

## spirit of excellence

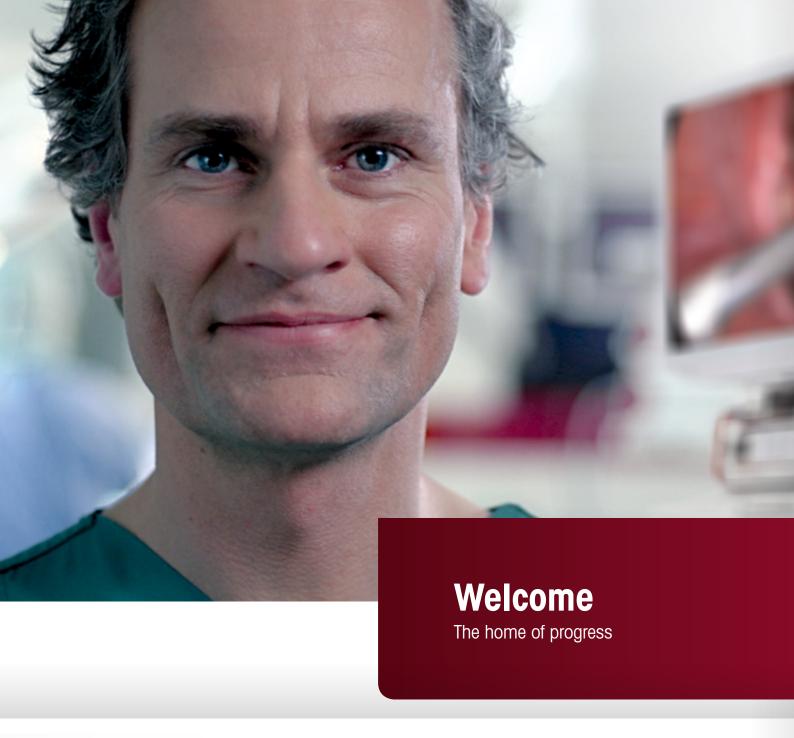
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## Welcome



**Jürgen Pfab** Co-CEO Jürgen Steinbeck Co-CEO

"spirit of excellence" is our keynote focus — it guides us in our routine work every day. We dedicate our full commitment to making this "spirit" a reality in the development phase and the manufacture of a new product. We also pursue our cooperation with physicians, surgeons, and users in this spirit through our global sales and service activities. The focus is on the requirements of our customers and on "excellence" in implementation by the people in our workforce. Join forces with us to discover the "spirit of excellence". We wish you a warm welcome at Richard Wolf.



### Every medical development needs courageous and creative minds to assist in achieving success.

As a pioneer in endoscopy, Richard Wolf is one of those forces that define progress. Our passion for high-performance medical technology has its roots in the history of our company. The vision of perfect visualization and minimally invasive interventions with outstanding outcomes for patients is transformed into reality through a carefully fostered dialog with doctors and scientists throughout the world

Our objective is to identify medical trends in the initial stages and to work together to achieve perfect solutions. Unique and highly functional products are created to meet the very highest standards in medicine by giving all our employees the scope to develop their strengths and full potential. Richard Wolf always offers added value. We are consistently one step ahead of the crowd. The inspiration and motivation to go the extra mile – this mindset defines the philosophy of the company Richard Wolf today. Pursuing this route is our destiny because there is still a great deal of work to do as we seek to honor our commitment to create a healthier world.







## Focus on people

Visualization with vision



Innovative solutions for human medicine are the result. Richard Wolf has a track record of experience spanning more than 100 years. The company played a leading role in the development of endoscopy and shock wave therapy. This integration of science and medicine defines the quest for first-class products and system solutions. **Based on the principle of "everything from a single source"**, **Richard Wolf creates certainty for the future and opens up new routes for multidisciplinary developments across different specialties**.

## The key to our strength

The people at Richard Wolf



excellence in innovation





**Enthusiasm is an integral feature.** Gaining joy from your work is a key factor for success at Richard Wolf. Our employees promote the "spirit of excellence" every day with passion and know-how. They are also enthusiastic about their work.

Our customers appreciate their enthusiasm. Sales, advice, and service all come with a friendly smile and helpful approach, personal commitment, and expert know-how. This spirit helps you to achieve your goals faster and delivers a better result.

