# profile



Building automation | Room automation | Clean room and process engineering from a single source

### Contents

Maril

| Neuberger Gebaudeautomation - quality, passion and reliability                   | 3  |
|--|----|
| Your customised solution - from a single source                                  | 6  |
| Range of services  | 8  |
| Building automation  | 8  |
| Room automation  | 9  |
| Clean room technology  | 10 |
| Clean room technology<br>Process engineering                                     | 11 |
| Product portfolio  | 12 |
| Building and room automation   | 12 |
| Monitoring and clean room systems  | 14 |
| Building control and management systems  | 16 |
| Electronics production and switchboard construction – flexible made by Neuberger | 18 |
| Automation solutions of the future - thinking about tomorrow today               | 20 |
| Services - personal, fast, competent   | 21 |
| Our references - from small to large projects                                    | 22 |

### Neuberger Gebäudeautomation. Quality, passion and reliability.

Since it was established in 1968, Neuberger Gebäudeautomation GmbH has become a leading supplier of building automation, room automation, clean room technology, and process technology solutions. Neuberger is synonymous with quality, passion and sustainability. We have been part of the Weishaupt Group since 1995. This corporate group comprises Max Weishaupt GmbH in Schwendi and Baugrund Süd Gesellschaft für Geothermie mbH in Bad Wurzach. Around 4,300 employees are involved in all aspects of energy. Our experts in energy sourcing at Baugrund Süd, energy technology at Weishaupt, and energy management at Neuberger prioritise maximum energy efficiency in line with nature and sustainability goals. Everything from a single source!

### Neuberger Gebäudeautomation 6 good reasons



We employ more than 650 people at our company headquarters in Rothenburg ob der Tauber in Central Franconia and at multiple regional centers in Germany and a subsidiary in Weiningen, Switzerland.

Our company philosophy is characterised by unrivalled focus on our customers. Neuberger is a one-stop supplier – starting with analyses and proposed solutions through to project planning and software development, and culminating in production, installation and commissioning, we are a dependable partner for all phases of your project.

The exceptional quality of our products and services makes us stand out as an experienced and invaluable partner across several industries. In addition, GMP\* guidelines are firmly anchored in our quality management system. Our end-to-end quality assurance, comprehensive training, lifelong and unlimited spare parts supply, along with maintenance, support and a dedicated hotline, ensures fault-free operation of your plants.



We are certified in accordance with DIN EN ISO 9001 and DIN EN ISO 14001. With our automation and building management system products, we possess the system expertise necessary to develop customised solutions of the highest standard. Everything is made in Rothenburg o. d. T. to ensure supply chain security and maximum availability of all products. Our customer base includes companies from the energy supply, healthcare, industry and research sectors, alongside companies from the pharmaceutical and laboratory sectors. We have also implemented public buildings, office buildings, swimming pools and shopping centers on several occasions. \*GMP = Good Manufacturing Practice, as defined by the standards of the American Food and Drug Administration (FDA), is one of the strictest production guidelines in the world.

# **HEADQUARTERS** Our headquarters in Rothenburg ob der Tauber Franconia serves as the hub for our development, production and administrative operations.

### Your customised solutions. From a single source.

Choosing Neuberger means working with an innovative and agile full-service provider and automation technology specialist. You will be working with people who hone in on your requirements in every phase of a project. You profit from our in-depth understanding of building technology and monitoring systems, exceptional proficiency across all facets of building services engineering, instrumentation and control and technical building plants. We meet all your needs with our comprehensive engineering expertise, continuously trained and qualified personnel, flawless execution and reliable all-round service. This ensures that your bespoke solution ultimately establishes benchmarks in integration, efficiency, convenience, sustainability, security and scalability.

### Individual solutions

Analysis, planning and project engineering – a single point of contact during all project phases

### Installation and commissioning

By more than 170 qualified and regularly trained specialists

### **Development**

In-house development of hardware and software, ongoing product development

### Training

In-house training courses, external and on-site customer training, regular seminars, own training center

### Manufacturing and production

In-house manufacturing of switchboards and electronic assemblies

### **Full service**

Maintenance, 24/7 service, comprehensive service network, personal support through qualified staff

### Quality assurance

In-house test department – 100% testing of all switchboards. Quality and environmental management according to DIN ISO standards

### Full product support

Unlimited spare parts, 24/7 service, maintenance

We work on every single project in such a way as to deliver premium results and highest quality. We focus 100% on the requirements and needs of our customers.

