The Heat Shrink System with Optimal Energy Efficiency and Maximal Safety



# powerShrink

Made by ZOLLER



We, the family-owned technology company, ZOLLER, focused our experience and competences for this new product development, as such, we are setting yet another milestone and rounding off the ZOLLER product portfolio.

Typical ZOLLER: Everything from a single source.

CHRISTOPH ZOLLER, ALEXANDER ZOLLER



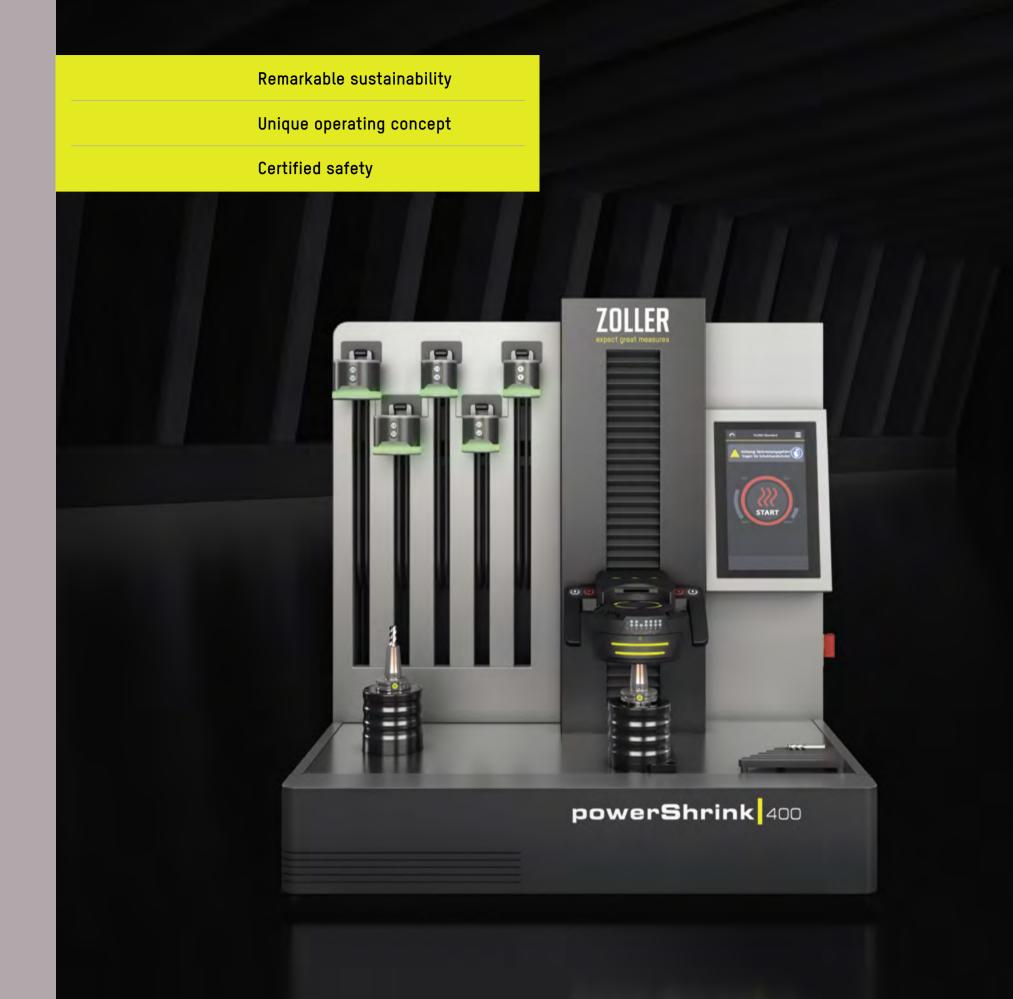
# We Stand for Smart **Progress**

**ECONOMICS** 

Clamping and unclamping tools in record time and saving energy and conserving tool holders: You get all these benefits with the inductive »powerShrink« heat shrink system. When developing this device, ensuring maximum energy efficiency as well as a fast and reliable shrinking process was very important for ZOLLER – allowing more profitability in your production. With the »powerShrink« machine series, you increase production efficiency.

The interaction of the components of this heat shrink system is unique: Increased profit is coupled with maximum safety. Discover the ZOLLER »powerShrink« heat shrink system system now, with our strengths revolving around quality, efficiency, comfort and benefit immediately from all of the advantages provided by this machine series.

solutions.zoller.info/en/powershrink





# Unbeatable ZOLLER Clamping Technology

Technologically and ergonomically, "powerShrink" leaves nothing to be desired. You benefit from an induction system that is perfectly aligned to your heat shrink tool holder, the technologically-perfected cooling systems and the ergonomic and simple operator guidance with the aid of the innovative LED-controlled ZOLLER "actbyLight" operating concept.

»actbyLight« guides you safely through the clamping process and includes the »shrinkbyLight« coil function, the LED-control on the induction coil, and the LED operating guide »coolbyLight« on the cooling system.



