

CHP in practice. The 2G Training Center.



Sharing knowledge.

2G Energy AG represents reliable and transparent collaboration at all levels. This includes sharing our expertise about heat and power generation and highly efficient CHP systems with our partners and customers. At the Training Center in Heek and throughout the globe.

Knowledge close to practical application. Directly from the manufacturer.

2G Energy AG is continuously working on developing its CHP system technology as one of the leading manufacturers of combined heat and power plants thanks to in-house research and development. Regardless of whether you are a customer, operator or partner, you benefit from the targeted transfer of the most recent findings and practical experiences directly from developers and manufacturers. We offer user/system-specific sales and service training courses at the 2G Training Center in Heek or, if requested, also at your premises.

Technology of the future: combined heat and power generation





Electricity
Heat

A globally successful manufacturer: 2G Energy AG

- 1. Wide product range between 20 and 4,000 kW
- 2. Own R&D for optimum customer solutions
- 3. Support of overall energy concepts as a solution provider

We offer our customers maximum benefit by pooling our strengths with dedicated, competent partners.

The available training courses. Sales and service.

Training	Particularly suitable for:						
	Series	Tipster	Sales Partner	Service Provider	Service Partner	Customer	
2G Sales Basics	all						
2G Sales Expert	all					*	
2G Sales Expert Plus	all		**			**	
2G Operator Level 2	filius patruus agenitor avus 500 plus					***	
2G Regular Service Level 10	filius patruus agenitor avus 500 plus						
2G Special Service Level 20	filius patruus agenitor avus 500 plus						
g-box 20 Regular Service Level 5	g-box 20						
g-box 20 Commissioning Level 15	g-box 20						
g-box 50 Regular Service Level 5	g-box 50						
g-box 50 Commissioning Level 15	g-box 50						
Safety Systems Gas Warning Systems	all						

^{*} Large customers, energy suppliers, planners, system engineers | ** Specialised g-box training on request

^{***} Operators of 2G power plants



Sales training courses

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As a 2G partner you require profound expertise in issues including the following to be able to market CHP systems successfully. These are:

- How does combined heat and power generation work?
- When and where is the use of CHP systems feasible?
- What kind of portfolio does 2G offer?
- What are 2G's competitive advantages?

2G sales trainings are always up to date and provide answers to these questions.

2G Sales **Basics**

The 2G sales basics training firstly deals with fundamentals about combined heat and power plants and secondly, it gives participants an insight into 2G, its corporate philosophy and the special product characteristics. This makes it possible for partners to identify projects and notify potential customers with an intention to purchase – also in terms of the many usage options.

Contents

- 2G company portrait
- CHP technology
- Product range
- Service and digitalization
- · Research and development
- Unique selling points
- References
- Plant tours

Training is intended specifically for:

- Tipsters
- Service partners
- Service providers
- Large customers, energy suppliers, planners, system engineers



1 day



Heek, Germany or as agreed



German | English additional languages on request

2G Sales **Expert**

2G sales expert training courses go beyond fundamentals to convey a more profound specialist expertise in the context of combined heat and power generation as well as the 2G product portfolio. Which module is suitable for the customer premises and what must be taken into account? Participants can individually discuss these questions as per customer requirements to thus successfully sell 2G power plants.

Contents

- 2G company portrait
- CHP technology
- Product range
- Installation and noise protection, part I
- PLC and software, part I
- Engine technology, part I
- Heat extraction, part I
- Service and digitalization
- Accessories, part I
- References

- my.2-g.com
- Documentation
- Visit to a reference system
- Market-specific discussion
- Design/efficiency

Training is intended specifically for:

- Sales Partners
- Large customers, energy suppliers, planners, system engineers



3 days



Heek, Germany | St. Augustine, USA or as agreed



German | English additional languages on request

2G Sales **Expert Plus**

This training course is based on the 2G sales expert training course and further enhances the acquired skills and expertise. Individual standard components as well as other application options are discussed in detail. Consequently, it is not just about the individual 2G power plant, but the overall project.

Contents

- Installation and noise protection, part II
- PLC and software, part II
- Engine technology, part II
- Electrical engineering
- Heat extraction, part II
- Accessories, part II
- Environmental policies
- Visit to a reference system

- Market-specific discussion
- Analyzing CHP practice

Training is intended specifically for:

Sales Partners



2 days



Heek, Germany | St. Augustine, USA or as agreed



German | English additional languages on request



Service training courses

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Exclusively systems that are looked after and maintained carefully will be highly versatile and efficient in the long term. Basic expertise about 2G systems helps operators to carry out minor maintenance themselves to minimize downtimes. Additional training courses are required for professional service with enhanced access to operating parameters. 2G's quality claim in the context of service is high: the CHP must run as well on any day as it did on the first day. For this reason, maintenance forms a comprehensive part of 2G quality management.

Level 2 **2G Operator**

Level 2 operator training has been designed for operators and operator staff of 2G C series systems (filius, patruus, agenitor and avus 500 plus). It deals with practical, basic expertise about combined heat and power generation as well as 2G systems.

