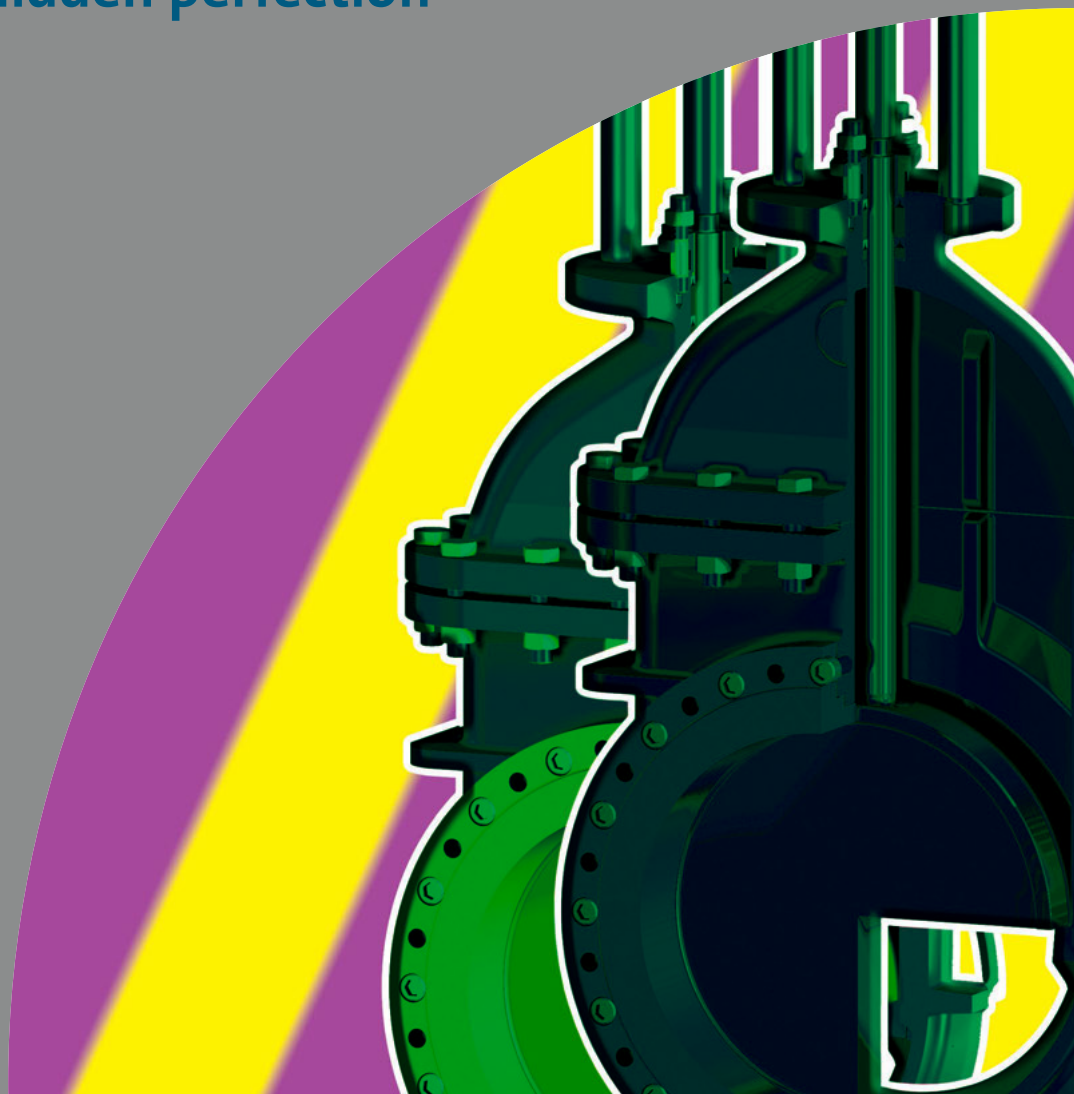
Valves

Industrial valves
Hidden perfection



The path to the directory of industrial valve manufacturers
http://arm.vdma.org/en/branche