»powerShrink 400«



»powerShrink 600«

# We Stand for Reliable Quality

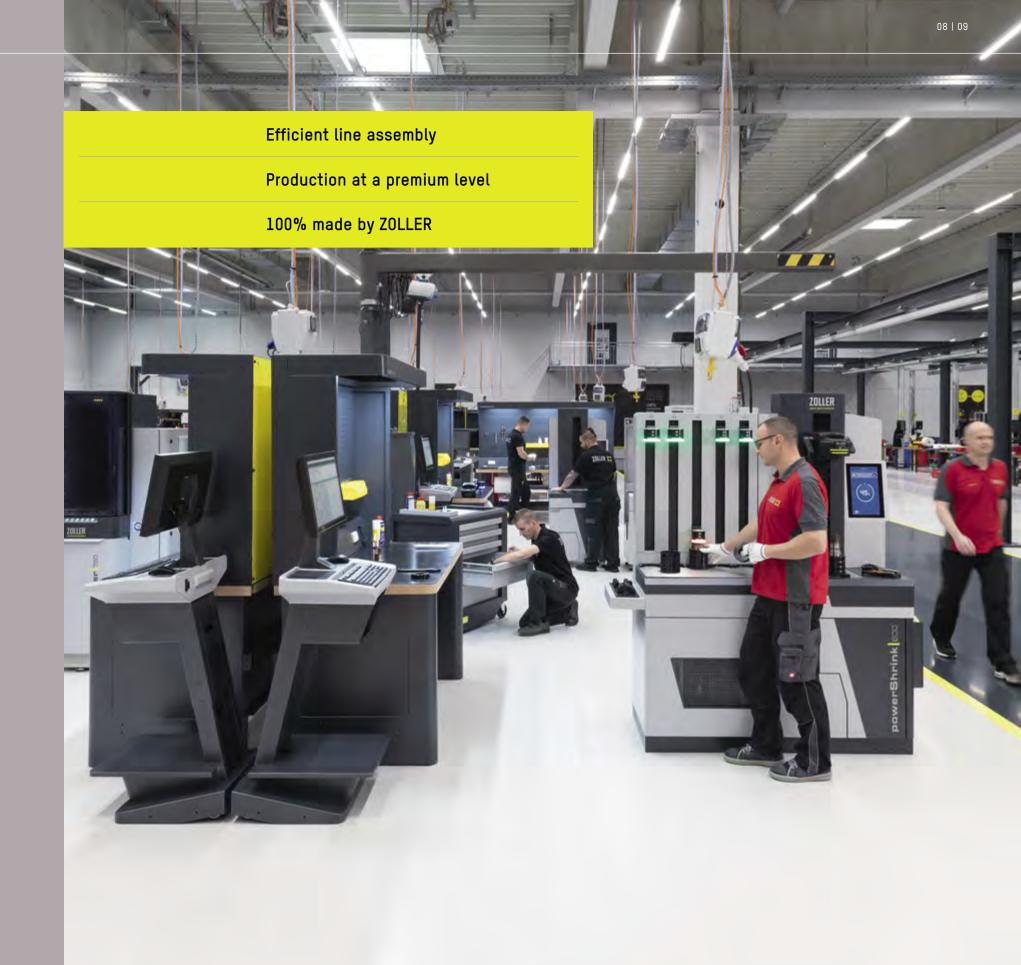
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100% made in Germany – that is our primary mission, and we work hard to ensure we achieve our goals. Thanks to an expansion of our production site in Pleidelsheim, Germany, our production is now even more efficient and economical.

The ZOLLER assembly — a team of specialized, competent employees from assembly and quality assurance ensure, day by day, that your »powerShrink« reaches your production facility in perfect condition. Your »powerShrink« does not leave the assembly line until all our employees are 100% satisfied, and the machine has the ZOLLER seal of quality. We are proud of this.

We have stood for "Made in Germany" since 1945. We are very proud that 100% of our development and assembly is done in Pleidelsheim. We make sure that you receive a tested and certified ZOLLER product.

ALEXANDER HAAS, STEFAN KAHN
Part of the ZOLLER assembly team



# We Stand for Targeted **Efficiency**

TECHNOLOGY

ZOLLER puts economic action on a par with sustainable action. Only those who manufacture with resource conservation in mind are able to both protect the environment and save money long term. With its unique heating process, »powerShrink« leads the way into a more energy-efficient future:

The ZOLLER induction system – the key components of this new product development. The efficiency of the ZOLLER shrinking process amounts nearly 1 to 1. This energy input could be achieved because of the intelligent power electronics and the induction coil with two windings. The consumed energy is the same energy that arrives at your shrink fit tool holders. They shrink-clamp faster, require less energy and go easy on your holders in the process. Intelligent components are combined, for more efficiency: With »powerShrink« you are well equipped for a more sustainable future.

Using resources correctly and effectively is our motto. We leave nothing to chance. Instead, we focus the shrink-clamp process on 100% efficiency – unique, innovative and simply phenomenal.

### CHRISTIAN PFAU, DOMENICO MELE

Head of Research and Development, Design Engineer HighEnd Projects

Up to 30% energy savings\*

Saving tool holders and resources

Long-term and sustainable savings

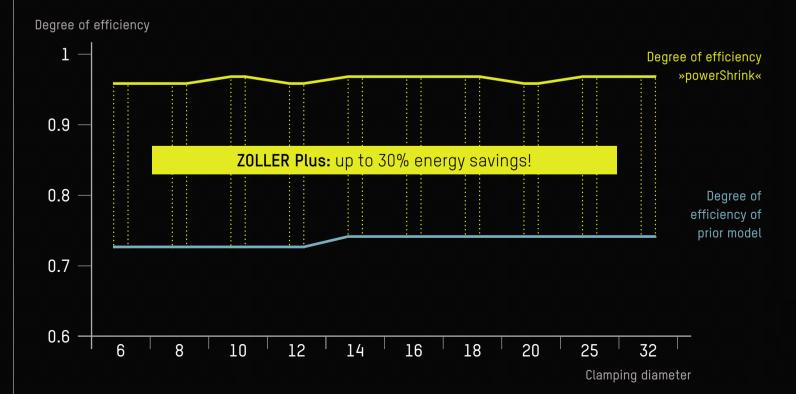


# Less Energy, Maximum Profit

With the ZOLLER »powerShrink«, you save time, reduce your electricity costs and protect your shrink fit tool holders, thanks to the reliable interaction of electronics, software and mechanics and a well conceived, reliable shrink process.

