

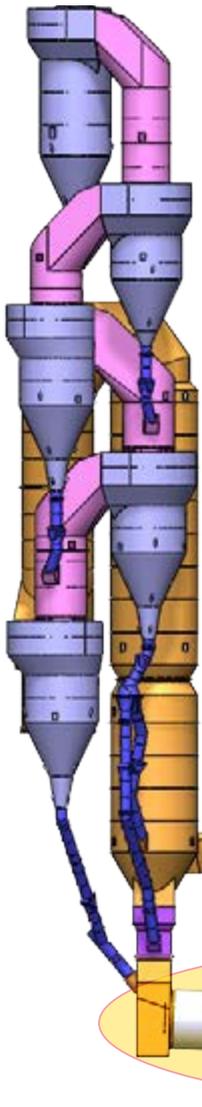
Measure kiln linings  
in seconds, with

# Linometer™ XLNT



MAGNUS

# Because you only make money when you make cement



Regular lining measurement is a sure way to ensure smooth operation in your cement kiln. With an accurate picture of lining condition, you can take necessary preventive measures at the same time you plan and prepare to expeditiously complete future maintenance stops.

But how much time can you spend measuring during your maintenance stops – whether planned or emergency? Certainly no longer than absolutely necessary.

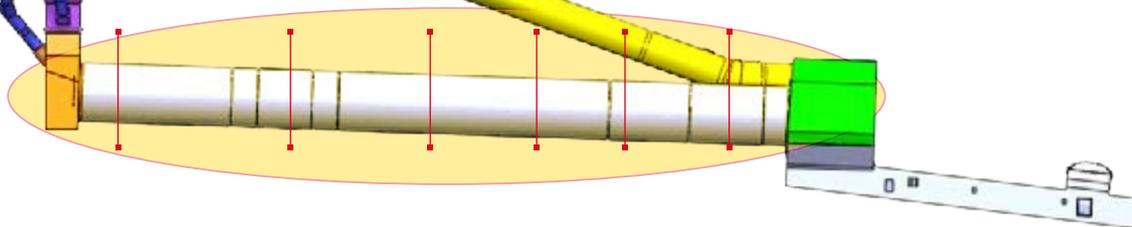
Höganäs Borgestad can now offer you a way to reduce lining measurement time by 90%. At the same time, you will minimize the measurement costs and danger to operators that traditional measurement methods cause.

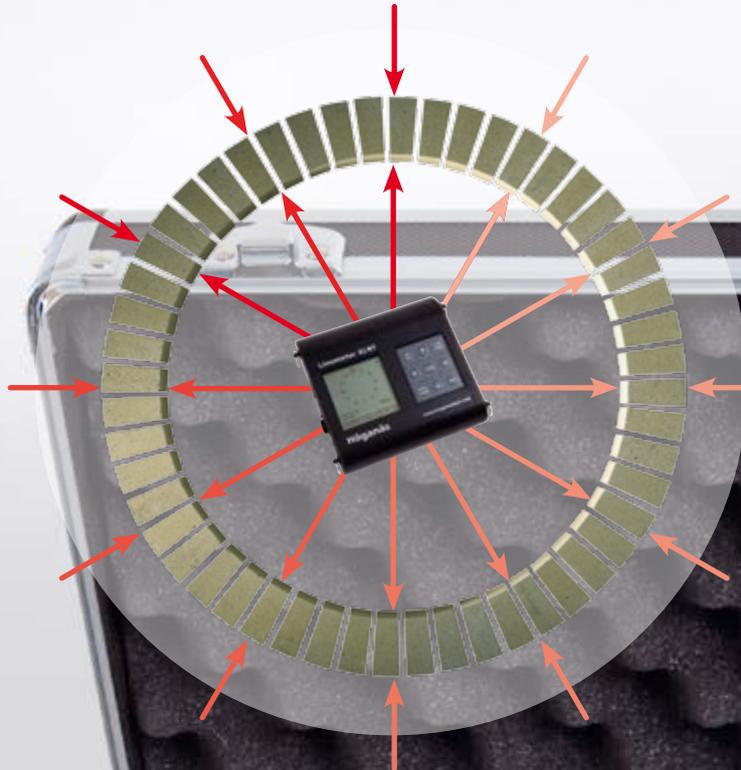
## Work smarter

Since 1995, cement plants around the world have chosen our Linometer™ instrument, because it delivers fast, accurate lining measurement without damage to the lining or danger for the operator.

Today, we can make you an even better offer – the Linometer XLNT. Light-weight and user-friendly, it will make lining measurement even faster, safer and more informative, because:

- Up to 72,000 measurements can be made and stored in the instrument itself. Therefore there is no need to take notes, and a single operator can perform the entire measurement task by himself.
- Up to 12 measurements can be made at each point, for a detailed picture of the lining's condition at that ring.
- You get precise and repeatable measuring points on the length of the kiln, thanks to the laser guide.
- Data is easily downloaded to a computer, and can be imported into a spreadsheet or your lining maintenance software.
- Compact and light-weight, the instrument itself weighs only 845 g (1.80 lbs), and probe and extension rod together weigh only 806 g (1.77 lbs). The probe's 'footprint' has been cut in half, so you spend less time removing coating from the brick surface.





Linometer XLNT – fast, accurate, repeatable measurement of lining thickness has never been easier.



# Non-invasive lining measurement in seconds

Unlike traditional measurement, where you must drill holes in your lining, the Linometer™ XLNT requires only that you clear a small patch of coating from the lining's surface.