Industrial valves

Hidden perfection

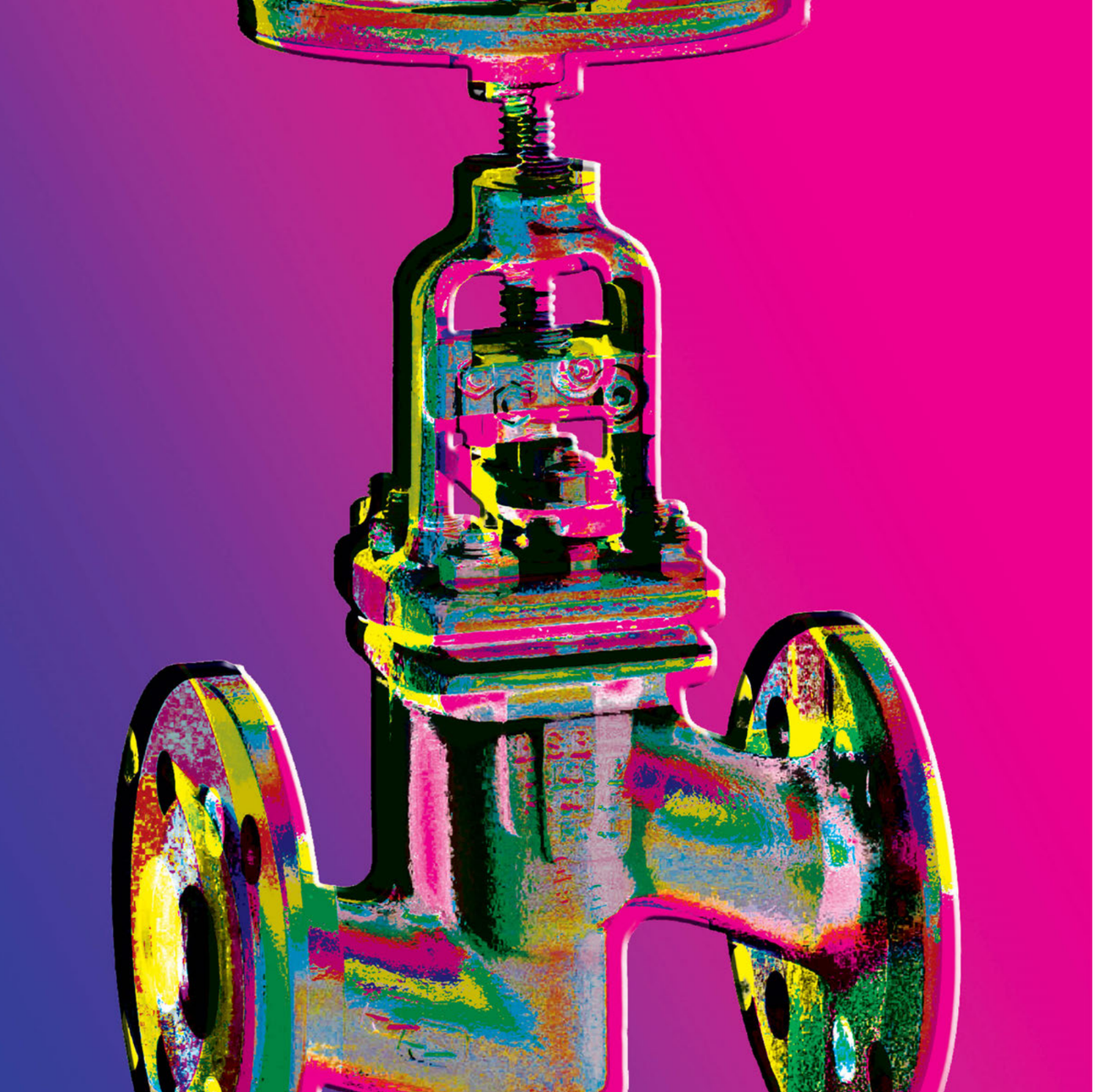
The fascination
of hidden perfection.

A young man paints everyday objects. Things that are always around, yet somehow remain almost invisible. He draws our attention to it – and makes it a piece of art. Today, everybody knows “Campbell‘s Tomato Soup”.

