of our general distributor RIX Corporation in 1999, we began designing and manufacturing high-pressure oil hydraulic machinery operating at oil pressures of 70MPa. The products we manufacture are highly trusted by customers in Japan and overseas, as unique products with advanced design know-how and technical value.

#### New innovations come from understanding the detail

The most important thing to us when developing a product is the spirit of basic technology and development. We are dedicated not only to technical excellence and making products which meet the needs of our customers, but also to design and development which understands their true purpose.

Realizing these aims requires a thorough understanding of the practicalities on the ground. Rather than performing tasks by simply relying on specifications, we endeavor to capture the details by visiting the actual site of operations, asking for customer opinions, and seeing, hearing, smelling and sensing the temperature in person.

We are dedicated to ensuring that we provide high customer value by using the above information to generate flexible ideas focused on our knowledge and experiences as a manufacturing organization and the functions required of the machine.

#### The organizational concept of "The value in the invisible."

In 2018 we unveiled our new organizational concept of "The value in the invisible.".

The products and services we provide can be thought of as visible value. We strive to create additional value on top of this by focusing on details and activities which can't be observed from the outside. Examples might be light chamfering or edges on processed components for safety reasons, designs which account for ease of maintenance, scorch-preventive coatings on bolts, welcoming visitors, or company-wide consistency training. While these are just a few examples, the idea of taking full account of the invisible from all perspectives of our business activities is not just about quality improvement, but a means of improving the image of our products and our company, while supplying products and services which provide a visible outcome which exceeds the customer's expectations. By equally regarding visible and invisible value and demonstrating synergies, we strive to nurture a positive cycle which responds to customer expectations with results.

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#### Aiming to be an "interesting organization" with products that live up to the Made in Japan ethos

In the future, we will continue to develop and supply products and services with high added value to the tire manufacturers of the world as well as a range of other industries, thereby we will increasingly be recognized across the world as an "organization of interest" generating added value, and contribute to the development of society through manufacturing.

To achieve this, we consider it important to transform the sites of our key employee activities from being sites across Japan to sites across the world, to engage with other organizations, gather information resources and provide technical services, while practicing reliable manufacturing and sharing organizational and product information.

As a Japanese manufacturing organization advancing into the world, we will operate as an "organization of interest with a dream" which lives up to the Made in Japan ethos, by providing products which typify the Japanese attention to detail and shine with artisan spirit.

#### History

1978	Ichimaru-Giken Co., Ltd. was established in Kurume city, Fukuoka.	
1979	Company moved to Chikugo city, Fukuoka.	
1993	Completed and move to No.1 factory in Chikugo city.	
1995	Completed No.2 factory.	
1997	Expanded No.2 factory.	
1999 No.3 factory Took on Oil-H manufacture	No.3 factory completed.	
	Took on Oil-Hydraulic department of RIX Corporation, and began manufacture of high- pressure oil hydraulic equipment.	
2003	Completed No.4 factory.	
2006	Completed No.5 factory.	
2009	Founder, Tsuneichi Ichimaru retired from office and Kenji Matsuura took office as President & CEO.	
2012	Kenji Matsuura retired from office and Tsutomu Hirao took office as President & CEO.	
2016	Quality Control Section was established.	
2017	Tsutomu Hirao retired from office, and Hironobu Ichimaru took office as President & CEO. Management philosophy was defined.	
2018	Culture Book was created. 40th Anniversary Ceremony was held.	
	Completed No.6 factory.	
2019	Acquisition of ISO 9001 and ISO 14001 Certification. Company name changed to "ROCKY-ICHIMARU Co., Ltd.".	

## The value in the invisible.





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#### Valves for tire curing press: Rocky Valve

This valve is used primarily in the internal line, external line and water hydraulic line of tire curing presses, and has given many years of field proven performance in Japan and overseas. It is capable of sealing for long periods at the high temperature and high pressure fluids required for tire curing and enables easy maintenance, including parts replacement. It is also capable of adapting to a range of specialized specifications to suit the requirements and usage for customer needs.



