### JENBACHER

# SKILLS FOR EXCELLENCE

### Services that matter



### **SKILLS FOR EXCELLENCE**

In our fast-moving energy landscape, your technical personnel need the knowledge to carry out your Jenbacher plant's basic maintenance tasks and optimize the plant's performance. Based on our original equipment manufacturer (OEM) expertise, our highly experienced trainers will work with your operators to develop the skills and knowledge needed to get the most from your Jenbacher system.



In an industry focused on increasing efficiencies and continuously improving plant operations by lowering downtime and costs, your technicians must be familiar with the latest technology, methods, and diagnostic tools. Training is a vital element for operators to meet these needs for faster, better, and more economical work performance.

#### Your strategic partner

As your Jenbacher system's OEM, INNIO Group provides you with excellent training capabilities and infrastructure for an exceptional learning experience. We help you gain the right skills and knowledge so you can get the most out of your Jenbacher energy plant.

#### Innovation strength

INNIO Group is continuously taking our technologies, services, and digital systems to the next level, using the latest innovation tools along with tested processes. We enable your team to manage your energy systems efficiently and sustainably, and we build on your feedback. Thanks to your continuous inputs, we constantly improve content, methods, and materials for our training offerings. As a result, 95% of our customers recommend attending Jenbacher training courses.



# **LEARNING FROM** THE EXPERTS

As the OEM that developed your Jenbacher energy systems, we help you gain the skills and knowledge you need for optimal plant performance. Our training center in Jenbach is the Center of Excellence for all our training-related initiatives.

#### A global network

Our excellent training infrastructure includes practice engines, simulators, and all necessary tools. You will find these at our worldwide training facilities in Jenbach, the U.S., China, and Thailand as well as at some distributor facilities.

### **Efficient and local**

We invest heavily in the professional development of our worldwide product trainers, who represent more than 20 countries through our global certified trainer network. Our Jenbacher trainings are offered in multiple languages, making it efficient and easy for your operators to attend our classes.

#### **Training material and equipment**

Through the strong collaboration between the training center and our Jenbacher Engineering experts, our training modules cover the latest developments as soon as a new product is launched. In most cases, our training locations have access to practice engine blocks – from simple gensets to containerized solutions and including newer as well as older component versions. This allows training participants to practice in a real-life and safe environment. Feedback gathered during trainings from participants gets forwarded to Engineering teams to continuously enhance the Jenbacher technology.

#### Modern digital tools

At INNIO Group, we offer you traditional training methods – such as simulators to help you optimize your daily operations - as well as modern digital tools such as e-learnings, augmented reality applications, and 3D engine views. With the use of special augmented reality (AR) devices, our on-the-job-trainings can bring your learning experience to the next level.

# **YOUR OEM TRAINING ADVANTAGES**



### **Optimized plant operations**

Get the most out of your Jenbacher energy system with the right skills and knowledge.

#### **Cost efficiency**

Increase your plant uptime and lower your cost of operation with skilled technicians.

#### The latest technology

Stay up-to-date with training content aligned to the newest product developments.

### **Comprehensive portfolio**

Learn through theoretical as well as practical trainings, on-site coaching, and digital training classes.

### Safety and environmental regulation compliance



Increase your team's awareness and give them the right expertise to properly use technology, methods, and tools.

#### Proven success

- 10,000+ classroom days per year
- Recommended by 95% of customers

- About 3,500 training participants (online and classroom) annually - Worldwide established network of training facilities and trainers





## **TAILORED SKILLS FOR YOUR OPERATIONS**

### The Jenbacher training portfolio

We empower you with the right skills to get the most out of your Jenbacher technology. Working with training participants from beginners to highly experienced technicians, our Jenbacher certified trainers use theoretical and practical training as well as on-site coaching and digital training tools.

#### Our trainings are tailored to your needs:

#### **Basic training**

For operators with less experience who need to develop skills to carry out the maintenance activities performed every 2,000 operating hours.

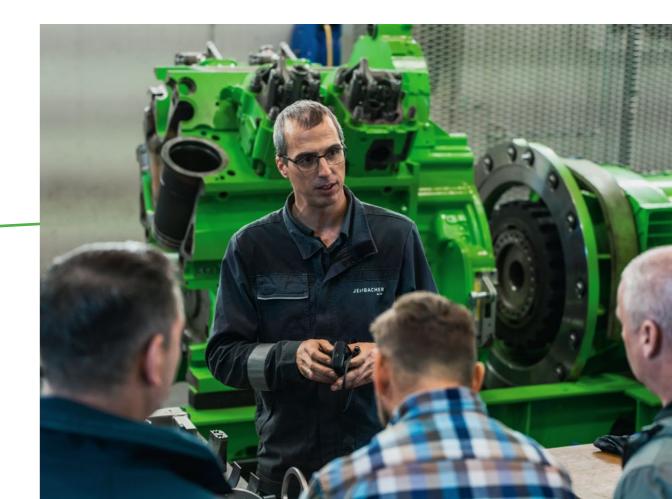
#### Advanced training

For more experienced operators who want to develop additional skills on controls optimization and extended maintenance work.