It’s a similar story with industrial valves. They are everywhere and yet often remain unnoticed. They are indispensable, reliable, but mostly work behind the scenes. But if they are good, they are a real piece of art.

We have them here for you. The hidden champions. The performers of their discipline.

Click here to go to the manufacturers‘ directory of industrial valves http://arm.vdma.org/en/branche



Durable

thanks to precise material knowledge.

Just how important the right materials are is something that Leonardo da Vinci had to find out the hard way during his lifetime when his famous painting, “The Last Supper”, suffered considerable damage. He had used experimental, organic paints and the non-durable Secco technique for his fresco – a tragic mistake.

Key industries such as process engineering, chemistry and petrochemistry, or energy management cannot afford to have any problems with materials. They therefore trust in the superior expertise of the German valve industry when it comes to choosing materials; these are constantly inspected, tested and certified and fully meet the required standards.

This ensures the long service life and high functional reliability of shut-off valves, the classic amongst industrial valves. They seal firmly when different media are used such as water and steam or oil and gas – reliably and long-term.

Even more durability can be found at http://arm.vdma.org/en/branche

Perfect Aesthetics

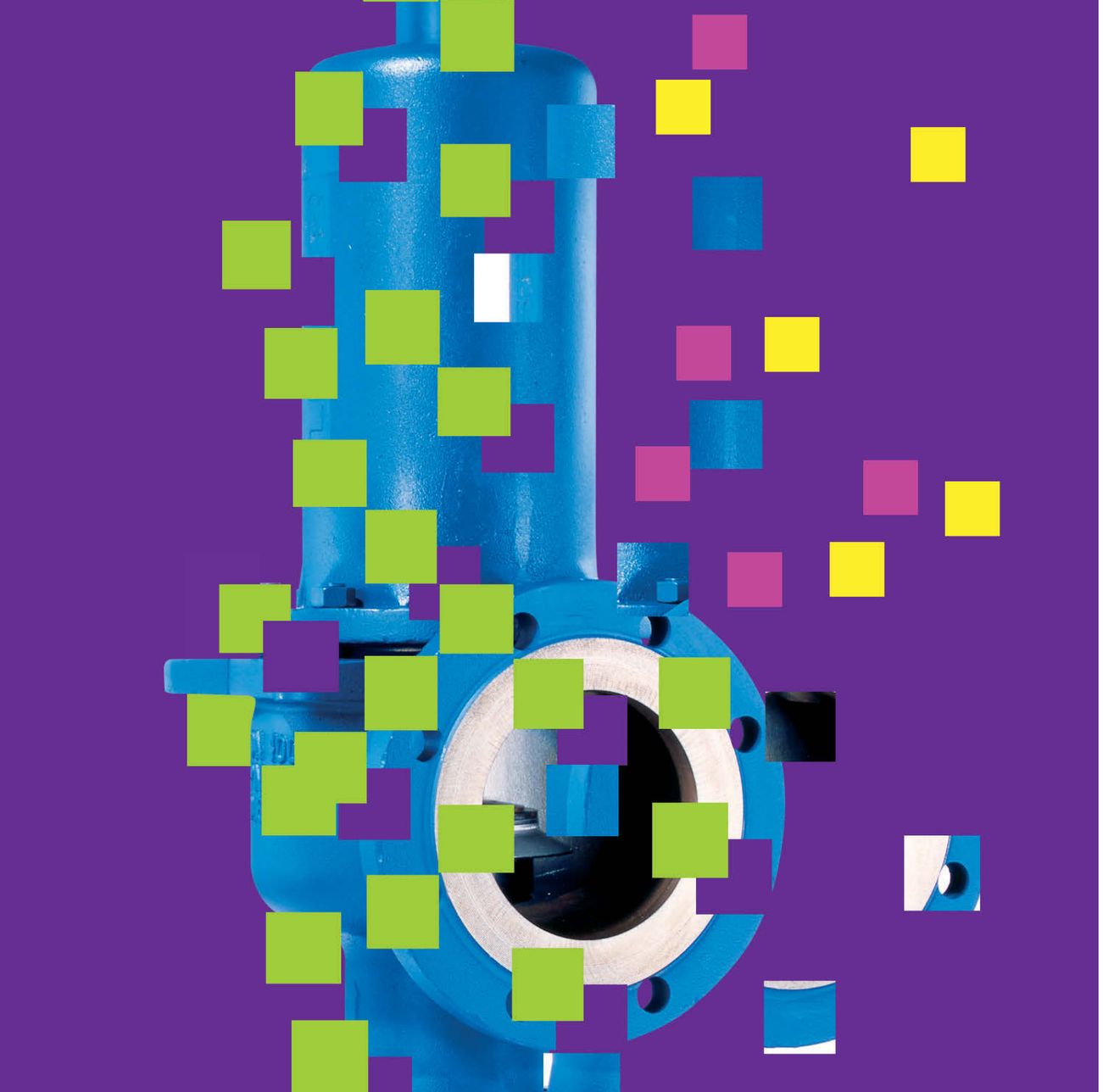
in form and function.