People are the focus at Richard Wolf. Future-proof personnel development and our training concept are integral elements of our human resources policy. Training is instrumental in allowing us to forge perspectives for the future and develop a qualified workforce to ensure the ongoing success of our company. We are proud to have a workforce with many long-serving employees who have demonstrated their loyalty to Richard Wolf through exceptional commitment. Values like fairness, respect, trust, and loyalty define a working environment where quality and sustainable entrepreneurial results thrive.

Allow yourself to be inspired and join us in experiencing the thrill of carrying out a rewarding job every day. Working to create a healthier world and a human community in the "spirit of excellence".



## **Surgery**The future in your hands



excellence in health care



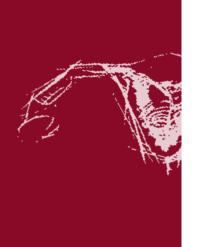
## excellence in health care

**Everything under control.** Experts at Richard Wolf, physicians, surgeons, and scientists from all over the world cooperate closely on moving forward in endoscopic surgery. Partnerships at a high level of specialization provide us with the platform for developing smart diagnostic and therapeutic systems. We work together with a single objective: providing surgeons with a future-proof spectrum of outstanding products to perform minimally invasive general, abdominal and thoracic surgery.

In-depth understanding of surgical and clinical workflows has led to the advanced development of our ergonomic ERAGONmodular forceps series, which represents the current benchmark in laparoscopic instruments.

Products from Richard Wolf are changing the face of surgery. **Benefit from these advances and hold the future in your hands.** 



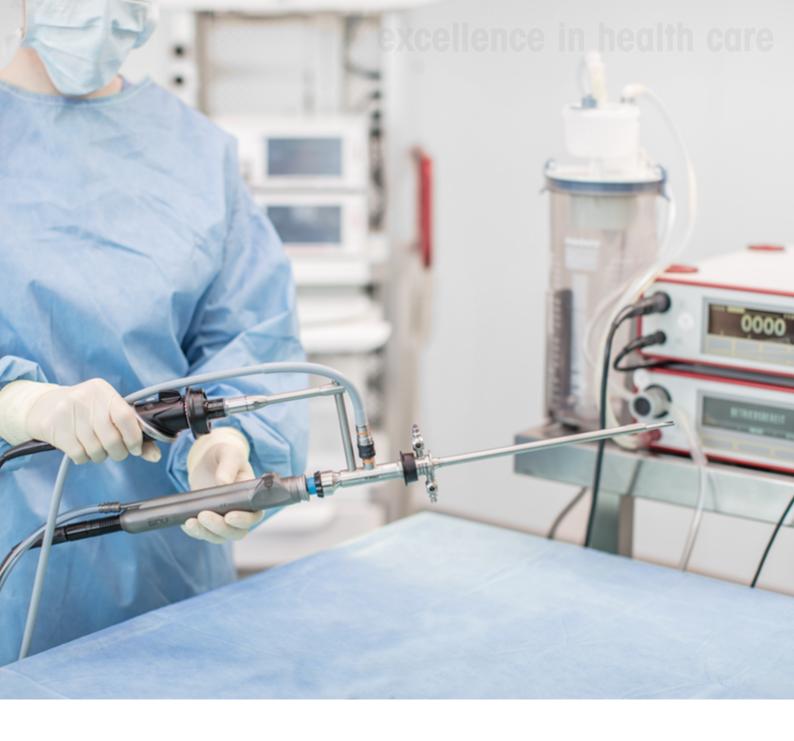


**Tried and tested.** Products and system solutions for gynecology at Richard Wolf have always followed the principles of "simplicity" and "safety". This approach has frequently enabled classic endoscopic procedures to be placed on the next technological platform. An ongoing exchange of ideas and communication with leading gynecologists enables us to generate visions as the nucleus for innovations. The resulting products have minimized the potential risks of interventions and reduced the trauma caused to patients. The miniaturization of instruments was an important milestone on this roadmap.

