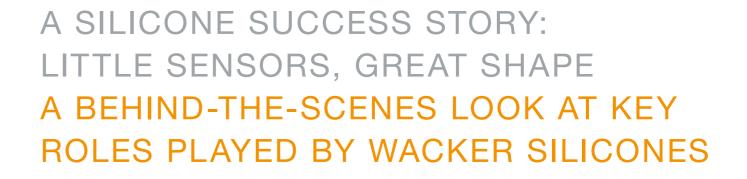




ALWAYS A STEP AHEAD

AN EXCEPTIONAL DAY WITH SILICONES





#### START

Just eighteen months ago, our protagonist Marie L. started training, and today, she plans to run her first marathon. Her body and mind are in great shape thanks to her great determination – and the special sensors in her running tights and shoes. We meet Marie as her alarm goes off in the hotel near the marathon city...

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05:30

Today's the day! By competing in one of the world's top marathons, I will prove without doubt that I'm in top shape. And with the mental toughness I developed during preparation, nothing can slow me down.

88:38

I head for the bathroom, where pleasant LED lighting sets the scene for an energizing shower. The complimentary shower gel, shampoo and body lotion make me feel right at home.

88:48

The towels here are incredible. How do they make them so soft yet absorbent?

08:49

Brush my teeth. No breakfast before running of course. Nothing against a nice cup of coffee though.



## POWER FOR PERFECT RESULTS



#### Spot on: LUMISIL®

The LUMISIL® product line comprises high-performance optical-grade silicones for LED manufacturers with demanding requirements.

All LUMISIL® products provide impressive product properties: they enable very efficient, cost-effective production and exhibit optimized flow and crosslinking characteristics, as well as high photostability. As an encapsulant, they effectively protect the LED chip against environmental influences that would shorten the chip's service life. Moreover, they show extreme thermal resistance during lead-free soldering of LEDs.



#### Towel mystery solved: WETSOFT®

Marie L. was surprised by the silky-yet-thirsty cotton towels found in the stylish bathroom. The hotel's secret? WETSOFT® hydrophilic fabric softener by WACKER. Its innovative structure combines the superb softness of silicones with the excellent wettability of hydrophilic molecules. WETSOFT® NE products are available as concentrated emulsions or easily dispersible fluids to suit a wide array of requirements. Other innovative silicone products for textile care include SILFOAM® anti-foam agents and WACKER® fabric care products.



#### Hidden beauty champion: BELSIL®

In development and manufacturing, WACKER takes great care to produce highly efficient and reliable formulations. The BELSIL® range of high-quality silicones is designed especially for personal care applications: from hair and skin care to cleansers, color cosmetics and deodorants. There's a BELSIL® to suit your every requirement – delivering properties such as a velvety surface, color intensity, gloss, hold or long-lasting moisture. Whether in hair care, skin care or color cosmetics, BELSIL® offers customized effects for all your competitive, market-ready products.



#### Pure performance: HDK®

HDK® pyrogenic silica – produced by WACKER for over 40 years – is used by successful customers the world over. Thanks to our integrated production system, the pyrogenic silica we produce is exceptionally pure.

Our wide range of hydrophilic and hydrophobic HDK® grades and HDK® dispersions offers you a variety of different solutions for all your requirements, from toothpaste to textile impregnation, toners and more.

## SILICONES HIDDEN CHAMPIONS WE CAN'T LIVE WITHOUT

Silicones do their job so well that we hardly notice them, but they're an integral part of modern life. In shampoos and conditioners, they give our hair luster and sheen; as silicone resin emulsion paints, they make wood and masonry water-repellent, while allowing water vapor and CO<sub>2</sub> to diffuse out of the building. Silicones also deliver top performance in medical tubes or orthopedic products, and provide heat-resistant automotive components.

What makes this incredible versatility possible? Silicones are modern synthetic products derived from quartz sand, a nearly unlimited resource. Their molecular structure can be modified in many different ways. As a result, silicone polymers can be designed with the customized properties you need, offering ground-breaking possibilities – and a leading edge.



Our production site in Burghausen, Germany

### PARTNERSHIP WITH A PIONEER WE'RE EXPERTS ACROSS THE BOARD

WACKER SILICONES offer a wide range of over 3,000 silicone products and comprehensive services – drawing on over a century of expertise and looking ahead to a bright future.

