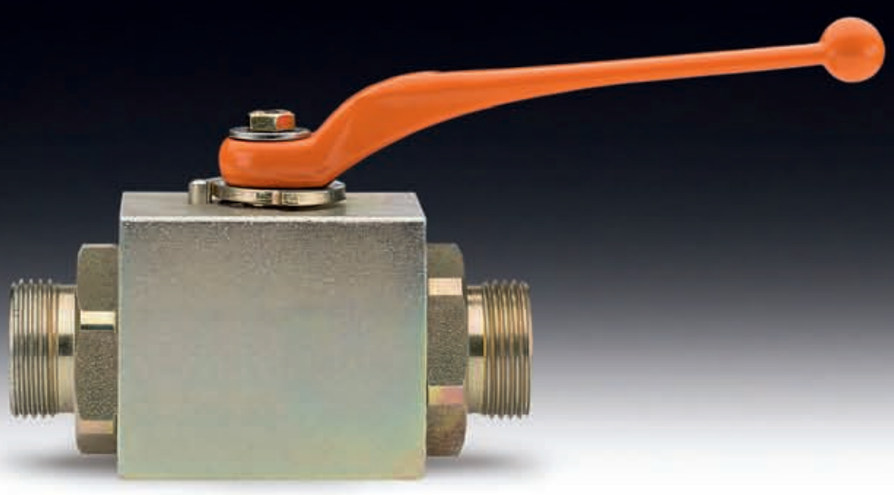
# BALL VALVES

## A N D  F I T T I N G S



vonScheven

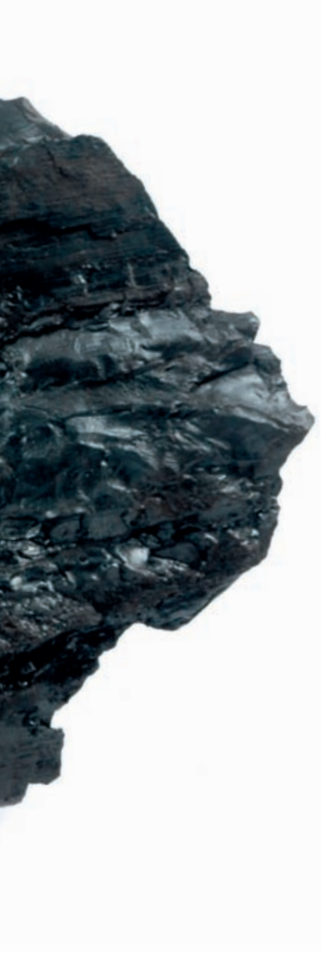
# MILESTONES IN THE COMPANY'S HISTORY

## RUHR MINING INDUSTRY

Rudolf von Scheven

Volker Wullstein

Dr. Mathias Wullstein



Although Sprockhövel appears from the air to nestle idyllically into the wooded foothills of the Bergisches Land, it actually belongs to the southern tip of the Ruhr area, a location that immediately conjures up its popular image as the cradle of coal mining. In those days, of course, conditions underground were anything but idyllic. When von Scheven was formed in 1937, miners were still working with pneumatic hammers, and valves were needed to regulate the air pressure for these machines and for the groundwater drainage pipes. For decades, those valves were supplied by companies in Sprockhövel – including von Scheven. Our founder Rudolf von Scheven quickly recognised the potential of new plastic materials when it came to making dimensionally stable seals. This led to the development of the first ball valves, initially just for use in established fields, then later, above all with the introduction of hydraulic systems underground, for more complex jobs that required much higher pressures. Featuring the advantage of a completely full bore in open position. Other industries soon learned about this innovative, sturdy and highly reliable valve technology, and the company began to grow. The most recent phase of expansion – taking our total administrative and production area to 6,000 square metres – was completed in 2008 under the leadership of today's senior management team Dipl.-Ing. Volker Wullstein and Dr. Mathias Wullstein. The stage is now set for the future to unfold without constraints on capacity – firmly rooted in the mining traditions of the Ruhr while supplying markets all over the world.

