Elastocon®

Elastocon AB

Tvinnargatan 25 SE-507 30 Brämhult SWEDEN Phone: +46 33 323 39 00 info@elastocon.se www.elastocon.com

Testing with precision



Our calibration lab is accredited by Swedac



Product overview



Specimen preparationAgeing ovens

• Stress relaxation and creep

- Low temperature testersHot Set testers
- Electrical testers
- Windscreen fogging testers
- Software for polymer testingCalibration & testing services

b-overview_14_1910

Rubber and plastic testing with precision

Elastocon develops, manufactures and sells instruments and software for testing of rubber and plastic materials.

We offer equipment for existing test methods and develop instruments for new test methods. Our objective is to offer instruments with high precision, which gives accurate results.

The company is based in Sweden and offers worldwide sales and service, with representatives in several countries around the world.

Elastocon is ISO 9001 certified and accredited according with ISO 17025 for our calibration and testing services.

Elastocon offers:

- Instruments and software for rubber and plastic testing
- Calibration
- Testing Services

Ackred. nr 1678 Kalibrering ISO/IEC 17025

EDA

Important years in the history of Elastocon

- **1987** Elastocon was founded by Göran Spetz
- **1989** The company moved from the Spetz family garage to premises at a former hospital in Borås
- **1993** We started our calibration service, which is able to calibrate most testing instruments with traceability to international references
- 1999 ISO 9001 certification
- 2000 ISO 17025 accreditation for calibration services
- **2011** Elastocon took over the operations of Mätcentrum i Eskilstuna AB

We also moved to our present premises in Brämhult/Borås

- **2012** The length laboratory moved from Eskilstuna to Brämhult in Borås
- **2015** Martin Spetz succeeds Göran Spetz as managing director for Elastocon AB
- **2018** ISO 17025 accreditation for testing services



Green colour shows countries where you can find Elastocon's customers. The company is based in Sweden and offers worldwide sales and service, with representatives in several countries around the world.





Specimen Preparation

Pneumatic specimen cutting press, EP 02, and manual specimen cutting press, EP 08, for preparation of test specimens of rubber and plastic materials, by punching. The cutting presses are small and and have a system for quick change of cutting dies. They stand secure on rubber feet and do not need to be attached to the table.

Using of cutting dies with a guiding rod

When cutting samples which curl and do not lie flat, the guiding rod (EP 04.04) can be used. The guiding rod makes it possible for the operator to manipulate the sample to optimise the cutting location. Watch a demo video on our website.

Specimen Cutting Dies, EP 04, are manufactured in both standard and special shapes. A special shank for quick mounting in presses EP 02 and EP 08 is included. All cutting dies are manufactured with an ejector, often an ejector plate, which helps the work and protects the edges of the test specimen and the operator.

Various testing equipment

Thickness Gauges: EV 01, for thickness measurement of rubber according to e.g. ISO 23529 and compression set measurement according to e.g. ISO 815-1.

EV 06 and EV 07 for thickness measurement of textiles according to e.g. ISO 5084.

Compression Set Rig, EV 03, according to ISO 815-1.

The rig consists of two circular polished plates of stainless steel with a central screw and spacer.

EV 03 fits in all Elastocon's cell ovens below the sample holder, or can be placed inside the cabinet ovens.

- Spacer set with spacers from 1 to 11,5 mm in 0,5 mm steps EV 03.01
- Spacer set from 1 to 11,9 mm in 0,1 mm steps EV 03.03

Tension Set Rig, EV 04, according to ISO 2285. The rig is made of stainless steel and can be adjusted from

25 to 100 % extension. The rig can easily be mounted on the sample holder of the cell ovens, or can be placed inside the cabinet ovens.

Lab Freezers

Elastocon freezing boxes have highly efficient insulation resulting in very slow temperature rise. The insulation also results in a large inner volume, which together with minimal outer volume saves space and gives low energy consumption. Together with the environmentally friendly refrigerant, this provides less influence on the environment.





Pneumatic cutting press, EP 02





Manual cutting press, EP 08

Guiding rod.





Specimen Cutting Dies.



Compression Set Rig, EV 03.



Tension Set Rig, EV 04.



Thickness Gauge, EV 01.



Thickness Gauge, EV 06.