One aesthetic principle applied for the architects of the first skyscrapers in Chicago just as much as for the designers of the German Bauhaus, namely: form follows function.

Clever solutions for shut-off valves are a great example of how this aesthetic design principle has also inspired German industrial valve manufacturers. A triple eccentric design achieves maximum closing force with minimum effort. In current simulations, the component geometry is optimised; by using finite elements, optimum weight is achieved.

Today, German industrial valve manufacturers are already looking for the solutions of tomorrow – for a decent environmental protection, high quality end products and utmost safety for humankind.

Even more functionality can be found at http://arm.vdma.org/en/branche



If the pressure‘s too high,
release some steam.

Hardly any other artist has succeeded in depicting the elements as impressively as William Turner. It was not only the depiction of light and speed that fascinated him, but also that of water and steam, which he accomplished brilliantly in his locomotive pictures.

Back then, high pressure levels were certainly a dangerous affair; now, it is just as important to release steam in good time during production to prevent damage occurring. The latest safety valves protect pressure vessels and pipeline systems from a sudden rise in pressure. They release gases, vapours or liquids quickly and reliably under great pressure - and prevent unnecessary losses by a fast counter-reaction, as soon as the normal state is restored.

Accurate safety valves for the most difficult pressure conditions protect systems and employees, for example, in the chemicals industry, in the production of technical gases, and in the food and beverage industry.

