YOUR CUSTOMIZED PNEUMATIC SOLUTION
TESTED AND READY-TO-INSTALL
Kundenspezifische Pneumatiklösungen

Lorem ipsum dolor sit amet
Always the best for your application – individually configured, modified or newly developed

Why be satisfied with less? Demand the best for your applications – in both technical and economic terms. We will show you that customized solutions are not only the better alternative, but also more cost-effective. Simply the best of both worlds.

If there is a solution, we will find it
Developing customer-specific solutions has always been one of our core skills. Building on decades of solid experience, our experts can draw from a wealth of knowledge and use it to create targeted solutions for your applications. Whether for ready-to-install configured modules, systems and subsystems, or for specific products in series production.

- System technology – ready-to-install pneumatic solutions
- Specific product development

Our system engineers mainly focus on the planning, configuration and assembly of control panels, control cabinets or handling systems. Product development experts implement customer-specific solutions and product modifications.

Industry expertise, an added benefit
Together with our customers, we have developed a product portfolio that is precisely tailored to meet the needs of the respective industry. It contains proven components and solutions that can also be adapted to suit your specific needs and requirements. Take advantage of our experience and contact us to discuss your application!
Voilà! Your specific ready-to-install pneumatic solution

Professional results, top quality and unparalleled service. Sound tempting? Our menu is ideal for special requests. Individually prepared with the best ingredients and the right accompaniment. Just what you ordered.
The simple route – efficient and on schedule

Your planning is in good hands
Starting from your task description, our specialists for system solutions work to create the right ready-to-install modular solution. They configure the products, components, and accessories that are best suited to your application, including compressed air preparation, valve technology and electric controls. Details can make or break a project, especially if it is highly complex. For your planning and implementation, this makes it all the more important to have experts at your side who are experienced in putting together every last piece of the puzzle. Only the best right from the start. Make it your standard. And one you can count on.

Save money, time, and irritation
You gain valuable time and free up capacities in your internal work and processes. Smooth implementation is our business and we take full responsibility for the complete system. We have only lived up to our part of the bargain when you are satisfied and everything is fully operational. Guaranteed.

Efficiency defined in modern terms
Results-oriented work always involves the intelligent delegation of specific tasks, at the right time and in the right scope, and to the right partner. Fall back on our experience as a specialist for customer-specific automation solutions.

Embrace on the safe, direct route to your individual pneumatic solution, without any detours. Contact us, describe your project, coordinate a timeline. That’s all it takes: We’ll handle the rest.

Contact Us
Describe Your Task
Development of Solution
Design
Documentation
Procurement and Logistics
Assembly and Testing

Commissioning
Delivery

Together with us
Provided for you
Advantages at all levels: optimum function, cost-effectiveness, efficiency

Rest assured that everything is on track: from planning, design and documentation to logistics and assembly, up to delivery. Make your work easier, let a single contact person take care of all your needs.

- Consulting, planning, service, design, documentation
  - A single contact person, more time for your core business
  - Minimized risk through fully tested complete system
  - Warranty for function and components
  - Free up your internal engineering capacities
  - Eliminate internal design costs, plug & play solutions
  - No expenditure for project and product documentation

- Procurement, logistics, assembly, delivery
  - Only one part number for the complete system
  - Fewer procurement expenses with a single supplier
  - Only one delivery, reduced internal logistics costs
  - Specialist assembly, reduced assembly time
  - Eliminate testing costs, plug & play
  - Avoid bottlenecks and production downtimes
The system spectrum

Planning, configuration, implementation – all from a single source
For over 30 years, we have developed specific solutions for our customers, tailor-made and with the guarantee of excellent results. Everything from a single source – in top quality and available when you need it. Always state-of-the-art: with worldwide service and the security of our established standards. Products range from valve units specifically configured for individual applications to ready-to-plug-in control cabinets with PLC or complete pneumatic and electro-pneumatic handling systems.

Cylinder valve units
Configure the optimum combination of cylinder and valve for decentralized use. The cylinder valve units are equipped with all desired special functions and mounting elements.

Modified valve systems
Based on suitable valves and valve systems from the standard product range, the valve units are configured with specific add-on components, function units and necessary accessories, and mounted ready-for-installation.

Modified maintenance units
The maintenance units are custom-configured for your specific needs and mounted ready-for-installation – including flow optimization and compressed air monitoring for long-term energy efficiency.

