TONWERK

Design: GAAN Gabriela Vetsch, André Riemens

T-EYE

BEDIENUNGSANLEITUNG TONWERK SPEICHEROFEN

INSTRUCTIONS D'UTILISATION DU POELE À ACCUMULATION TONWERK

OPERATING INSTRUCTIONS TONWERK STORAGE HEATING STOVES

ISTRUZIONI PER L'USO DELLA STUFA D'ACCUMULO TONWERK

TONWERK-SPEICHERÖFEN

AUSZEICHNUNGEN:

- Design Preis Schweiz
- MUT-Umweltpreis, Auszeichnung für umweltfreundliche Entwicklungen
- red dot award, für hohe Designqualität, Designzentrum Nordrhein-Westfalen
- Eidgenössischer Preis für Gestaltung, Produktdesign
- Design Plus, ISH Frankfurt
- PLUS X AWARD, Gütesiegel für die Besten der Besten

DISTINCTIONS OBTENUES PAR LES

POELES À ACCUMULATION TONWERK:

- Design Preis Schweiz (Prix du Design Suisse)
- MUT-Umweltpreis (Prix de l'environnement MUT), distinction accordée aux développements écologiques
- red dot award, pour un design de haute qualité, Centre du design de Rhénanie du Nord-Westphalie
- Eidgenössischer Preis für Gestaltung, Produktdesign (Concours Swiss Design Prize, design du produit)
- Design Plus, ISH Francfort
- PLUS X AWARD, label de qualité pour le meillleur du meilleur

TONWERK STORAGE HEATING STOVES

AWARDS:

- Design Preis Schweiz (Switzerland Design Award)
- MUT Umweltpreis, award for ecofriendly developments
- red dot award, for high designquality, Design Centre of North Rhine-Westphalia
- Eidgenössischer Preis für Gestaltung (Swiss Federal Design Award), product design
- Design Plus, ISH Frankfurt
- PLUS X AWARD, quality seal for the best of the best

PREMI RICEVUTI DALLE STUFE

D'ACCUMULO TONWERK:

- Design Preis Schweiz (premio svizzero per il design)
- MUT-Umweltpreis, premio per lo sviluppo ecologico
- red dot award, premio per il design di alta qualità del centro di design della Renania Settentrionale-Vestfalia
- Eidgenössischer Preis für Gestaltung, Produktdesign (premio elvetico per la forma, il design dei prodotti)
- Design Plus, ISH Frankfurt
- PLUS X AWRAD ,sigillo di approvazione per il meglio del meglio

design preis schweiz

mut Umweltpreis 2000

reddot award

PLUS X AWARD®

ENGLISH

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Version 20161231

1. TONWERK STORAGE HEATING STOVE – A SWISS QUALITY PRODUCT

Thank you for buying a Tonwerk storage heating stove – we are sure you will derive as much pleasure from our product as we do.

These instructions contain interesting and informative facts and all you need to know about the subjects of heating, wood, and operating your Tonwerk storage heating stove. Please read these instructions carefully before using your stove for the first time and keep them in a safe place.

WE ARE SATISFIED WITH OUR WORK WHEN YOU HAVE NO MORE QUESTIONS.

In our energy-conscious times we have made it our mission to extract the maximum possible energy from the raw material wood with the minimum possible emissions.
We want to utilise effectively wood, fire, and the heat they generate.

WE HAVE CREATED A LIVING SPACE FOR YOUR WOOD FIRE – THE TONWERK STORAGE HEATING STOVE!

Your Tonwerk storage heating stove never fails to fascinate with its extraordinary design and a heart of the most innovative technology – **handmade in Switzerland!**

YOU CAN LET THE SUN SHINE WHENEVER YOU WANT TO!

Next to stone and bone, wood is one of the oldest working materials in the world.

1.1 THE STORAGE HEATING STOVE

The storage heating stove is a fireplace made of ceramic or natural stone.
The energy or heat generated by burning wood is absorbed by the ceramic storage core. Once the wood has completely burned, this core, as a heat exchanger, radiates the stored energy in the form of heat at a carefully dosed rate, releasing it over its surface for an extended time into the environment.