With ZOLLER's induction technology, you heat your shrink fit tool holders optimally. For you, this means: consistency, across the entire clamping range and only for as long as necessary. This gives you shorter heating and cooling times, shorter cycle times, protects the tool holders and increases their lifetime.

A particular advantage of »powerShrink«, with which ZOLLER is making its contribution to sustainable use in production, is the **energy savings of up to 30%** when compared to the prior available model. We are especially proud of that. The heat and energy arrives exactly where you need it to safely shrink and unclamp your tools.





# Compact Top Class

Safe, free cooling bell guidance - ensures maximum comfort and safety with the help of a simple fixating mechanism when attaching the cooling bells.

Innovative default cooling bells - for the rapid cooling of your heat shrink tool holders. High-quality information of the tool diameters provides information about the correspondingly correct cooling bell.

Optionally, the »powerShrink 400« is also available with cooling bells, including »coolbyLight« operator guidance and temperature check or with »zStream« air cooling.

Robust and smooth work surface - made from stainless steel, offers sufficient space for the heating and cooling of your heat shrink tool holder. The material is optimally aligned to the mounting pot so that shifting the tool is easy, quiet and fast.

Ergonomic storage boards left and right - offers space for positioning cleaning brushes, safety gloves, cooling adapters and holding rings close to the process, thereby rounding off the ergonomic operation of the machine.

Large storage space - offers sufficient space for cooling components and flue gas suction device.



# »powerShrink 400« TÜV and UL/CSA approved

The »powerShrink« induction system is certified according to international IEC/EN 61010-1 and cNRTLus standard.

Proven and certified safety.

Intelligent induction coil with screening plates - with ergonomic handle on the left side, including membrane function buttons for moving the coil and activating the heating process.

The »shrinkbyLight« operator guidance system uses LEDs to provide information about which windings are active at the moment and ensures that the correct pane is inserted into the coil for the stored data record. »shrinkbyLight« literally gives the green light for the further shrinking process and, in so doing, ensures maximum safety. The flue gas suction device ensures that the operator is protected.

Optionally, the »powerShrink 400« is available as a »varOct« coil.

Smooth-running induction coil axis – for fast and comfortable movement of the coil The pneumatic release of the axis clamping, the high-precision THK linear guide and the counterweight allow the operator ergonomic workflows and a long service life. The maximal tool length is 18.1102 inch (460 mm).

**Practical hand scanner** – for a rapid and safe start of your shrink-clamping process. Simply scan the DataMatrix code on the ZOLLER »idChip«, and you will immediately have all necessary shrinking parameters available in the »pilot« software.

Industrial 12.5-inch TFT touch monitor, with ZOLLER »pilot« software – impresses with a razor-sharp display and simple operation via touch. The clearly-structured graphic software interface intuitively guides you through the shrink process, with the help of large function areas and colors. The intelligent cooling system, the cooling manager, coordinates the cooling times depending on the chuck diameter and switches off the cooling module after a defined time. This saves additional energy in the shrink process.

Optionally, the »powerShrink 400« is also available without monitor and with a control via a membrane keypad.

Stable table – provides the perfect basis for a long-lasting product, thanks to its particularly robust construction. For maintenance and checks, the front door can be opened and the water cooler, mounted on a drawer, can be pulled out.

Optionally, you can get the table on rollers and with an ergonomic handle for flexible positioning of the »powerShrink 400« in your production or as a workbench version without table.



# High Performance Interaction

# »powerShrink 600« TÜV and UL/CSA approved

The »powerShrink« induction system is certified according to international IEC/EN 61010-1 and cNRTLus standard.

Proven and certified safety.

Innovative cooling bells with »coolbyLight« operator guidance and cooling management and diameter display – guide the operator safely through the cooling process, with the help of the color system and the LEDs on the cooling bells. In addition, the cooling bells are labeled with the corresponding tool diameters in a high-quality manner.

The »powerShrink 600« is optionally also available with default cooling bells or with »zStream« air cooling.

Smooth-running, linear, mechanical cooling bells guide – permits exact and safe positioning of the cooling bells on your heat shrink tool holders. A correction weight ensures that the cooling bell does not drop abruptly when it is released via the push-to-release mechanism. This is safe and provides protection against injuries. The guide also ensures that the cooling bell does not touch the cutting edge during placement, thereby preventing damage to it.

Optionally also available in simple fixation mechanism version.

Robust and smooth bearing surface - made from stainless steel, offers sufficient space for the heating and cooling of your shrink-clamping chuck. The material is optimally aligned to the fitting molds so that shifting the tool is easy, quiet and fast.