After having taken part in the training, operators will be able to carry out minor maintenance tasks. Consequently you benefit from shorter downtimes and higher system availability.

Contents

- General information on combined heat and power generation
- · How does a CHP work?
- Engine design and functions
 - Turbocharger
 - Sensors
 - Ignition
 - · Fuel systems
- PLC and external connections
- Documentation

Training is intended specifically for:

2G power plant operators



filius | patruus | agenitor | avus 500 plus



2 days



Heek, Germany or as agreed



German | English additional languages on request

Level 10 **2G Regular Service**

Level 10 maintenance training is based on level 2 operator training for the content discussed as part of the C series. It concludes with a test. After having passed the test participants are awarded the level 1 dongle. Participants are authorized to carry out maintenance work and are granted free access to 2G Connect (online access to 2G systems).

Contents

- 2G dongle
- Exhaust gas measurements
- Ignition timing
- Maintenance logs and planning
- Documentation

Training is intended specifically for:

- Service Partners
- Service Providers



filius | patruus | agenitor | avus 500 plus



3 days



Heek, Germany or as agreed



German | English additional languages on request

Level 20 **2G Special Service**

Level 20 emergency training is aimed at 2G service partners and 2G service providers. It requires having successfully passed the level 10 maintenance training.

The level 20 training concludes with a test. After having passed the test, 2G service partners or 2G service providers are granted enhanced access to PLC and parameter settings within the 2G system and they are authorized to carry out maintenance.

Contents

- Internal network monitoring, generator synchronization
- Electronic engine control
- Ignition update, including adapting the calibration parameters
- · Adjusting the knock sensor
- Display settings and operation (data transfers)
- New content is applied in practice as part of use cases

Training is intended specifically for:

- Service Partners
- Service Providers



filius | patruus | agenitor | avus 500 plus



3 days



Heek, Germany or as agreed



German | English additional languages on request

Level 5 **g-box 20 Regular Service**

Level 5 maintenance training is for g-box 20 operators and operating staff. It deals with practical, basic expertise about combined heat and power generation as well as the g-box 20. After having taken part in the training, operators will be able to carry out minor maintenance tasks. Consequently you benefit from shorter downtimes and higher system availability.

Contents

- General information on combined heat and power generation
- · How does a CHP work?
- Engine design and functions
- Turbochargers
- Sensors
- Ignition
- Fuel systems

Training is intended specifically for:

- Service Partners
- Service Providers



g-box 20



2 days



Heek, Germany or as agreed



German | English additional languages on request

Level 15 g-box 20 Commissioning

Level 15 training results in profound expertise of PLC and configuration parameters in the g-box 20. Participants must have successfully taken part in the level 5 training and after having passed the associated test, participants are authorized to commission g-box 20.

Contents

- PLC and controls (enhanced access to relevant parameter grid voltage)
- Display/configuration parameter dial in
- Documentation (commissioning log, Tas, TIs, TSPs, STAs)
- · Simulation of practical commissioning

Training is intended specifically for:

- Service Partners
- Service Provider



g-box 20



2 days



Heek, Germany or as agreed



German | English additional languages on request

Level 5 g-box 50 Regular Service

Level 5 maintenance training is for g-box 50 operators and operating staff. It deals with practical, basic expertise about combined heat and power generation as well as the g-box 50. After having taken part in the training, operators will be able to carry out minor maintenance tasks. Consequently you benefit from shorter downtimes and higher system availability.

Contents

- 2G dongle
- Exhaust gas measurements
- Ignition timing
- · Maintenance logs and planning
- Documentation

Training is intended specifically for:

- Service Partners
- Service Providers



g-box 50



2 days



Heek, Germany or as agreed



German | English additional languages on request

Level 15 g-box 50 Commissioning

Level 15 training results in profound expertise of PLC and configuration parameters in the g-box 50. Participants must have successfully taken part in the level 5 training and after having passed the associated test, participants are authorized to commission g-box 50.

Contents

- PLC and controls (enhanced access to relevant parameter grid voltage)
- Display/configuration parameter dial in
- Documentation (commissioning log, Tas, TIs, TSPs, STAs)
- · Simulation of practical commissioning

Training is intended specifically for:

- Service Partners
- Service Providers



g-box 50



2 days



Heek, Germany or as agreed



German | English additional languages on request

2G Safety Systems **Gas Warning Systems**

The training deals with theoretical and practical expertise of gas warning centers and associated transmitters. It authorizes service partners and service providers to certify gas warning systems and commission them.

Contents

- Maintenance and commissioning of explosion protection and gas warning systems as well as smoke alarms
- Regular calibration
- Repair work

Training is intended specifically for:

- Service Partners
- Service Providers



All series



1 day



Heek, Germany or as agreed



German | English additional languages on request



Would you like to become a 2G partner? Get in touch!



2G Energy AG

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