A TONWERK STORAGE HEATING STOVE GIVES YOU THAT FEEL-GOOD HEAT, EVERY DAY

1.2 THE RADIATED HEAT

The human organism responds to radiated heat with a particularly pleasant feeling. It is physiologically beneficial and soothing.
Since prehistoric times humans have utilised and enjoyed radiated heat. It is transmitted by electromagnetic waves in the infrared range. Radiated heat travels through air without loss and without heating this. Not until it encounters solid bodies like walls, objects, and also people does it generate heat. This effect is familiar to everyone from sunny winter days.
Even when the air is very cold you can feel the warm rays of the sun on your skin.
It makes you feel a temperature that is higher than the actual air temperature. This explains the great benefits and the sustainability of radiated heat.

2. INTERESTING FACTS ABOUT WOOD AND THE ENVIRONMENT

2.1 WHAT IS WOOD?

WOOD – NATURAL AND PRACTICAL!

Do you know what you are putting in the firing chamber of your Tonwerk storage heating stove when you are filling it with wood?

This is 50% carbon, 42% oxygen, 6% hydrogen, and 2% mineral substances, nitrogen, oils, resins, tanning agents, and colorants.

... that is wood!

2.2 ENVIRONMENTAL PROTECTION

THE FUTURE HAS NOW BEGUN!

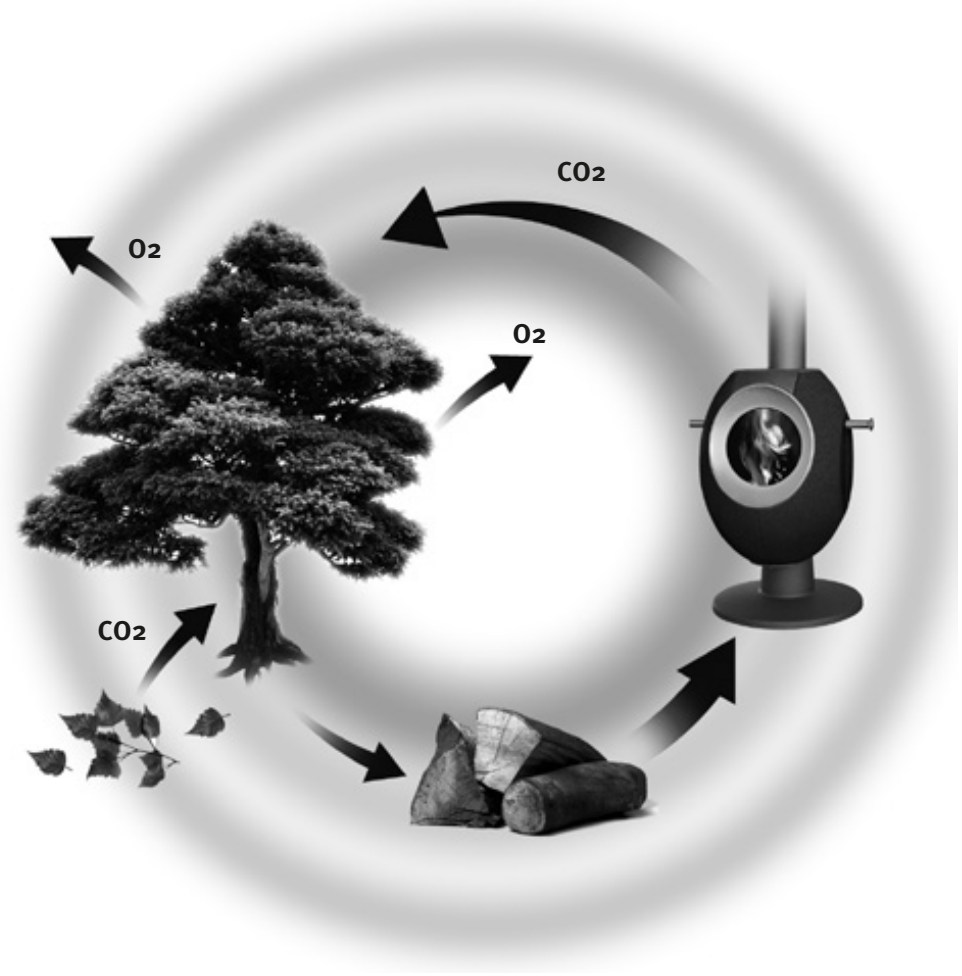
Burning firewood releases only as much CO_2 as the tree has absorbed from the atmosphere during its growth.

And when the firewood comes from nearby there are no additional CO_2 emissions from transport.

Wood rotting in the forest generates the same amount of CO_2 as the same wood burning.

