

Woodward Valves & Actuator Servicing for LNG Thermal Gas Turbines

Profile

Winter 2022



Woods Tomisato in 1978

Who We Are

<http://www.woods-corp.co.jp/>

Highlights

- The sole-authorized channel partner of Woodward Inc. in Japan
- Revenue predominantly from aftermarket servicing (Maintenance & Overhaul) of Woodward products in Japan
- Extensive customer base among the heavy industry and marine sectors in Japan
- Expertise in mechanical/electrical control and actuation
- Own office and factory facilities in Chiba and Kobe

Timeline

2002	<ul style="list-style-type: none">• Launched in Kobe Japan following the acquisition of Woodward Kansai Office• Recognized as Woodward's sole-authorized channel partner for Japan
2008	<ul style="list-style-type: none">• Began operations in Woodward's Tomisato factory in Chiba
2010	<ul style="list-style-type: none">• Began after-market servicing of heavy-frame gas turbines at Tomisato factory
2015	<ul style="list-style-type: none">• Acquired Tomisato factory facility from Woodward
2020	<ul style="list-style-type: none">• Founder CEO stepped down, change to current CEO Natsuki Miyata

Lines of Business

Woodward-Related

Repair/Maintenance/OH

- Mech&Elec governors
- Digital turbine controls
- Field Service

Prime Mover Control

- Retrofit
- Engineering
- Commissioning

Parts & Product Sales

Heavy-frame Gas Turbines

- Fuel Valve & Actuator repair and OH
- Ancillary components

Power Gensets

- Engine control systems
- Power management
- Design & engineering

Customer Training



Non-Woodward

Ship Automation System Engineering



Perimeter security



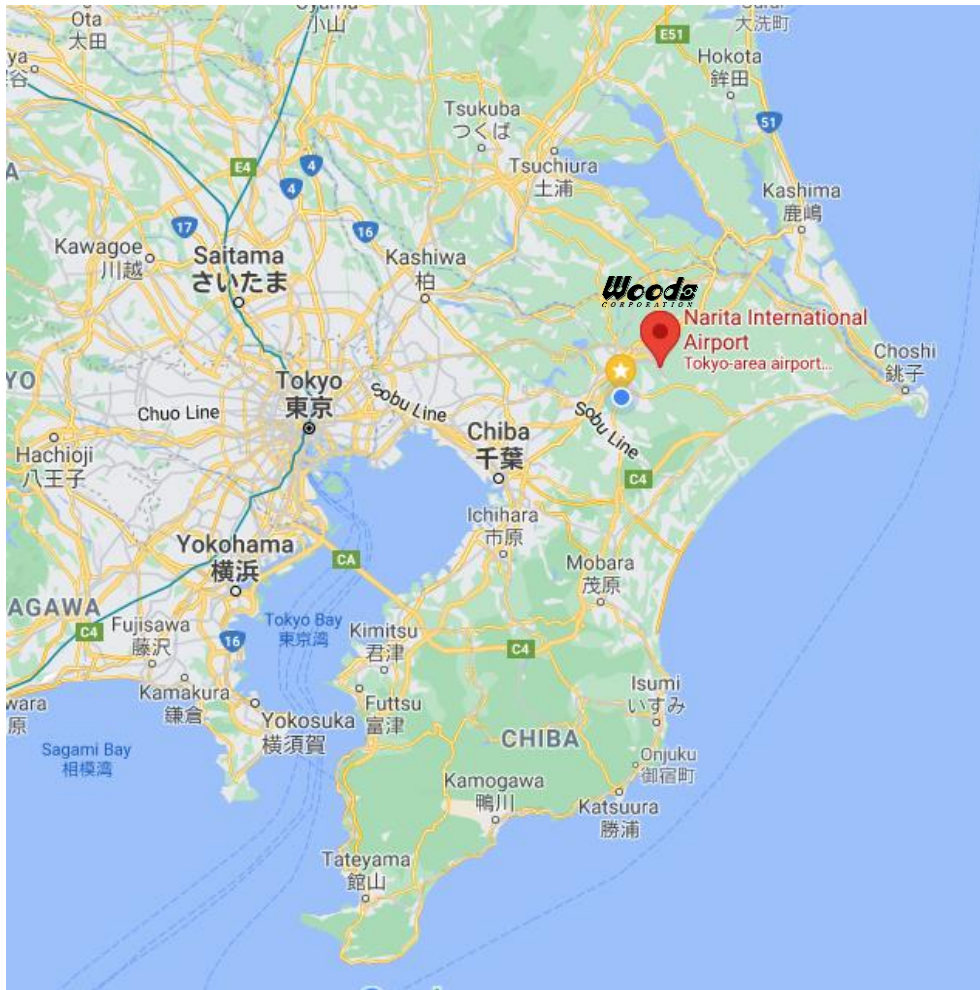
Maritime security



Selling Agent Business



Woods Tomisato Facility



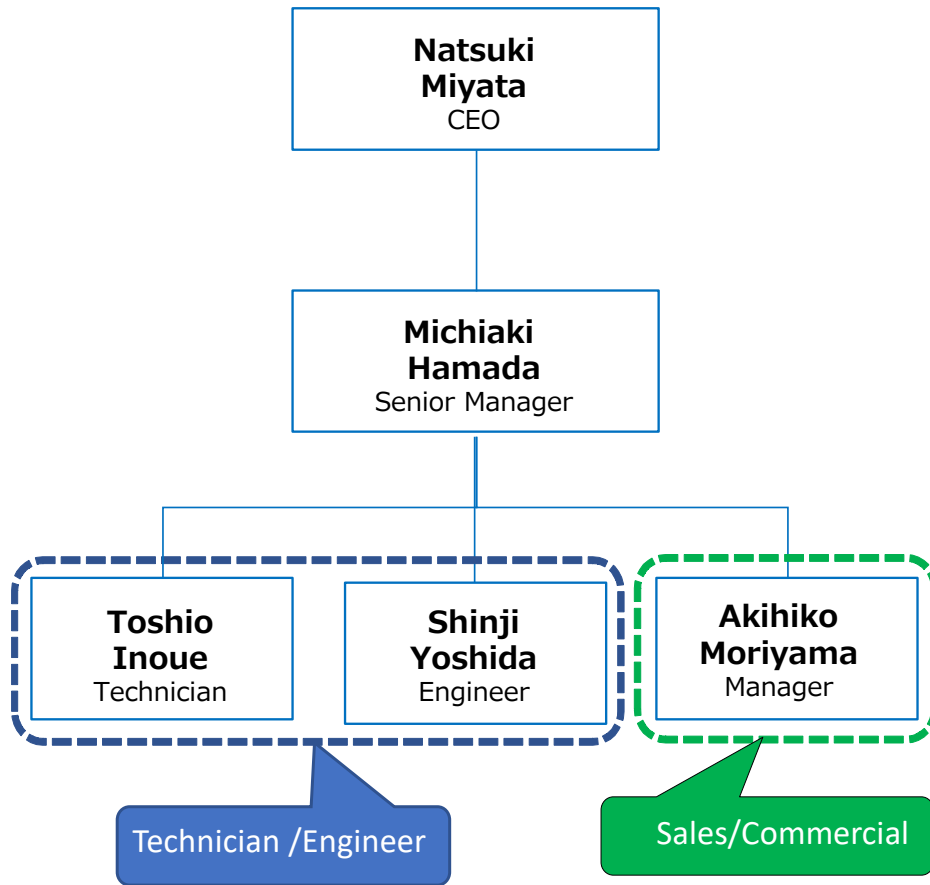
- Woods Tomisato is located just 20 minutes from Narita Airport, the primary gateway for international air cargo
- Our proximity will save time on logistics and turnaround time