ET 03 Low Temperature freezer -10 °C to -45 °C suitable for compression set at low temperatures.

ET 07 Very Low Temperature freezer -30 °C to -60 °C.

ET 04 Ultra low Temperature freezer -60 °C to -85 °C suitable for cooling the liquid for Gehman, TR and Brittleness testers.

High precision ageing ovens for rubber and plastic testing

Elastocon have produced and developed high precision ageing cabinets and cell ovens for ageing of polymer materials since 1987.

Benefitting from this long experience our latest generation of ovens represent a major step forward in the design of such instruments.

Cabinet Ageing Ovens

Our cabinet ageing ovens meet most ISO and ASTM standards for testing of rubber and plastic materials. Depending on model, they are made with a useful volume of 50, 60 or 120 l and with a temperature range of 40 °C to 200 °C, or 40 °C to 300 °C. The ovens can be supplied with low air speed, high laminar or turbulent air speed or with a carousel, which rotates during ageing.

Cell Ageing Ovens

Manufactured in 4 or 6 cell configurations, the cell ovens are available with either single temperature controller or multiple (individual) cell controllers and with a temperature range of 40 $^{\circ}$ C to 200 $^{\circ}$ C, or 40 $^{\circ}$ C to 300 $^{\circ}$ C.

Our ageing ovens have the following features:

- Controlled from a micro PLC with colour touch screen.
- Improved insulation reduces energy consumption, environmental impact and cost.
- Cooling channels in the casing for low surface temperature.
- Resettable countdown timer for each cell or oven.
- Test names can be given in the PLC.
- Alarm history.

Two temperature sensors are used, one for temperature control and one for measuring the temperature close to the samples. This sensor can also be connected to a logging software.







Cabinet ageing oven EB 10-II with a factory set throttle to give a fixed air exchange rate of 7 or 14 changes per hour.



Cabinet ageing oven EB 26 with a carousel, which rotates during ageing.



All Elastocon's ageing ovens meet or exceed the requirements in IEC 60811 and ISO 188.

Cell ageing oven EB 20 is equipped with 6 cells, each with individual temperature. Each cell has individual control of the air exchange rate, and has room for 24 test pieces.



Sample Holder – one holder per cell is included with the cell ovens.

Specified requirements for ageing ovens

Ageing ovens is a standardized expression with very well specified requirements for different features that has been proven to be important to have a reliable ageing especially for polymeric materials. Studies have shown the importance of the control of:

The temperature accuracy is very important for heat ageing tests, as a 1 $^{\circ}$ C error in temperature corresponds to around 10 % error in test time.

- Temperature variations in time
- Temperature variations in space
- Air speed inside the oven
- Air exchange rate and also the presence of the same

Requirement	High precision ageing ovens	Laboratory ovens
Temperature accuracy in time	Yes, high requirements	Yes
Temperature accuracy in space	Yes	No
Specified air speed	Yes	No
Specified air direction	Yes	No
Specified air exchange rate	Yes	No
Specified extra temperature sensor	Yes	No

Comparison of cell ageing ovens and cabinet ageing ovens





ovens	Cell Ageing Ovens	Cabinet Ageing Ovens
Inner volume	Smaller, 100 × 300 mm	Bigger, from 50 up to 120 litres
Suitable for samples, e.g. dog bones	Yes	Yes
Suitable for products	No	Yes
Temperature accuracy in the whole inner space	Yes	Yes
Air speed	Fulfils standard requirements	Fulfils standard requirements
Air exchanges per hour	3–20 changes/hour, adjustable with air flow meter, with individual control for each cell	3–200 changes/hour, adjustable with air flow meter or fixed during produc- tion depending on model
Numbers of different temperatures	1–6 (each cell can have their own individual temperature and therefore works as separately ovens)	1
Numbers of different materials that can be aged simultaneous	1–6	1 (you shouldn't have different materials in the same space, they might interfere with each other)
Option for turbulent air flow	Yes, with an additional air stirrer in the bottom of the cells	Yes, EB 26 has a carousel that enables turbulent air flow and higher air speed

Test Tube Ovens

Elastocon's test tube ovens are designed for ageing tests according to ASTM D865 Rubber-Deterioration by Heating in Air (Test Tube Enclosure). The ovens can also be used for testing in liquids according to ASTM D471 and ISO 1817 Effect of liquids. Glass tubes for both standards are included.