Wood does not contribute to the greenhouse effect!

Wood is stored solar energy.



2.3 BUYING FIREWOOD

Where can I get my firewood?

BUYING READY-TO-BURN FIREWOOD

Regenerated ready-to-burn firewood can be purchased from dealers:

- stove-ready, stored for at least two years
- predried, stored for one year
- fresh from the forest

Every dealer has a wood moisture meter that they use to test the wood they buy. The ideal residual moisture is 12–15% and should be no higher!

TREATING FIREWOOD YOURSELF

Unseasoned wood can be purchased from the forestry office, owners of woodland, or the community:

- trunks lying in the forest
- seasoned trunks by the wayside

Whether you have cut your own wood or bought it, the important thing is: **the wood should be dried for at least two years before it is burned!**

2.4 DRYING AND STORING WOOD

DRYING

The water content of firewood has a great effect on its burning properties. Your wood should be as dry as possible. Only then can it give off much heat and burn without polluting the environment. Freshly cut wood can contain between 45 and 60% moisture depending on the season and type. After the optimal drying this water content drops to below 15%. Depending on the wood type this can take about two years, and even longer for some kinds.

STORAGE

If firewood is to dry thoroughly, it must be cut into small pieces.
Check this yourself: the circumference should be max 20–25 cm. Store the wood out of doors, protect it from rain and snow, and make sure it is well ventilated.

Damp wood damages your stove and reduces the calorific value!

What you must not burn: refuse, wet wood, briquettes!

2.5 WOOD TYPES AND CALORIFIC VALUE

The calorific value describes the heat energy released when one kilogram of fuel is burned under specific conditions.
The calorific value is based on the volume specified in stacked or solid cubic metres.
The various wood types have various calorific values:

TREE	CALORIFIC VALUE
Hardwoods	
beech, oak, locust	2100 kWh/stcm
birch	1900 kWh/stcm
sycamore	1900 kWh/stcm
Softwoods	
Douglas fir, pine	1700 kWh/stcm
larch	1700 kWh/stcm
spruce, fir	1500 kWh/stcm

The values are based on 15% residual wood moisture!

A TONWERK STORAGE HEATING STOVE CAN BE FIRED WITH ALL OF THE ABOVE WOOD TYPES.

The many oils and resins in larchwood also provide for an acoustic fireworks!

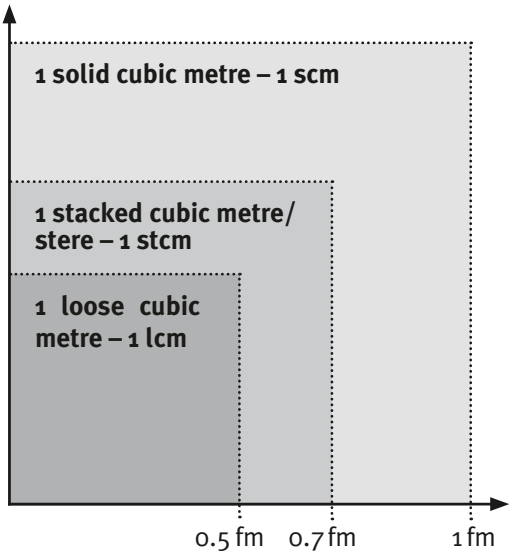
2.6 UNITS OF MEASUREMENT FOR WOOD

Solid cubic metre (scm): As its name suggests, the solid cubic meter corresponds to one cubic metre of solid as opposed to stacked wood.

Stacked cubic metre (stcm) or stere (st): A stacked cubic metre or stere corresponds to one cubic metre of stacked wood including the gaps between layers. One stere equals 0.7 solid cubic metres.

Loose cubic metre (lcm): The loose cubic metre is a measure for chopped firewood that is loosely packaged for trade and transport. One loose cubic metre is 0.7 steres or about 0.5 solid cubic metres.

NOTE THE SPECIFIED UNIT OF MEASUREMENT WHEN ORDERING!



2.7 WHAT HAPPENS WHEN WOOD BURNS

Burning or combustion is a rapid oxidation of substances forming flames. When wood burns, the oxygen in the air combines with the carbon and hydrogen in the wood. In the process, energy is released in the form of heat and light. In the ideal case the products of complete combustion are only carbon dioxide, ashes (formed primarily of the wood's mineral constituents), and water.

