



## WAM Tech Talks 5.0 - Interview with Georg Schulze-Dürr

3 February 2026

### ***1. Can you briefly introduce your company and its core expertise within the industrial and manufacturing sector?***

[3R solutions](#) is a global provider of **smart manufacturing and automation solutions** for industrial pipe fabrication.

With **more than 40 years of experience**, we support industrial companies in transforming traditional production environments into **future-ready, highly efficient manufacturing operations**. This long-standing expertise allows us to combine proven industrial know-how with **next-generation digital technologies**.

Our focus is on enabling **productivity gains, cost reduction, and workforce transformation** by integrating automation, intelligent software, and data-driven decision-making. We help manufacturers reduce dependency on scarce skilled labor while creating **safer, more attractive and sustainable workplaces**.

By delivering fully integrated **smart factory concepts**, we align material flow, production, and digital transparency to support strategic objectives such as **operational excellence, resilience, and long-term competitiveness** - fully aligned with **Vision 2030 and Industry 5.0**.

### ***2. What key challenges do your solutions address for manufacturers and industrial operators today?***

Today, manufacturers and industrial operators are under growing pressure to **increase efficiency and productivity** while simultaneously facing **skilled labor shortages, rising operating costs, and increasing production complexity**.

Our solutions directly address these challenges by enabling **measurable manpower savings**, improving **operational reliability**, and significantly reducing errors through **software-driven automation**. This allows companies to stabilize output, even in an environment where qualified labor is scarce.

Beyond efficiency, we support a fundamental **transformation of the shop floor**. Physically demanding and error-prone tasks are converted into **safer, more structured, and more attractive workplaces**, helping companies retain talent and position themselves as modern, future-oriented employers.

A key shift is that **decisions on the shop floor are no longer dependent on individual experience alone**. Instead, intelligent software acts as a **digital backbone**, dynamically coordinating machines, workflows, and material flow in real time. Resources are utilized at their optimal capacity, workplaces are clearly organized, and idle time caused by missing material or poor coordination is eliminated.

In this way, our solutions enable manufacturers to move toward **smart factories aligned with Industry 5.0 and Vision 2030** - combining efficiency, resilience, and human-centric automation into a sustainable competitive advantage.

### ***3. How do your technologies support efficiency, sustainability, or operational optimisation across industrial processes?***

Our technologies support efficiency, sustainability, and operational optimisation by establishing a **streamlined digital super-structure** that seamlessly connects engineering, planning, and production into one coherent workflow.

Through automation and the use of digital twins, we significantly reduce **manual intervention, rework, and material waste**. This leads to **more predictable operations, higher productivity, and improved cost control**, while at the same time supporting a more responsible and sustainable use of resources.

The impact extends well **beyond the shop floor**. We help industrial operators optimise the entire fabrication ecosystem, including downstream activities such as inspection, quality assurance, and surface treatment. In many industrial environments, the greatest losses are not caused by the processes themselves, but by **inefficient organisation, poor coordination, and lack of transparency between process steps**.

By addressing these gaps, our solutions reduce idle time, improve throughput, and enable **data-driven operational decisions across the full value chain**. This allows manufacturers to move from reactive production to **structured, resilient, and scalable operations**.

#### ***4. Which industries or sectors benefit most from your solutions, and why?***

In simple terms, our solutions create the greatest value in **industries where complex piping systems are mission-critical to operations.**

This includes sectors such as **energy and power generation, oil and gas, refining, shipbuilding, pharmaceuticals, food and beverage, and other process-driven industries.** Across these sectors, operators face similar challenges: **high coordination effort, strict quality and safety requirements, and increasing pressure to deliver projects faster and more cost-effectively.**

Wherever complexity is high and reliability is non-negotiable, our software-driven approach delivers the strongest impact. We help industrial operators **standardise and orchestrate complex processes,** reduce dependency on scarce skilled labour, and significantly improve **operational predictability and consistency.**

The result is a more **efficient, resilient, and scalable production environment,** enabling companies to maintain high quality standards while improving productivity and long-term competitiveness.

#### ***5. What differentiates your company from other solution providers in the global industrial market?***

What truly differentiates **3R Solutions** is that we do not focus on individual tools or machines, but on the **entire digital process around piping.**

We combine **deep industry experience** with **proprietary software** that connects engineering, planning, production, and execution into a **single, coherent workflow.** This holistic approach allows us to address complexity at a system level, rather than optimising isolated steps.

Unlike many solution providers, we are **vendor-neutral and highly configurable.** We do not represent specific machine brands or follow a fixed manufacturer catalogue. This gives us the freedom to select the **best-fit technologies** for each project and adapt them to the customer's operational reality - not the other way around.

As a result, our customers benefit from **measurable manpower savings, higher process reliability, and predictable outcomes,** while building a scalable foundation for **future-ready manufacturing environments.**

In short, we act as a **strategic transformation partner,** enabling industrial operators to move confidently toward the next generation of smart, resilient production.

## ***6. Why did you choose to participate in WAM Saudi, and what opportunities does the Saudi market present for your business?***

We chose to participate in WAM Saudi because it is a focused platform that brings together industrial decision-makers and transformation leaders shaping the future of manufacturing in the region.