Even more safety can be found at http://arm.vdma.org/en/branche

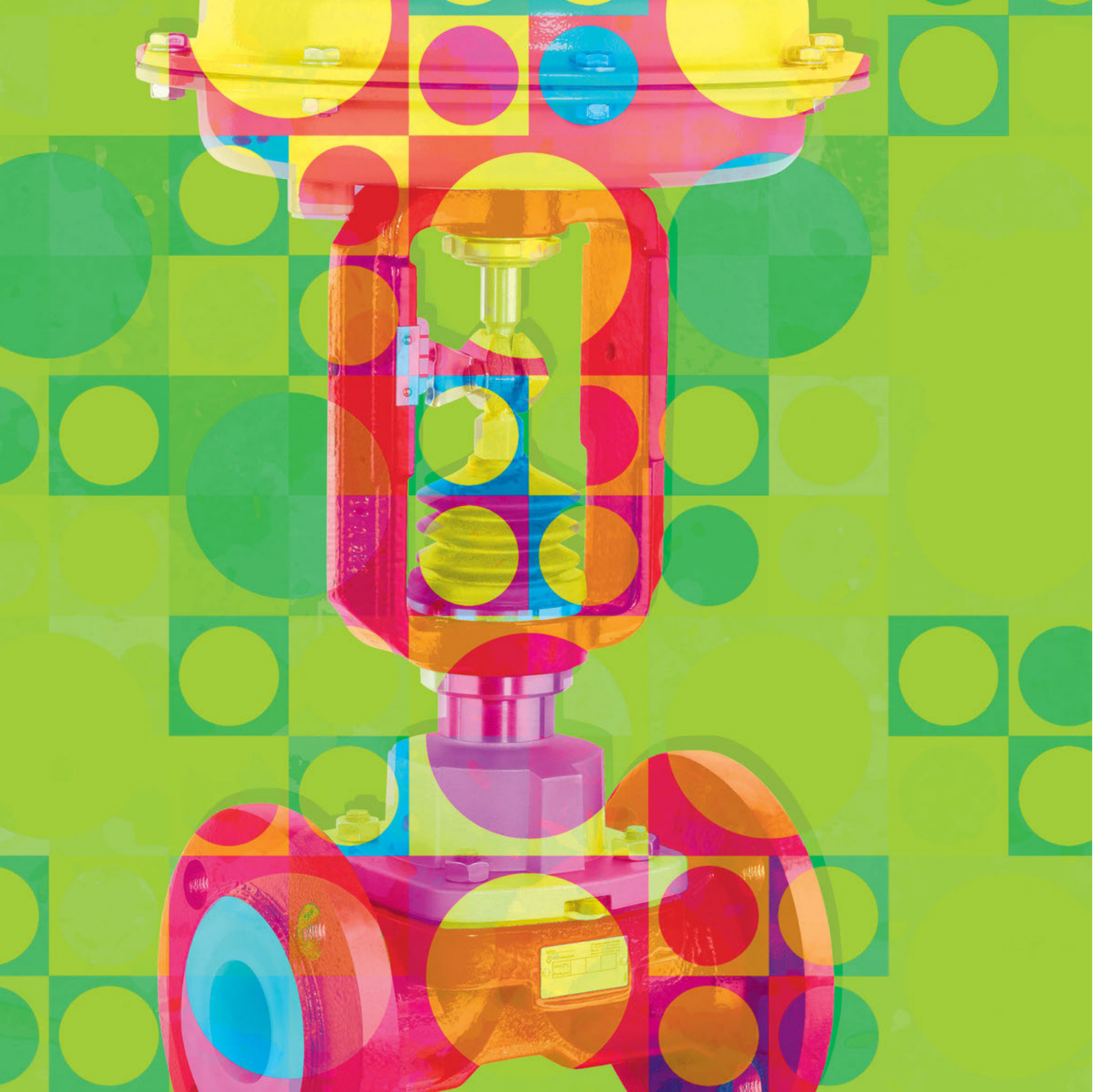
“No can do”
can be fatal.

The hydrant is perhaps the most taken for granted valve. It is in widely use and yet hopefully not required that often. However, when it is used, it needs to be unmistakeable and work perfectly. This is when it saves lives.

It is amazing how much expertise is behind one of today‘s above-ground hydrants. Its individual parts are made of aluminium, brass, alloys and enamelled, ductile cast iron – to make it indestructible and work safely. At all times.

What makes a hydrant a work of art? Is it the sure knowledge that it will always work? Or its classic design that is not only loved by children? The hydrant has it all. How great that it exists!

Clever solutions for water management can be found at http://arm.vdma.org/en/branche



The multi-talents

hermetic, soft-sealing and reliable.

Universal geniuses are rare. But every now and then they appear - the da Vincis, Goethes, or Humboldts.

Diaphragm valves are easy to handle and reliable as shut off, control and throttle valves. They seal hermetically tight - in a smooth, gradual process that prevents sudden pressure surges. Thanks to these excellent characteristics, they are widely used.

Lined with PFA/PTFE, diaphragm valves are used for corrosive, pure and ultra pure liquids, gases and vapours in chemical, pharmaceutical and food technology, as well as in industrial processes. Simply speaking, they are multi-talents and universal geniuses.