The combustion process on firewood can be divided roughly into three phases.

Heating and drying – In this first phase the water and other volatile substances stored in the firewood evaporate.

Pyrolysis – In this second phase the firewood decomposes at temperatures from about 150 °C.

Actual combustion – In this third phase the gases formed in the first two phases react with additional oxygen from the atmosphere to form carbon dioxide and water. Also any remaining charcoal burns completely with time in the combustion zone. Only ashes remain as the single residue of combustion. Each phase of combustion can be observed very easily on an open fire.

Burning wood is a proactive contribution to climate protection!

A fire needs three things: fuel, oxygen, and heat.

3. APPROVALS AND CERTIFICATIONS

3.1 APPROVAL

Your Tonwerk storage heating stove has been tested under the following standards:
EN 13240/15a B-VG

3.2 Multiple connection

The Tonwerk storage heating stove is fitted as standard with a self-closing firing chamber door. This is an important operating and safety element. The door closes automatically as soon as it is released. Consequently the Tonwerk storage heating stove is suitable for connection to flues with multiple installations (several stoves connected to the same flue).

3.4 CE CONFORMITY

The manufacturer, Tonwerk Lausen AG, confirms that the Tonwerk storage heating stove conforms to the standards under EN 13240 and that the quality requirements are constantly monitored.
Rhein-Ruhr-Feuerstättenprüfstelle GmbH;
RRF-40133432-1

3.5 RATINGS PLATE

The ratings plate is affixed to the rear, at the base of the stove.

4. FIRE PROTECTION

The national and European standards, the local and building legislation, and the fire safety terms and conditions must be observed without condition.
Your chimney sweep or Tonwerk partner company will be pleased to inform you.

4.1 SAFETY DISTANCES TO FIXED TONWERK STORAGE HEATING STOVES: T-EYE

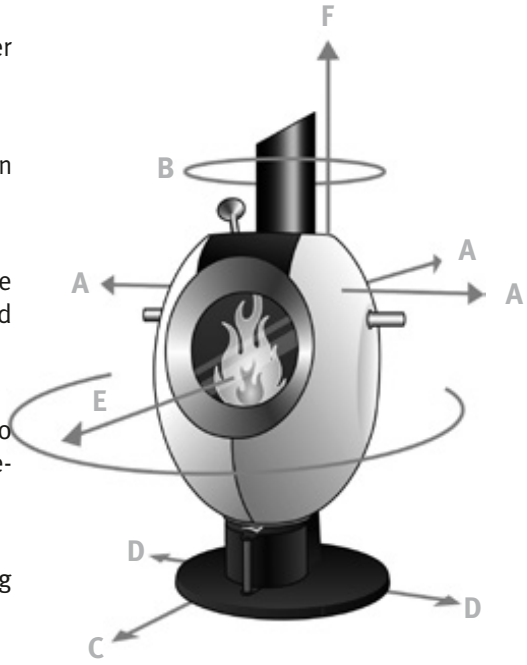
Safety distance A
The side and rear panels must be no closer than 10 cm to flammable materials

Safety distance B
Smoke pipes must be no closer than 20 cm to flammable materials

Safety distance C + D
Flammable floor materials must be no closer than 50 cm to the front and 30 cm to the sides

Safety distance E
Firing chamber apertures must be no closer than 80 cm to flammable materials within the radiation zone

Safety distance F
The minimum distance from the ceiling is 50 cm



4.2 SAFETY DISTANCES TO SWIVELLING TONWERK STORAGE HEATING STOVES: T-EYE

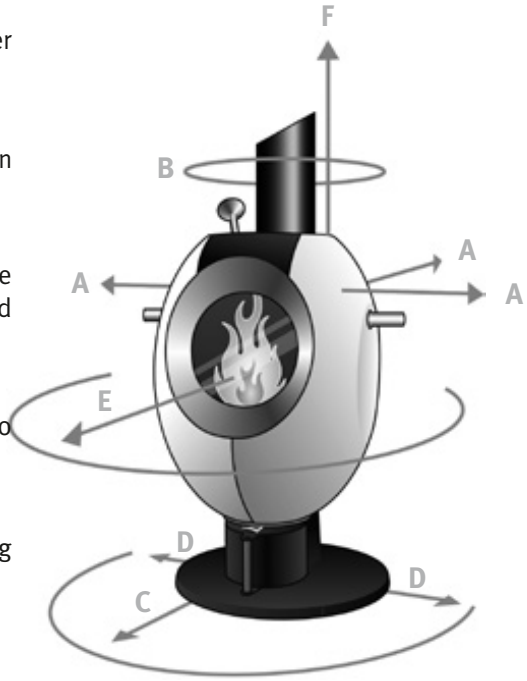
Safety distance A
The side and rear panels must be no closer than 10 cm to flammable materials

Safety distance B
Smoke pipes must be no closer than 20 cm to flammable materials

Safety distance C+D
Flammable floor materials must be no closer than 50 cm to the front and 30 cm to the sides.

