Bedienungsanleitung
User Manual

Horizontal-Schrumpfgerät
Horizontal Shrinking Device
HS 1100-P

Helmut Diebold GmbH & Co.
An der Sägmühle 4
D-72417 Jungingen (Germany)

Tel.: + 49 (0)7477-871-0 Fax: + 49 (0)7477-871-30
E-Mail: diebold@hsk.com

Information zum Hersteller / Manufacturer

Helmut Diebold GmbH & Co.
Goldring Werkzeugfabrik
An der Sägmühle 4
D-72417 Jungingen (Germany)

Tel.: + 49 (0) 74 77-871-0
Fax: + 49 (0) 74 77-871-30
Web: www.diebold-hsk.de
Mail: kontakt@diebold-hsk.de

Copyright

Änderung

Die Firma Helmut Diebold GmbH & Co. behält sich inhaltliche und technische Änderungen vor.

Gewährleistung

Für Schäden, die durch Nichtbeachtung dieser Anleitung entstehen, wird keine Haftung übernommen.

Copyright

Changes

Helmut Diebold GmbH & Co. reserves the right to modify the specifications of this device to reflect technical advances.

Warranty

All Diebold devices are warranted to be free from manufacturing and / or material defect. Misuse of the devices will void warranty.

English

14. Foreword

This user manual is part of the technical documentation for the Horizontal Shrinking Device HS 1100-P manufactured by Helmut Diebold GmbH & Co..

This user manual contains all information necessary for proper use of the unit.

The contents correspond to the stage of construction of the Horizontal Shrinking Device HS 1100-P at the time of preparation of this manual. Due to continuous development and customization, design and specifications are subject to change.

Data, diagrams, drawings, descriptions, and etc. included in this manual are for informational purposes only, and are not to be used for manufacture.

The intent of this operation is to familiarize you with the Horizontal Shrinking DeviceHS 1100-P and facilitate its proper use.

Please inform us if you should find any errors in this manual.

All Diebold products are manufactured according to the current standards for quality products. We recommend to service the units periodically as recommended in this manual. The manual contains all data to enable the user to use the units according to the manufacturers recommendations.

14.1. Outline

This user manual contains important instructions for the safe operation of the Horizontal Shrinking DeviceHS 1100-P, for reducing repair costs and downtime, and for increasing the reliability and service life of the induction unit.

The foot line shows the name of the unit on the left, the date of compilation in the middle and the page number on the right.

14.2. Note

Please store the original packaging of the Horizontal Shrinking Device HS 1100-P in case the unit needs to be returned to Diebold for service or maintenance.

15. Symbols and pictograms

Warnings: **Are marked by warning triangles with a hazard symbol, and warn of dangers resulting in personal injury or damage to property.**

General warning

Hazard posed by electric current or voltage

Commands: **Are marked by circles with hazard symbol or square with instructions, and describe an activity or the use of certain items or objects.**

Wear goggles

Wear safety gloves

Notes: **Are marked by the information pictogram and contain recommendations or other additional information.**

Example:

Detailed instructions for the chemical test method are available from your supplier.

Lists: **Are marked by the symbol •**

Example:

- Can be used for high speeds
- Highest clamping forces
- Slim body chuck

Activities: **Are marked by the symbol ➢ and provide instructions for the stated activity. The result of the activity can be stated as explanation.**

Example:

- ➢ Change coil
- ➢ Set shrinking time
- ➢ Remove tool

16. General Safety instructions

For shrink fit chucks a new technique is used, which allows the tool change with the matching shrink chuck in a convenient, efficient and energy saving method. The induction generator is built using state of the art technology at the time of delivery and is reliable. Nevertheless, the equipment may pose a hazard if it is not used by trained or at least instructed personnel and / or for the intended use. Therefore, please note:

Read the operating manual carefully before initial set-up and operation of the unit, and become well acquainted with the control elements.

The operating manual is an integral part of the unit, and must be accessible and understood by all persons working with the unit.

Only trained individuals should be allowed to operate this unit.

The unit may only be operated as specified for and under good working conditions.

This unit is designed and programmed for the use of Diebold “ThermoGrip” chucks. When other shrink chuck forms and designs are used, problems may occur, because shrink parameters are set for Diebold shrink chuck contours.

Only use Diebold shrink fit chucks! For other shrink fit chucks no warranty can be given.

Unauthorized modifications or repairs to the unit will void warranty. Such modifications lead to damage of the unit.

16.1. Operating location

The Horizontal Shrinking Device HS 1100-P is a table-top unit.