Our innovative hysteroscopy portfolio creates new benchmarks for patient safety and user-centricity. Our engineers have worked together with experienced users to develop world-class products like the Resection Master, the world's first resectoscope with automatic chip suction, designed specifically to meet the requirements for surgical gynecology. The surgeon retains an overview and keeps firm control of operating times. **Yet another reason patients place their trust in you.** 









# ENT/Bronchoscopy For all the senses





## excellence in health care

**Have you heard?** Advanced, minimally invasive concepts in diagnostic techniques and therapy for the respiratory tract are inseparably linked with Richard Wolf.

Richard Wolf supplies a wide range of user-specific instruments, rigid and flexible bronchoscopes for children and adults, and appropriate accessories particularly in laryngoscopy and bronchoscopy.

Create your own image: The optical quality of the endoscopes and the flexible bronchoscopes from Richard Wolf deliver impressive images for bronchoscopy. They enable you to get clear visualization and help your patients to breathe easily again.





**Experience on all sides.** At Richard Wolf, we listen very carefully when urologists tell us about their experiences with our system solutions and instruments. This is an integral part of the philosophy of our company and it is a key feature in the profile of our employees. They help to create first-class products for all urological applications. The spectrum ranges from rigid and flexible instruments to complex systems for intracorporeal and extracorporeal lithotripsy.

Innovations are created at the interface between experience, knowledge, and inspiration. This is how Richard Wolf developed the world's first flexible two-channel sensor ureterorenoscope for fast, uncomplicated endoscopic treatments — also for urologists working in private practice. In addition, System Blue — our system for Photodynamic Diagnostics — opens up new pathways for early identification of bladder carcinomas. Our effective laser enucleation system, the powerful Holmium:YAG Laser, and our disposable products enable us to offer the complete range of equipment necessary for endourological interventions in the upper and lower urinary tract. We define new standards for proven technologies in the area of resectoscopes. Our experience in developing high-quality urological systems will provide you with support for specific applications.



## excellence in health care





## Orthopedics Keeping on the move



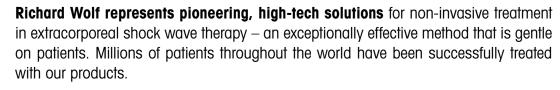
## excellence in health care

Empowering you to reach your destination faster. An increase in the intensity of sporting activities is often accompanied by excessive physical stresses and unbalanced load distribution. These are the adverse impacts of our highly dynamic social activities. Joint disorders and injuries to the musculoskeletal system are becoming more frequent. An increase in the number of cases being handled in hospitals and general practice is accompanied by enhanced expectations on the part of patients. They have high aspirations for fast rehabilitation and a quick return to a mobile existence, free of pain.

Instruments manufactured by Richard Wolf have been created to combine efficiency and therapy at the highest possible level. Always at the leading edge of developments, arthroscopic products and systems have been developed for all joints. The spectrum ranges from proven instruments for manual application, through multifunctional motorized systems, to bioactive and resorbable implants.

Richard Wolf equipment moves dynamically into the future and creates therapeutic options that consistently promote patient welfare and facilitate affordable treatment concepts. **Lead from the front and join us.** 





The following indications can be treated with shock waves:

- Erectile dysfunction
- Heel spurs
- Gallstones and salivary-gland stones
- Golfer's elbow
- Calcified shoulder

- Kidney and ureteral stones
- Tennis elbow
- Trigger-point therapy
- Wound treatment

We guarantee our customers certainty for their investment and maximum quality "Made in Germany" with a service life of several million guaranteed shock waves that is unique throughout the world. Richard Wolf also supplies a uniquely wide performance range of point-focused, linearly focused and planar therapy sources for a large range of individual treatment forms.

We have joined forces with ELvation® Medical GmbH – our exclusively authorized sales and service partner – to pioneer new ways of guaranteeing the best possible, competent customer support in the shock-wave sector.

Richard Wolf has developed the optimum solution in extracorporeal shock wave lithotripsy (ESWL) and extracorporeal shock wave therapy (ESWT). **You define the right focus.** 







excellence in health care

## excellence in health care

**Minimally invasive is our objective.** This passion links up our RIWOspine subsidiary company with visionary spine surgeons and leads to a new dimension of minimally invasive spine surgery. The combination of patient-friendly percutaneous access ports to the spine and high-resolution endoscopic imaging enables us to develop unique endoscopic surgical procedures that are minimally invasive.