Glass tubes for air cooling are included and water cooling can be supplied as an option.

Two models are available

• Test Tube Oven EB 11-II with 24 test tubes.

• **Test Tube Oven EB 28** with 4 × 6 test tubes and four temperatures.

Insert for ASTM

The insert has three test tubes for testing according to ASTM D865 Heat Ageing and ASTM D471 Testing in liquids, and fits EB 19 and EB 20.

The glass tubes can be supplied with a grounded joint for a stopper or for a water cooler.

The glass tube system is also very suitable for testing in liquids according to ISO 1817.

The images to the right show three configurations.

1. ASTM D865 Heat ageing

- **2**. ASTM D471 Liquids with air cooler (with and without glass tube in the first image)
- 3. ASTM D471 Liquids with water cooler (optional)

Accessories for Elastocon's ageing ovens



Left: Insert for Heat Stability test, EB 07.02

1

Insert for cell ovens for testing of Heat Stability of PVC according to IEC 60811-405.



Stand EB 01.01 is a stand to support the sample holder for cell ageing ovens while mounting test pieces for ageing.



Elastocon offers a test tube rack with room for 15 test tubes. The rack is perfect for our test tube ovens, or liquid testing in a lab oven.







Rack for ageing ovens, ERACK11. The two lower shelves are extendable and are suited for cell ageing ovens EB 01-II, EB 19 or EB 20. On top is a fixed shelf for ageing cabinets.

Stress Relaxation Test System



The stress relaxation test system from Elastocon is used for continuous measurement in either compression or tension. It meets the requirements in ISO 3384, ISO 6914 and ASTM D6147.

The EB 02 relaxation rigs are used in combination with the cell ageing ovens EB 17, EB 21, EB 22 or EB 23 when testing at elevated temperature. **ALE-test – Aeration and Liquid Exchange test** means that it is possible to have both aeration and liquid exchange during a stress relaxation test.

ALE-test consists of a special test rig where the sample is mounted, a stirrer that mixes the liquid and air inside the container, input and output of air and liquid, plus a control box that controls the new functions. This system makes it possible to test closer to real conditions, such as in a in a vehicle's fuel system, than has previously been possible to do in a laboratory.

EB 02 relaxation rigs arranged for different test methods



Rig 1Rig 2Rig 1 is arranged for
testing in compression
according to ISO 3384.Rig 2



Rig 3 is arranged

for testing in liquid

according to ISO 3384.

Rig 2 is arranged for testing in tension according to ISO 6914 method A.



Rig 4 is arranged for testing according to *ALE-test*.



Rig 5 is our latest addition for testing relaxation in tension, a triple rig where you can perform a triple test in the same rig.



EB 02.01 Container



EB 02.01P Container

Containers for testing of stress relaxation in liquids are some of the optional accessories for the relaxation rigs.

Cell Ovens for Stress Relaxation

We have cell oven versions for use in relaxation testing. The height of these ovens is lower and incorporates an integrated draught hood, to eliminate variation in force measurements due to temperature and air effects.

The ovens are available in the following versions:

- 4 cells with individual temperature control (EB 21)
- 6 cells with individual temperature control (EB 22)
- 6 cells with the same temperature and cycling between -40 °C to 245 °C (EB 17)
- 4 cells with the same temperature control **(EB 23)**
- 4 cells with the same temperature and cycling between +20 °C to +200 °C, cooled with tap water (EB 23 LTP)

Software for Relaxation Testing, EC 05

This software evaluates results from relaxation tests according to ISO 3384 and ISO 6914. The software is user friendly and many functions can be done by a mouse click.

Software for Arrhenius Plot, EC 15

Arrhenius plots can be used to evaluate results from relaxation tests and to make life time estimations. EC 15 is a user-friendly software that quickly help you plot the graphs and display the result.



Software for Arrhenius Plot, EC 15.

Automatic Relaxation and Creep Tester, EB 18-II-3

We have further developed our creep and stress relaxation systems into a combined creep and relaxation instrument.

The instrument is based on our cell ovens, which means that each test station can run with an individual temperature.

The test rigs are based on our relaxation rig EB 02, but lowering and raising of the rigs is motor driven. The compression or tension of the samples is also motor driven with a servo motor.

