



SCIENCE FOR SOLIDS



| 1959

André Verder starts trading pumps and semi-finished products.

| 1989

RETSCH becomes part of the VERDER Group.

| 1998

RETSCH TECHNOLOGY is founded.

| 2012

ELTRA and CARBOLITE are acquired.

| 2013

GERO extends the portfolio of CARBOLITE in the temperature range up to 3000 °C.

| 2015

Acquisition of the company ATM. CARBOLITE and GERO operate under the common brand name CARBOLITE GERO.

| 2018

QNESS becomes part of VERDER SCIENTIFIC.

| 2019

Microtrac and MicrotracBEL are acquired by the VERDER Group.

| 2020

Retsch Technology, Microtrac and BEL become Microtrac MRB. ATM and QNESS unite to QATM.

VERDER SCIENTIFIC – ALLIANCE FOR SCIENCE. AND A BETTER WORLD






As part of the VERDER Group, the Scientific Division sets standards in the development and manufacture of modern, reliable laboratory and analysis equipment. We provide our customers with tailor-made solutions for sample preparation, treatment and analysis of solids.

As a company that is 100% family-owned, our only obligation is to staff and customers. That gives us the freedom to act on our own responsibility and plan in the long run. Especially in these fast-moving times, sustainability is an important success factor for us. This is reflected by our high-quality,

long-lasting products but also by our employees, many of whom have been part of our success for decades. What makes us particularly proud: Our products are used in many areas which actively improve our environment and quality of life. The precision of our instruments is the basis for, e. g., increasing the effectiveness of drugs, producing healthier food, or improving the recyclability of packaging or the safety of aircraft components.

“Making the world a little better every day” is not an empty phrase for us but lived reality and a daily challenge for our more than 1,000 employees.

THE VERDER SCIENTIFIC BUSINESS AREAS


-  Materialography & Hardness Testing
-  Heat Treatment
-  Elemental Analysis
-  Milling & Sieving
-  Particle Characterization



 250 Mio. € revenue

 9 manufacturing sites

 12 subsidiaries & 200 distributors

 1000 employees

www.verder-scientific.com

PARTICLE ANALYSIS
IN FOCUS

EXCELLENCE ON THREE CONTINENTS



A CLASS OF ITS OWN IN PARTICLE CHARACTERIZATION

Under the brand name of Microtrac MRB, three worldwide renowned manufacturers of particle analysis instruments have joined forces: Retsch Technology, Microtrac and MicrotracBEL.

The result of this coalition is a product portfolio for particle characterization without parallel:

- I Laser diffraction
- I Dynamic light scattering / zeta potential
- I Dynamic & static image analysis
- I Gas adsorption measurement for the determination of specific surface and pore size distribution

The three manufacturers continually strive to make particle analysis more accurate, more effective and more convenient. This goal is clearly reflected in product development and, in the past, has led to groundbreaking inventions in laser and image analysis technology.

The combined expertise and focus of our staff in the three centers of excellence in the US, Germany and Japan is the foundation of our success. Every day we endeavor to meet and exceed the expectations of our customers in research and industry by offering new, innovative solutions.

PARTICLE SIZE & PARTICLE SHAPE ANALYSIS, GAS ADSORPTION MEASUREMENT



**PARTICLE SIZE AND
SHAPE ANALYZER SYNC**



**NANOPARTICLE SIZE
ANALYZER
NANOTRAC WAVE II Q**



**SURFACE AREA & PORE
SIZE DISTRIBUTION
ANALYZER BELSORP MAX II**



**PARTICLE SIZE & SHAPE
ANALYZER CAMSIZER X2**

www.microtrac.com

WITH PASSION AND
COMMITMENT

OPEN FOR NEW SOLUTIONS



UNVEILING THE INVISIBLE

Under the common brand name QATM, two of the most innovative companies in the materialography and hardness testing sector, ATM and QNESS, have joined forces. As manufacturers of high-quality machines and software solutions, we know exactly what our customers need.

Our cut-off machines, mounting presses, grinders, polishers/electrolytic etchers as well as hardness testers and analysis systems are designed to ensure safe, efficient and accurate work in the materialographic laboratory. Two specialized and committed teams in Germany and Austria develop

and manufacture the entire product range at the respective premises.