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# WORKING ALONE IS MER

# ONLY TEAMWORK

The culture of any business is determined above all by the motivation and commitment of its workforce. Achieving this is largely a matter of subtle leadership, efficient operating procedures, transparent communication channels, flat hierarchies and a willingness to discuss and solve complex tasks through a constructive dialogue that also challenges existing ideas and positions. That does not mean there is no longer a place for concentrated individual efforts, although they must be fully aligned with the overall purpose. We have conveyed this business philosophy in architectural form by incorporating open spaces into our administration building – as a reflection of the way we interact with our colleagues. We think the design might well appeal to those of our customers who naturally expect a first-class product but who place equal value on the quality of communication and the support and advice they receive. Looking ahead, the ability to exchange information rapidly and to show organisational flexibility in terms of administration, design and production will be increasingly vital, especially given the need within our expanding industries to remain

globally competitive and to innovate. Our experienced customer support teams can draw on a huge network of contacts and information. They can give you all the advice you need on the most reliable valve technology, the physical properties of any special fluids that you may use and how to manage them accordingly, industry standards, directives, regulations and statutory record-keeping obligations. We can even provide all this support at the planning stage. You never know, perhaps our ideas might just spark off a completely new train of thought on your side.

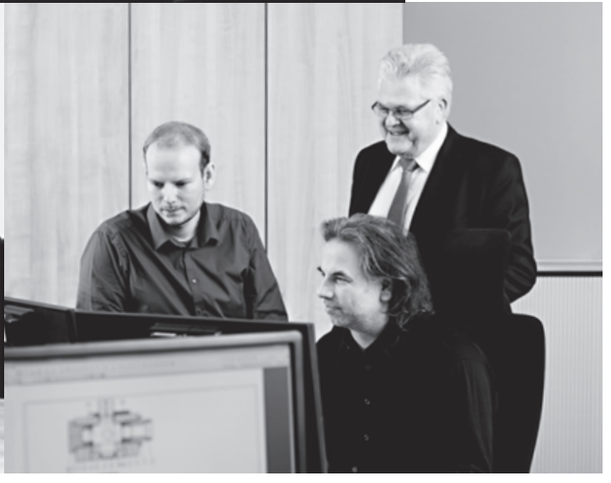
vonScheven

E L Y  A  F O R M  O F **ADDITION.**

L E A D S  T O

**MULTIPLICATION.**

A M



# FLUIDS


KSAE-C


DBA-C


HBS-C


ESK


EFK


NBDI-C


NBA-C


KSAE-DR-C


HBS twin handle


NSK-AL-C


NBDA-C


NBI-C


NSKI-C

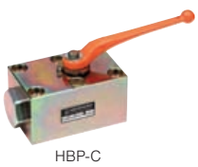

KFL-B


HKA-C


SEL-C


DBF-C

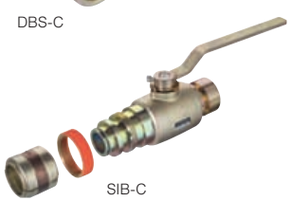

NSKA-C


HBP-C


DBS-C

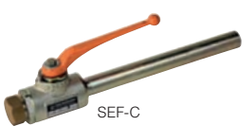

NSK-AF-C


HBSK-C


SIB-C


EHK-D


VSK-C


SEF-C


VRSV-C


Ball valve with pneumatic actuator and limit switch


DBI-C


KFK-B


HKS-C


HBDS-C


K-KFB-C


Ball valve with electro-hydraulic actuator


NBAC-C


MSK


MKA-C

# ARE FUSSY

## P O R T F O L I O

SIBK-D

V-SB

SBAC-C

V-KV-C

HKA-C

HBS-D

Actuator mountings

Ball valve with
electric actuator

Effective material flow management in complex production systems calls for an in-depth understanding of the consistency and state of the fluids in question. It also requires components that are capable of directing, interrupting or releasing the flow of such substances with pinpoint precision. We offer an extensive portfolio of high-performance ball valves and fittings tailored to the requirements of an ever-increasing range of fluids. It covers a broad scope of materials, geometries and technical features. Should you fail to find a suitable product, we will go one step further and engineer a customised ball valve to match your specific application. In fact, we particularly relish such challenges.