## **A SUSTAINABLE INVESTMENT**

investment based on:

- Lower overall maintenance costs, including fewer engine issues
- Higher engine uptime with faster resolution when events occur
- More profitable plant operations



#### Proven success

- Together, our Jenbacher training experts have several hundred years of experience on our engine technology.



#### Our trainings provide you with numerous advantages that help you better use and operate your Jenbacher equipment. Most importantly, training and professional development lead to optimized plant performance and a fast return on

# MANY CUSTOMERS ACROSS THE GLOBE

# Benefit from the Jenbacher training program

With about 3,500 students per year, the Jenbacher training program is not only well established, but also widely seen as a significant benefit to our customers. Here is what they say about the program:

#### IEW Biogas Wolgast GmbH in Germany

»The training allows me to perform the 2,000-operating-hour maintenance on our Jenbacher modules, thus adapting the operation to our needs and minimizing downtime. The handling of flow charts and the self-regulation of the modules help me troubleshoot and assess events like misfires, ignition timing, and pressure changes. For the training itself, I remember well the uncomplicated handling, the easily accessible structure, and the technical high-quality knowledge of your training staff. I would be happy to recommend your training to others. Colleagues would learn safe handling, deeper insights, and a good overview of your products.«

René Pogrzeba, Plant Manager of Wolgast

#### Stadtwerke Dinslaken in Germany

»The training allowed us to practice on the engine, and we were taught what we can do on it ourselves. It was very interesting to see what is possible in terms of diagnostics on the DIA.NE XT4. Thus, I would highly recommend the training. In addition, I was particularly impressed with the headquarters facilities in Jenbach. There, you can get to know the entire Jenbacher portfolio – not just the smaller engines but also, for example, a Type 9 engine that is as big as a semi-detached house.«

Marcus Maßner, Boiler attendant of Stadtwerke Dinslaken

#### Madei Taas in Israel

»I would like to emphasize the top training quality, including the presentation of educational material, the concentration on the review of technical questions, and phased explanations until all aspects of the trainer's response are fully understood by all students. I would also like to note the high professionalism of the Jenbacher trainers, who took an active part in the discussion of various issues of technical content. I will definitely continue to attend Jenbacher trainings to further extend my Jenbacher product knowledge.«

Dmitry Rachmanin, Service engineer of Madei Taas



## **JENBACHER TRAINING PROGRAM**

Training content for Jenbacher engines is continually updated in close cooperation with the Technology, Engineering, and Services departments.

#### Product training delivered at our training centers

(Austria, U.S., Thailand, China)

Course and description	Length	Engine type	Languages	Location
<b>Operator course (OPT)</b> Operation and basic maintenance	24 hours	all	EN/ES/DE/IT/ ZH/PT/NL/DK/ RU	Training centers/ on site
<b>On-the-job training (TJE)</b> <sup>1</sup> Extended DIA.NE XT access and troubleshooting	27 hours	all	EN/ES/DE/IT/ ZH/PT/NL/DK/ RU	Training centers/ on site
On-the-job training - maintenance (TJM) Preventive maintenance up to major overhaul	27 hours	all	en/de	Training centers
<b>Customized product training</b> Special updates or refresher courses as agreed with the customer Contact the training center for details	variable	all	en/de	Training centers/ on site

#### Typical content of a four-day operator training includes:

- Jenbacher engine design concepts
- Important engine components and their function
- Operation criteria and engine operation optimization
- Technical documentation and how to find relevant information
- Work with the engine control management system (DIA.NE)
- Practical inspection and maintenance work