Control panels
The control panels are specifically designed to the available space in the machine and work environment, and come tested and ready to bolt on.

Control cabinets
Ready-to-install control cabinets containing all essential components for application control – ready-to-install, interconnected, fully protected against external influences.

Pneumatic handling systems
We plan and create pneumatic handling solutions for your applications. Systems and subsystems for gripping, moving and positioning.
As diverse as your applications: a glimpse at our product portfolio

**Energy-saving cylinder valve units**
Cylinder valve units always provide an efficient solution. Customized designs can do even more.

- Extensive basic cylinder range with piston diameters from 25 to 320 mm and strokes from 80 to 1000 mm
- Equipped with safety valves, check-choke valves, stop valves and energy-saving valves
- Integrated sensors, pressure regulators, compressed air accumulators, mounting elements, etc.

**Configured control cabinets and panels**
The spectrum of control cabinets ranges from a small switch box with basic functions to a complex switching center with all control options and PLC. As a modular unit for trouble-free machine integration, control panels are individually equipped with all mechanical, electrical and electronic interfaces.

**Technical parameters for control cabinets:**
- Sizes from 300x300x210 mm to 1500x2500x500 mm
- Custom paint jobs
- All electronic controls including field bus connections
- Compressed air preparation with all functions (press./vac.)
- Use of ATEX components

**Added benefits for the application:**
- Perfectly matched components
- Integrated pneumatic and electronic control
- Increased functional reliability
- Longer service life
- Excellent adjustment to requirements
- Reduced maintenance effort
- More flexible assembly options
- Improved energy efficiency

▲ Cylinder valve unit for low-temperature applications to -40°C
▲ Compact electropneumatic pressure regulation with analog sensors for the printing industry
▲ Electropneumatic control cabinet for the control of entire automation processes
▲ Control cabinet with window and stainless steel interconnections
Pneumatic handling systems
Whether mechanical, vacuum-based or non-contact – the configured systems always integrate the optimum technologies. As pick & place solutions or a complex handling system as a linear or area gantry.

- Inexpensive assembly thanks to the Easy-2-Combine interface
- Cost-effective adaptation of modules and subsystems

Modified valve systems
Whether for valve blocks with CAN bus control and integrated pressure monitoring or valve systems with additional air supply and channel separation – the spectrum is as diverse as the applications themselves.

- Flow range from 100 to 6000 Nl/min
- Popular electrical protocols are available (i.e. CANopen, Device Net, Ethernet, Profiibus etc.)

Application examples for specific product developments
From one-off-solutions to series components – specific product developments can optimize an application down to the very last detail. Sometimes, just a simple modification or addition to selected standard products can improve function and reduce costs. Alternatively, an entirely new product solution with comprehensive functional integration may be what you require. Either way, our specialists will get you on the right track to an optimum solution, drawing from their extensive experience from customer-specific projects.

- Modification of standard components
- Combining different functions in a single product
- Product development with expanded specifications
- Integration of electronics and pneumatics
Tailor-made components and products – distinctive solutions

Standard is good – but customized is even better! Tailor-made products are the icing on the cake; they are a perfect fit and serve as specialists for your tasks. They allow precise integration in machine environments and increase the efficiency of processes.

Square today, round tomorrow
There are plenty of good reasons for choosing customer-specific solutions for products and applications. Making the switch to sustainable, innovative products, adjusting to different environmental conditions or improving functionality, productivity, and energy efficiency are just a few. Round or square, every product solution should exhaust all technical possibilities in order to ensure it is future-proof.

Starting points and potential improvements:
- Bundled functions and fewer components
- Creation of customer-specific function modules
- Functional integration in applications
- Applying energy-saving concepts and components
- Enhanced cost-effectiveness and lower TCO
- Use of alternative materials
- Compliance with customer-specific standards
Good reasons for customized pneumatic components

When standard is not enough
When you need a highly specialized solution, you can call on our experts for customer-specific product development. Their job ranges from implementing simple customized modifications to standard components to developing completely new user-oriented devices in innovative models and functions. From highly complex projects with functional integration to cautious, yet effective, adjustments, either way you get tailor-made components with clear added benefits for your application.

- Product modifications
- Integration of electronics/pneumatics
- Function integration
- Innovative concepts
- Extended environmental specifications

Well organized, competent, prudent: It’s that simple
If an individualized product solution is what you’re after, then you have come to the right place. All we need is a description of your task. We guarantee efficient progress within a proven project organization with clearly defined targets and deadlines. From briefing to series production and in close cooperation with you, especially during the initial phases of the project.