#### End connection: thread (Rc, NPT), flange (JIS, DIN, ANSI)

#### A thread and flange connection valve to meet a range of standards.

- · 2/3-way piston valve (TPC series)
- · 4-way piston valve (FP series)
- · Steam regulating valve (SR series)
- · Control valve (DC series)
- · Knuckle joint (LI series)

proprietary standard.

· Control valve (PDC series)

· Lift check valve (PVL series)

· Needle valve (PNV series)

**End connection: other** 

· 2-way piston valve (MP/MT series)

· 2/3-way piston valve (PMS series)

· 2/3-way piston valve (PTPC series)

· Y-type check valve (PYL series)

· Ejector (PHE series)

 $\cdot$  2-way piston valve (RPC/OPC series) · 2/3-way piston valve (GP/GT series)

specification.

· 4-way piston valve (PFW series) · Steam regulating valve (PSR series)

· Relief check valve (PRW, PAW series)

- · Y-type check valve (YL series)
- · Ejector (HE series)
- · Relief check valve (LCV series)

End connection: panel (for manifold)

· 2/3-way piston valve (PPM/PMM/PPW series)

A manifold panel connection valve to our

Specialized valve series built to customer



![](_page_4_Picture_15.jpeg)

**FP** series

**TPC** series

DC series

![](_page_4_Picture_19.jpeg)

![](_page_4_Picture_20.jpeg)

**PPW** series

PPM series (NC)

![](_page_4_Picture_28.jpeg)

MP series (NO) MT series (NC) PMS series (NC)

### **ROCKY-ICHIMARU** Panel Unit (RPU)

A compact manifold piping system using panel connector valves to our proprietary standard. Fully compatible with internal line, external line, water hydraulic and air systems, this unit is designed and manufactured on a one-off basis to suit the customer's system and usage site. The RPU can also be designed and manufactured as a thermal enclosure to maintain the temperature of the RPU and save energy.

#### **RPU Examples**

![](_page_4_Picture_34.jpeg)

![](_page_4_Picture_35.jpeg)

For internal line

For internal line (with thermal enclosure)

![](_page_4_Picture_38.jpeg)

For platen and container jacket steam line

For water hydraulic driven SMO cylinders

### **Rubber Machinery equipment**

We design and manufacture a range of machinery used in equipment used in the tire manufacturing process.

We design and manufacture components and products used in today's equipment, including for many older devices operational for many years, we conduct interviews to discover current issues and customer requirements, we make improvements and design and manufacture machinery with new added value, and we undertake development of proprietary products and joint development with customers.

#### **Devices for BOM and AFV press**

BAG cylinder (dome-type, platen-type), Bag well, Vertical loader chuck, Loader system, Unloader, Hydraulic cylinder, Ram cylinder, Stripping ram, Chuck ejector, Platen, BOM container height adjustment mechanism, REC (Water hydraulic center mechanism with LVDT), Heat shield, etc.

![](_page_4_Picture_46.jpeg)

![](_page_4_Picture_47.jpeg)

**PSR** series

![](_page_4_Picture_52.jpeg)

![](_page_4_Picture_53.jpeg)

![](_page_4_Picture_54.jpeg)

![](_page_4_Picture_57.jpeg)

For BAG cylinders and water hydraulic cylinders

![](_page_4_Picture_60.jpeg)

For air driven SMO cylinders

![](_page_4_Picture_62.jpeg)

**BAG cylinder** (BOM dome-type)

![](_page_4_Picture_64.jpeg)

**REC (Water hydraulic center** mechanism with LVDT)

![](_page_5_Picture_0.jpeg)

#### **Devices for oil hydraulic tire curing machines**

Oil hydraulic driven center mechanism, Loader chuck and Loader system, Squeeze cylinder

\* Center mechanism, Loader, Unloader, PCI and Squeeze cylinder are also provided as OEM/ODM to major press manufacturers.