The needs and ideas of our users, our experience and our sense of responsibility, combined with the continuous drive toward perfection, inspire and motivate us to go the extra mile in order to offer physicians and patients innovative, safe and optimized solutions for spine surgery. **We perform innovation!** 





Clean, sterile instruments are a key requirement for hygiene management in hospitals and for physicians in private practice. Offering you solutions for hygienic instruments is second nature at Richard Wolf. Our systems provide efficient operation and offer added value. Robust, secure storage of high-quality instruments, efficient handling and maximum control are all key aspects. For example, we offer systems that operate without sterile repackaging or the need to change seals. This reduces the amount of time expended and cuts costs.

Perfect reprocessing starts at Richard Wolf in the development phase for instruments. Zero-maintenance components that can be quickly dismantled are important building blocks for optimum reprocessing and sterilization.

The human factor is also critical. That's why specialist personnel responsible for reprocessing have to undergo in-depth training courses. Richard Wolf provides insights into applications, maintenance, and benefits through practical demonstrations. This closes the circle to the people served by the technology in order to create space for the real goal — your patients.









## Visualization The image of essential perspectives



excellence in health care

## excellence in health care

**Visualization with vision – camera systems from Richard Wolf.** The perfect interplay of individual components across the entire image-processing chain is the focus of our endeavors at Richard Wolf. Our objective is to give the surgeon the best possible image of the surgical field: Light-intense endoscopes generate a brilliant image, which is optimally processed in modern camera controllers.

Innovative functions are often already integrated into standard versions, e.g. Special Imaging Modes, which can facilitate tissue differentiation depending on the circumstances. Refined platform concepts in the entry-level and premium segments represent maximum flexibility within a product family. A large number of application options – from flexible endoscopes with chip-on-the-tip technology to high-end 3-chip 4K UHD camera heads – leave hardly anything to be desired. Energy-efficient, high-power light sources with LED technology deliver the right quantity of light. **Sharpen your perception for the detail.** 





## The integrated OR Networked to the future

## Focused. Uncomplicated. Integrated. Operating Room integration from Richard Wolf.

A long track record spanning many years of experience in endoscopy enables Richard Wolf to implement OR integration consistently and rather differently. The focus is clearly on benefits for the user and on all functions that contribute to process support. At the same time, a top priority is the development of a future-proof system that can be flexibly adapted to the requirements of hospitals.

This approach has enabled one of the most streamlined OR integration systems in the marketplace to be established. The system conserves resources and implements most of the functions using software. It makes use of existing infrastructure in the hospital and is integrated through a single user interface. The uncomplicated operation using an intuitively comprehensible user interface and a large number of refined functions facilitates smooth workflows in the operating room – e.g. all integrated image sources can be automatically documented and medical products can be controlled centrally. You can optimize your workflows with the integrated operating room from Richard Wolf.



# orenovae



**Fly safely.** Although passenger numbers are rising inexorably every year, airplanes rank among the safest modes of travel. Frequent inspection of engines with endoscopes — simple, fast, and cost-effective — makes a key contribution to safety. The reliability of our daily supply of electricity and gas would also be inconceivable without endoscopic turbine inspections.

As a specialist for high-quality endoscopes, Richard Wolf has made a significant contribution to this development by supplying optimized endoscopes right from the start. Today, Blending Scopes manufactured by Richard Wolf eliminate damage caused by foreign bodies in the aircraft turbines without disassembly and dismantling. Patented success saves 6-digit amounts worldwide every day.



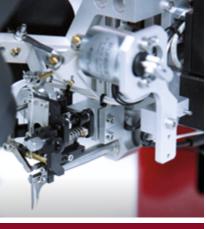


## Working with your head and your hands

Where ideas and crafted precision are joined up

**Our products are created and made to meet the highest aspirations every day.** Which developments are pioneering? What needs are emerging and what are the opportunities? The Department of Research and Development is one of the centerpieces of Richard Wolf. This is where the future develops — our destiny is forged here and to a certain extent the future of medical technology. Our engineers and designers work hard to integrate the latest technologies within the pre-production phase and implement the results of an intensive exchange of ideas with opinion formers.

