COMPANY PROFILE

INNOVATEST Group of companies



INTRODUCTION

INNOVATEST is a leading supplier of materials hardness testers and related automation systems.

Hardness testers are used in a large variety of applications ranging from the aerospace industry to automobile manufacturing, steel works, general manufacturing companies and material analyses laboratories.

The machines determine the hardness of metallic raw materials, parts or objects. Hardness tests, usually the resistance of a material against penetration, are either conducted to control quality before or during the use of metallic materials and parts or to find the cause of damage if an object or part failed.





VISION

world.

Our core competencies in design, custom design and high quality development are continuously being improved to be best in-class. They are at the heart of what we are."

service."

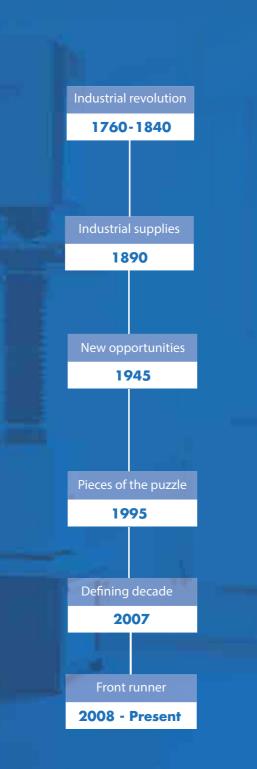


"We aim to be the most successful, competitive, innovative and productive manufacturer of hardness testers in the



"It is our final objective to provide our customers the best ownership experience by delivering the highest quality products, expert application support and a world-class





HISTORY

WHERE IT ALL BEGAN

1760 to 1840, the industrial revolution created a demand for measurement and control of dimensions and materials. In 1890 a general tools and industrial supplies company in Maastricht, The Netherlands, started to provided local ceramic & glass industries the tools to build and service their production machines. In the decades to follow, the business would flourish, until the Second World War started to wind down the economy.

The end of the war brought new chances, new opportunities. Specialized in providing machinery, cutting & measuring tools to the metals industry, the company further developed to a large domestic supplier of industrial requirements.

THE PIECES OF THE PUZZLE

In the years to come, the management invested mainly in the distribution of machinery and machine tool accessories that are used in the metal working industry. The field of activities became broader and more general, the coming of a new management generation decided that "focus" would be a better way ahead.

Slowly, but determined to turn the company in to a specialist rather than a generalist, changes were made to the range of products. Machine tools and accessories were sold to partners in the industry while measuring instruments became the key product range.

A DEFINING DECADE

In 2007 a determining step in the focus process took place. A company dedicated to research and development for the hardness testing industry was established (INNOVATECH Holding BV).

From 2008 onwards, the group's activities would focus on the designing and manufacturing of hardness testing machines only. A decision that turned INNOVATEST into one of the market leaders in the industry.

4

CROSSING BORDERS

GLOBAL PRESENCE

In 2009 a sales & service center in Shanghai, China was added to the group company, to provide the fast growing Chinese manufacturing industry a good showroom and training facility, as well as fast, reliable sales and service activities.

The success in China resulted in the establishment of INNOVATEST showrooms and service centers in Singapore, Malaysia, Thailand, Vietnam and more recently, the new facility of INNOVATEST Japan Co., Ltd. Closer to home a stronghold in Eastern Europe, INNOVATEST Polska (Poland) was established.

TODAY

INNOVATEST nowadays has a presence on all continents with sales and service organizations, a wide distributor and agency network and excellent service capabilities around the globe. Over 73 distributors all acting as after sales service organizations, make us actually local to you.

A large group of service staff to provide installation service and after sales service worldwide. A creative base of excellent engineers, providing innovating research and development activities.



"We convince by our presence!"



THE HEART OF WHAT WE ARE

"Due to the collective knowledge of our people and our entrepreneurial spirit, we have become one of the world's leading manufacturers of hardness testing machines. We're proud of our extraordinary roots and build on that each day to innovate products that professionals in the materials testing business want and need. Delivering innovation that expands boundaries for the users of our equipment expanded our widespread global recognition.

We continually implement the latest user insights and technology to design and build innovative products that influence trends. And it pays off-the employees in our manufacturing, research and design centers spark ideas leading to more than 1500 high-tech machines delivered every year.

You might think it's enough for us to be one of the world's leading manufacturers of hardness testing machines, but at INNOVATEST, we never stop finding new ways to innovate and earn trust.

Ultimately, our main interest is our customer's benefit and to assure the best possible ownership experience."



Mr. Roland Engbersen **CEO/ Managing Director**

MANAGEMENT

Mr. Roland Engbersen CEO/ Managing Director General group management

Mr. Eric Custers CFO/Finance Director Treasurer and financial management

Mrs. Nicole Paulissen CSO/Sales Director Distributor & Sales management

Mrs. Lily Zhang COO/Global Manufacturing Director World wide manufacturing & sourcing management

Mr. Edwin Lansink CTO/Chief Technology Officer Research & Development department manager of INNOVATECH Holding BV

FACTS & FIGURES

Founding year group	1890
Founding year INNOVATEST	2007
Head quarters	Maastricht, Th
Type of company	BV (Private Li
Employees	130+
Group companies	4
Service sites	57
Facilities world wide	21000m2
Yearly output	1500+ units







The Netherlands imited)

RESEARCH & DEVELOPMENT

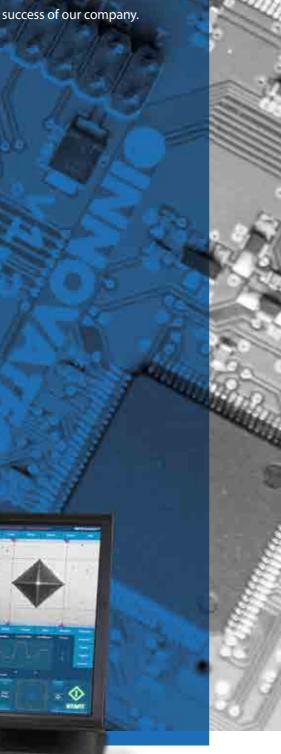
In a global industrial landscape that is changing fast, INNOVATEST continually renews its designs and the range of products. Our development is technology driven, R&D is directed towards developing products, customers first, to meet the unmet needs and to improve operator product experiences.