The instrument has displacement resolution of 0,0001 mm with an accuracy of 0,003 mm and can be equipped with load cells from 100 N to 1500 N.

Creep Testers

We can also supply different type of creep instruments, e.g. **EB 15** for Full Notch Creep Test (FNCT) according to ISO 16770 and **EB 25** for e.g. ISO 899 which can be customized in some extent.





Software for Relaxation Testing, EC 05.

Support Agreement

Elastocon offers support agreements, which are valid for 12 months before renewal. One important feature in our support agreement is free software updates during the validity time.



Low Temperature Testers

For rubber materials there are four important standardized test methods for Low Temperatures.

Elastocon TR Tester, ET 01-II, for determination of low temperature characteristics by the temperature retraction procedure according to ISO 2921 and ASTM D1329.

The Elastocon TR Tester, has 6 test stations, is computerized and performs the test automatically after the cooling media has been cooled down and the samples have been mounted. An automatic release of the samples, after the precooling period, is included.

Elastocon Gehman Tester, **ET 02-II**, for determination of the relative stiffness characteristics of vulcanized or thermoplastic rubbers, also called the Gehman procedure. The test is done according to ISO 1432, ASTM D1053, or technical equivalent standards.

The Elastocon Gehman Tester, has 6 test stations, is computerized and performs the test automatically.

Elastocon Brittleness Tester, **ET 05-II**, for automatic determination of Brittleness point according to ISO 812, ISO 974, ASTM D746 and ASTM D2137. The brittleness tester is designed as a computerized falling weight tester, where the speed is set by the height and the energy by the attached weights.

The test rig is raised by a pneumatic cylinder.

Combinations

The TR Tester, Gehman Tester and Brittleness Tester can be combined using the same base unit and a rig changing system.

The combined instrument consists of a base unit with a cooling bath and the electronics. The different test rigs are then mounted on a carousel. No lifting is necessary when switching from one method to another. *Watch a demo video on our website*.

An automatic computerised Low Temperature Tester increases the precision up to 5 times. The capacity will also increase by about 50 % and not least the labour time will decrease about 75 %.





TR Tester, ET 01-II.

Gehman Tester, ET 02-II.



Combined low temperature instrument with a Gehman Tester selected, on the adjustable table ET 01.08.

Low Temperature Compression Set test system

By using the **EV 09 rig** in combination with a modified laboratory freezer with a special lid the Low Temperature Compression Set test can be performed without touching the test piece, according to ISO 815-2. All adjustments of height and releasing the compression are made outside the freezer thus improving the accuracy of the test results.



The low temperature laboratory freezer (-10 to -45 $^{\circ}$ C) is modified with the **ET 03.01-x conversion kit** (available for 4 or 6 rigs).



Software for Low Temperature Compression Set (LTCS), EC 10. This software can monitor the temperature during the test time and records the recovery when the test piece is released.

Hot Set Testers

Ovens for determination of Hot Set

EB 16-II is made for hot set testing of cable material according to IEC 60811-2-1, IEC 60811-507 and equivalent standards.

It is built on an ageing oven that performs well inside the apparatus requirements in IEC 811.

To avoid too high temperature loss when inserting and cutting the samples, the samples are placed through a small opening in the top of the oven. To get a suitable working height and not shake the samples during insertion, the oven is fixed and the sample holder moves up and down by a servo motor driven screw system.

The oven has a controlled air exchange rate and low air speed which can be controlled by a flow meter, meeting the requirements for ageing ovens in IEC 811.

Measurements are made through the window with a laser pointer mounted on a measuring scale placed on the door. The window can be taken apart for cleaning.

When measuring the elongation with a push on a button on the scale, the measured values are entered into a spreadsheet template, via a Bluetooth connection.

The set is measured outside the oven with a digital caliper also connected to the computer, both included with the EB 16-II. A finished report can then be produced in a spreadsheet software.

The Hot Set Oven Basic EB 30 is made for hot set testing of cable material according to IEC 60811-507 and equivalent standards.

It is built on a heating cabinet with window in the door. The inner chamber of stainless steel is equipped with illumination. Measurements are made through the window with a laser pointer that is mounted on a measuring scale placed on the door. The line laser will automatically shut off when the door is opened.

All measurements can be inserted in a spreadsheet template (included) for calculation of both the weight necessary for each sample, and the hot set test result.