Safety distance E
A minimum distance of 80 cm applies to the whole swivelling range

Safety distance F
The minimum distance from the ceiling is 50 cm



4.3 GENERAL SAFETY INSTRUCTIONS

- Never leave children alone or unattended at a burning fireplace.
- Teach your children how to behave properly and operate safely the fireplace.
- Every stove gets hot when fired: risk of burning!
- Avoid touching the outside surfaces when the stove is operating.
- Do not burn refuse or painted wood.
- Dispose of the ashes only after they have cooled completely.
- Inform your specialised dealer without delay of defect gaskets.
- Observe the information in our operating instructions and make a proactive contribution to fire prevention and the protection of our environment.
- Due to risk of heating gas leaks, this stove, with the exception of lighting, refilling and removing of ash, may only be operated with the door closed.Open windows and/or doors in over-heated rooms.

4.4 CHIMNEY SAFETY INSTRUCTIONS

The condition and functionality of your chimneys must be inspected by a chimney sweep or specialist before the Tonwerk® storage heating stove is installed.

If the chimney catches fire, immediately call the fire brigade.

4.5 CONDUCT DURING MALFUNCTIONS – SHUTTING DOWN SAFELY

In rare cases, also a pilot fire can fail to generate a draught in the flue.

You must then ask your chimney sweep for advice. On no account must you attempt to light a larger fire. When smoke escapes from your stove, air the room immediately and contact your chimney sweep. You should then refrain from firing your stove.

5. OPERATING INSTRUCTIONS

5.1 BEFORE FIRING THE STOVE FOR THE FIRST TIME

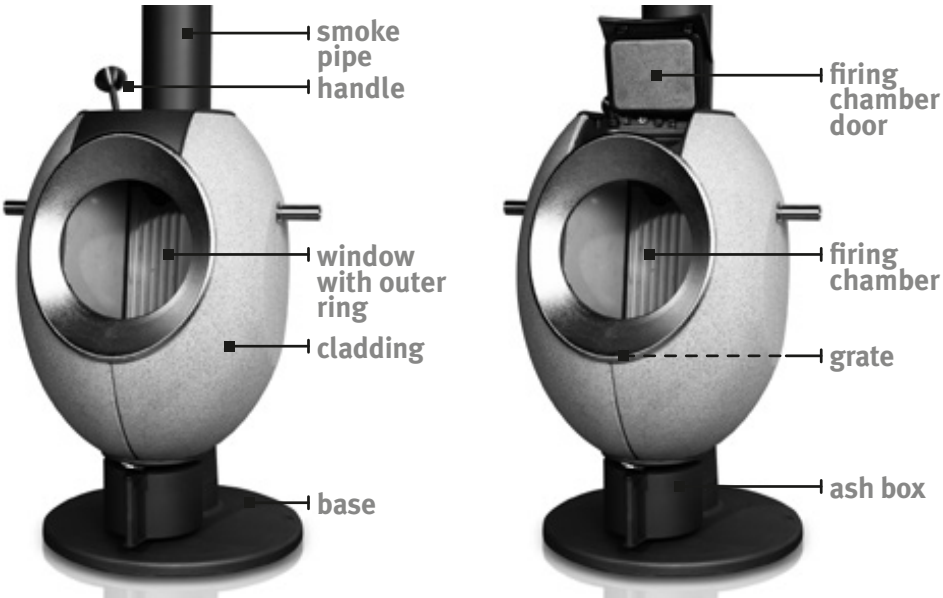
Dear Customer,

You have now been instructed by one of our specialised dealers on how to fire your Tonwerk storage heating stove.

In these operating instructions we wish to set down each step that you must take if you are to encounter no problems when operating your Tonwerk storage heating stove.

Read through these operating instructions carefully and keep them in a safe place. Your specialised dealer will be pleased to assist you with any questions you may have.