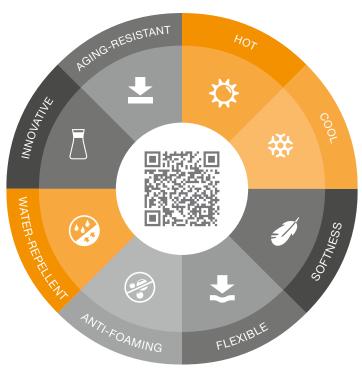
WACKER has more than 100 years chemical industry experience. We've been making silicones since 1947 – at first only in Burghausen, now all over the world. We benefit from two strengths of the WACKER corporation: one of WACKER's major assets is our integrated production network. Its main

focus is on raw materials such as salt, silicon and ethylene. With our integrated production processes, we optimize material efficiency by purifying and recycling our by-products, sending them on for external usage. Thus our silicone network makes over 3,000 silicone products and pyrogenic silica from just a few raw materials: silicon, methanol and common salt (sodium chloride).

Secondly, we have energy networks at our locations in Burghausen, Nünchritz and Zhangjiagang, where waste heat is fed back into the production cycle.

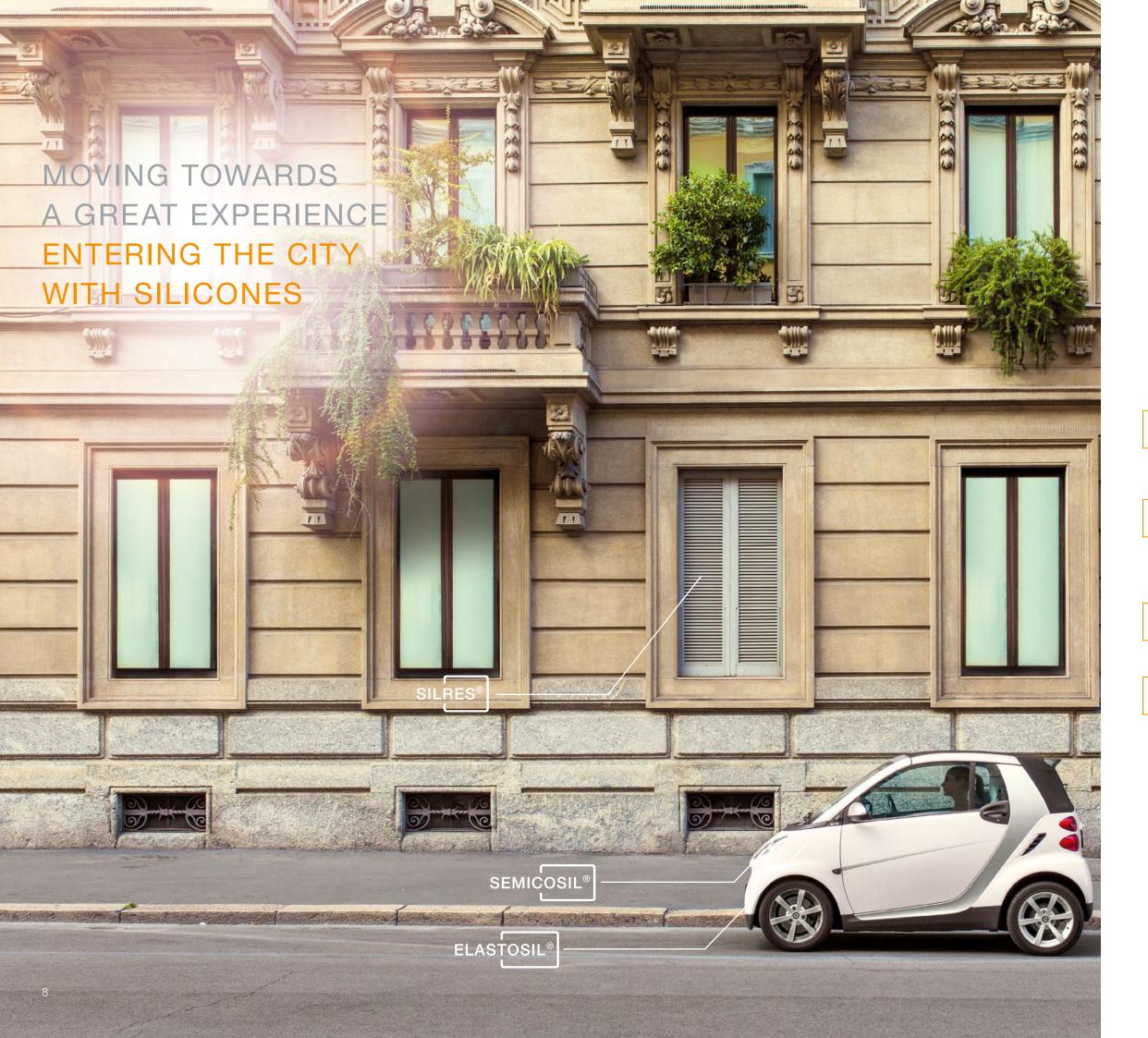
Our backward vertical integration
ensures reliability of supply to our
customers – and also stable quality
standards, because we control the entire
process from start to finish. For example:
we have our own silicon smelter in
Holla, where we produce a large part of
our required silicon.