Valve and Actuator for Heavy Frame Size Turbines

Woodward Valves & Actuator Servicing
for LNG Thermal Gas Turbines

Woods Team Key Members



Natsuki Miyata President & CEO	SMBC JPMorgan BNP Paribas Joined Woods in 2015
Michiaki Hamada Senior Manager LGV Business	ANA GE Japan Joined Woods in 2013 Years of relevant experience: 28
Toshio Inoue Chief Technician	Woodward Japan Joined Woods in 2008 Years of relevant experience: 15
Shinji Yoshida Chief Engineer	TDK Joined Woods in 2019 Years of relevant experience: 9

Service Operation

- Work Area



- Wash & Clean Area



- Electric Product Test
Proprietary test stand



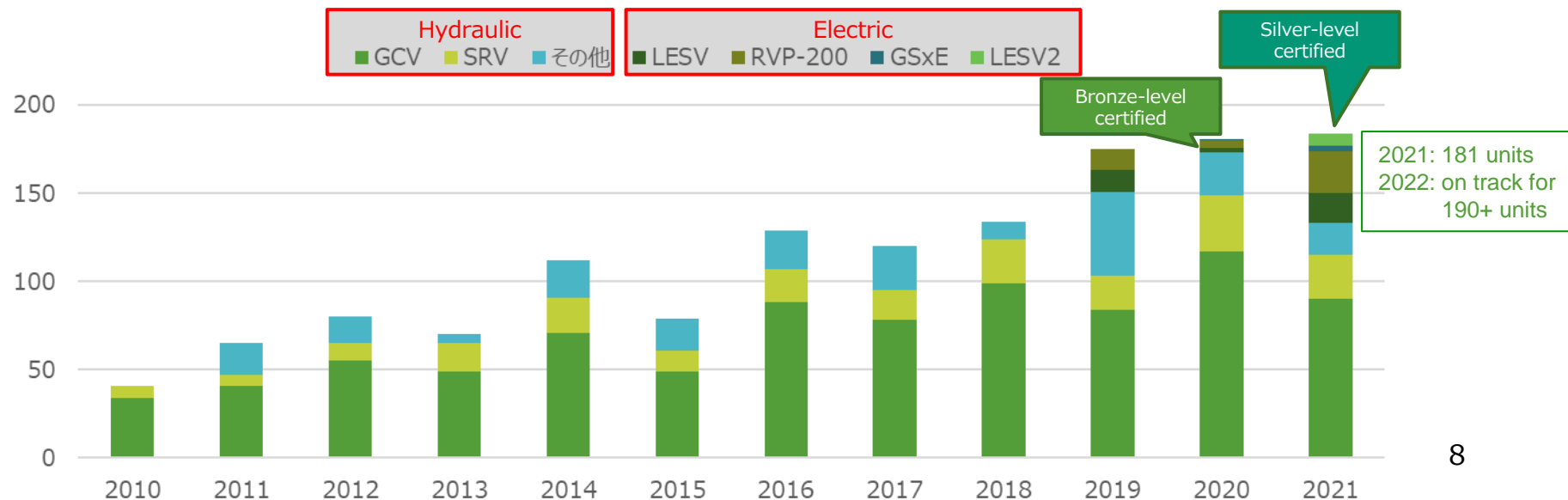
- Hydraulic Product Test