**2-way ball valves with thread connection**
DN 4 - 80 mm, PN up to 2,500 bar

**2-way ball valves with flange connection according to DIN, ANSI, SAE**
DN 10 - 250 mm, PN up to 420 bar

**2-way ball valves with weld ends**
DN 8 - 50 mm, fully welded up to 300 mm
PN up to 400 bar

**2-, 3- and 4-way ball valves for manifold installation**
DN 6 - 25 mm, PN up to 500 bar

**3-way changeover ball valves**
DN 4 - 100 mm, PN up to 500 bar

**Multiway ball valves (positive overlap)**
DN 4 - 25 mm, PN up to 500 bar

**Ball valves with plug-in connection (Steck-O, Super-Steck-O, SSKV)**
DN 6 - 100 mm, PN up to 500 bar

**Ball valves and fittings for the mining industry**
DN 10 - 100 mm, PN up to 500 bar

**Actuation/automation**
Our ball valves can be actuated in various ways, depending on the specific application. The options available to you are hand levers, handles and various types of actuator – pneumatic, electric, hydraulic and electro-hydraulic.

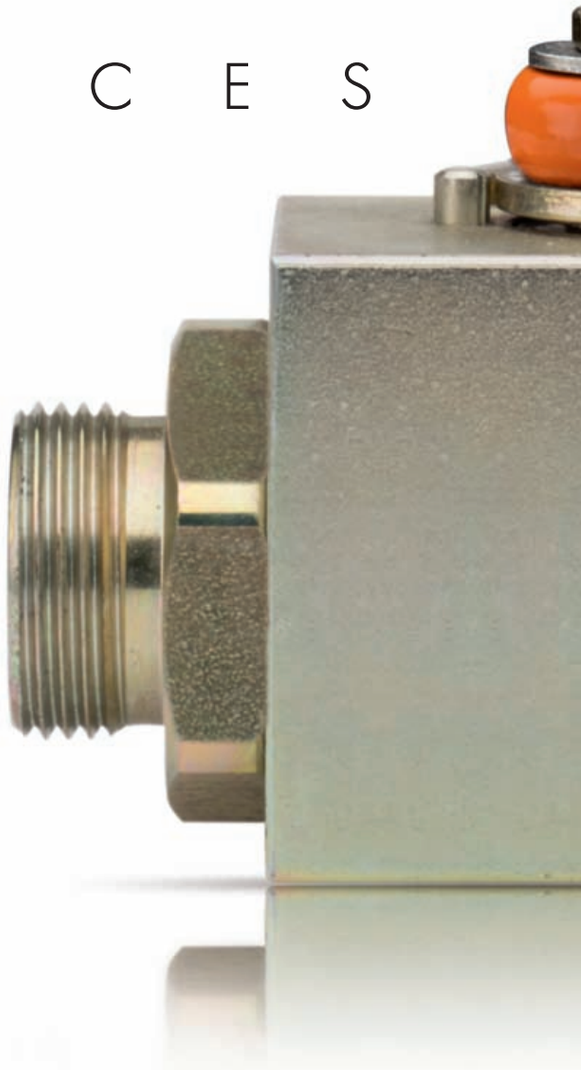
**Special programme**
You may also be interested in customised solutions designed and produced to the highest standards. We look forward to assisting you.