#### SILICONE PRODUCTS: UNIQUE EFFECTS AND SPECIFIC PROPERTIES



# SUPPLY CHAIN: WACKER SILICONES QUARTZ CHARCOAL RAW MATERIALS SILANES FUMED SILICA FUNCTIONAL SILANES FLUIDS & ELASTOMERS EMULSIONS > 3,000 PRODUCTS & ENDLESS APPLICATIONS

6



17:45

I'm off to my first marathon! The rental car is running smoothly and is astonishingly quiet on the inside – really relaxing.

As I drive into the city, the historic old town with its gorgeous brickwork and wooden storefronts catches my eye. It looks even better than I remember.

88:45

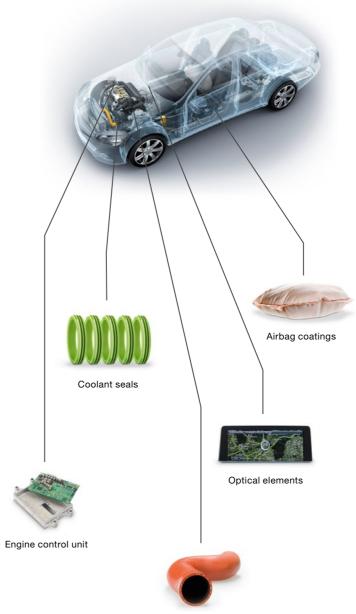
All registered and ready to go, I join my group at the start line.

88:14

The marathon is ready to begin. I'm excited – and just a bit nervous, too. Good thing I'm well equipped, from head to toe...



# A BRIGHT FUTURE THANKS TO EXPERTISE AND INNOVATION





#### The secret's in the paint: SILRES®

Marie L. is thrilled that the historic store-fronts look better than ever. The city's open secret: WACKER silicone resins – after all, SILRES® has been leading the way for over 50 years. Highly water-repellent but permeable to water vapor, the SILRES® line promotes durability, enhances aesthetics and increases energy efficiency. As a base for top-quality decorative coatings, SILRES® BS brings paint manufacturers and painters successful results on masonry facades. SILRES® WH is specifically designed for wood, providing long-lasting protection from water – even after years of outdoor weathering.



#### Less stress on the road: SEMICOSIL®

SEMICOSIL® products effectively protect electronic components in motor vehicles against external influences. They reduce thermic stress of fragile components in electronic parts, circuit boards and hybrid elements. SEMICOSIL® adhesives reliably protect components against mechanical and chemical impacts, dampening vibrations and, thanks to the uniform stress distribution between different materials, are also able to dissipate the heat generated during operation of the component.



#### Driving efficiently and staying cool: **ELASTOSIL**®

Today's motor vehicles are becoming increasingly compact and economical. But downsizing engines and adding electrical components means higher temperatures under the hood. Heat-resistant hoses and sealants are required. WACKER's automotive elastomer ELASTOSIL® combines outstanding heat stability and superb processability, making it an ideal, cost-efficient choice for turbochargers, radiators and particle filters.

ALWAYS ADVANCING, TOGETHER WITH YOU ON FIVE CONTINENTS, WACKER IS CLOSE BY

#### WACKER boasts unparalleled customer proximity:

Local experts cater to your exact requirements, taking into account regional characteristics and available raw materials, as well as all applicable standards and legal regulations. On every continent, and in every language, you can count on WACKER to be close at hand, ready to help you find the answers you're looking for.

#### Advantages for you:

- Uniform standards worldwide
- Customer support from technical experts in your native language
- Solutions developed together with you





#### Production sites

Production sites around the globe ensure outstanding customer proximity. We manufacture to the same standards at every location, allowing us to supply global companies who need the same item on different continents. We can also easily adapt to local and regional market requirements.