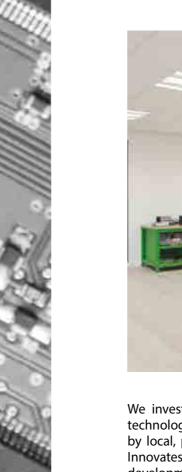
New product design and development is a crucial factor in the success of our company.





ALCON: 600







We invest 15-20% of our yearly revenues into new technologies and new product designs. Supported by local, provincial, national and European subsidies, Innovatest tops 2.5 million euros a year in product development that will determine users future experience of hardness testing.

To drive the development of our highly automated systems, the department covers 4 major fields of expertise; Mechanical, Optical & Electronic engineering as well as sophisticated Software programming.

Our global R&D processes cover cultural and lingual requirements and collect knowledge from across our international corporate networks. Because in the end, the best way to predict the future, is to simply invent it yourself.

THE PRINCIPLES & APPLICATIONS OF

HARDNESS TESTING

Hardness has a variety of meanings. To the metals industry, it may be thought of as resistance to permanent deformation. To the metallurgist, it means resistance to penetration. To the lubrication engineer, it means resistance to wear. To the design engineer, it is a measure of flow stress. To the mineralogist, it means resistance to scratching, and to the machinist, it means resistance to machining.

Hardness may also be referred to as mean contact pressure. All of these characteristics are related to the plastic flow stress of materials.

Although there are other methods, INNOVATEST has concentrated its research and development to the hardness testing methods that are recognized global standards, Brinell, Rockwell, Vickers and Knoop.



ONHOVATEST











BRINELL

From the late 19th century, more attention was paid to hardness testing. Johann A. Brinell, a Swedish engineer, presented a paper to the Swedish Society of Technologists describing his "ball" test. This rapidly became known as the Brinell test and became universally used in the metalworking industry.

ROCKWELL

Later onwards, 1919, the Rockwell test was introduced. It has become, by far, the most popular hardness test in use today, mainly because it overcomes the limitations of the Brinell test. The inventor, Stanley P. Rockwell, a Hartford, Connecticut, heat treater, used the test for process control in heat treating.

VICKERS

Both Brinell and Rockwell however are using rather high test forces. Because of the need to measure thin & small objects as well as layers and coatings there was a need for another method more suitable to fulfill these requirements. The Vickers hardness test was developed in 1924 by Smith and Sandland.

KNOOP

Knoop (HK) hardness was developed at the National Bureau of Standards (now NIST) in the USA in 1939. An elongated diamond pyramid shaped indenter is used to perform low force (10gf to 1kgf) tests on originally brittle materials like glass or minerals.



MAASTRICHT

OUR CENTRE OF EXCELLENCE

The head office of INNOVATEST is located in Maastricht, in the Kingdom of the Netherlands. The city is positioned on both sides of the Maas river (La Meuse), derived from the Latin "Mosae Trajectum", meaning; place to cross the river. It's located in the south of The Netherlands and borders with Germany and Belgium.

From a Roman settlement around a bridge over the Maas river, around 70AC during the reign of Augustus Ceasar, Maastricht developed to a Medieval religious center. In the 16th century it became an army garrison town and in the 19th century an early industrial city famous for its ceramics production.

The important strategic location of Maastricht resulted in the construction of an impressive array of fortifications around the city during this period. Both the French and Spanish kingdoms occupied the city in turns. In 1748 the French conquered the city once more at what is known as the Second French Siege of Maastricht, during the War of Austrian Succession. The French took the city for the last time in 1794 and Maastricht was annexed to the First French Empire (1794–1814). For twenty years Maastricht remained the capital of the French "departement de La Meuse".

After the Napoleonic era, Maastricht became part of the Kingdom of the Netherlands in 1815. It was made the capital of the newly formed Province of Limburg (1815–1839). When the southern provinces of the newly formed kingdom seceded in 1830, the Dutch garrison in Maastricht remained loyal to the Dutch king, William I, even when most of the inhabitants of the town and the surrounding area sided with the Belgian revolutionaries.

In 1831 arbitration, the Great Powers allocated the city to the Netherlands. However, neither the Dutch nor the Belgians agreed to this and the arrangement was not implemented until the 1839 Treaty of London. During this period of isolation Maastricht developed into an early industrial town.



Maastricht retained a distinctly non-Dutch appearance during most of the 19th century and it was not until the First World War that the city was forced to look northwards.

Today, the town is a thriving cultural and regional hub, popular with tourist for shopping and recreation. Also worth are seeing 1677 national heritage buildings, the second highest number in the country, after Amsterdam. It became internationally well-known through the Maastricht Treaty, as the birthplace of the Euro.

INNOVATEST is located at the North-East entrance in a close distance to the city center.





BE CERTAIN!

Consider the importance of hardness testing in the quality control processes of aerospace, automotive, failure analysis, global metal working industries and general manufacturing. Determining the material properties offers valuable insight into the strength, flexibility, durability, and capabilities of a wide range of component types from raw materials to finished goods, and prepared specimens.

Hardness testing simply matters. Be Certain!

OUR GLOBAL SHOWROOMS



SHANGHAI



MAASTRICHT

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