CONFERENCE

220 - E

TOA

OFFICE

Co

30

FFICE D

D

OFFICE

OFFICE

CC C

CONFEREN

885

CON (B)

### Range of services. Modern, innovative, flexible.

### **Building automation**



### Heating systems

Efficient control of energy consumption. Minimal operating costs through use of modern and intelligent solutions and energy management.



**Refrigeration systems** Optimised operation of refrigeration plants in buildings for power generation and distribution.



Lighting

Lighting control and inclusion of outdoor brightness and spectral composition in daily requirements.



**Smoke extraction and fire protection** Safety-oriented control and regulation of smoke extraction and fire protection systems.



### Ventilation and air conditioning systems

Automation of all ventilation and airconditioning systems – flexibly to suit project requirements.



**Room automation** Modern room automation cuts costs, optimises benefits and boosts added value.



**Sun protection** Shading and blind control based on the position of the sun.



Alarm management and fault signalling system Guaranteed plant operability through structured alarm and fault message management.

BUILDING AUTOMATION All from a single source – building automation, building control, instrumentation and control, building management system and energy management

### **Room automation**



#### Heating and cooling

Intelligent and demand-based heating and cooling increases comfort and cuts down on energy requirements.



#### Presence

Control of room climate, lighting, shading and media technology based on presence detection..



#### Lighting

Lighting control and regulation based on brightness levels and presence detection.



#### Media equipment

Control of media, event and conference equipment based on predefined scenarios.



### Air conditioning and ventilation equipment

Automated control of temperature and fresh air based on air quality, presence and room occupancy.



### Temperature

Optimised temperature control of the rooms through sensor-based monitoring of air temperature.



### Sun protection and shading

Control of sun shading and blinds based on external brightness and weather conditions.



#### Humidity

The deliberate, sensor-controlled adjustment of relative humidity in the room has the following outcomes: A positive effect on comfort and health.

**ROOM AUTOMATION** Modern room automation cuts costs, optimises benefits and boosts added value.

### Clean room technology (pharmaceuticals, laboratories, healthcare, hospitals, pharmacies, etc.)



### GMP monitoring

The systems were developed in accordance with GMP guidelines and satisfy all the requirements of FDA 21 CFR Part 11.



### Mapping

Ensuring product quality in storage, refrigeration and freezer units through the assessment of temperature distribution, identifying cold and hot spots.



#### Sensors

Sensor technology tailored to each application and customer-specific needs, regardless of manufacturer.



Calibration

On-site or factory calibration with the latest measuring technology across the entire measurement range.



**Clean room terminals, clean room lighting and signal lights** For the operation, visualisation, signalling and monitoring of clean rooms.



#### Validation and qualification

Documentation preparation and implementation of qualification compliant with GMP guidelines.

### **CLEAN ROOM TECHNOLOGY**

Neuberger's instrumentation and control technology and monitoring systems guarantee GMP-compliant, qualified and secure operation.



#### Airlock control

Control of personnel and/or material locks to ensure the safety of employees, products and the environment.





#### Swimming pools

Monitoring of water quality and automation of pool water technology, providing operators with maximum ease of use.



**Control of room conditions** Control of all technical building plants and a range of conditions in clean rooms.



**Sewage treatment plants** Automation of plant technology for environmentally friendly water treatment.



Analyses and reports Customised evaluation and presentation of quality-relevant data.



**Brewing equipment** Automation of all brewing technology systems.

### PROCESS ENGINEERING

Neuberger provides automation solutions tailored for process engineering production facilities across various industries.