Stable table - provides the perfect basis for a long-lasting product, thanks to its particularly robust construction. For maintenance and checks, the front door can be opened and the water cooler, mounted on a drawer, can be pulled out

Large storage space – for cooling components, flue gas suction device and for storing your accessories such as the unclamping device. All components are stored in a structured and tidy manner in three compartments integrated in the table, including an extendable drawer.

Smooth-running induction coil axis – for fast and comfortable movement of the coil The pneumatic release of the axis clamping, the high-precision THK linear guide and the counterweight allow the operator ergonomic workflows and a long service life. The maximal tool length is 23.622 inch (600 mm).

Intelligent induction coil with »varOct« screening plates – with ergonomic handles on the left and right side, including membrane function buttons for moving the coil and activating the heating process. Thanks to the maximum diameter of 1.80315 (45.8 mm), tools with larger cutting diameters can also be simply clamped and unclamped. With the help of a grid, the inner diameter of the »varOct« can simply be adjusted to the required diameter, either manually or in an automated manner.

Apart from »coolbyLight«, ZOLLER »shrinkbyLight« is one of the two functions of the ZOLLER »actbyLight« control concepts. This optionally available operator guidance of the coil uses LEDs to indicate which windings are active and whether the selected diameter is in accordance with the selected data record. This rules out the possibility of an incorrectly set coil! The flue gas suction device ensures the operator's safety.

Practical hand scanner – for a rapid and safe start of your shrink-clamping process. Simply scan the DataMatrix code on the ZOLLER »idChip« and you will immediately have all necessary shrinking parameters available in the »pilot« software.

Industrial 12.5-inch TFT touch monitor, with ZOLLER »pilot« software – impresses with a razor-sharp display and simple operation via touch. The clearly-structured graphic software interface intuitively guides you through the shrink process, with the help of large function areas and colors. The intelligent cooling system, the cooling manager, coordinates the cooling times depending on the tool diameter and switches off the cooling module after a defined time. This saves additional energy.

Ergonomic storage boards left and right - offers space for positioning hand scanners, cleaning brushes, safety gloves, cooling adapters and holding rings close to the process, thereby rounding off the ergonomic operation of the device.



# Smart Design for Maximal Efficiency

The ZOLLER induction coil, an intelligent, well-conceived »powerShrink« highlight. Two parallel-connected windings within the coil can be activated can be activated and controlled separately, depending on the clamp diameter and length. This enables optimum energy input into the clamping area, accelerating the heating and cooling process, in addition to protecting your tool-holding fixture.

If you choose the "varOct" screening variant, you can look forward to even more convenience and perfect preparation for automated processes. "varOct" adjusts itself, either manually or fully automatically, to the diameter of the tool used.

Scan the QR code and see the ZOLLER induction coil in the video!



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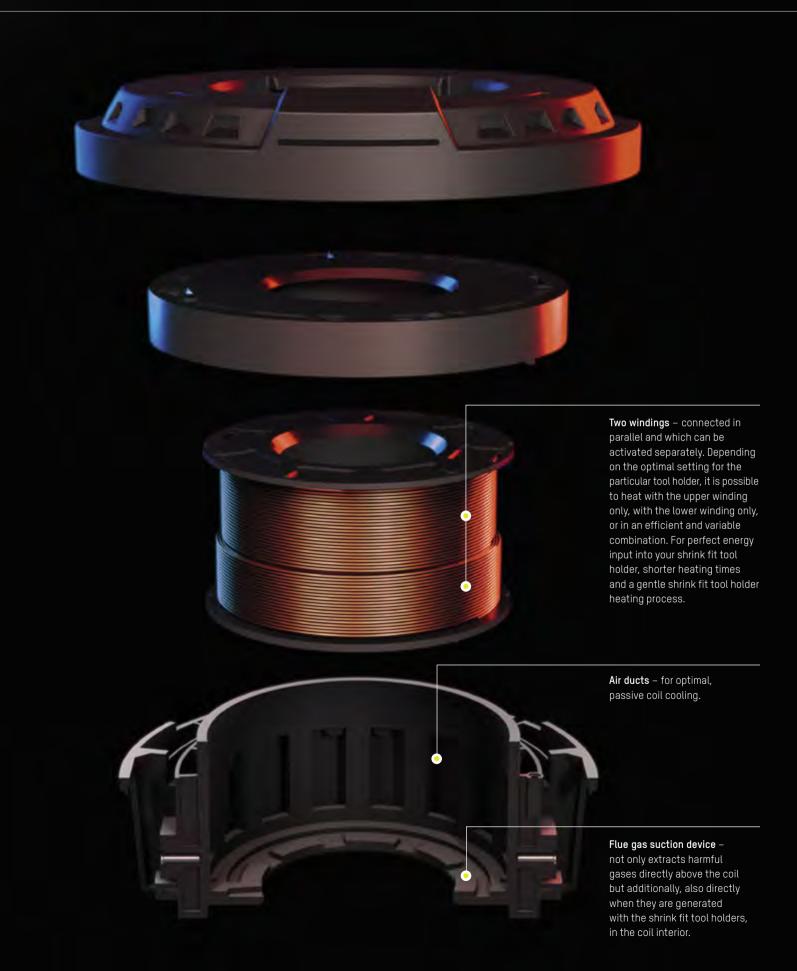
# Coil with screening plates

Simple and safe: Position tool, insert correct screening plate and shrink-clamp.

An optional diameter monitoring feature alerts you to the correct screening plate.