Saudi Arabia is a highly attractive market for us, driven by its strong industrial base, large-scale projects, and the clear strategic direction defined by Vision 2030. Many manufacturers are now moving from expansion to modernisation and productivity-driven transformation.

Our solutions strongly support these goals by helping industrial operators increase efficiency, reduce manpower dependency, and upgrade existing facilities through software-driven automation. In this way, we actively contribute to the Kingdom's ambition to build resilient, competitive, and future-ready industrial capabilities in line with Vision 2030.

## ***7. How does WAM Saudi align with your growth strategy in the Middle East and international markets?***

WAM Saudi aligns very well with our growth strategy because it connects us with regional industrial leaders, EPCs, and project owners who are actively investing in modernisation and automation.

The Middle East - and Saudi Arabia in particular - represents an important growth market, driven by large-scale industrial projects, long-term investment horizons, and the transformation agenda under Vision 2030. These dynamics create strong demand for software-driven productivity improvements and smart manufacturing concepts.

At the same time, many projects in the region are closely linked to global supply chains, which allows us to combine regional activities with our international experience and capabilities.

In this context, WAM Saudi supports our growth strategy by enabling long-term cooperation, pilot initiatives, and scalable implementations across both regional and international markets.

## ***8. What solutions or capabilities will you be showcasing to visitors at WAM Saudi?***

At WAM Saudi, we will be showcasing our software-driven automation solutions for pipe fabrication, with a strong focus on connecting engineering, planning, and production into a single, consistent digital workflow. The emphasis is on transparency, predictability, and control across complex industrial processes.

Visitors will see how digital twins, intelligent production planning, and seamless machine integration enable significant manpower savings, improve process reliability, and unlock the full potential of existing facilities. Rather than replacing assets, our approach helps manufacturers maximise the value of what they already have.

We will also highlight how our solutions support the transition toward smart factories and Industry 5.0 in a pragmatic and scalable way. Manufacturers can modernise step by step, aligning productivity improvements with human-centric automation. At the same time, workplace quality

is enhanced, operational performance becomes more stable, and organisations build a solid foundation for long-term competitiveness.

### ***9. What types of partnerships or collaborations are you looking to explore during the event?***

During the event, our primary focus is on engaging with large industrial end customers operating complex, fabrication-intensive facilities.

This includes leading operators in sectors such as refining, energy, chemicals, pharmaceuticals, food processing, and other process-driven industries where piping systems are critical to operational performance. We already have practical experience in the Kingdom, having delivered a large-scale, highly automated pipe fabrication facility for a major shipyard on the east coast of Saudi Arabia. This gives us a strong understanding of local project requirements and industrial expectations.

We are particularly interested in collaborating with organisations that take a long-term, strategic view on automation, workforce optimisation, and the evolution toward smart manufacturing environments. Rather than transactional projects, we focus on partnerships built around clear objectives and measurable outcomes.

Our goal is to establish direct customer relationships and support them through structured evaluations, pilot initiatives, and scalable implementations that deliver sustainable operational value and long-term competitiveness.

### ***10. How do you see Saudi Arabia's industrial transformation creating new opportunities for companies like yours?***

Saudi Arabia's industrial transformation is creating strong opportunities for companies like ours by combining **large-scale industrial investment with a clear long-term direction under Vision 2030**.

As the Kingdom modernises its industrial base, the focus is increasingly on **productivity, automation, localisation, and workforce development**. Many operators are no longer looking only to expand capacity, but to **upgrade existing facilities and design new plants that are more efficient, resilient, and digitally enabled**.

This shift creates a clear demand for **software-driven optimisation and smart manufacturing approaches** that deliver measurable performance improvements while reducing dependency on manual, labour-intensive processes. For us, this represents an opportunity to support Saudi manufacturers in building **competitive, future-ready industrial operations** that contribute to sustainable growth within the Kingdom.

***11. What value do you believe WAM Saudi brings to exhibitors looking to connect with government entities, corporates, and decision-makers?***

WAM Saudi offers a **focused and high-quality platform** for exhibitors to engage in **substantive discussions** with government-related entities, major corporates, and senior decision-makers.

Unlike broader trade shows, WAM Saudi brings together stakeholders who are **directly involved in industrial development, automation, and long-term investment initiatives**. This creates an environment where conversations move beyond product presentations and focus on **strategic priorities, operational challenges, and realistic transformation paths**.

For companies looking to build **long-term relationships in the Saudi market**, this depth of dialogue is particularly valuable, as it supports trust-based engagement and aligns industrial ambitions with practical execution.

***12. What message would you like to share with industry leaders, investors, and visitors attending WAM Saudi?***

Our message to industry leaders, investors, and visitors at **WAM Saudi** is that **industrial transformation does not have to be disruptive or risky**.

With the right **digital foundation**, automation and smart factory concepts can be introduced **step by step**, delivering **measurable productivity gains, manpower optimisation, and improved workplace quality** while protecting ongoing operations.

We believe the strongest and most sustainable results come from **combining human expertise with software-driven processes and long-term thinking**. This approach creates **efficient, resilient, and future-ready industrial operations** and supports Saudi Arabia's ambition to build globally competitive industrial capabilities for the decades ahead.