Place the unit on a clean, dry workbench, in a dust and vibration-free environment.

Avoid direct sunlight on LCD display.

16.2. Hazards from electric components

The unit contains components with dangerous voltages. Please observe the following for your own safety:

This unit is to be serviced ONLY by trained personal authorized by the manufacturer.

Do not allow metal chips or liquids to enter the unit.

Unit should be cleaned regularly.

Only ThermoGrip chucks and quality cutting tools should be used.

16.3. Hazards from hot parts

The very effective form of heating only heats the relevant boundary zones of the shrink fit chuck with low heat input.
The surface of the shrink fit chuck can heat up to approx. 400°C.

Caution! Risk of burns!

For your own safety, comply with the following safety rules when working with the unit:

Ensure that hot parts cannot be touched by mistake.

Never leave hot “ThermoGrip” chucks uncovered. Remove hot tools from the coil and place them in their respective cooling positions or in the Chiller Unit.

Do not place hot tools on flammable surfaces.

When shrinking tools in and out, always wear the supplied gloves for protection from burns and cuts.

Remove all metallic objects from the environment of the inductive coil!.

During operation, remove all jewelry and keep hands clear of coil.

16.4. Avoid overheating “ThermoGrip” Chucks

The chuck and tool can overheat as a result of incorrectly entered shrink parameters and repeated heating of a “ThermoGrip” chuck in a short period of time. This is why the shrink parameters must be entered with particular care. Use a lower setting if in doubt. Repeated heating the chuck is to be avoided. Before heating chucks again, make sure to cool it down to room temperature first.

Avoid the use of excessive shrinking energy and long shrink times.

Do not keep flammable substances in the vicinity of the unit.

Do not use flammable cleaning agents.

16.5. Hazards from electromagnetic radiation

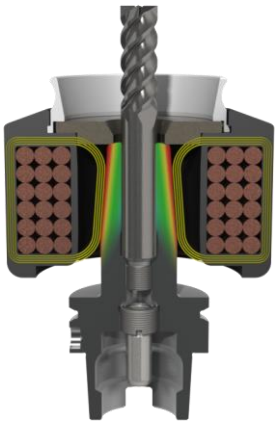
When the unit is used properly, there is no magnetic radiation to the immediate surroundings. The radiation safety of the unit has been tested and verified by EN 55011:2007+A2:2007 category A group 2. If the Inductive heating is started up without a tool holder in the coil, the magnetic field affects only the immediate vicinity of the coil.

For your own safety, please comply with the following rules:

Do not run any other units into the vicinity of the unit to avoid electrical interference.

If you have a cardiac pacemaker, please consult the manufacturer or your doctor. In certain cases, interference is possible.

17. General information about ThermoGrip ® Shrink technology



Shrinking has been known as a technique for achieving non-detachable connections, and offers remarkable advantages for chucking tools. By the inductive heating with high energy density, tools can be changed in a matter of seconds.

A cylindrical tool is pushed into a heated and expanded bore of the chuck; after the chuck has cooled, a high radial clamping force is applied. When handled properly, the clamping operation is reversible and can be repeated as often as required. The possible clamping forces are higher than any conventional clamping techniques.

Only shrink using clean tools in cleaned chucks!

17.1. Micro processor controlled Induction generator HS 1100-P

With the help of special coils, only the specific clamping area of the chuck is heated.

This means it is possible to shrink out carbide tools as well as tools with the same temperature expansion behavior as the tool holder (e.g. HSS tools).

A special housing / shield surrounding the coil prevents magnetic flux to a large extent. The control components and the high frequency generator are integrated in the housing.

17.2. Advantages of ThermoGrip ® Shrink technology at a glance:

- Quick shrinking times in and out
- High clamping forces
- Higher tool and spindle life due to small run-out (< 3 µm)
- Good surface finish due to high rigidity of the tool clamping system
- High flexural yield strength and radial clamping strength and stability also with long body lengths
- Slim body of the chucks for high speeds
- Only localized yet homogeneous heating of the chuck
- Clamping of carbide and HSS tools (see 4.3.1 Werkzeugschäfte)
- Fastest possible cooling time of the tool and chuck
- Specific heat-resistant steel give the chucks a high tool life and makes them dimensionally stable

17.3. Quality of the tools and chucks

Tool shafts and shrink fit chucks must have the following characteristics to guarantee a easy on- or unshrinking process.