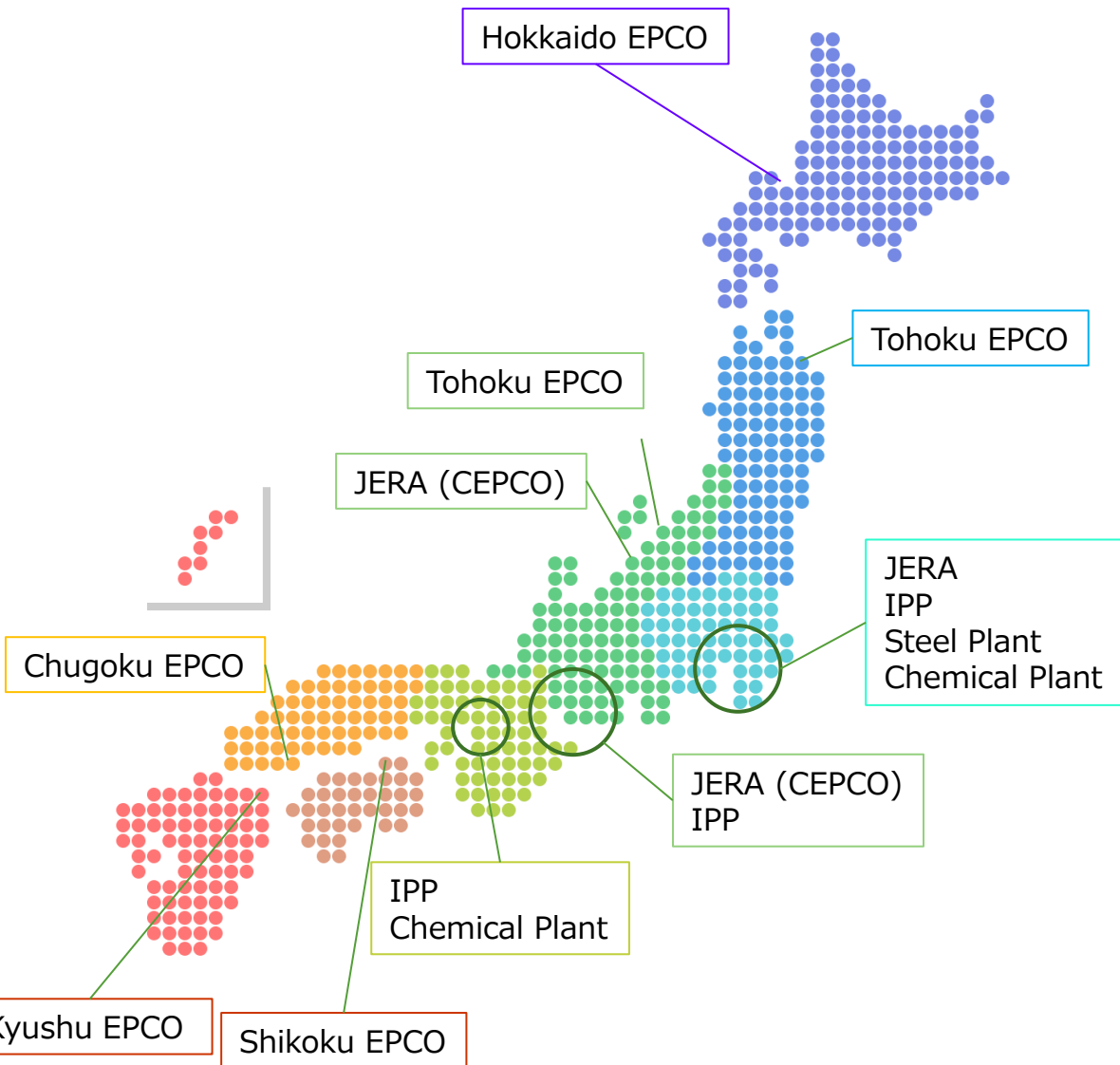
Unparalleled Service Track Record

- Repair & overhaul, and final inspection services on Woodward valves and actuators used in heavy-frame gas turbines by GE and MHI
- Extensive track record and experience working with Japan domestic EP sites since 2010
- The sole Woodward-accredited facility in Asia for aftermarket services
 - Silver-level service facility on Woodward electrically-actuated valves and actuators
 - LESV (Large Electric Sonic Valve), RVP-200 (Rotary Valve Platform), GSxE/P (Gas Rotary Stop Valve w/ Electric Actuation or Pneumatic), ELA (Electric Linear Actuator) : Certified in 2021
 - LESV-II: To be certified in early 2023

