

Impressum

Herausgeber

KCI GmbH
Tergartenstr. 64
D-47533 Kleeve
Tel. + 49 2821 711 45 0
Fax + 49 2821 711 45 69
aw@kci-world.com
www.armaturen-welt.de

V.i.S.d.P.

Nicole Nagel
n.nagel@kci-world.com
Thijs Elshof
t.elshof@kci-world.com

Redaktion

Michael Vehreschild
m.vehreschild@kci-world.com
Catrin Senger
c.senger@kci-world.com

Redaktion International

Lucien Joppen
l.joppen@kci-world.com
Sarah Bradley
s.bradley@kci-world.com
Wang Hong
h.wang@kci-world.com

Informationen/Anzeigen

Simon Neffelt
Tel. + 49 2821 71145 44
s.neffelt@kci-world.com

Nicole Nagel

Tel. + 49 2821 711 45 55
n.nagel@kci-world.com

Abonnementservice

Chantal Schüller
Tel. +49 2821 711 45 53
c.schueller@kci-world.com
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SPOTLIGHT ON

Müller quadax is creating success stories and new capacities

Setting the course for future growth

The figures speak for themselves – the QUADAX series from the müller coax group is a huge success. Turnover has almost tripled in the last four years and this brings QUADAX to the peak of its capacity. “It is now time for our subsidiary to take on the next step in the value chain with assembly”, explains Friedrich Müller (Managing Partner, müller co-ax group). With the ground-breaking ceremony for a new building, “we are now setting the course for future growth”.

QUADAX valves were launched on the market eleven years ago. The first valves were made in and used by the first reference customers in 2010. “Especially at low temperatures, the QUADAX has a clear competitive advantage due to its innovative design principle”, explains Patrick Hofacker, Managing Director of müller quadax gmbh. This is why customers from the cryogenic technology sector, such as Linde or AirLiquide, were among the first customers. But the QUADAX has also been successfully implemented for several years in other areas, such as power generation, the gas industry, desulphurisation plants, district heating, petrochemicals, steam generation and in many other applications.

Focus with a small dynamic unit

In 2017, the QUADAX product range was spun off into an independent subsidiary. “The distribution channels and the right trading partners are completely different for Quadax than for our parent company müller co-ax. This meant we needed more focus and a small dynamic unit that can adapt quickly to rapidly changing market conditions,” says Friedrich Müller, Managing Partner of the müller coax group, about the aim of the spin-off. And the plan worked. Müller quadax was able to con-

tinuously increase turnover and was only just short of the eight-figure turnover mark in 2020. “We have radically changed our distribution channels and how we offer our services. We have also significantly invested in the QUADAX brand, which used to be a big unknown on the market as a small business unit of co-ax,” summarises Patrick Hofacker. “This is where a great deal of inventive thin-



Patrick Hofacker, Managing Director of müller quadax gmbh

king meets an innovative spirit, which time and again brings about individual solutions that are precisely tailored to the requirements of customers and partners,” says Michael Knorr, Technical Managing Director of müller quadax gmbh. Both managing directors are agreed: A great team that is always fully focused and gives their com-



Ground-breaking ceremony for the planned new müller quadax gmbh building.

plete commitment “is our most valuable asset”.

New building creates more space

In order to sustainably establish itself in the eight-figure turnover range, more space and optimised processes are needed. “The new assembly hall will triple the current space. This is allowing us to create room for growth in the coming years and our subsidiary can align the processes completely with its own business model. This leads to greater efficiency and quicker delivery times,” says Friedrich Müller, Managing Partner of the müller co-ax group.

A new building with more office space is being built. An assembly hall with approximately 3,000 square metre of space and ten metres high is being built as an annex with storage and clean room production for the oxygen valves. Here, the course is set for the future with sta-



QUADAX® flange in new ice blue.

te-of-the-art storage and conveyor technology, the latest paint booth, state-of-the-art testing technology and optimised intralogistics processes and workflows. Patrick Hofacker: “We can now use the experience of our fitters and assembly management of the past eleven years to redefine our processes and operating procedures. “To be successful, the focus should not only be on the products and their technical edge and reliability, but also on the human side of things. “Both the customer and the employees must be able to rely on me and what I say”, says Friedrich Müller, Managing Partner of the müller co-ax group Trust plays a huge role.

Local production – global distribution

The commitment to the headquarters in Forchtenberg is also important to the company, which underlines the investment. “The strategy is still to leave the value

creation centrally in Forchtenberg, but to continue to act globally. The central production strategy makes it possible to maintain top quality”, explains Friedrich Müller, Managing Partner of the müller co-ax group.

Ice blue valves for the extreme

But müller quadax is not only preparing for the future with a new building. The company is also bringing a touch of colour into play. Its butterfly valves are now available in ice blue instead of grey silver. “We want to be more recognisable and highlight our strength at low temperatures”, explains Patrick Hofacker. This is a change that makes sense and also fits perfectly with the company's slogan: “MADE FOR THE EXXTREME”.