Other multi-talents can be found at http://arm.vdma.org/en/branche

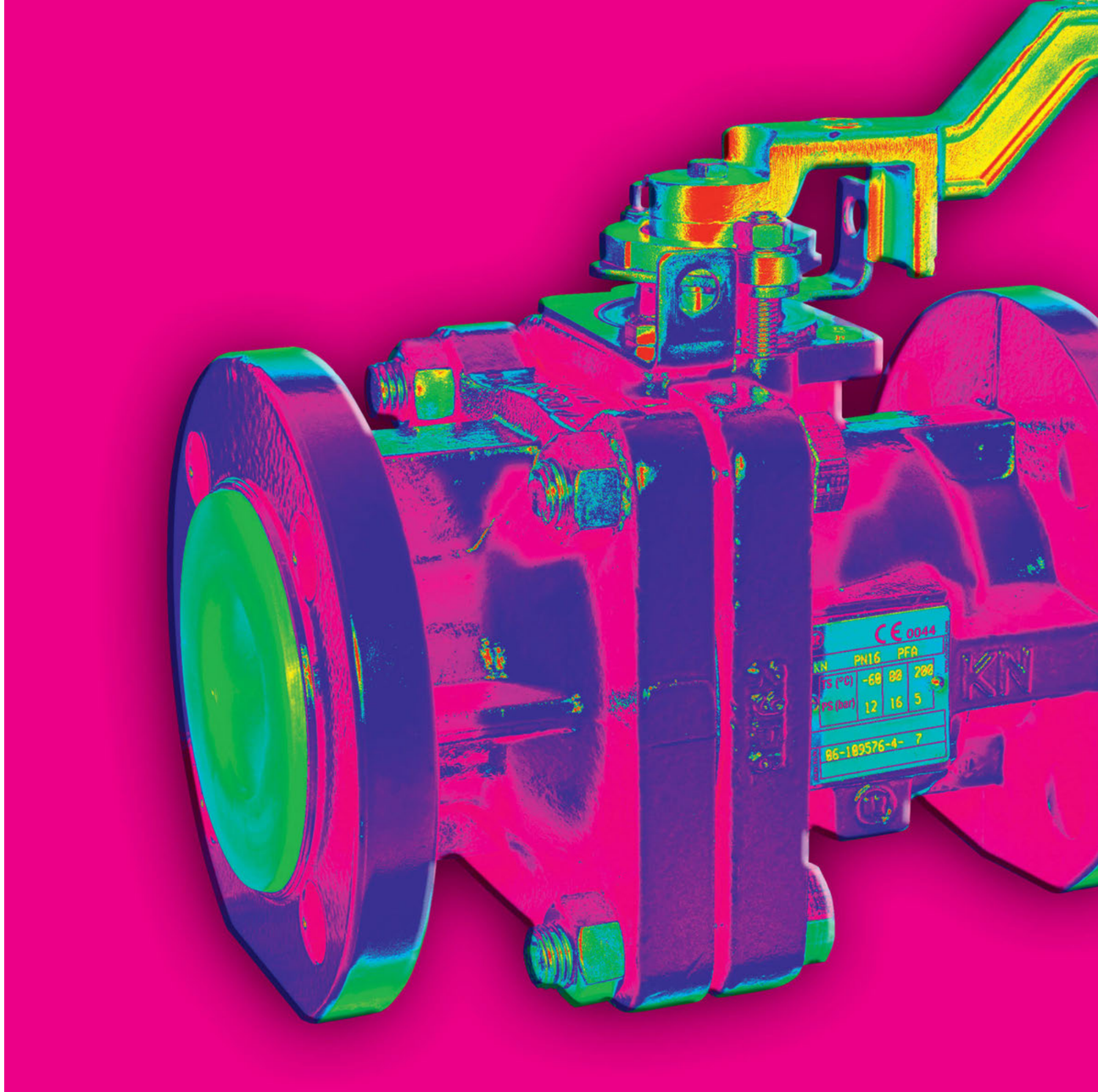
Optimising the tried and tested
for international success.

Classic Greek/Roman antiquities are considered the first pinnacle of art in architecture and sculpture. Yet, the Roman engineers were also pioneers: they already used valves in their pipeline technology.

These days, ball valves are characterised by their particularly low pressure losses. This means that the upstream pump can have smaller dimensions - which in turn saves energy and increases the durability of the entire system. After all, high pressure means high levels of wear.

Optimisation never stops. In modern ball valves, for example, the single body shaft avoids the “ball to switching shaft” weak spot. These sorts of developments are appreciated at an international level: around 75 percent of production of the approx. 120 German industrial valve manufacturers goes into export.

Other innovative German valves and fittings can be found at http://arm.vdma.org/en/branche



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