# Coil with »varOct« screening system

Convenient and reliable: Position the tool, adjust the screening system manually or start the automated process at the push of a button. Step into the digital future of shrink-clamping.



# Flexibility in Next to No Time

With the ZOLLER induction coil with screening plates, you select a simple, manual clamping process with infrequent diameter changes or low variance.

Plates with different diameters ensure that the coil's magnetic field is optimally aligned and screened accordingly. When operating your »powerShrink«, the optionally available »shrinkbyLight« operator guidance system, consisting of the control LEDs for diameter monitoring and the status display of the windings, additionally increases your process reliability.

### Standard coil 14 kVA with screening plates and »shrinkbyLight« operator guidance

The screening plates are available in five sizes (D3 mm to D32 mm). In the »pilot« operating software, the corresponding diameter is selected, and the correct plate is displayed.

Once the plate has been inserted, the diameter monitoring indicates whether the correct plate was inserted. Only then can the heating process be started. Operating errors and overheated tool holding fixtures are excluded.

### 22 kVA coil

The coil with screening plates is optionally available as a 22 kVA coil, for shrinking larger shrink fit tool holders diameters D40 mm to D50 mm and reinforced shrink tool holders (higher wall thickness). Screening plates are available with the D16 mm to D20 mm, D25 mm to D32 mm and D40 mm to D50 mm diameter size executions, also available in split design. Via a quick-change interface, this can be ergonomically operated on the »powerShrink« in exchange with the 14 kVA coil.



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Screening plate – available for different tool diameters. You can also optionally get them in a split execution.





**Status indicator LEDs** – of the windings (yellow inactive, red active).

Diameter monitoring

indicates the correct plate (green) and thereby ensures even higher process reliability.

# When Art Hits the Spot

Inspired by modern architecture and optical kinematics, ZOLLER's Research and Development department has created a masterpiece. The ZOLLER induction coil with screen system »varOct« ensures maximum efficiency and ergonomics in the shrinking process.

The flowing, interlocking movements of the individual screening elements allow precise manual or automated setting of the correct diameter of the "varOct" – for convenient and reliable shrink-clamping with maximum overlap. Thanks to an inner diameter of up to 1.80315 inch (45.8 mm), tools with larger cutting diameters can also be easily unclamped. The optionally available "shrinkbyLight" operator guidance system, consisting of the control LED for diameter monitoring and the status display of the windings, additionally increases process reliability.

# Coil with screen system »varOct« 14 kVA and operator guidance »shrinkbyLight«

The diameter adjustment of the »varOct« takes place either manually or in a CNC-controlled manner. Short rotational travel allows for comfortable and, above all, very fast adjusting to the correct diameter.

Diameter monitoring indicates whether the setting has been made correctly to match the selected diameter and data record. Only then can the heating process be started. Operating errors and overheated tool-holding fixtures are excluded.



02

## 8 Ferrite elements

Ingeniously conceived. Perfectly constructed. The eight variable elements of the »varOct« coil shielding glide past each other in a closed manner – a design experience.

The unique ZOLLER element, for unbeatable design and efficiency.



# Cool Highlights for Efficient Cooling

With »powerShrink« by ZOLLER, you cool with maximum efficiency. The five cooling bells for standard shrink fit tool holders, from D6 mm to D32 mm, ensure fast, consistent cooling thanks to their intelligent design and integrated contact cooling. Your shrink fit tool holders are protected and high true-running accuracy is maintained.

When selecting the cooling bell with "coolbyLight" operator guidance, you're choosing maximum process reliability and speed in your shrink process.

01 02

# Cooling bells

Select between the default cooling bell for simple cooling or the LED execution, with »coolbyLight« operator guidance for even more convenience, speed and safety in the cooling process.

# Cooling bell guide

Simply hooked in or safely guided? Decide between two variants of the cooling bells guide: the simple fixing mechanism or the linear guide for maximum comfort and safety.



The matching cooling bell for every requirement: Select between the default cooling bell or the cooling bell with »coolbyLight« operator guidance, for maximum safety for your operators. Both cooling bells can be supplied either with free guidance, or with linear, mechanical guidance.

In combination with the alternative 22 kVA coil, an optional additional cooling bell is available for shrink fit tool holders D40 mm to D50 mm. This is designed without »coolbyLight« operator guidance.



### Cooling bell default

for rapid and simple cooling of your shrink fit tool holders. High-quality information of the tool diameter provides information about the correspondingly correct diameter.

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### Cooling bell with »coolbyLight« operator guidance

safely guides you through the cooling process with the help of the color system, switch over LEDs and temperature check.

**Green glowing:** ready for cooling

**Green blinking:** the cooling bell for usage **Red glowing:** Shrink fit tool holder hot **Blue blinking:** Shrink fit tool holder chilled





### Free guide with practical fixating mechanism

The cooling bells are aligned centered, via the specially-designed suspension. The height of the suspension can be selected variably and adapted to your usual tool lengths. This means that the cooling bells are positioned ergonomically and can be used quickly and efficiently.



### Linear, mechanical guidance for more comfort

The linear guide allows exact positioning of the cooling bell on the shrink fit tool holder.

The intelligent push-to-release mechanism enables controlled release of the cooling bell from the locking cap and avoids abrupt movements.

Optimal weight compensation ensures an independent, smooth and slow downward movement, without the risk of injury and ensures an optimal fit.

