# Elastocon

# Testing with precision

# Elastocon AB

Tvinnargatan 25 SE-507 30 Brämhult **SWEDEN** 

Phone: +46 33 323 39 00 info@elastocon.se

www.elastocon.com



Our calibration lab is accredited by SWEDAC





info@elastocon / #1-2021 / Spring News

Elastocon Polymer Testing Laboratory

I started Elastocon 1987 and already from the start we also performed testing for customers, besides developing and manufacturing instruments for polymer testing.

My background is in polymer testing, first as Laboratory manager at Firestone factory in Borås, then as section manager, Rubber Testing at the Swedish National Testing Institute, SP (now RISE).

Some of the customers from SP came to me at Elastocon and wanted to continue to use my testing and consultancy services.

We did not advertise the testing services as I did not want to compete too much with the SP institute, and it continued in this way over the years. We performed standard rubber testing methods and a lot of stress relaxation testing often in combination with Lifetime estimations.

Read more on next page.



Elastocon was founded in 1987 by Göran Spetz who then worked at Swedish National Testing Institute, SP (now RISE) in Borås, Sweden.



Kim Bini is manager for Elastocon's accredited contract testing laboratory.

# Elastocon manufactures instruments for testing of rubber and plastic materials

- Specimen preparation
- Ageing ovens
- Stress relaxation and creep
   Computerised testing
- Low temperature testing
- Windscreen fogging

- Electrical tests
- Custom built instruments
- Calibration service

# **Elastocon Polymer Testing Laboratory**

Continued from first page.

# 2017 we got big jobs from two customers.

One customer wanted us to perform lifetime estimation of about 20 SBR and EPDM materials of seals for water pipes. The other customer had 12 fluoro-rubber materials and wanted us to run cycling stress relaxation test between 23°C to 250°C.

The best material lasted over 1 year at 250°C.

2017 we also decided to get 15 rubber test methods accredited and to start to market our testing services.



Ackred. nr. 1678 Provning ISO/IEC 17025 We increased our capacity for stress relaxation and low temperature tests.

For stress relaxation we now have capacity to test 35 materials with three test pieces each at the same time.

We have invested a lot in more instruments for our laboratory in the last 4 years and examples are shown in the table.

All instruments are also available for demonstrations if you are interested in purchasing an instrument.

Göran Spetz

Instrument	Application
EB 02 + EB 21, EB 22HT, EB 21LTHTP, EB 22VHT	Relaxation rigs for compression 4 materials, 4 to 40 °C 2 materials, 40 °C to 200 °C 8 materials, 23 °C to 300 °C, cycling 6 materials, 40 °C to 300 °C 6 materials, 40 °C to 350 °C 2 materials in liquid, 40 °C to 150 °C
EB 02 TE + EB 21	Relaxation rigs for tension, 2 materials, 40 $^{\circ}\text{C}$ to 200 $^{\circ}\text{C}$
EB 02 ALE + EB 21	Relaxation rigs for compression with air and liquid exchange 1 material, 40 $^{\circ}\mathrm{C}$ to 200 $^{\circ}\mathrm{C}$
EB 02 + EB 17 + EB 17.01 cirkulator	Relaxation rigs for compression, cycling temperature 2 materials, -40 °C to 245 °C 2 materials, -40 °C to 150 °C
EB 18-II-1	Automatic relaxation and creep tester, force range 5 to 1 500 $\rm N$
TO 10ST	Tensile and compression tester, 10 $kN$
EB 03C	Fogging tester for windscreen fogging in vehicles
TH 100	Haze tester for measuring transmission and diffusion
C\$ 380	Gloss meter, three angles 20°, 60° and 85°
MP 1200	Melt index tester for method A and B
IT 503	Impact tester for Sharpy and IZOD
Digitest II	Hardness tester, Shore A, AM and D. IRHD-N and IRHD-M





 $\textbf{Above: Stress relaxation test system. \textbf{Right: } Combined \ TR-\ and \ Gehman-tester.$ 

Instrument	Application
ABT220 5DNM	Analytical balance with 5 decimals
OZ\$ 574	Stereo microscope with camera
Abrasion	Abrasion tester for rubber
Rebound	Rebound tester
DSC 4000	DSC instrument for melting points and OIT
TGA 4000	Thermal balance for determination of composition
Spectrum II	FTIR spectrometer for determination of polymer and softener type
Identipol	Instrument for characterising thermoplastics
TCi	Instrument for measuring thermal conductivity
EE 01-III	Instrument for measuring electrical resistivity
Titan \$1	<b>XRF analyser</b> for determination of elements from Mg to U, for determination of mineral fillers in polymers
EB 04-II + EB 12-II	Cabinet ovens for precision ageing of polymers, 40 °C to 300 °C
EB 20	Cell ovens for precision ageing of polymers, 40 °C to 200 °C
FD 56	Laboratory oven
QUV	Weathering tester with UV light, heat, and condensing water
Q-SUN Xe-1	Weathering tester with xenon light and temperature
ET 01-II	TR-tester for low temperature retraction
ET 02-II	Gehman-tester for low temperature torsional stiffness
LTCS	Low Temperature Compression Set test system

# Eva Chröisty is our new market coordinator

In May Eva Chröisty started as our new market coordinator.

Prior to joining Elastocon, Eva worked for Arla Foods AB.



Read our new web articles about testing, calibration and about old measuring instruments in Elastocon's museum.

Visit www.elastocon.com/learnmore/about-testing or /about-calibration or /elastocon-museum

# Cell ovens with temperatures up to +350 °C

According to customer requests, Elastocon expands the temperature range for both cell ageing ovens and stress relaxation ovens.

We can now offer EB 20VHT, which is a high precision ageing oven equipped with 6 cells. The temperature range is between +40 °C to +350 °C.

For stress relaxation we can offer EB 22VHT, a high precision ageing oven for stress relaxation testing with temperature range between +40 to +350 °C. To make stress relaxation tests possible we also offer the relaxation test rig EB 02VHT for testing in compression in temperatures up to +350 °C.

In our own accredited testing laboratory, we can also perform contract testing according to above temperature specifications.

## Would you like to know more?

Please contact us at info@elastocon.se for more information.





# Contacts

#### **Martin Spetz**

Managing Director +46 33 323 39 33 martin.spetz@elastocon.se

### Göran Spetz

Manager Marketing and Sales +46 33 323 39 31 goran.spetz@elastocon.se

## Ann-Cathrine Magnå

Sales Manager, Nordic area +46 33 323 39 32 ann-cathrine.magna@elastocon.se

#### Anna Anderzén

Sales Manager, Export area +46 33 323 39 37 anna.anderzen@elastocon.se

# **Economy and Administration**

+46 33 323 39 51 ekonomi@elastocon.se

You can also reach us at info@elastocon.se

#### Kim Bini

Laboratory Manager, Testing +46 33 323 39 40 kim.bini@elastocon.se

# Jonas Nilsson

Calibration and Quality +46 33 323 39 36 jonas.nilsson@elastocon.se

#### Andréas Svensson

Electrical Design and Support +46 33 323 39 34 andreas.svensson@elastocon.se