

# Magnetic<sup>®</sup> Scale Transformer

## The Protection for Your Pipes!

magnetic calcium converter

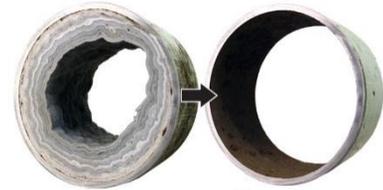
The protection for your pipeline

Measurable results in just 4 weeks



***Invest only once – save for the rest of your life!***

- ✓ Protection for Pipes and Appliances.
- ✓ Reduction in Energy Costs.
- ✓ Increased Thermal Efficiency.
- ✓ 20 Year Warranty.
- ✓ No Chemicals or Salt introduced to Water.
- ✓ Minimal Installation Cost
- ✓ No Maintenance or Running Cost.



**Minimal installation cost | No operating cost | No running cost |  
20-year warranty**

# Magnetic®

## A Success Story -

### The revolution in limescale protection devices

❖ **1994:** In the year of its foundation, the magnetic company launched a limescale transformer with a new installation system. That revolutionised the previously usual price-performance ratio. House-owners then only had to invest 30% of the previous price of a limescale protection device. That made the magnetic® Scale Transformer a bestseller for house owners.

❖ **1996:** The start of a unique series of practice-oriented long-term tests supervised by city and town councils and local authorities. The tests were carried out throughout Germany with different water compositions. All tests had the same result: 100% protection of pipes and hot water systems against limescale! That gave house owners and the trade the necessary certainty.

❖ **2000:** Magnetic started water vitalisation research in co-operation with scientists and doctors. The harmonious combination of physics with biophysics, i.e. the limescale transformation with vitalisation was achieved. The warranty period was simultaneously extended to 20 years.



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# Magnetic® Scale Transformer

## The Problems with Limescale: visible & invisible

- Hard water is visible in the kitchen and bathroom. We see the limescale in the form of scale on taps, water kettle, etc. and an increased in consumption of soap, detergents, washing powder and cleaners. (Visible limescale problems).
- However, ***limescale causes the biggest damage where you cannot do anything about it. In the pipes and the hot water system.*** That is where limescale forms. Layer after layer. The results are expensive repairs and maintenance work. (Invisible and dangerous limescale problems).



Limescale formation, from left to right: plastic, iron, copper, stainless steel.

### Invisible and Dangerous

- Extensive damage due to limescale formation in pipes
- Limescale damage in the hot water system
- Shorter service life of your plumbing components



### Visible and Annoying

- Limescale on mixers, taps and shower heads
- Increased consumption of soap, washing powder and household / commercial cleaners
- Damage to appliances & machines

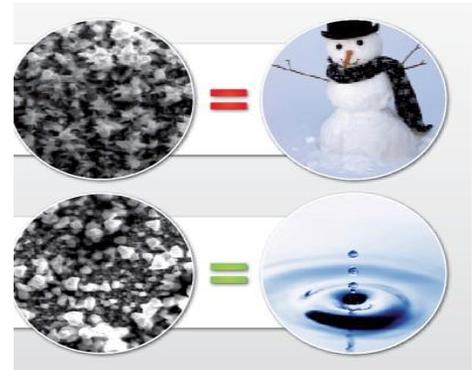
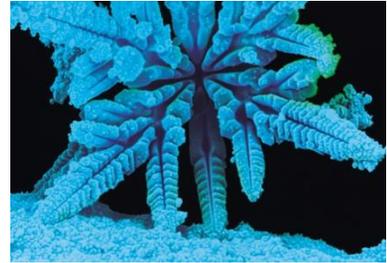


Limescale accumulation – Hardness range 3: About 100 kg of lime flows through the pipes per year with a water consumption of 25 m<sup>3</sup> per month.

# Magnetic<sup>®</sup> Scale Transformer

## How it works!

- ❖ Limescale as seen under a microscope, has a snowflake like structure allowing the jagged edges to stick together and accumulate.
- ❖ After passing through the Magnetic's Limescale Transformer, the molecular shape of limescale is transformed into a spherical shape. In turn, this allows the Limescale to now pass through and not accumulate, keeping the vitality of the water while protecting **all** appliances.