#### Integrated production sites

At our integrated production sites in Germany (Burghausen and Nünchritz) and China (Zhangjiagang), we manufacture all of our many products – from silicon to silanes, siloxane, silicone and silica. These locations share another special feature: because we've optimized the energy and product flows, nearly all by-products are recycled, avoiding waste.



#### Technical centers

Our experts feel at home in your region. Because they speak your language, and are familiar with your market and application, they really understand your needs. At the same time, they are linked to a global network of technical experts, for ongoing training, education and support. And if the global network is unable to help out - we'll simply invent something new especially for you in our Innovation Teams in Europe, Asia or the Americas.



#### Sales offices

Face-to-face contact is the most efficient way to get in touch and find a solution to suit your needs. That's why we have established sales offices on every continent, to make sure there is always an opportunity for personal support close to you – 50 offices, to be exact. The best thing is, you can stay at home - and we'll come to you.



#### WACKER ACADEMY

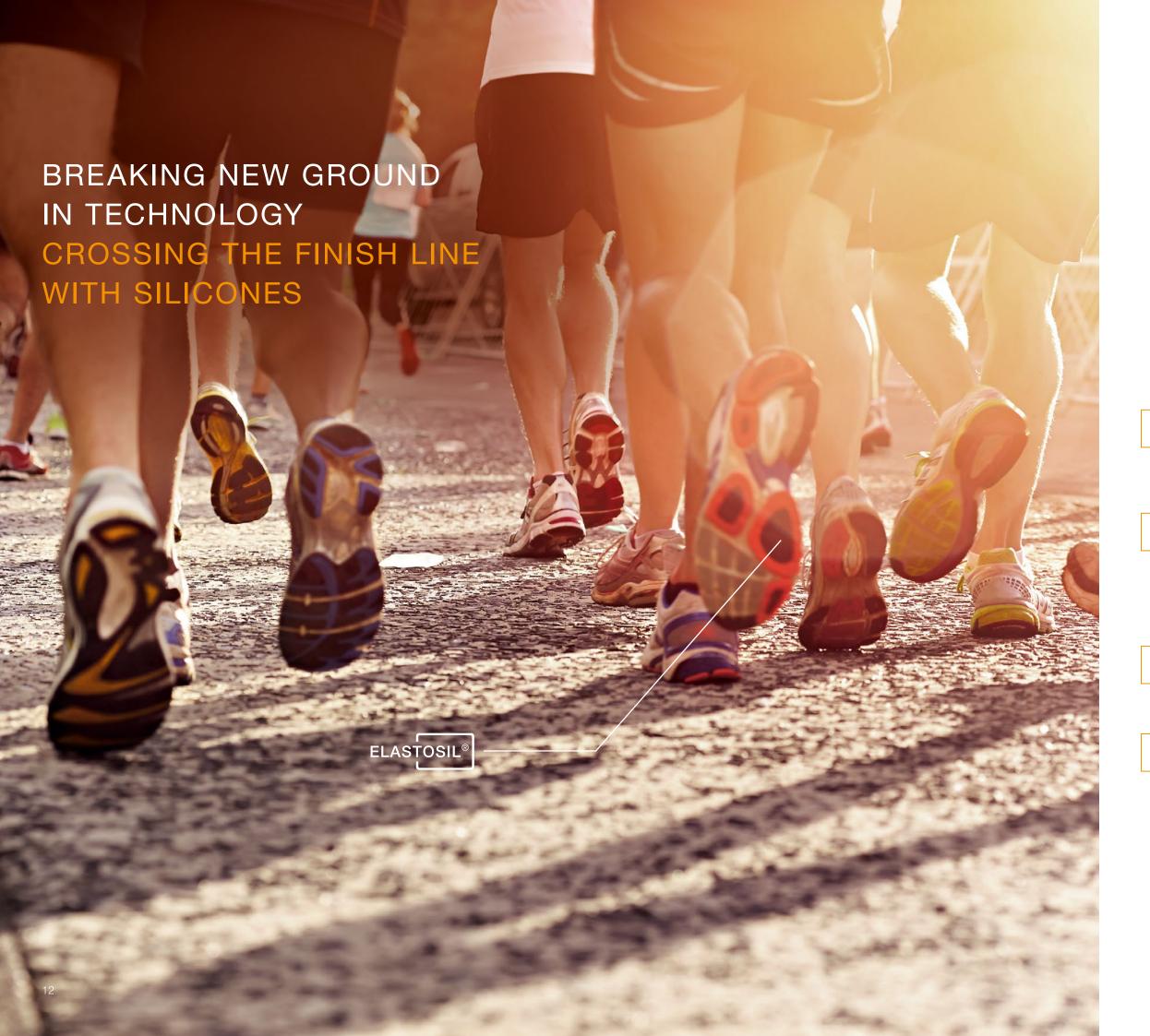
Knowledge is everything. We offer our employees, distributors and current and potential customers a range of helpful seminars - online or on-site. Along with in-depth information about our products, best practices and formulation, we also explain market requirements and any standards or regulations applicable to our products. And the WACKER ACADEMY is not just a local training center - it also comes to you. A session at your offices? A course in your lab? Great! We'd be happy to arrange it!