5.2 ABOUT THE STOVE



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5.3 GENERAL INFORMATION

5.3.1 WHEN THE STOVEPIPE PAINT DRIES

When the stove is fired for the first few times the paint on the stovepipe emits an odour when it dries.
Make sure that the combustion chamber is completely filled. The Tonwerk storage heating stove then reaches its optimal operating temperature and the paint dries faster.
Also make sure the room is well ventilated during this phase.

5.3.2 VENT PIPE AND VENTILATING SYSTEM

Extractor hoods and ventilating systems can affect the operation of your Tonwerk storage heating stove.
Please make sure that there is adequate incoming air for multiple installations.

5.3.3 HEATING IN THE TRANSITION TIME AND IN DIFFICULT CONDITIONS

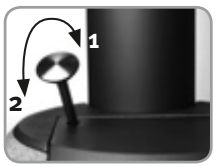
In damp or foggy weather, at outdoor temperatures from 15 °C, and during the transition time you are advised to light a pilot fire before firing the stove proper. This serves to displace the cold, heavy air in the chimney and to create the right conditions for the optimal extraction of smoke.
This pilot fire is lit with paper in the chimney's inspection aperture until extraction is assured.

5.3.4 PREPARATIONS FOR FIRING

Have ready an adequate supply of chopped firewood, ecofriendly lighting aids, and kindling. You are best storing the wood in a warm room for a number of days before firing.

6. FIRING THE STOVE

To open –
push the handle to the back (1)
To close –
pull the handle to the front (2)



IMPORTANT
The lock must engage!

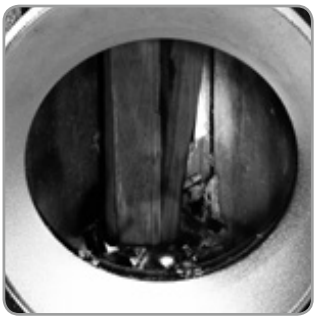
Place the firewood inclined slightly towards the back in the firing chamber. The weight of the firewood presses down on the grate and the combustion air supply is opened.

Place an ecofriendly lighting aid at the centre and two handfuls of kindling over the top.

Bear in mind that the stove must be filled completely with small pieces of chopped wood 33 cm in length.

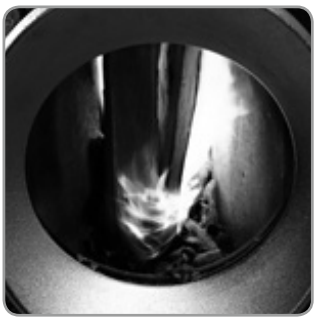
If you have a supply of mixed wood types, you can burn these together.

Now ignite the lighting aid and lock the door. The wood burns from top to bottom. Only when there is a strong blaze does the wood release its whole energy that can then be absorbed by the storage stone.



6.1 ADDING MORE WOOD – FOR MORE HEAT

If you want more heat simply add another two pieces of firewood while there are enough flames visible.



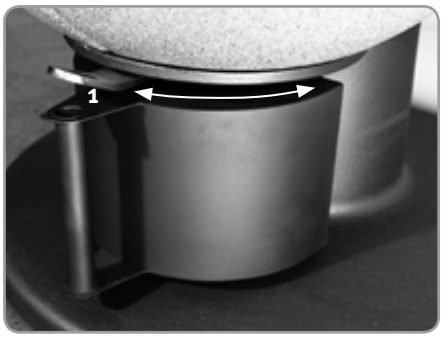
The added wood ignites within a few minutes and burns from bottom to top.

Once the wood has burned completely and all flames have extinguished, the combustion air supply closes automatically when there is no more weight on the grate.
The heat reservoir is therefore prevented from cooling too quickly.
You can enjoy the radiated heat for hours.

7. CLEANING AND CARING FOR YOUR STOVE

Rough surfaces on the outer cladding can be vacuumed off with an upholstery attachment. Polished surfaces are cleaned with a spray-wet cloth. The provided cleaning stone is used to remove stubborn soiling. Under no circumstances must you use hard brushes or chemical cleaning agents.

The optimal functionality is obtained when the chimney, stovepipe, and stove are cleaned at least once a year.



7.1 EMPTYING THE ASHES

Empty the ash box as soon as it is full. Only empty when the stove is cold into a fireproof container (embers - fire hazard).