### Building and room automation. Flexible, future-proof, intelligent.



PMC2 Compact Programmable Logic Controller DR4200

12

13

# neuberger.

### Monitoring and clean room systems. GMP-compliant, secure, reliable.

Remote maintenance / diagnostics / alarms Monitoring server / Building control and management system ProGrafNT client / Web client via SMS, email, web browser building management system **ProGrafNT** (GMP) www Internet / Intranet, Ethernet TCP/IP, BACnet/IP, OPC, ... PROGRAMMABLE LOGIC CONTROLLERS / MONITORINGSYSTEM AZ4300 PMC AZ420 0 🕐 E7 0 HAKS-Y1002MFH0 0 Casean Sibru . 10 07.1 1 HAKS Y1003MFH01 20-85K 2 R.017-01 Caberro 1 Schakanlage Ubersog schut 1 Cacesm Vorala COMI COMI 20 872 2 . HAKS Y2014MF ALGI AL 2 Schultaniage Sieverse 2 KAFC1 Algem . INIT OK / FAULT 3 C ALGIA INIT OK / FAULT 3 Standmeton 30 87.3 3 HAKS-Y2015MF 3 KAEUT Aligen RUN / FAULT 4 @ FLG1 RUN / FAULT 4.0 4 8 174 4 # HAKS-Y2016M 4 KAE02 Kallenn 5 C ALGIA 5 C Elekin 50 81.5 5 Littury O TX 6 @ E7.8 © TX 6 Endertigung 6 . 1 6 0 40 RX RX 7 O E7. 7 C Enderligue 7.0 COM2 3 @ E78 COM2 50 80 8 KLEU2 9 @ 67.9 INIT OK / FAUL INIT OK / F 9.0 . 9 KAEGZ RUN / FAULT 10 @ 57.10 RUN / FAULT 10 CALGTA 10 Repara 10 . e.g. Touch Panel TP42XX 10 KAEN3 11 Reparatur 11 @ E7.11 1 . ALG1/ 11 0 11 C KAED2 Kathe O TX TX . 12 @ E7 12 12 0 2 CALG1 / 12 . Voit 12 - KAE00 0 @ RX O RX 13 @ Mass 13 @ E7.12 13 @ 13 0 4 13 KAEGQ Kafeerzo n . 14 m Ma 14 @ E7.34 14 10 4 CALG 14 @ KU 15 @ E7.15 5 0 4.6 15 KUE02 Server A .... · WW.Sahar • VA-Staran Adresse 10 Adresse : Adresse 3 Adresse ! Adresse 8 Adresse 7 Adresse 8 Adresse 1 Adresse 12 Adresse 13 Adresse 1 1 PMC2 Programmable Logic Controller 4000 000 000 B e.g. RoomPanel RP8100 **GMP-Monitoring** Airlock and access **Clean room Clean room** Sensors control systems terminals lights

14

15

# neuberger.

Higher-level systems

Historical data Analyses Reports MES systems etc.

### GMP SERVICES



Ensuring product quality in storage, refrigeration and freezer units.



### Calibration

On-site or factory calibration always using state-of-the-art measurement technology.



### Validation and qualification

Documentation preparation and implementation of qualification.



#### Training

Seminars and training sessions focused on practical application, tailored to specific target groups.



### Building control and management system. ProGrafNT - neutral, open, flexible.

**ProGrafNT** is Neuberger's intuitive building control and management system for monitoring, operating and visualising technical building plants of all sizes.

The use of open interfaces guarantees a high degree of flexibility in the visualisation of a wide variety of plants. With graphical displays, numerous evaluation options and comprehensive logging across all automation levels, operators and facility management can maintain an overview at all times. The system is infinitely scalable and can be seamlessly tailored to fit various buildings and properties.

**ProGrafNT** also satisfies the stringent requirements of the United States Food and Drug Administration (FDA) and can therefore also be used as a GMP monitoring system in multiple scenarios in accordance with 21 CFR Part 11. Applications in clean room environments, such as pharmaceutical and laboratory technology, or in data centers, pose no issue thanks to secure user administration and an extensive audit trail.





17

16

# neuberger.

By choosing **ProGrafNT**, you are selecting a control and management system crafted by Neuberger that boasts exceptional durability and sustainability thanks to its cross-generational use and continuous further development.