Especially for shrink fit tool holder shapes and tools with larger cutting edge diameter than shaft diameters – these tools require new, unique cooling solutions. Here, cooling bells are used sparingly.

With the »zStream« air cooling by ZOLLER you get maximal flexibility and protection with the cooling of your tools and shrink fit tool holder, independently of their contour or diameter. Tool cutting edges are in absolutely no danger of being damaged. You require absolutely no accessories such as a cooling adapter. In addition, your shrink tools are also consistently cooled over the entire length of up to 13.7795 inch (350 mm).



Two or three separate cooling places\*
for parallel, effective use. The "zStream"
air cooling system is also excellently suited
for cooling of placed down tools.



# We Stand for Unique Comfort

**ERGONOMICS** 

Comfort in the workplace generates motivation and commitment among employees. We are convinced of this. For more than 75 years, ZOLLER has constructed its products to be as ergonomic and safe as possible for operators' use. Safety is our top priority – both for your employees and for your tools and processes. Thus, we leave nothing to chance in the shrinking process. Here, especially, we paid attention to the clear user operator guidance of the »powerShrink«:

**ZOLLER »actbyLight«** – a system that guides you through the shrinking process quickly and intuitively. The intelligent networking of hardware components such as the coil and the cooling bells with the »pilot« device software allows LEDs to light up and flash in different colors. Operators can immediately detect if the correct screening plate has been used for the tool. They always reach for the correct cooling bell and the color guide provides information on the corresponding temperature status of their shrink fit tool holder.

Our aspiration was to use our color scheme to intelligently communicate technology to the outside world. We developed the perfect solution: simple, visible to all and understandable worldwide.

#### FRANK HARTSTEIN

Member of the »powerShrink« product development team



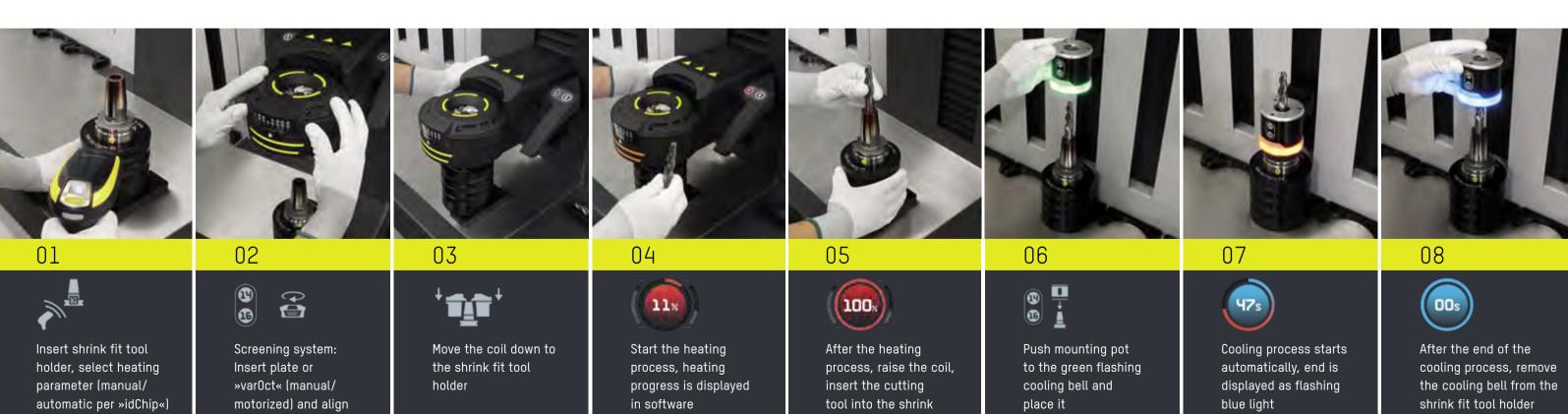
The depicted device includes options and accessories

# Reaching Your Goal Safely and Efficiently

With »powerShrink« by ZOLLER, shrink-clamped tools are quickly ready for use: thanks to intuitive »pilot« software, an intelligent induction system, and the consistent monitoring of the work steps.

The »powerShrink« technology ensures shortest process functions. The resulting short process times can even be achieved by inexperienced operators after only a brief training period. The »pilot« operating software guides you through all production steps and controls numerous processes fully automatically. The software displays the component required for each production step and supports you visually with the aid of graphic displays on the screen and the pioneering ZOLLER »actbyLight« control concept. The light-controlled operator guidance for safe and efficient use of the »powerShrink« in your company.





fit tool holder

# Clearly Guided and Perfectly Networked

The clearly structured graphic display of the ZOLLER »pilot« software intuitively guides the operator through the operating dialog, step-by-step, with the help of large function buttons and a well-conceived color concept. The 12.5-inch monitor impresses with a clear and detailed display.



Parameter selection – the required heating parameters can be selected simply and safely through clear and understandable software function surfaces.