4 different templates are included and ready for installation on your computer for the usage in the spreadsheet software.

Included in the purchase of Hot Set Instrument

EB 16-II	EB 30	
Grips, hooks and weights for 8 samples	Grips, hooks and weights for 4 samples	
Bluetooth connected caliper	No	
Bluetooth connected meas- uring scale with line laser on the instrument	Line laser with measuring scale on the instrument	
2 timers inbuilt in the PLC touch screen	No	
Computer	No	
Templates for calculations and report	Templates for calculations and report	





Equipment for electrical testing of rubber material

Resistance Tester, EE 02, is an instrument for determination of electrical resistance on conductive and antistatic rubber products according to ISO 2878.





Volume Resistivity Tester, EE 01-III, for determination of volume resistivity on conductive and semi-conductive rubber materials, according to ISO 1853.

Volume Resistivity Tester, EE 03-III, for determination of volume resistivity on semi-conductive materials, according to cable standard IEC 60502-2.

Volume Resistivity tester, EE 04-II, for determination of volume and surface resistivity on insulated materials.

Software for resistivity measurements, EC 14, for data acquisition, storing and presenting the data against time.









EE 04-II Volume Resistivity tester for determination of volume and surface resistivity on insulated materials includes a voltage instrument and a resistivity test fixture.

Equipment for polymer and carbon black analysis

Tube Oven, ES 14, for polymer and carbon black analysis.

The tube oven can be used for the following and similar test methods:

- ISO 247 Rubber Determination of Ash
- ISO 1408 Rubber Determination of carbon black content
- ASTM D297 Rubber Determination of carbon black and ash content
- ASTM D1603 Plastics Test method for carbon black in olefin plastics



Windscreen Fogging Tester

Determination of fogging characteristics of trim materials in the interior of vehicles

The Windscreen Fogging Tester, EB 03,

is an equipment for determination of windscreen fogging according to ISO, SAE and other automotive standards. The equipment has a compact design with the heating bath and cooling bath integrated in one casing.

For cooling the water bath, the instrument can be connected to tap water of max 18 °C. If the tap water is too warm, the EB 03C model can be supplied with a built in cooling system with Peltier elements.

Accessories

In parallell with a fogging test, a control test with the reference liquid DIDP shall be made to determine the fogging value.

Several different fogging accessories are available in our assortment, also company specific accessories.



te



A suitable **balance** for gravimetric tests with 0,00001 g resolution.







A haze-meter measures several transparency parameters in one instrument: total transmission and haze.

Film Creep Tester

Film Creep Tester EB 24 based on our Ageing Oven EB 10-II with a digital ruler system including a line laser pointer for manually measuring the creep.



The ruler is connected to a computer via Bluetooth and the values are fed into an spreadsheet template which calculates the result and presents the graphs.



Software



The Hardness software, EC 01, can be connected to several hardness testers, e.g. from Wallace and Bareiss, for all Shore and IRHD scales.



The Balance software, **EC 03**, can be connected to e.g. Kern and Sartorius balances, for measuring and calculating density, weight change and volume change.



Low Temperature Compression Set (LTCS), EC 10. This software can monitor the temperature during the test time and records the recovery when the test piece is released.



The EC 14 software is used for resistivity measurements. The software acquires, stores and presents the data against time.



The Thickness software, EC 02, can be connected to Mitutoyo gauges. Thickness measurements and calculations of compression set.



The Relaxation software, EC 05, is a user friendly software as many functions can be done by a mouse click.



The data monitoring software, EC 11, is used for monitoring instruments such as ovens and laboratories for temperature and humidity.



The EC 15 software helps you create an Arrhenius plot e.g. after a stress relaxation test. The software is very user friendly and has several customization options.

Elastocon offers accredited rubber and plastic testing services







Stress relaxation testing.

Low-temperature retraction (TR test).

TR Tensile stress-strain properties.

Elastocon performs testing and consultancy assignments in rubber and plastic. Our specialities are ageing tests, estimation of lifetime and testing of low temperature properties on rubber materials.

We are accredited for 13 rubber testing methods, see the box to the right. It is SWEDAC, the Swedish Board for Accreditation and Conformity Assessment, that performs the accreditation.

We can also do other non-accredited tests.