- Universal building management system with open interfaces
- Can also be used as a monitoring system within GMP-regulated environments
- Simple integration of third-party and higher-level systems
- Intuitive and plant-orientated operating concept
- Licence model without information
  point restriction
- Future-proof system
- Historical database / trending
- Event and alarm management
- "Ready for Management-GLT" unrestricted choice of system architecture
- Extreme sustainability and durability through intergenerational use
- Wide range of software options
- Room configuration in room automation using RoomDesigner
- Energy management with ProEnergie according to DIN EN ISO 50001
- Control and regulation with ProWetter based on weather data
- Needs-based access management with ProZutritt

### Electronics production and switchboard construction. Flexible solutions made by Neuberger.

Since its establishment in 1968, the production of switchboards has remained one of Neuberger's core competencies, making it an essential component of our product portfolio.

Continuously developed and expanded by highly specialized experts, our product portfolio ensures maximum functional reliability, durability, sustainability and high availability.

### State-of-the-art electronics production

We manufacture electronic assemblies and switchboards in our new, ultra-modern electronics production facility measuring almost 3,500 m<sup>2</sup>. Utilizing the latest machinery, predominantly fully automated on a highly efficient production line, we manufacture products daily to meet the most stringent functionality and quality standards.

- In-house electronics production
- State-of-the-art machinery
- Fully automated SMT production
- 100% inspection and visual inspection of all produced assemblies
- Climatic chamber for burn-in tests
- In-house EMC test laboratory
- Unlimited spare parts supply for all products manufactured in-house
- Maximum delivery capability

### ELECTRONICS PRODUCTION The assembly of printed circuit boards

(SMT production) is fully automated using state-of-the-art machines.

#### Flexible switchboard construction

All switchboards are designed and planned using the latest software tools. If special enclosures or customerspecific designs are required, these can easily be produced in our own metalworking center.

Our highly specialized personnel, who undergo regular training, undertake

project-specific wiring and outfitting of stand panels, wall-mounted cabinets and axis controllers. Finally, all plants are tested in our in-house test center before delivery.

This helps us to achieve optimal results and maximum performance in manufacturing and delivering over 2,600 switchboards and room automation distribution boards annually.

- Maximum flexibility in switchboard production
- Switchboard planning and design with the latest software, e.g. E-Plan, AutoCAD, Autodesk Revit, etc.
- In-house metal production and metalworking shop with fully automated sheet metal parts processing
- Highly specialised wiring teams that undergo regular training
- In-house test center
- 100% individual testing



### Automation solutions of the future. Thinking about tomorrow today.

The potential offered by the use of new technologies is extraordinary. This is why we are already tackling the tasks and challenges of tomorrow's automation on a daily basis.

New tasks and challenges present fresh opportunities and possibilities for us to maintain adaptability amidst dynamically changing economic and competitive situations. This is why we are already using smart and new technologies that reliably guarantee the efficient, sustainable and safe operation of plants and buildings.



### Services. Personalized, fast, competent.

At Neuberger, just like every company within the Weishaupt Group, we adhere to the principle: **"The value of a product or service is measured by the quality of its customer support".**  In line with this principle, we are committed to guaranteeing maximum reliability and functional safety for every project we manage. Our customers can rest assured that none of Neuberger's products will be discontinued, and that spare parts will be available for life. We also provide support 24 hours a day, 7 days a week.





### Spare parts supply

We guarantee an **unlimited supply of spare parts** for all products that we manufacture in-house.





### 24/7 service

Our dedicated service team **is on hand 24/7**, every day of the year, to provide personal assistance with technical support, plant activation or emergencies.





### Maintenance

Our specialized maintenance team ensures swift, skilled and reliable **plant maintenance** and optimization.



### Training

Experience the advantage of hands-on **seminars and training** sessions, conducted at our own training center or through external programs.