Because it is quick and completely non-invasive, you can make more measurements, more often. This gives you a truly accurate picture of your lining's condition, and lets you plan and rationalize your lining replacement.

Slung on a strap over the operator's shoulders, Linometer XLNT is a powerful tool in a user-friendly package. To use it, the operator just sets measurement range on the user-friendly control panel, presses 'reset' to calibrate the sensor, and then begins measuring. Read-outs come immediately, either in millimeters or inches.

The remote probe and telescoping extension arm allow measurement of all parts of the lining's circumference without bending or stooping, and without rotating the kiln.

## Quick, accurate and safe

The Linometer XLNT measures lining thickness with an accuracy of 99%, requiring only a few seconds – the time it takes to scrape away a bit of coating and place its probe on the brick surface – to return a correct reading. It often takes less than 30 minutes for a single operator to make comprehensive measurements on an entire section of your kiln.

And it is completely safe for the operator. Since no drilling is required, there is little risk of coating downfall or brick fracture. Because it is battery-operated, there are no power cables to draw and no risk of short-circuiting. With no drilling, there is also no dust and no noise.

Once measurements are complete, it is a simple matter to connect the Linometer XLNT to the USB port on a computer to import measurement

results to your preferred kiln maintenance software.

## Cost-effective, too

The Linometer XLNT saves you time, thereby saving you money. That by itself is reason to use it.

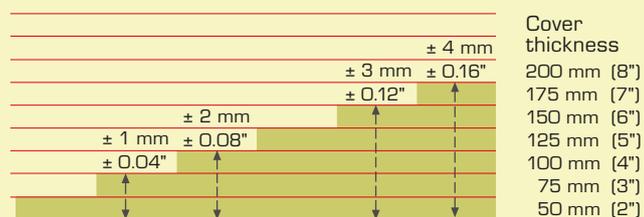
But the additional savings are also great. For traditional drilling and measuring, the cost of diamond-headed refractory drill bits alone quickly adds up to a lot of money. The Linometer XLNT's only 'consumables' are six AA batteries, and they will last many months before being easily replaced.

In the end, the bottom line is your cement-manufacturing profit. If your necessary measuring and maintenance work is finished quicker, you can get back to making cement sooner. That is what the Linometer XLNT will help you to achieve!

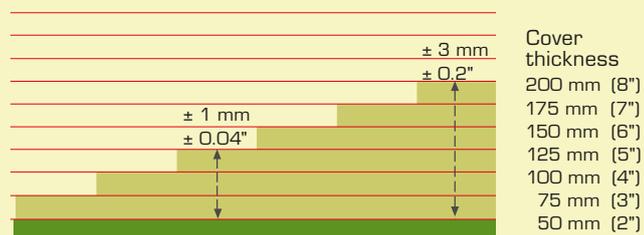
**Even with the two basic calibration curves, measurement accuracy always exceeds 98%.**

### Accuracy

Thickness of underlying plate <35 mm (1-3/8")



Thickness of underlying plate >35 mm (1-3/8")





# And packed with use



## Carrying case

Rugged foam-lined Swedish-made case securely houses all components for safe transportation to and from the kiln.

## Laser Guide

Accurate to within  $\pm 1.5$  mm, the Leica® precision digital laser guide makes it possible for the operator to accurately and repeatedly select the correct measurement points on the length of the kiln. It also offers many additional features, such as volume calculation, max and min measurements, built-in level and illuminated 4-line display.



## Measuring probe

Rugged PVC-encased probe withstands rough treatment. Securely attaches to the Linometer XLNT via a DIN connection. Only a small patch of brick needs to be cleared for the probe to take an accurate measure.

## Extension arm

Aluminum monopod extension arm can telescope up to 1.5 m (5'), extending the operator's reach. Easy snap-on connection locks probe securely in place.



# er-friendly features



## Linometer XLNT

Unnecessary delay is red ink on your balance sheet.

With Linometer XLNT, you can complete lining measurement quickly, easily and accurately, supporting proper preventive maintenance at the same time you minimize unproductive downtime.

Weighing only 845 g, the Linometer XLNT hangs from a strap around the operator's neck, leaving hands free to do the work.

The easy-to-navigate keypad gives the operator powerful measurement capabilities, and possibility to compare with earlier measurements.

Digital graphic display provides a clear picture of lining thickness variations throughout the measured kiln.

## Technical data

<b>Housing</b>	Durable PVC coping. Woven nylon shoulder straps.
<b>Controls</b>	User-friendly dust-proof keypad.
<b>Indicator</b>	LCD digital display, alphanumeric and graphical. Metric or imperial measurements. Backlit.
<b>Power</b>	6 × 1.5 V standard AA batteries.
<b>Probe</b>	PVC casing. Face dimensions 110 × 120 mm (4.33 × 4.72"). Velcro attachment for extension arm. 3.0 m (10') 4-wire connecting cable, DIN contacts.
<b>Extension arm</b>	Telescoping aluminum monopod, extendable up to 1.5 m (5'). Snap-on attachment for measuring probe.
<b>Weight</b>	Linometer XLNT: 845 g (1.80 lbs) Probe/extension: 806 g (1.77 lbs)
<b>Laser guide</b>	Class 2 laser. Measures up to 100 m (109.4 yds) range, with ±1.5 mm accuracy. Weight: 145 g (0.32 lbs)
<b>Carrying case</b>	Rubber-coated and dust-proof, edges reinforced with extruded aluminum. Foam padding holds components securely in place. Optional shoulder strap.



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