Top Entry butterfly valves are a flagship product from quadax. The Top Entry version is primarily used in pipeline construction, where flanged connections need to be avoided. When maintenance is to be carried out, all internal parts can be removed through the top entry access point, while the housing remains in the pipeline. This is an advantage that has already been benefiting users for some time. For example, müller quadax was awarded a major contract for the Top Entry butterfly valve to replace side entry valves in an existing LNG plant and for an expansion with a new LNG terminal. Located in Europe, this terminal will provide access to the North West European gas market with an ini-



Planned new müller quadax gmbh building. Photos: müller quadax gmbh

SPOTLIGHT ON



Cryotest for QUADAX® Top Entry.

tial throughput capacity of 12 billion cubic metres per annum (bcma), which will be expanded to 16 bcma in the future.

Top Entry: Expectations exceeded in endurance testing

During storage and transport, natural gas could enter the atmosphere, especially at critical components such as measuring instruments and process valves. In addition to the negative impact on the environment, these fugitive emissions could also have an impact on safety. The operating company of this LNG terminal is therefore paying close attention to this fact and requested an individual performance test for the approval of cryogenic swivel valves to be installed in its terminals and storage tanks.

For this purpose, the low-temperature test according to BS 6364 was combined with an endurance test ac-

cording to EN 12567. The 4-offset QUADAX® butterfly valve DN 500 mm, ANSI class 150, has been tested in the ITIS test laboratory in the Netherlands under ten specified thermal cycles with a test for fugitive emissions alternately at +20°C and at -196°C. In addition, the requirement was to complete an endurance test in which 500 mechanical circuits at -196°C measured internal and external leakage after specific cycles.

High precision meets high performance

"Thanks to 4-offset construction and a high degree of precision, in manufacturing, the QUADAX® butterfly valves have once again proven their outstanding performance, not only at high temperatures, but also in cryogenic applications", says Patrick Hofacker. The test institute ITIS BV certified that the seat leakage never exceeded the already



The assembly teams successfully installing the DN900 QUADAX® Top Entry.

low value of 590 ml/minute and after 500 cycles no leakage at all could be detected. Furthermore, the fugitive emission never exceeded a value of $\leq 1.0 \cdot 10^{-5}$ mbar·l/s for the shaft seals and for the upper flange seal of the valve.



QUADAX® Top Entry.

The round seat and seal geometry of QUADAX® butterfly valves are a completely frictionless metal sealing construction. Thanks to this round geometry, the seat and sealing ring are quite literally fitted after a few hundred cycles and provide maximum tightness, even if the material shrinks or expands due to extreme temperature differences.

In addition, the QUADAX® Top Entry butterfly and control valves fully comply with the requirements of the EN 1473-2016 specifications for valves and are specifically designed for LNG applications where inspection and maintenance work can be carried out safely and easily in the installed position without any further risks to service personnel.

Decades of experience create trust

müller quadox gmbh now has a whole host of projects to point to as a reference. With over 10,000 valves sold, it has made a real name for itself with established success on the market. However, the foundations were laid back in 1960 with the founding of müller co-ax and the development of the coaxial valve by Gottfried Müller. He invented coaxiality, in which two round bodies lie on the same axis – a technical revolution.

World Market Leader Champion

The company's success is truly sustainable. This is also highlighted by its latest award. müller co-ax gmbh is now the newest member of the World Market Leader Index. The Index lists German world market leaders according to strict, scientifically verified and comprehensible criteria.

To achieve the title of "World Market Leader Champion", the müller co-ax group impressed as an owner-managed company that sets standards in the industry as a globally successful valve manufacturer in the field of coaxial valve technology and high-pressure valves. Valves for a wide variety of media and applications are developed and produced on-site in Forchtenberg. "We are very proud of this award as we can once again highlight our outstanding competences. Our customers can rely on us and our valve technology. We always have our finger on the pulse and provide solutions for current and future market developments," says Friedrich Müller, Managing Partner of müller co-ax gmbh.

Foundation for future success

Today, numerous customers worldwide rely on this uncompromising quality, even for the most extreme requirements. The German-speaking DACH region, Europe and the USA are strong markets for the company. müller quadox is also already well positioned in the Asian and Russian markets, "but we still see much more potential here", says Patrick Hofacker. The company will also seize this opportunity – the foundations for this have already been laid by the company with its quality products, its growth, its expansion and its team.

Michael Vehreschild



Friedrich Müller, Managing Partner of the müller co-ax group, at the presentation of his title with Walter Döring, former Deputy Federal Chairman and Minister of Economics.



Facts & figures:

Company:	müller quadox gmbh
Products:	QUADAX® double flange, QUADAX® flange, QUADAX® gate valve replacement, QUADAX® butt weld type, QUADAX® Top Entry
Sectors:	LNG & LPG systems, thermosolar, industrial gases, district heating, power generation, hydrogen, oil & gas upstream, oil & gas downstream, low temperatures, oxygen, compressors, aerospace, chemical processes, shipbuilding
Employees:	Approx. 50 (300 in the group)
Turnover:	Close to €10 million (€60 million group turnover)
Subsidiaries:	approx. 40 worldwide
Foundation:	2009 as a brand in the co-ax group, since 2017 independent subsidiary of müller quadox gmbh
Headquarters	Forchtenberg
Managing directors:	Patrick Hofacker and Michael Knorr
Contact details:	müller quadox gmbh Im Kupfertal 52 74670 Forchtenberg (Germany) Tel. +49 7947 94343-0 Fax +49 7947 94343-29 E-mail: info@quadox.de



Proud customers installing the DN900 QUADAX® Top Entry.