Ideas are transformed into products by the hands of special craftsmen. Our production process is carried out in a high-tech facility combining optics, precision engineering, electronics, and software in perfect harmony. We are dedicated to in-house production. This is the only way we can meet the defined quality standards and carry out regular checks. Precision is a key factor here in combination with the capability to supply the marketplace with sophisticated products designed down to the last detail. All the products supplied from our company have passed through a certificated system of quality control. This system ensures that you can rely absolutely on the functionality and quality of your Richard Wolf instruments. **Made in Germany. A promise that we keep every day – with hearts, minds and hands.** 







## **Operational Excellence**

On the road to peak performance

excellence in quality

## excellence in quality

**Richard Wolf on the road to peak performance.** This is the maxim for a holistic, lean transformation. Our interpretation of the concept of W-OPEX expresses the Wolf Operational Excellence Concept. It encompasses the alignment of the company with the requirements of the marketplace, our customers, and our own corporate guidelines. An interdisciplinary roadmap for incremental process optimization defines the route to achieving our ambitious goals.

The W-OPEX philosophy is already deployed at the first stage of the entire supply chain in order to enhance added value and cost-effectiveness in the relevant business processes. The sales processes follow in the next stage geared to increasing the positive effects. Another component of W-OPEX is Critical Chain Project Management in research and development, which reduces the time to market by maximizing innovation and project throughput.

An improvement organization was created in order to foster sustainable transformation within the company and achieve the ambitious targets. A self-learning organization is being created together with employees and managers with the objective of achieving continuous improvement.



## Your values motivate us

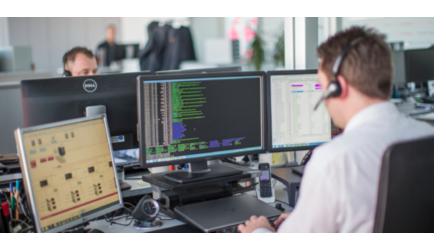
Pioneering service

excellence in customer relations

## excellence in customer relations

Your decision to purchase products made by Richard Wolf means you have also opted for one of the best service packages on the market. The quality and functionality of the products need to be perfectly harmonized in order to achieve first-class results. However, the advanced technical facilities required for ambitious results in the sphere of medicine also need to be an asset that preserves the capital expenditure invested. A strong and experienced partner is the key to this issue.

The team at Richard Wolf is dedicated to speed and dependability. Our comprehensive service package provides the solution. We do everything in our power to maintain your values at the highest level and minimize downtimes. Operational reliability and cost optimization over the entire service life of products made by Richard Wolf is the central service function. Our professional customer service is your expert contact in this area. **Richard Wolf Service gives meaning to values and delivers a promise to you: We are there for you, whenever and wherever you need us.** 





**Progress is a good investment.** Richard Wolf offers tailor-made finance concepts which maintain liquidity. You then have the capability to invest in new products and improved systems. **This provides you with certainty and creates flexibility that benefits your patients.** 



## From insight to intervention

Where experts learn

excellence in education

## Prima Vista



## excellence in education

## Person to person, specialist to specialist, doctor to doctor.

This describes the concept of the Richard Wolf Academy "Prima Vista" — the first and first-class view of innovative techniques and technologies. Teachers and learners come together here, users and innovators, specialists and generalists. New fields of application are created at the Richard Wolf Academy using the latest technologies and through the exchange of experience between leading opinion-formers.

We bring the best together in "Prima Vista": specialist leaders share their knowledge and a dedicated audience is keen to learn.

The Richard Wolf Academy is based in Knittlingen but it also has an international presence with locations in the USA and in China. This forms the base for organizing workshops and training sessions at many centers throughout the world. Clinical events and tutorial sessions are part of the very popular training program.

Today, "Prima Vista" is an established platform for knowledge transfer and innovative creativity. Specialists from orthopedics, surgery and many other specialist areas are delighted to pass on their knowledge and themselves receive new stimuli. "Prima Vista" – an initial view, which is also unique.



## We speak your language

International and always local



## excellence worldwide

## Richard Wolf enjoys the trust of its customers across the world.

What began as a family business in Knittlingen, has developed into a company with global importance and presence. Fourteen branches and 130 distributors enable us to meet the aspirations and needs of physicians, patients and engineers with local reach. Additional service locations take specific account of requirements in particularly strong or emerging markets.

Cultures and mindsets may be very different: **but we speak a common** language — the language of innovation, quality, and perfection.

## **Richard Wolf GmbH Germany**

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