#### **Proprietary development devices**

Automation, labor saving and safety measures for tire curing machines, and some development devices for quality improvements.

![](_page_5_Picture_6.jpeg)

#### **Compact SP center mechanism**

An oil hydraulic or water driven compact SP center mechanism. The oil hydraulic driven model can be manufactured for OR tire use. The PC/TB sizes include a servo driven type.

![](_page_5_Picture_9.jpeg)

Gas Circulation Unit (GCU) Circulating gas and steam within the bladder during curing reduces the upper and lower temperature difference within the bladder and reduces the variation in curing. Bladder clamp devices The lower bladder clamp ring can be fixed to the BAG head of the center mechanism using a specialized double cam mechanism through the ac-

tion of a single air cylinder.

![](_page_5_Picture_12.jpeg)

Steam joint When exchanging molds, the steam system for the container jacket is attached and detached remotely rather than using a manual coupler.

![](_page_5_Picture_14.jpeg)

mechanism through the action of a single air cyl-

#### Shaping Unit (SU)

inder

A core unit for G tire to be inserted in bladder in its off line stage. Both beads of the G tire are caught and shaped, allowing high precision insertion.

#### **Devices for tire building machines**

We manufacture various drums used in tire building machines using blueprints supplied by the customer, both as new and refurbished one-off units based on customer requirements. • Shaping drums • Band drums • Belt drums

· Other specialized drums

• N • C • N • C

#### **High-pressure oil hydraulic devices**

We design and manufacture a range of applied devices for use in high-pressure oil hydraulics including pumps, cylinders, valves and accessories compatible with high-pressure oil hydraulics at 70MPa. As well as the products listed in our catalog, we are able to offer combinations of devices to suit the customer's usage case. We further offer design and manufacture of units utilizing oil hydraulic pumps and cylinders and all devices incorporating electrical control, including supplied as OEM/ODM.

#### **Examples of applicable devices**

 $\cdot$  Calking devices for oil hydraulic hose and piping (supplied OEM/ODM)

- Punchers (supplied OEM/ODM)
- · Notchers (for steelworks)
- · High-pressure hydraulic boosters
- $\cdot$  800 ton and 1,000 ton presses
- · Golf ball curing machines
- · Engine-type oil hydraulic pumps
- Bolt tensioners, etc.

#### Other

We also design and manufacture a range of devices not aimed for other industry.

- Examples:
- $\cdot$  High-pressure valves (highest usage pressure: 10MPa, 15MPa)
- $\cdot$  Angle sheet-type large 2-way valves (primarily for steelworks)
- $\cdot$  High-pressure gas accredited valves
- $\cdot$  Canada TSSA standard compatible valves (CRN certification number)
- · Air cylinders for tundish use

![](_page_5_Picture_42.jpeg)

#### **Other devices**

- We also design and manufacture devices used in processes other than tire curing and tire shaping machines based on customer requirements.
- Examples:
- · Mold preheating devices
- · Oil injectors
- · Mill rubber test press
- · G tire carry lifter
- Auto joint valve

![](_page_5_Picture_51.jpeg)

![](_page_5_Picture_52.jpeg)

1,000 ton press for insulation sheet manufacture

![](_page_5_Picture_54.jpeg)

Engine drive high-pressure oil hydraulic pump

![](_page_5_Picture_56.jpeg)

High-pressure valve (DN15~50)

![](_page_5_Picture_58.jpeg)

Angle sheet-type large 2way valve (DN50~200)

![](_page_6_Picture_0.jpeg)

![](_page_6_Picture_1.jpeg)

![](_page_6_Picture_2.jpeg)

![](_page_6_Picture_3.jpeg)

The ROCKY-ICHIMARU Culture Book and mascot character: embodying our vision