Life flourishes between poles of extremity. There is no need to struggle with psychology to recognise this. Exterior living environments are perceived in similar ways: as light and dark, for instance, as noisy or quiet, warm or cold, high or low. The same applies in the field of science, where entire worlds drift, and sometimes achieve cohesion, in the space between plus and minus or within the fundamental interactions of physics. The ubiquitous computer of the modern day works on the same principle by storing yes/no data as binary zeros and ones in its memory. Such an apparently straightforward procedure also characterises the functioning of our ball valves: their superficially simple open/close mechanism operates at the analogue level, of course,

# ALL OUR PRODUCTS DO IS OPEN AND CLOSE – BUT WITH ABSOLUTE PRECISION.

## D I V E R G E N C E S

yet often as part of highly complex applications. Substance flows are retained, diverted and released in full and free passage, influencing numerous chemical and physical processes as a consequence. All that's needed is a quarter turn of the ball – manually, pneumatically, electrically or hydraulically, as required. The materials we use and the combinations in which we use them are as wide-ranging as the fluids themselves. This goes for our (stainless) steel alloys and many different types of plastic. Making the right choice is a minor artwork in itself, and one we have been refining from the very start – empirically, methodically and now for three generations.



(Hydraulic) oils

Plastics

Acids

Lyes

# FLUIDS

Water

Emulsions

Fuels

Lubricants

Bitumen

Hydrocarbons

Air

Natural gas

Butane

Acetylene

# GASES

Inert gases

Methane

Propane

Nitrogen

Oxygen

Moulding sand

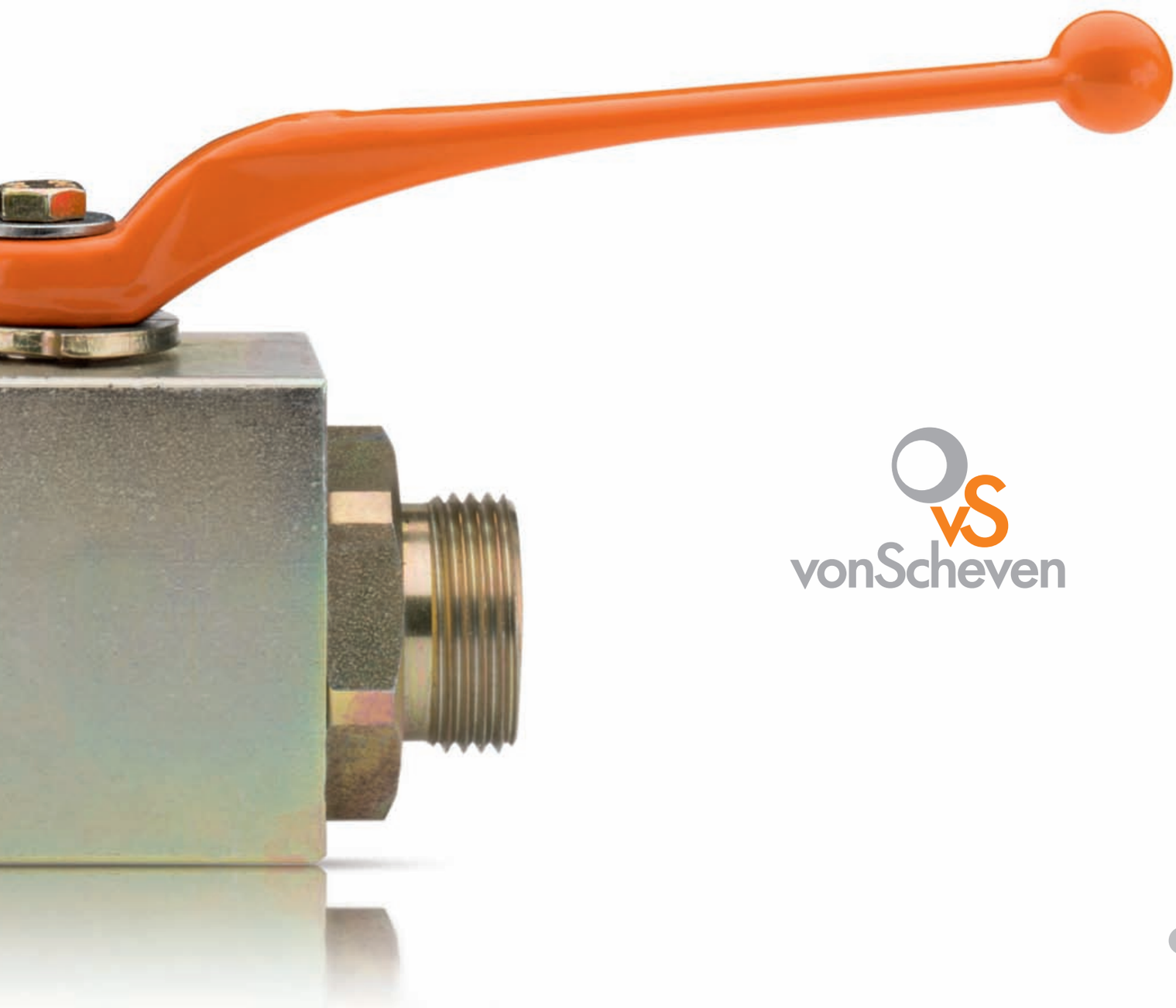
Cement

# SOLIDS

Concrete

Granules

Sand



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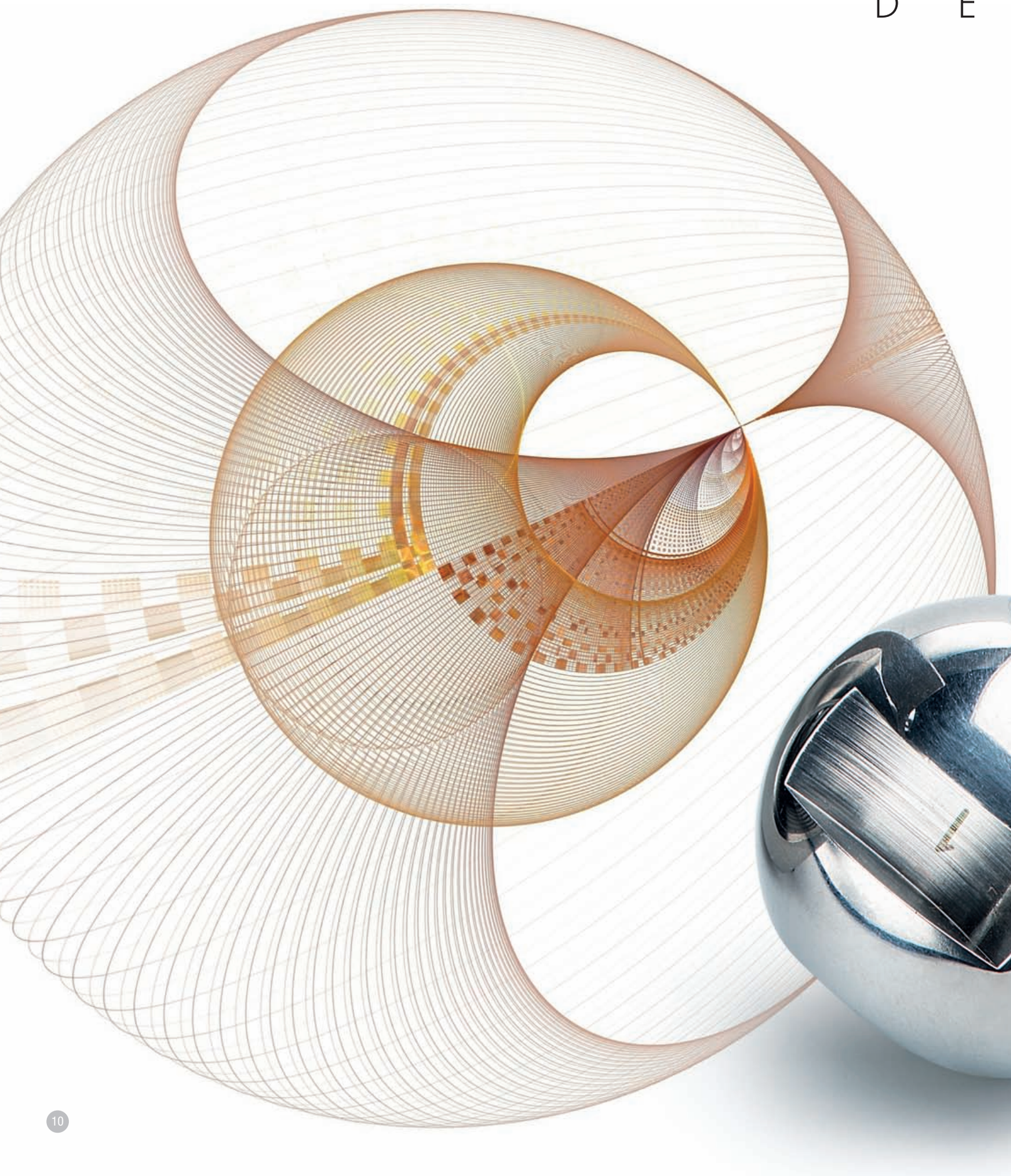
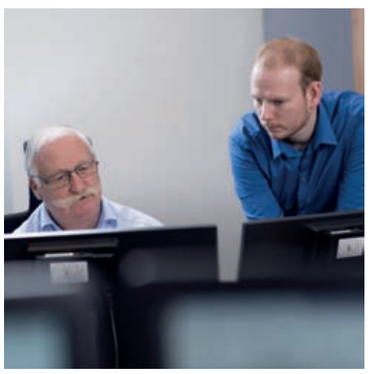
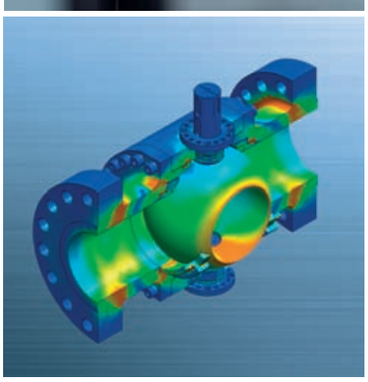
# A SPHERE IS IDEAL IN THEORY – AND IN PRACTICE.