- Some examples of our non-accredited tests are:
- Weathering tests.
- Determination of fogging characteristics of trim materials in the interior of automobiles.
- Determination of the electrical conductivity or resistance of rubber material.
- Thermal conductivity testing.

For polymer testing inquiries and quotations, please contact us via info@elastocon.se

Accredited rubber test methods in Elastocon's testing laboratory

ISO 34-1	Tear strength	NEDAO	
ISO 37	Tensile stress-strain properties		
ISO 48	Hardness IRHD	\mathcal{Q} \mathcal{Z}	
ISO 188	Accelerated ageing and heat resistance	PEDITE	
ISO 815-1	Compression Set	Ackred. nr. 1678	
ISO 815-2	Low Temperature Compression Set	Provning ISO/IEC 17025	
ISO 1432	Low-temperature stiffening (Gehman test)		
ISO 1817	Resistance to liquids		
ISO 2921	Low-temperature retraction (TR test)		
ISO 3384-1	Stress relaxation in compression		
ISO 6914	Ageing characteristics by measurement of stress relaxation in tension		
ISO 7619-1	Hardness Shore		
ISO 11346	Estimation of life-time and maxi	mum	
	temperature of use		

Lifetime estimation

One of our specialties is lifetime estimation, especially of rubber materials.

The testing is performed at three different temperatures and a critical property is tested until the function is finished.

When testing rubber, it's common to use stress relaxation in either compression or tension. The times to reach the "end of life" time for each temperature will be plotted in an Arrhenius graph and the lifetime at lower temperatures can be extrapolated.





Above: EPDM relaxation curves at three temperatures. Left: Arrhenius plot at 40 % relaxation.

Elastocon offers accredited calibration







We offer a wide range of calibration services within the following units:

Length · Mass · Temperature · Force · Pressure · Hardness · Extension · Speed · Time* · Humidity* · Angle* · Gloss* · Colour* · Small gas flows* · Torque*

 * Not included in accreditation.

The calibration is done with traceability to international reference standards. After the calibration, a signed calibration certificate with all data such as results, traceability and uncertainty is issued.

Calibration in field

Elastocon performs a large part of our calibration tasks in the field, on-site at the customer's facility. Many instruments are simply too large to be sent in for calibration in our laboratory. Other types of equipment, like balances, are greatly affected by their ambient environment.

Read more at Elastocon Mätcentrum's website: www.kalibrera.se

Elastocon Mätcentrum is the part of Elastocon AB performing calibration. We offer calibration both in our calibration laboratory and in the field. We are accredited within ISO 17025 for calibration and certified for ISO 9001.

Calibration is an important part of quality work today. At Elastocon we are experts in calibration and have the necessary equipment and education as well as the accreditation.

Employing external calibration services,

such as ours, can save money for your business.

Let Elastocon calculate for your external calibration work and give you a quotation. Consider that it might be less expensive for your company to let us do the calibration you perform internally as well.





We can assist you with a material specification for the material in your products and make ongoing tests of your delivered products. This can be very important for your product quality, especially if you use a supplier far away from you. Please contact us for more information.

Training in testing and calibration

Do you need customized training in testing and calibration, either at us or at your company? Please contact us for more information.



Ackred. nr 1678 Kalibrering ISO/IEC 17025

Rubber literature



Rubber Technology – an introduction

This is a book that provides a basic technical understanding of rubber, as well as more detailed knowledge in several areas, with the aim of giving readers a real insight into the fascinating world of rubber.



A Technical report of a five year ageing project

75 Rubber and TPE materials have been tested in air, water and oil up to five years at temperatures from 40 °C to 250 °C

Representatives

Elastocon has local representatives in several countries around the world, please see our website www.elastocon.com for contact information.

Note that we have different websites:

- www.elastocon.com for our market outside of the Nordic countries.
- **www.elastocon.se** for our Nordic market with additional testing equipment from several well-known manufacturers that we represent in the Nordic region. We only sell these instruments in the Nordic countries.



 $Green\ colour\ shows\ countries\ where\ you\ can\ find\ Elastocon's\ customers.$

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

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

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





Elastocon AB

Tvinnargatan 25 • SE-507 30 Brämhult, SWEDEN • Phone: +46 33 323 39 00 • E-mail: info@elastocon.se

www.elastocon.com