## By changing the structure of Limescale (Calcium), and not removing it from the water the following benefits occur:

- ✓ Less energy needed to heat water, Fuel and Electricity
- ✓ Less appliances breaking down, longer service life
- ✓ Less heating elements needing replacement
- ✓ No maintenance/running costs
- ✓ Minimal installation costs
- ✓ No spare parts needed
- ✓ No carbon Emissions
- ✓ No chemicals
- ✓ No salts
- ✓ No plastic bags used for salt
- ✓ Less requirement for Calcium supplements
- ✓ Less detergents, shampoos and conditioners
- ✓ Less packaging / plastic containers
- ✓ Less water usage, no regeneration
- ✓ Rust problems and pitting are permanently combated
- ✓ Less call outs, reducing carbon emissions from service vehicles



# Installation



**magnetic®** ...einfach besser

# Installation

The magnetic Scale Transformer with vitalization must not be mounted around a galvanized iron pipe but only around non-magnetic parts/ pipes (such as copper, brass, plastic and stainless steel). Installation ideally around the main in order to treat all incoming water. The diameter of the pipe can be smaller than the diameter of the Scale Transformer, it will still have its full function.

The two halves of the Scale Transformer must be attached to each other (no gap). Make sure that the metal inlays have direct contact. As the two halves of the Scale Transformer (unlike regular magnets) “click” in both directions please make sure it is mounted as shown in the picture. As a reference you may use the green logo strip which has to always face the same direction. The flow direction of the water is irrelevant.



**WARNING:** The magnetic Scale Transformer with vitalization works with magnetic fields. Therefore keep away from medical-technical devices like pacemakers, electrical and electronic devices, EC cards and their magnetic stripes and chip cards, watches, MC's, CDs, floppy disks and other magnet sensitive media.

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# Magnetic<sup>®</sup> Scale Transformer

## Technical Data XXL DN50

<b>Mode of operation:</b>	physical lime transformation (conversion)		
<b>Function :</b>	When the extremely potent magnetic field of the magnetic <sup>®</sup> Scale Transformer is passed by the water, the dissolved minerals are exposed to a series of intermolecular vibrations. The crystallization is disrupted and the intramolecular cohesion is broken. This leads to the relaxation of the water surface, dissolution of existing lime scale and prevention of new crystal structure formation.		
<b>Field Strength:</b>	ca. 400 mT		
<b>Weight:</b>	ca. 11 kg		
<b>Flow Rate:</b>	8.50 m/s		
<b>Device Dimensions:</b>	Length total	660 mm	
<b>( +/- 1mm )</b>	Length "magnetic"	420 mm	
	Inner diameter	steel pipe DN 50 (drinking water pipeline)	
	Outer diameter	88,9 mm	
<b>Installation:</b>	Is installed in the existing drinking water line. Corresponding transitions (press flanges) must be provided by the customer.		
<b>Maintenance:</b>	maintenance-free		
<b>Warranty:</b>	20 years		



# Magnetic<sup>®</sup> Scale Transformer

## Technical Data XXL DN80

**Mode of operation:** physical lime transformation (conversion)

**Function :** When the extremely potent magnetic field of the magnetic<sup>®</sup> Scale Transformer is passed by the water, the dissolved minerals are exposed to a series of intermolecular vibrations  
The crystallization is disrupted and the intramolecular cohesion is broken. This leads to the relaxation of the water surface, dissolution of existing lime scale and prevention of new crystal structure formation.

**Field Strength:** ca. 400 mT

**Weight:** ca. 16 kg

**Flow Rate:** 8.50 m/s

**Device Dimensions:**

Length total	600 mm
( +/- 1mm)	Length "magnetic" 320 mm
	Inner diameter steel pipe DN 80 (drinking water pipeline)
	Outer diameter 114 mm

**Installation:** Is installed in the existing drinking water line. Corresponding transitions (press flanges) must be provided by the customer.

**Maintenance:** maintenance-free

**Warranty:** 20 years



# Magnetic<sup>®</sup> Scale Transformer

## Technical Data XXL DN100

<b>Mode of operation:</b>	physical lime transformation (conversion)		
<b>Function :</b>	When the extremely potent magnetic field of the magnetic <sup>®</sup> Scale Transformer is passed by the water, the dissolved minerals are exposed to a series of intermolecular vibrations. The crystallization is disrupted and the intramolecular cohesion is broken. This leads to the relaxation of the water surface, dissolution of existing lime scale and prevention of new crystal structure formation.		
<b>Field Strength:</b>	ca. 400 mT		
<b>Weight:</b>	ca. 19 kg		
<b>Flow Rate:</b>	8.50 m/s		
<b>Device Dimensions:</b>	Length total	750 mm	
<b>( +/- 1mm)</b>	Length "magnetic"	420 mm	
	Inner diameter	steel pipe DN 100 (drinking water pipeline)	
	Outer diameter	180 mm	
<b>Installation:</b>	Is installed in the existing drinking water line. Corresponding transitions (press flanges) must be provided by the customer.		
<b>Maintenance:</b>	maintenance-free		
<b>Warranty:</b>	20 years		