- Unique training center in the chemical industry
- First-hand application expertise both local and global
- In-house program, on-site seminars and events run by experienced specialists

#### Locations:

Burghausen, Beijing, Moscow, Mumbai, Singapore, Dubai, São Paulo, Allentown, Adrian, Seoul, Mexico City, Dalton, Ho Chi Minh City

10 11



2:18

Across the finish line! I glance at my watch: I've completed my first marathon in three hours, four minutes – quite an achievement!

42:48

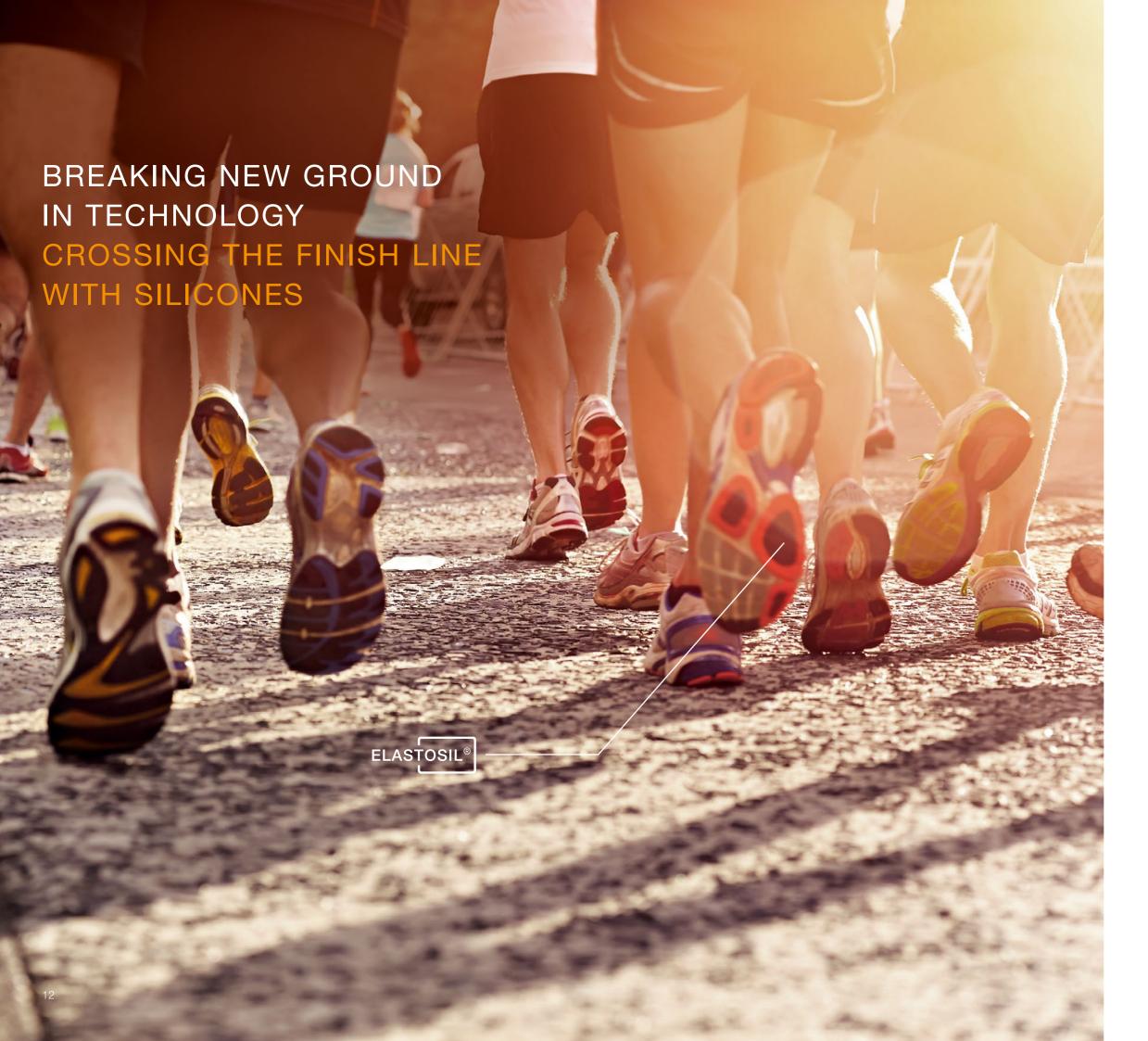
I've "walked it out" for about a mile, while giving a short interview. Turns out, my sister tipped off the local newspaper and of course they wanted to hear all about the sensors in my running gear. I think they got more attention than I did...