of units serviced

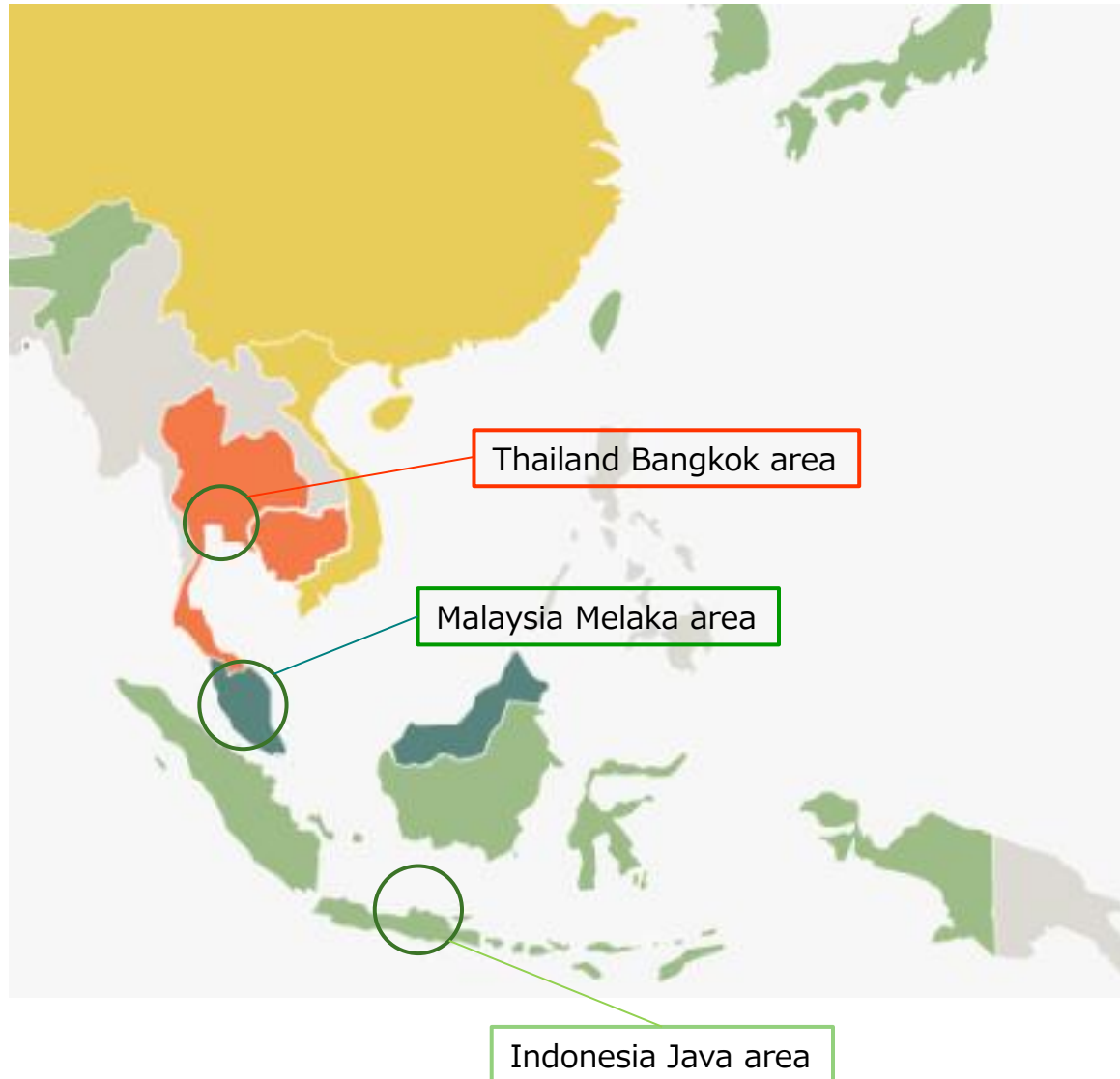


Woods Serviced Sites in Japan



Japan Total 24 Users
Hokkaido EPCO,
Tohoku EPCO
JERA
Chugoku EPCO
Shikoku EPCO
Kyushu EPCO and IPP
with 101 Gas Turbines
658 Valves & Actuators

Woods Serviced Sites in Asia



Non-Japan Sites
Malaysia, Thailand, Indonesia
Total 5 Users