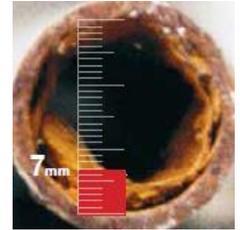


# Magnetic<sup>®</sup> Scale Transformer

## Lime Protection and Vitalization Testimonials

### ✓ Report of the city of Filderstadt

- **Location:** The city of Filderstadt described lime scale issues in various buildings they own. Many of the pipes show massive scale formation
- **Issue Treated:** The city of Filderstadt states that the use of the scale transformer was a full success and therefore allow us to use the pictures and their statement as a show case.
- **Customer's Statement:** Shows the state at the beginning of the test and after approximately 10 months. The result is that the scale formation decreased from 7mm to 2mm



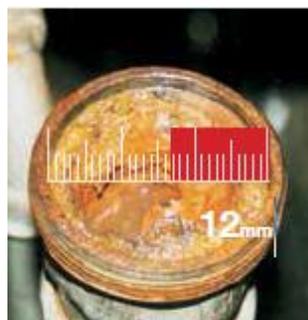
Start of Test



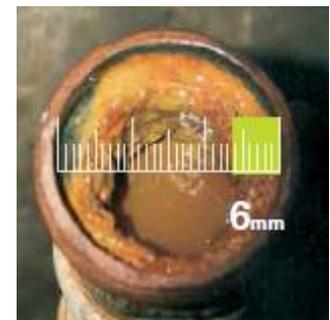
After 10 Months

### ✓ Report of the city Eibelstadt

- **Location:** Elementary school of Eibelstadt
- **Issue Treated:** Massive scale formation in piping system of the elementary school. The City considered a completely new installation of all pipes.
- **Customer's Statement:** The test went very positive. The observed not only no new scale formation but also a decrease of the existing crusts. As seen in page 5 the scale layer decreased from 12mm to 6mm within 1/2 year.



Start of Test



After 6 Months

# Magnetic<sup>®</sup> Scale Transformer

## Lime Protection and Vitalization Testimonials

**Customer:**

Brandt (brussels biscuit producer / 1000 employees / 175 mio.

**Location:**

Brandt production plant

**Issue treated:**

Brandt faced major issues with scale formation on their heat exchangers. Once per year they had to decalcify with critic acid. This took a lot of time and production down time. After 4 years they even had to me changed.

**Customer's statement:**

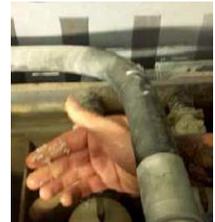
Treating their system with the magnetic scale transformer was the best decision. "We have never seen such clean heat exchanger after 15 months "

**Customer:**

Central sewer plant city of Wertheim (23.000 inhabitants)

**Location:**

Wertheim

**Issue treated:**

Scale formation on distilling unit which had to be decalcified every month

**Customer's statement:**

„In the beginning we were extremely skeptical as we had already tried various products without succes. Since the test started we see no scale formation. There is only a very thin layer which does not get thicker“

**Customer:**

State retirement department (15.000 employees)

**Location:**

LVA Head Oce Berlin

**Issue treated:**

LVA found major corrosion in their heating system considering an exchange of the system.

**Customer's statement:**

„Before installing the magnetic scale transformer we considered changing the heating system. After the test we found that the scale formation wasn't only avoided but existing crusts decreased“

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## Lime Protection and Vitalization Testimonials

**Customer:**  
Building contractor



**Location:**  
Vilsbiburg (12 apartments)



**Issue treated:**  
Scale formation on electric warm water boiler

**Customer's statement:**  
After 1 year of using the magnetic scale transformer there was only very little scale formation. The formed scale was soft and easy to remove.

**Customer:**  
Building contractor



**Location:**  
Würzburg (125.000 inhabitants)

**Issue treated:**  
Scale formation in piping system of apartment block

**Customer's statement:**  
"The results of the test are beyond our expectations. You have convinced all relevant persons including myself. Due to the positive results we consider using the scale transformer in morge of our buildings"

**Customer:**  
Town of Weissach



**Location:**  
Gymnasium Weissach

**Issue treated:**  
Scale formation and corrosion of piping system

ORTSBAUAMT

**Customer's statement:**  
„Since we use the scale transformer we have no more leakages in the system. We value the reliable and cost ecent remedy for scale transformation and rust“

# Magnetic<sup>®</sup> Scale Transformer

## 200 Kent, Ottawa