With a great deal of dedication and creativity, we produce machines which, thanks to elaborate details, continually optimize operation for the user.

In this process, we never lose sight of the latest technical developments.

Topics like connectivity or software-based automation of working steps are high on our agenda.

Focused, creative, dedicated – that's QATM.

MACHINES FOR MATERIALOGRAPHY AND HARDNESS TESTING



ROCKWELL HARDNESS
TESTER QNESS 150 CS ECO



CUT-OFF MACHINE
QCUT 600 A



HOT MOUNTING PRESS
QPRESS 50



GRINDING & POLISHING
MACHINE QPOL 250 ECO

www.qatm.com

MORE THAN A CENTURY
OF EXPERIENCE

**QUALITY AND
INNOVATION
MADE IN GERMANY**



THE PIONEERS IN SAMPLE HOMOGENIZATION

RETSCH's success story began more than 100 years ago. With the patent registration for the first mechanic mortar grinder, the company's founder laid the foundation for an unparalleled development. Today, laboratories all over the world use our mills, crushers and analytical sieve shakers to grind, homogenize and characterize samples.

The range of application areas is as wide and versatile as our product offering. From the production of nano particles with a ball mill to processing thousands of kilos in a jaw crusher – RETSCH covers the entire field of

size reduction of solid materials.

Instrumental analysis procedures are frequently complex and cost intensive. That is why we share our profound application knowledge with our customers in seminars, workshops and webinars. Because every analysis can only be as good as the previous sample preparation process.

RETSCH is the undisputed global leader in this field - often copied but never matched.

LABORATORY MILLS AND SIEVE SHAKERS FOR SAMPLE PREPARATION AND CHARACTERIZATION OF SOLIDS



JAW CRUSHER
BB 500



KNIFE MILL
GRINDOMIX GM 200



MIXER MILL
MM 500 vario



VIBRATORY SIEVE SHAKERS
AS 200

www.retsch.com

BUILDING ON
PRECISION

RELIABILITY TO THE SMALLEST DETAIL



ELEMENTAL ANALYSIS

EXACT – ROBUST – DURABLE

Since its foundation in 1981, ELTRA develops and manufactures powerful combustion analyzers for elemental analysis of a wide variety of solids. These are used to reliably, reproducibly and precisely measure concentrations of carbon, sulfur, oxygen, nitrogen or hydrogen. In 2007, thermogravimetric analyzers were added to the portfolio. Today, ELTRA is one of worldwide leading manufacturers in this sector.

Our customers come from research institutions, universities and industries like steel, mining, coal, construction materials or aerospace where precision

and reliability are indispensable. ELTRA analyzers are characterized by their robust design and high functionality for use in a production as well as laboratory environment.

Our formula for success: Based on a combination of proven technology and the extensive experience of our staff we convince our customers with versatile products and dedicated support – and have been doing so for almost 40 years.

COMBUSTION ANALYZERS FOR THE DETERMINATION OF C/S, O/N/H AND THERMOGRAVIMETRIC ANALYZERS



CARBON SULFUR ANALYZER
ELEMENTRAC CS-i



CARBON WATER ANALYZER
ANALYZER CW-800



THERMAL ANALYZERS
TGA THERMOSTEP



**OXYGEN NITROGEN
HYDROGEN ANALYZER**
ELEMENTRAC ONH-p

www.eltra.com

THE WHOLE WORLD
OF HEATING

EXPERTS FOR INDIVIDUAL SOLUTIONS



FURNACES ARE OUR PASSION

Ashing, drying, sintering, debinding, annealing – the list of heat treatment processes for which CARBOLITE GERO offers furnaces and ovens could be continued at will.

With two production and sales sites in the UK and Germany, CARBOLITE GERO is perfectly equipped for the development and manufacture of high temperature furnaces up to 3000 °C as well as of standard laboratory products. But even with one of the most varied and extensive offerings of

furnaces and ovens, there are still occasions when a standard design simply does not meet the user's precise requirements. The development of such bespoke variations of the standard for complex heat treatment processes is our specialty. This ability makes us the leading solution provider for customers from fields like aerospace, engineering, material sciences or medicine.