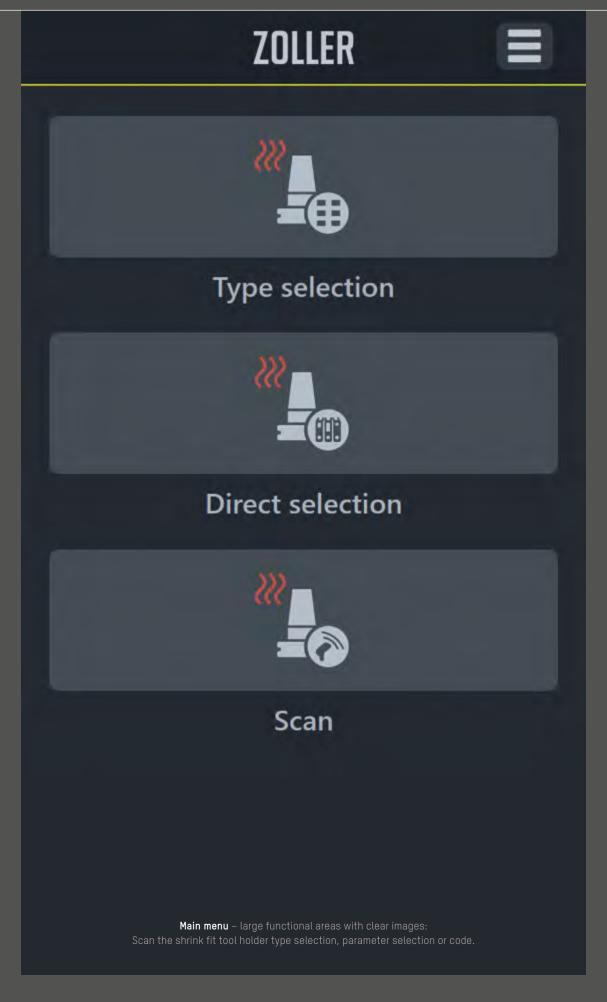
**Step-by-step guidance** – throughout the entire shrink-clamp process, »pilot« shows you exactly which step you are to carry out and when.



Scan function – all parameters suitable for the shrink-clamping chuck are loaded automatically – regardless of the manufacturer. It is possible to monitor the number of heating processes and the information display per shrink fit tool holder.



Status displays – whether for heating or cooling process, »pilot« shows you the progress of the process and important safety instructions.





	»powerShrink 400«	»powerShrink 600«
Machine equipment		
Membrane keypad for the selection of the diameter to be shrink-clamped	<b>(1)</b>	-
12.5 inch touch monitor with ZOLLER operation software »pilot«	•	•
Stable table	•	•
Set-up table with rollers for flexible positioning in production	•	-
Workbench version for compact installation on own tabletop	•	-
induction coil axis with pneumatic release of the axle clamping	•	•
Heating also see page 18 to 23		
Induction coil with screening plates	•	•
Induction coil with screening plates and »shrinkbyLight« operator guidance	•	•
»varOct« induction coil, manually adjustable	•	•
»varOct« induction coil , manually adjustable, »shrinkbyLight« operator guidance	•	•
»varOct« induction coil , CN controlled adjustment, »shrinkbyLight« operator guidance	<b>⊙</b> <sup>[2]</sup>	•
Quick change interface	-	•
14 kVA induction coil	•	•
22 kVA induction coil	-	<b>⊙</b> <sup>[3]</sup>
Flue gas suction device	•	•
Coil operating handle left	•	•
Coil operating handle right or on both sides	•	•
Cooling also see page 24 to 29		
No cooling system	•	-
Cooling bells default, 5-fold	•	•
Cooling bells with »coolbyLight« operator guidance, including temperature check, 5-fold	<b>⊙</b> <sup>(2)</sup>	•
Free cooling bells guidance with fix mechanism	•	•
Linear, mechanical cooling bells guidance with push-to-release mechanism	-	•
Air cooling »zStream« with two cooling places	•	-
Air cooling »zStream« with three cooling places	-	•
Cool manager <sup>(4)</sup>	•	•

	»powerShrink 400«	»powerShrink 600«	
Software			
ZOLLER operating software »pilot«	<b>⊙</b> <sup>[2]</sup>	•	
Self-explanatory, graphic function surfaces	<b>⊙</b> <sup>[2]</sup>	•	
Color animated status indicators	<b>⊙</b> <sup>[2]</sup>	•	
Interface to the »actbyLight« control concept	•	•	
Scan function	<b>⊙</b> <sup>[2]</sup>	•	
Counting functions of shrink-clamping procedure	<b>⊙</b> <sup>[2]</sup>	•	
Hardware options & accessories			
Length setting »eQset«	<b>©</b> <sup>(5)</sup>	•	
Hand scanner	<b>⊙</b> <sup>[2]</sup>	•	
Mounting pot	•	•	
Mounting rings SK, HSK, polygon shank taper, others on request	•	•	
Special cooling adapter	•	•	
Storage board for mounting rings and special cooling adapters	•	•	
Tool tray	•	•	
Tray for cleaning brushes	•	•	
Five divided screening plates with plate storage	•	•	
Unclamping device »toolEx«	•	•	
Positioning device »liteSet«	•	•	
Technical data			
Shrinkable tool length	18.1102 inch (460 mm)	23.622 inch (600 mm)	
Maximum inner diameter of induction coil »varOct«	1.80315 inch (45.8 mm)	1.80315 inch (45.8 mm)	
Maximum inner diameter of the induction coil with screening plates	1.9685 inch (50 mm)	1.9685 inch (50 mm)	
Shrink-clampable diameter with 14 kVA induction coil	0.11811-1.25984 inch (3-32 mm)	0.11811-1.25984 inch (3-32 m	
Shrink-clampable diameter with 22 kVA induction coil	-	1.5748-1.9685 inch (40-50	