Hook in the ash box and move the lever (1) several times to the right and back. Take out and empty the ash box.

7.2 CLEANING THE WINDOW

Press together the locking hook (1) and lift up and out the outer ring with the window (2). Clean this with a moist cloth and some ashes.

Repeat for stubborn soiling or use a special flue window cleaner.

Put the window back in and make sure that the locking hook engages.

7.3 CLEANING THE SMOKE FLUE

Remove the outer ring with the window.

Remove the rear panel (1) from the combustion chamber.

Clean the stovepipe and the smoke flue and vacuum off residue.

Put the parts back in their original positions and make sure that the locking hook engages.

WE WISH YOU MANY PLEASANT HOURS WITH YOUR TONWERK STORAGE HEATING STOVE.

8. TIPS & TRICKS

Wood does not ignite when stove is fired; fire just smoulders away; fire extinguishes:

- not enough firewood
- kindling unsuitable
- wood too damp
- firewood too thick
- ashes not emptied

Heavy sooting in the firing chamber; heavy sooting on the window:

- too little wood
- firewood damp or too thick

Smoke escapes from the stove:

- assure adequate extraction in the chimney, light pilot fire
- provide for adequate supply of air
- empty ashes

Your specialised dealer will be pleased to assist you with any further questions you may have.

9. WARRANTY

We grant a five year warranty for your new Tonwerk storage heating stove. The warranty period begins on the day the stove is installed and tested by the specialised dealer. Warranty claims become valid when the purchase price for the stove has been paid in accordance with the agreement and the warranty certificate has been completed and returned within thirty days to Tonwerk Lausen AG. If one of these conditions is not fulfilled the minimum warranty of six months applies.

9.1 WARRANTY TERMS

- proper installation by a specialised dealer
- the storage heating stoves are handled in accordance with these operating instructions and the safety instructions marked by this symbol: ⚠
- no continuous firing
- no overheating
- regular (once a year) maintenance by a specialist.
- There must be no modifications to the stove structure: these can cause malfunctions and permanent damage
- Only genuine original parts may be used.

9.2 EXCLUDED FROM THE WARRANTY

- wearing parts like gaskets, cast grate, fireclay, and glass
- smoke and soot damage
- natural discoloration or deviating colours on the outer cladding
- cracks in the combustion chamber that have no effect on the safe functioning of the Tonwerk storage heating stove
- damage incurred through failure to observe these operating instructions
- damage covered by an insurance policy or other agreement

GARANTIEZERTIFIKAT

Wir gewähren für Ihren neuen Tonwerk Speicherofen eine Garantie von 5 Jahren. Die Garantielaufzeit beginnt mit dem Tag der Inbetriebnahme durch den Fachhändler.
Der Garantieanspruch tritt dann in Kraft, wenn der Kaufpreis für den Ofen vertragsgemäß entrichtet ist und das Garantiezertifikat vollständig ausgefüllt innerhalb 30 Tagen an die Tonwerk Lausen AG zurückgesendet wird.
Wird eine dieser Bedingungen nicht erfüllt, so gilt die Mindestgarantie von 6 Monaten.

CERTIFICAT DE GARANTIE

Nous vous apportons une garantie de 5 ans pour votre poêle à accumulation neuf. La période de garantie commence à courir à partir de la date de mise en service par le distributeur spécialisé.
Votre prétention à la garantie entre en vigueur au moment où vous vous êtes acquitté du prix d'achat du poêle fixé par contrat, et si vous avez renvoyé dans un délai de 30 jours à la Tonwerk Lausen AG le certificat de garantie intégralement rempli.
Si l'une de ces conditions n'est pas respectée, on appliquera une garantie minimale de 6 mois.

WARRANTY CERTIFICATE

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CERTIFICATO DI GARANZIA

Per la vostra nuova stufa d'accumulo Tonwerk vi offriamo una garanzia di 5 anni. Il periodo di garanzia ha inizio il giorno della messa in funzione da parte del rivenditore specializzato.
Il diritto alla garanzia entra in vigore quando il prezzo d'acquisto della stufa è pagato conformemente al contratto e il certificato di garanzia è rispedito compilato in tutte le sue parti entro 30 giorni a Tonwerk Lausen AG.
Tonwerk Lausen ata, verrà applicata la garanzia minima di 6 mesi.

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TONWERK

SPEICHERÖFEN
MADE IN SWITZERLAND