D E S
D E



# I G N  A N D
# V E L O P M E N T





It has been said that the great thing about physics is the fact that it deals with reality. Whereas a mathematical model offers, at best, a reduced depiction of that reality, physics impresses on us that not everything is quantifiable, and that much can only be calculated unsatisfactorily, if at all. This balancing act between theory and practice has exercised a great many minds since the days of Pythagoras, who believed the world could be calculated. Our design engineers need to grapple with both sides: the mathematical ideal of the sphere and its physical properties as actually experienced. The fruits of this exemplary symbiosis of thought, simulation and experimentation – combined with an in-depth knowledge of materials and their load-bearing capacity – are exploited by our development teams on a daily basis. In itself, however, a sphere (i.e. a ball) does not make a ball valve – even if the ball remains its functional core or its heart, so to speak. Only when interacting with complex seals and adjusting mechanisms and carefully housed in a robust casing does it become the component valued by our customers around the world: a dynamic, precise and secure shut-off valve for material flow management. Over the decades, we have produced a modular construction unit which, combined with today's wealth of empirical knowledge and modern methodology, has brought about attractive client-specific solutions and some surprising innovations along the way. This process has been driven by the inventiveness of our employees and supported by the superb CAD systems of the modern day. Now we look to a future that started with mining.

# MANUFACTORY WITH HIGH-TECH AP

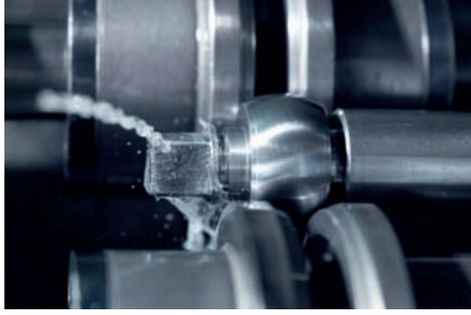
## P R O D U C T

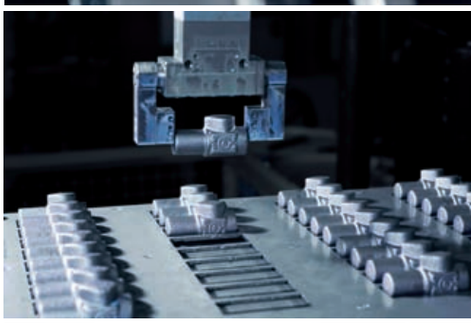
On the face of it, a grand piano and a ball valve don't necessarily have that much in common.
In fact, one would say that, given their appearance and function, they were decidedly different. One makes beautiful music, the other ensures – or prevents – the smooth throughflow of fluids. What connects the two is how high-quality components are diligently assembled to make one perfect whole. Created by dedicated experts with a supreme understanding of their craft down the generations.
As no two ranges are identical, we are miles away from the drudgery of the assembly line here. Every piano and every ball valve is a unique specimen, if you like. From the very first touches right through to the final checks. With us, that holds true for small batches just as it does for bulk orders. Of course, we too find a use for efficient and cost-effective technologies of the next generation. Despite our high-powered, numerically controlled machining centres, special machinery and robot-loaded rotary transfer machines, however, once our automated processes are complete we still rely on the familiar attributes of discerning craftsmen. On manual dexterity, irreplaceable intuition and human flexibility, which should not be underestimated, and on our staff, to whom we as a family-owned business feel a special obligation. Without them, our ball valves would not be amongst the best in the world. We're sure of that. And success proves us right.

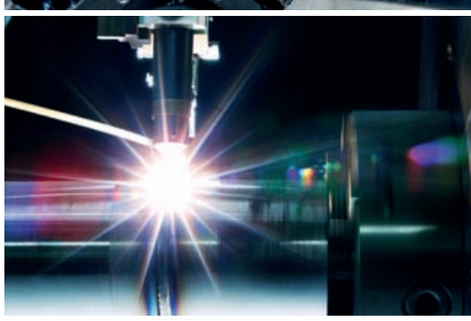
vonScheven

# PEAL

I O N








TOUCH

# MISTAKES ARE TEACHERS OF INNOVATION

## Q U A L I T Y

TÜV Certificate
DIN EN ISO 9001:2008
TÜV Certificate AD-2000 HP 0
Certificate PED 97/23/EG
(replacement: 2014/68/EU)
TÜV Certificate TA Luft
TÜV Certificate in-house
inspection service TPED

TÜV Certificate component test

GWI-HTB inspection

VdS Certificate
Production facility VdS
approved production

Apragaz Type Approval TPED
BAM Test report according
to DIN EN ISO 15615:2002

DVGW Gas certificate

SVGW Gas certificate

TR customs union certification
of the EAC (CUC)

Contradictory though it may sound, you will find the most accurate measuring machines for 3D coordinates ever developed in the history of technology precisely in those places that preach a zero-error philosophy. And we're no different. Firstly, because we want to find out whether production genuinely can now run without any errors or not. And secondly, so that we can really put supplied components through the wringer. Of course, our approach involves interlinking, simulating and optimising all design, manufacturing and assembly parameters in such a way that what emerges at the end is a perfect ball valve. As always, this means careful measurement, alignment and testing. The fact that sometimes hidden errors are uncovered and that the work done to fix them frequently sparks something innovative is an extremely welcome side-effect of our quality assurance. Once the finishing touches are finally in place, a hundred percent pressure test provides conclusive proof that each and every ball valve is in impeccable working order. It is this understanding of quality that has already brought us a whole host of certifications. With many more undoubtedly still to come.

# PROGRESS IS DRIVEN BY SUCCESS

## S U C C E S S  I S  D E F I N E D  B Y  C U S T O M E R S

It is said that there are many paths to success. But it is also said that success only kicks in when you start doing more than just what's necessary – continuously. Truisms that, as so often happens, are a fairly accurate reflection of reality. What is clear is that success is generated by disciplined activity and an ability to keep decision-making and implementation relatively close together. Nobody appreciates and rewards this more than the customer – with recognition, loyalty and ultimately with orders. Satisfied customers will come back. Delighted customers will pass the word around. Our references from all manner of different sectors speak for themselves.

vonScheven

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