### **Our references.** All shapes and sizes.

Our experience spans a broad spectrum of tasks for numerous reputable companies both in Germany and internationally. Our proficiency and track record in building and room automation encom-





Stadtwerke Crailsheim GmbH, Crailsheim

#### Research and science

Max-Planck und Fraunhofer-Institute, e.g. in Erlangen, Garching, Göttingen, Kaiserslautern, Mainz, Mülheim an der Ruhr, Munich





attocube systems AG, Haar

pass projects of all sizes, from kindergartens to partially automating mid-sized businesses, up to full-scale project planning and execution of significant contracts like the European Central



Kugler Feinkost GmbH, Parsdorf

#### Power supply

e.g. municipal utilities in Bad Windsheim, Crailsheim, Frankfurt am Main, Munich, Münchenstein (CH), Rothenburg o.d.T., Šabac (SRB), Sindelfingen, Wertheim, etc.



The Chedi Andermatt, Switzerland

### Industry

A range of established companies at home and abroad



Bank in Frankfurt am Main. Our aim is to achieve customer satisfaction.

### Shopping centers, retail and commerce

Aarepark (CH), Bauhaus DIY outlets, Edeka supermarkets, Kö-Galerie shopping center, Main-Taunus-Zentrum, Media-Märkte, Outletcity Metzingen, etc.





Sparkasse, Ulm





Max Weishaupt GmbH, Schwendi

### Hospitals and clinics

Augsburg, Bad Mergentheim, Baden (CH), Berlin, Heidelberg, Kitzingen, Lohr am Main, Lucerne (CH), Munich, Ravensburg, Tübingen, Ulm, etc.





Mercedes Benz Museum, Stuttgart



#### Sports and leisure facilities

e.g. sports facilities in Bad Bevensen, Halle, Laatzen, Neu-Ulm, Ouickborn, Rothenburg o.d.T., Scheßlitz, Schwendi, etc.



### Universities

Bayreuth, Berlin, Darmstadt, Hanover, Heidelberg, Frankfurt am Main, Potsdam, Munich, Ulm, etc.





Klinikum Dritter Orden, Munich

#### Museums and art galleries

Berchtesgaden, Friedrichshafen, Grefrath, Hamburg, Hamm, Heilbronn, Munich, Regensburg, Schwäbisch Hall, Stuttgart, Ulm, etc.

#### Pharmaceutical companies and laboratories

Many well-known firms from the fields of medical technology, research and manufacturing



OrangeCampus GmbH, Neu-Ulm

Housing, real estate and residential complexes

Berlin, Dresden, Hamburg, Frankfurt am Main, Nuremberg, Munich, Pfäffikon (CH)

### Kindergartens

Bad Neustadt an der Saale, Braunschweig, Bad Wurzach, Erkelenz, Feldkirchen, Friedberg, Nuremberg, Sonthofen, Vaihingen an der Enz, Wiesbaden, etc.



### Public institutions and administrations

e.g. district offices, savings banks, credit unions, insurance companies, municipal administrations, etc.



Allergopharma GmbH & Co. KG, Reinbeck

Swimming, leisure and adventure pools

Einbeck, Feuchtwangen, Freilassing, Göttingen, Halle an der Saale, Itzehohe, Magdeburg, Munich, Schwäbisch Hall, etc.



ABG FRANKFURT HOLDING GmbH, Frankfurt/Main



### Neuberger

Gebäudeautomation GmbHOberer Kaiserweg 6DE-91541 Rothenburg o.d.T.Phone: +49 9861 402-0Fax: +49 9861 402-333E-Mail: info@neuberger.netInternet: www.neuberger.net

### Neuberger

Gebäudeautomation AG Im Gewerbepark 4a CH-8104 Weiningen Phone: +41 44 747 86 86 Fax: +41 44 747 86 80 E-Mail: info@neuberger.ch Internet: www.neuberger.ch

### All from a single source

Neuberger, established in 1968, is a highly qualified supplier of products and solutions for building automation and the pharmaceutical industry.

Neuberger has been part of the Weishaupt Group since 1995 and supplies everything from a single source – planning, products, software, installation, commissioning, maintenance and 24/7 service.

Neuberger's building automation systems are designed to optimize efficiency through the integrated management of all technical system.





Celje (Slovenia)

Headquarters in Rothenburg ob der Tauber