(2:49

Now it's time for some lower-back stretches. By the way, my legs feel great!

(2:58

Off to find that massage tent everyone's raving about. Ready to relax and regenerate. There's a huge post-race party planned for tonight, and I have a feeling my sensors and I will be on the VIP list...



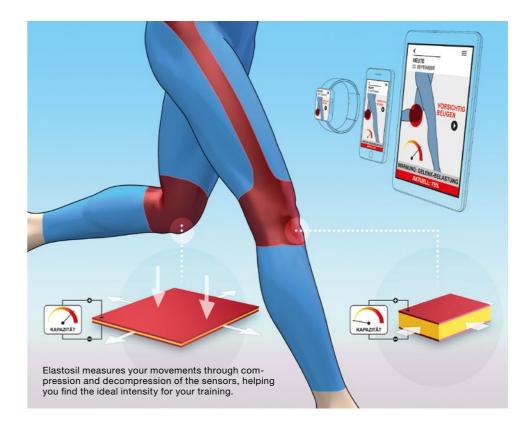
# PERFECT TRAINING THANKS TO SILICONE



#### A step into the future: ELASTOSIL® Film

What is so special about Marie L.? She is one of the world's first athletes to test two forerunner products. Via sensors in her tights, she can check her running style on her smartphone and optimize her technique, so she can finish the race in great form. To prevent her phone from getting "out of breath", it is recharged via the generators in her shoes, which transform the kinetic energy from every step into electricity for the phone battery.

What's so special about ELASTOSIL® Film? It is ultrathin, highly precise and therefore an ideal di-electric electro-active polymer. It can be made into capacitive stretching and pressure sensors, actuators and generators.



#### AT THE CUTTING EDGE OF EXPERTISE DRIVEN BY INNOVATION -FOR OVER A CENTURY

#### Research and development on different levels

With a strong focus on research and development, WACKER is a highly research-intensive company that provides innovative momentum for products and applications. In 1903, 11 years before Wacker Chemie AG was established, WACKER founded its corporate research usually awarded during the International facility, "Consortium for Electrochemical Industry," in Munich, which is still concentrating on basic research today. Innovation teams research liquid and solid silicones, while development teams, dedicated to specific industries, come up chemistry. with new solutions. Last but not least, application experts adjust our products to your specific requirements. Humming with activity, the WACKER labs are the perfect environment for "creating tomorrow's solutions" - today!

#### Fostering collaboration rewarding science

Research awards significantly boost scientific and technical collaboration - the very basis of innovation. Along with the Kipping Award, the WACKER Silicone Award is the world's most prestigious accolade in silicon chemistry. It is Symposium on Silicon Chemistry – the leading summit for silicon researchers worldwide. Among the 18 laureates to date are Richard Müller and Eugene Rochow - the pioneers of silicon

#### Investing in the future

About 70 percent of WACKER's turnover is based on the raw material silicon: Siltronic uses it to make wafers; Polysilicon, one of the top two global producers, turns it into solar panels; and we turn it into silicone. So it's no surprise that WACKER founded an institute at the Technical University of Munich (TUM): The Institute of Silicon Chemistry, where we've also endowed the chair. Since 2006, new fields and applications in silicon-organic chemistry have been investigated and opened up there. With the opening of the institute's own laboratory tract in the middle of 2008, the scholarship holders are working under optimal conditions.