Let us know what we can do for you and profit from our specific resources and experience. We will make headway on your individual pneumatic solution right away – even during the initial consultation.
Unconventional and interdisciplinary – targeted product development with proven project organization

Of course, a tailor-made design is always the best solution. It fits exactly and, as a result, provides decisive additional benefits – if you know how to do it. Only then can targeted solutions be efficiently achieved and implemented with technical and organizational prowess.

Each day is different from the next
When developing customer solutions, our experts can draw from the latest findings in pneumatics and the innovative products in our standard program, i.e. cutting-edge products that are established as “best in class” in numerous applications. They also have cross-systems competence and a wealth of experience gained in cooperation with users from a wide variety of industries. In short, they have all the prerequisites for implementing customized, “best in class” solutions.

From briefing to series production
Professionalism right from the start: from our initial conversation with the user and the joint creative phase to the specific search for solutions, and finally series production. Simulation, functional and concept testing, prototype construction, all test phases, pre-series production to SOP up to series maturity are all part of our service.
Our range of services

If it’s conceivable, it can be done
Reliable feasibility estimates are as much a part of our core competencies as creative concepts. Based on our experience from countless projects, we have a good instinct about what it takes for a successful implementation. Not everything that is possible needs to be put into practice. That is also part of our daily service: promoting creativity – with good judgment.

Modification of standard components
Modifications to products from our standard program, such as special materials, modified threads or special seals, can quickly and easily be used to create tailor-made products for your individual application.

Combining different functions in a single product
The targeted integration of functions with mechanical, pneumatic and electronic elements enables the development of highly compact and efficient functional units for a broad range of tasks.

Product development with additional specifications
Maximum efficiency is achieved through completely new concepts for customer solutions. Products that combine the perfect match of material, function and work environment. Whether you require high stability for harsh operating conditions or lightweight solutions for delicate tasks – our products come well prepared and know what they’ll be up against in their daily work.

Integration of electronics & pneumatics
From the adjusted pressure range of a pressure regulator to new designs with control functions – highly integrated electronics open up new dimensions in pneumatics. This includes previously unknown possibilities offered by valve units equipped with special additional functions and pressure separation, or electropneumatic pressure regulator valves with external sensor inputs, boosters or integrated switching valves.

Pre-series production and test phases
Series production and application
Working unit for extreme conditions. Assembly on a truck engine
Technological leadership and international market transparency

Utilize our product and industry experience for your application!
We see optimization as an ongoing process. The world around us is constantly changing and we are not satisfied with “leaving well enough alone”. There are always opportunities for potential improvements. Our experts for customer-specific solutions will be happy to assist you.
In dialog with our customers and partners

Around-the-clock information
The AVENTICS Internet Portal never sleeps. In the online catalog, you can find additional information covering the entire product range, including all technical details, as well as the use of user-friendly Engineering Tools.

Based on proven expertise and a first-class product range
Our understanding of cooperation goes well beyond the boundaries of individual projects. We are constantly in dialog with our customers and are always a competent contact for both technical and economic questions. The know-how contained in our comprehensive pneumatic product range gives us a solid foundation for our work.

- Cylinders and sensor technology
- Valves, valve systems, field bus connections
- Gripper and vacuum technology
- Compressed air preparation, assembly material, accessories

Understanding our customers allows us to respond more quickly and give us a head start in achieving tailor-made solutions. Thus, we always remain close to the action and ensure the technological lead for us and our customers.

Online catalog
The fastest point of entry is via our online catalog. Here you can start your search directly by entering a part number or keyword.

CAD
Your desired object can be issued here directly as a CAD file in various formats, as a PDF file, or for further configuration in your software.

Configurators
The configurator can be reached by clicking the selected product. After selecting your product, you can begin to adapt it to your own specifications.

Calculation programs
Here you can specify the dimensions or loadbearing capacity of your components with a wide variety of calculation options. We also provide an air consumption calculator as a special feature.

Circuit diagram software
With the D&C Scheme Editor, you can quickly and easily create circuit diagrams that are based on your component layout and linked to your catalog selection.

eShop
The eShop is our online shop that answers your price requests and monitors the whole order process up to delivery.
The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.