<sup>(1)</sup> For a shrink fit tool holder according to DIN 69882-8

<sup>(2)</sup> In combination with 12.5 inch display

<sup>(3)</sup> In combination with quick change interface

<sup>(4)</sup> In combination with cooling bells/water cooler

<sup>(5)</sup> In combination with coil handle right

<sup>-</sup> not possibl

# Options

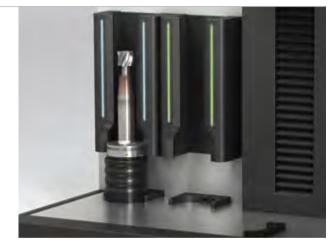
# Flue gas suction device

The flue gas suction device reliably removes flue gases from the work area of the operator. The established and patented flue gas suction device above the induction coil was expanded by an integrated suction in the inside of the coil housing. The suction of the flue gases thus happens directly where they are produced. The filter unit finds a safe place in the table.



# Air cooling »zStream«

With ZOLLER's air cooling »zStream« you obtain maximal flexibility and protection with the cooling of your shrink fit tool holder, independently of its contour or diameter. In addition, your shrink-clamping tools are cooled consistently and safely across their entire length - without the risk of being damaged. »zStream« is also ideally suited for cooling placed down tools. »powerShrink« is available with two or three separate cooling places\* for parallel, effective use.



# Length setting »eQset«

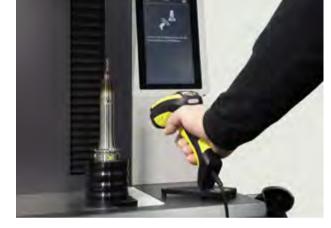
The integrated length setting system is used to set the overall length or projection length and for the tool exchange. The pneumatically-activated quick adjustment and fine adjustment by hand wheel allow a fast, ergonomic and precise position of the probe head to the required height. The probe head is quickly and simply shifted into measuring or park position via a linear guide.



# Scan function, incl. hand scanner

The »pilot« software scan function, combined with the hand scanner, enables the reliable selection of the appropriate shrink parameter by scanning the holder number on the shrink-holding fixture. Regardless of the manufacturer, all shrink-clamping chucks with a DataMatrix code (e.g., ZOLLER »idLabel«, ZOLLER »idChip«) are supported.

In the »pilot« software, each heating process can be counted per shrink-clamping chuck. In addition, a warning and wear limit, in relation to the permissible heating operations, can be stored.



# Membrane keypad for »powerShrink 400«

Alternatively, the diameter selection \*\* on the »powerShrink 400« can be selected quickly and simply via an oil- and dirt-resistant, workshopcompatible and durable membrane keypad.



# Set up table for »powerShrink 400«

As an alternative to installation on a workbench, the »powerShrink 400« can be positioned on a set-up table with ergonomically optimal working height. This provides a tidy place for the cooler and flue gas suction device. The table is optionally available with sturdy rollers and an ergonomic handle, to allow variable positioning of the »powerShrink 400«.



# Mounting pot

With your »powerShrink«, you get a default mounting pot.

Optionally, additional units can be ordered for parallel heating and cooling. The bearing surface is perfectly matched to the mounting pot and enables a comfortable and quiet shift.



# Mounting rings

The different mounting rings allow flexible retooling between different mounting interfaces. For all common tool-holding fixture types and sizes up to SK 50, HSK 100 and PSC 10.



# Special cooling adapter

Cooling adapter for specialized shrink fit tool holder forms and sizes (e.g., also for D3 mm to D5 mm). Matching for cooling bells D14 mm to D16 mm or D25 mm to D32 mm.



# Storage board for mounting rings and special cooling adapter

The storage board provides space for storing four mounting rings and six size I special cooling adapters or three size I and size II special cooling adapters.



# Tool tray

For depositing shank tools at the shrinking workstation. The position of the tray can be freely selected by the operator.



# Tray for cleaning brushes

For storing the cleaning brushes, there is a tray with all brush diameters, which can be attached to the machine via magnets, and at any position. The brushes for cleaning the locating bore of shrink fit tool holders are also available from ZOLLER – for shaft diameters D3 mm to D32 mm, optionally made of brass or plastic.



# Coil operating handle

For optimal, user-friendly operation, the operating handle, which is mounted on the left as a default, can optionally be selected to be mounted on the right side or on both sides.

Each control handle is equipped with two function buttons – for moving the coil and activating the heating process.



# Split screening plates with tray

For unclamping of placed down tools, optionally, a set of screening plates (5 pieces) in split version including the corresponding disc tray can be ordered.



# Unclamping device »toolEx«

»toolEx« supports you when removing tools from the shrink-clamping chuck, which cannot be removed by hand or with pliers, such as broken tools. The set includes a holder and six ejector rods.



# Length setting »liteSet«

With the »liteSet« you set the projecting length of the tool to be shrink-clamped. The maximum cantilever length is 150 mm. The set includes four clamping prisms for shaft diameters D3 mm to D32 mm.





Parent companyHeadquarters

Branch office

ZOLLER quality is "made in Germany" — and there for you, anywhere in the world.

Our company has its own locations and branches at 85 sites in 62 countries, guaranteeing we are close to customers and can provide first-class, personal customer service in local markets.

#### GERMANY

#### HEADQUARTERS

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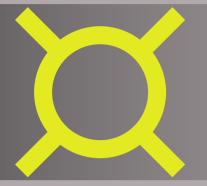
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