#### eTraining program

Course and description	Length	Engine type	Languages	Location
How does a Jenbacher gas engine work?	5 - 10 min	Type 2-6	en/de	Virtual
How to measure the valve stem projection and adjust the valve lash	5 - 10 min	Туре 6	en/de	Virtual
How to measure the axial offset	5 - 10 min	Type 4/6	en/de	Virtual
How to change the intake air filter	5 - 10 min	Туре 3	en/de	Virtual
How to change the oil filter cartridge	5 - 10 min	Type 4/6	en/de	Virtual
How to measure the battery acid level	5 - 10 min	Type 2-6	en/de	Virtual
How to change the gas filter cartridge	5 - 10 min	Type 2-6	en/de	Virtual
How to check the concentration of anti-freeze in cooling water	5 - 10 min	Type 2-6	en/de	Virtual
How to relubricate the generator bearing(s)	5 - 10 min	Type 2-6	en/de	Virtual
DIA.NE XT4: How to lock and unlock	5 - 10 min	all	en/de	Virtual
DIA.NE XT4: How to start and stop your engine (automatic start)	5 - 10 min	all	en/de	Virtual
DIA.NE XT4: How to use the alarm management	5 - 10 min	all	en/de	Virtual
DIA.NE XT4: How to view trends	5 - 10 min	all	en/de	Virtual
DIA.NE XT4: How to login and adjust the power output	5 - 10 min	all	en/de	Virtual

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- Download the INNIO Group Learning Experiences App on: https://training.innio.com/jenbacher/app

<sup>1</sup> Please contact your local Service representative to find out if you meet the criteria to attend this course.

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#### Find out more

- Get information about our specific courses on:

- https://training.innio.com/jenbacher/instructor-led-training - Watch our training videos on:
  - https://training.innio.com/jenbacher/etraining-library

## JENBACHER SERVICES SOLUTIONS

Our global Jenbacher Services team knows your Jenbacher energy system best. As your OEM, INNIO Group provides you with a full suite of life-cycle solutions — from original parts to reliable remote and on-site services — all enabled by our cutting-edge myPlant technology.



# TOTAL SUPPORT FROM INNIO GROUP

#### Delivering flexibility and experience

Drawing on more than 65 years of power innovation, INNIO Group's Jenbacher technology provides hydrogen-ready power generation to businesses and industries striving for a greener future. Today's highly efficient Jenbacher systems deliver energy independence through low-emission, secure, and cost-effective energy solutions.

#### With key benefits from our powerful digital platform

Through our myPlant Performance digital platform, we provide remote support for our connected customer-operated systems around the globe. Today, more than 12,000 Jenbacher systems are managed remotely, and more than 1,200 billion data points are evaluated annually – a powerful proof-point of INNIO Group's knowledge and experience.

#### Backed by our commitment to sustainability

At INNIO Group, we commit to the highest ethical standards and implement best practices in governance and compliance. A sustainable way of conducting business is front and center of everything we do. By selecting us as your supplier, you enter a long-term relationship with a reliable partner. Our fundamental mission to deliver a sustainable future and empower the world's transition to net zero was recognized with prestigious EcoVadis ratings. In 2021, we joined the "Race to Zero" campaign, initiated by the United Nations, to bring together global leadership for an accelerated transition to a net-zero future. Thanks to our efforts, INNIO Group's ESG Risk Rating again secures our number one position across more than 500 companies globally in the machinery industry assessed by Sustainalytics.<sup>2</sup>

INTERESTED?

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### **HOW WILL YOU BENEFIT?**

### Contact a consultant from Jenbacher Services to learn more.

With our training, you can make the best even better. Reach out today by completing the contact form online jenbacher.com/contact.

Or contact our Training Coordination Team at: jenbacher.trainingcenter@innio.com.



#### About INNIO Group

INNIO Group is a leading energy solution and service provider that empowers industries and communities to make sustainable energy work today. With its product brands Jenbacher and Waukesha and its digital platform myPlant, INNIO offers innovative solutions for the power generation and compression segments that help industries and communities generate and manage energy sustainably while navigating the fast-changing landscape of traditional and green energy sources. INNIO is individual in scope, but global in scale. With its flexible, scalable, and resilient energy solutions and services, INNIO enables its customers to manage the energy transition along the energy value chain wherever they are in their transition journey.

INNIO is headquartered in Jenbach (Austria), with other primary operations in Waukesha (Wisconsin, U.S.) and Welland (Ontario, Canada). A team of more than 4,000 experts provides life-cycle support to INNIO's more than 55,000 delivered engines globally through a service network in more than 100 countries.

In March 2023, INNIO's ESG rating ranked first out of more than 500 companies worldwide in the machinery industry assessed by Sustainalytics.

For more information, visit the INNIO website at innio.com, the Jenbacher website at jenbacher.com or the Jenbacher Services website at jenbacher.com/en/services.

Follow INNIO Group and its brands on  $\mathbb X$  (formerly known as Twitter) and **in**.



**ENERGY SOLUTIONS.** EVERYWHERE, EVERY TIME.

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