Highly modern with a long tradition – furnaces and ovens from CARBOLITE GERO.

FURNACES AND OVENS UP TO 3.000 °C FOR LABORATORY AND INDUSTRY



AAF ASHING FURNACE



TF TUBE FURNACE



HTK FOR MIM & SINTERING



CUSTOM DESIGN FURNACE

www.carbolite-gero.com

KNOWLEDGE TRANSFER FOR CUSTOMERS AND PARTNERS

The VERDER SCIENTIFIC companies see themselves as solution providers. We offer competent application support and technical assistance and share our knowledge and expertise with our customers in **seminars, webinars and workshops.**

Our customers benefit from individual process and application consulting. Our application experts process and measure your samples in our **in-house application laboratory** and provide recommendations for the most suitable method and instrument.



APPLICATION CONSULTING

Processing and measuring samples in our in-house laboratories



SEMINARS & WEBINARS

Expert knowledge for your application.



KNOWLEDGE BASE

Detailed information about a wealth of applications.

WE ARE HERE FOR YOU – ANYTIME ANYWHERE!

GERMANY (HEADQUARTER)

Verder Scientific GmbH & Co. KG
Retsch-Allee 1-5
42781 Haan
T +49 (0)2104 2333-500
E info@verder-scientific.com

AUSTRIA

Verder Scientific Austria GmbH
Reitbauernweg 26
5440 Golling
T +43 6244 32082
E info.at@verder-scientific.com

BELGIUM & THE NETHERLANDS

Verder NV
Kontichsesteenweg 17
2630 Aartselaar
T +32 3 870 96 40
+31 30 677 92 61
E info@verder-scientific.be
info@verder-scientific.nl

BRAZIL

Verder Scientific Comércio
de Equipamentos Ltda.
Rua Continental number 146
09750-060 São Bernardo do Campo
São Paulo
T +55 11 4391 4145
E contato@verder-scientific.com.br

CHINA

Verder Shanghai Instruments
and Equipment Co., Ltd.
Building No. 15, Lane 739
Kangwei Road, Pudong District
201315 Shanghai
T +86 10 82608745
E info@verder-group.cn

FRANCE

Verder SARL
8 Allée Rosa Luxembourg
Immeuble Arizona 95610
Eragny-sur-Oise
T +33 (0)1 34 64 31 11
E verder-info@verder.fr

GREAT BRITAIN

Verder Scientific UK Ltd.
Parsons Lane Hope
S33 6RB Hope Valley
T +44 (0)845 458 5196
E info.uk@verder-scientific.com

INDIA

Verder Scientific Pvt. Ltd
Plot No – 5A/10-11, 1st Floor
ID Nacharam, Road # 1
Uppal Mandal, Hyderabad, 500076
T +91 40 2980 6688/89/90
E info@verder-scientific.co.in

ITALY

Verder Scientific S.r.l.
Via Pino Longhi, 12
24066 Pedrengo (BG)
T +39 035 19913800
E info@verder-scientific.it

JAPAN

Verder Scientific Co., Ltd.
5-8-8, Shinjuku
160-0022 Shinjuku-Ku
Tokyo
T +81 3 5367 2651
E info@verder-scientific.co.jp

RUSSIA

Verder Scientific LLC
ul. Bumazhnaya, d. 17
190020 Saint-Petersburg
T +7 812 777 11 07
E info@verder-scientific.ru

SOUTH AFRICA

Verder Scientific Pty Ltd
10 Village Crescent
Linbro Business Park
Johannesburg
Gauteng 2065
T +27 (010) 6120141 (Johannesburg)
+27 (0860)109 259 (Cape Town)
+27 (010) 6120141 (Exports)
E sales@verder-scientific.co.za

USA

Verder Scientific Inc.
11 Penns Trail
Newtown, PA 18940
T +1 866-473-8724
E info-us@verder-scientific.com



For your information:
You will find the complete
country selection on our
websites.



VERDER SCIENTIFIC GmbH & Co. KG
Retsch-Allee 1-5
42781 Haan · Germany
info@verder-scientific.com

www.verder-scientific.com