FIND OUT MORE...



FIND OUT MORE...



FIND OUT MORE...





#### WACKER SILICONES - THE FOUNDATION FOR UNLIMITED APPLICATIONS

#### All of our brands, at a glance

Put our products to work for you! For more details, or to discuss a customized application, please contact us at info@wacker.com

Toll-free number Germany: 0800-6279-800

Toll-free number International: 00 800-6279-0800

Toll-free number Canada, Mexico and US: 001 888-922-5374

#### **SILICONES**

CONSTRUCTION



- Silicone sealants
- Concrete protection
- Waterproofing Membranes
- Natural stone conservation



**AUTOMOTIVE AND TRANSPORT** 

- Impregnation of brick
- & roof tiles

- Airbag
- Hoses
- Connector seals Automotive parts
- Automotive electronics
- Aviation & aerospace



- Electronics
- Lighting
- Electrical insulation
- Transmission & distribution
- Wires & cables
- Silanes for the electronics industry
- Thermal insulation



Industrial coatings

COATINGS AND PAINTS

- Architectural coatings
- Printing inks
- Paper & film coatings



Household care

Personal care

Tissues



HEALTH CARE



Medical devices

Wound care

Orthopedic

Prosthetics

technology

Surgical drapes

PERFORMANCE ADDITIVES



- Defoamer Processing aids Water treatments • Performance additives
- ADVANCED



MANUFACTURING MACHINERY



- Molded articles
- Extruded articles
- Injection molded articles
- Additives
- Processing auxiliaries/ Polymer modification

16 17

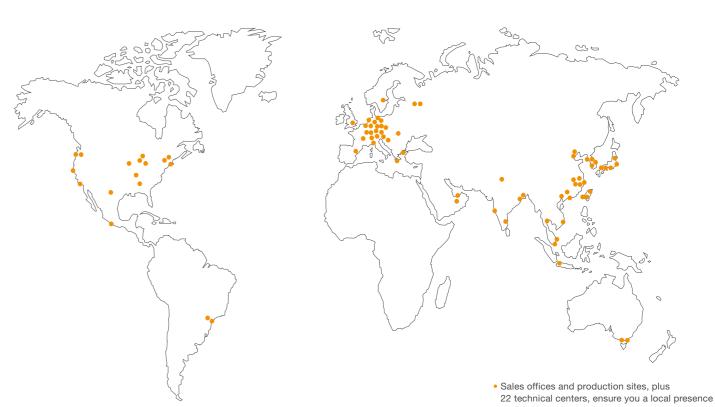
#### REACHING OUT TO YOU

In our work with customers, we have experienced many exceptional days, often extending to years or decades of successful partnership. They value our availability, proximity and the technical expertise we offer. And we enjoy taking time for them and starting the conversation.

So let us know: what solution can we create together today?



## EXPERTISE AND SERVICE NETWORK ON FIVE CONTINENTS



WACKER is one of the world's leading and most research-intensive chemical companies, with total sales of €5.3 billion. Products range from silicones, binders and polymer additives for diverse industrial sectors to bioengineered pharmaceutical actives and hyperpure silicon for semiconductor and solar applications. As a technology leader focusing on sustainability, WACKER promotes products and ideas that offer a high value-added potential to ensure that current and future generations enjoy a better quality of life based on energy efficiency and protection of the climate and environment.

Spanning the globe with 5 business divisions, we offer our customers highly-specialized products and comprehensive service via 25 production sites, 22 technical competence centers, 12 WACKER ACADEMY training centers and 50 sales offices in Europe, North and South America, and Asia – including a presence in China. With a workforce of some 17,000, we see ourselves as a reliable innovation partner that develops trailblazing solutions for, and in collaboration with, our customers. We also help them boost their own success. Our technical centers employ local specialists who assist customers world-

wide in the development of products tailored to regional demands, supporting them during every stage of their complex production processes, if required.

WACKER e-solutions are online services provided via our customer portal and as integrated process solutions. Our customers and business partners thus benefit from comprehensive information and reliable service to enable projects and orders to be handled fast, reliably and highly efficiently. Visit us anywhere, anytime around the world at: www.wacker.com

All figures are based on fiscal 2015.



Wacker Chemie AG Hanns-Seidel-Platz 4 81737 München, Germany Tel. +49 89 6279-1741

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