17.3.1. Tool shanks

- must be smooth
- must be free of oil and grease
- preferably should not have a clamping face
- must not have any marking with raised areas
- must have the necessary tolerance quality

The following shank tolerances are required for the various shank diameters:

Shank-Ø	Shank tolerance	Tool type
3 mm	h4	Carbide
4 mm	h4	Carbide
5 mm	h5	Carbide
≥ 6 mm	h6	Carbide or HSS

17.3.2. Shrink fit chuck holes

- must be smooth
- must be free of oil and grease
- must have the necessary quality of tolerance

18. Initial Set-Up of the HS 1100-P

18.1. Connecting the device

To ensure that the unit is not damaged during the unpacking process, unload the unit with the top facing up. Do not hold the unit housing by the coil.

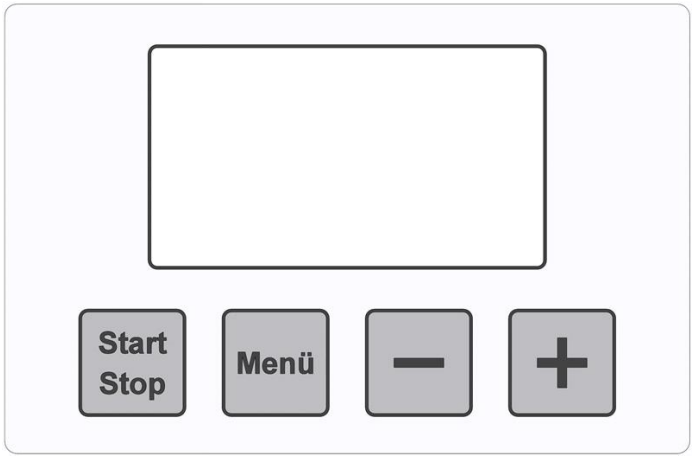
Connect the power cord to the power supply. Make sure that the main power switch while the unit is off. Through the operation of the main switch, the device is now ready for operation. The LC display will show "Diebold".

18.2. On-site socket and fuse

Picture	Pin designation	Pin name	Wire colour
	L1	Phase L1	brown
	L2	Phase L2	black
	L3	Phase L3	black / grey
	N	Neutral wire	blue
	PE	Protective earth	green-yellow
The rated voltage between the phases is 3x400V (-10/+10%)			

Always connect the neutral wire N and protective earth PE !
If a ground fault circuit-breaker is used to secure the CEE socket, it must be a 4-pin model and according to DIN VDE 0100 (part 530) for frequency converters of type B (all-current-sensitive).

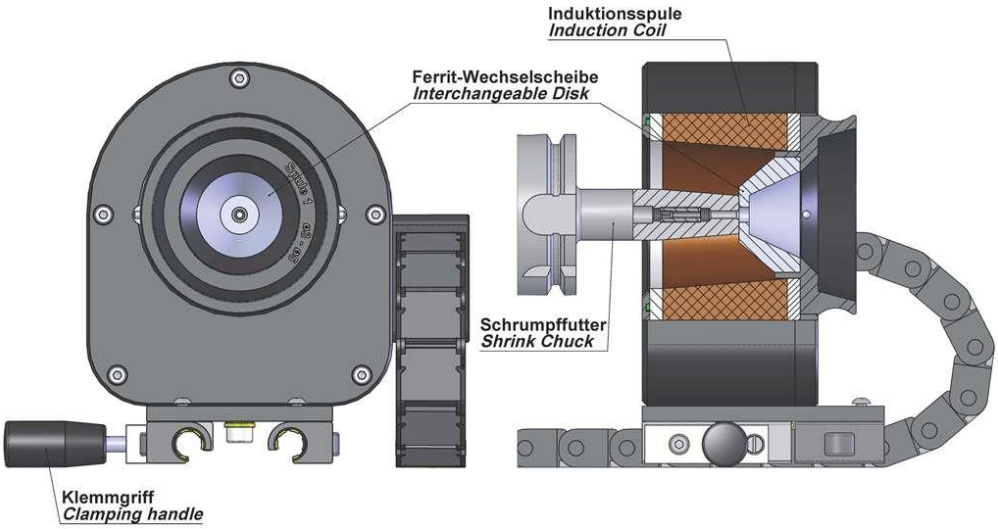
18.3. Controls of the HS 1100-P



19. Operating the HS 1100-P

19.1. Ferrite Interchangeable Discs

Ferrite interchangeable discs are used for the effective heat shrinking process and are necessary for shrinking of Carbide and HSS tools. The discs will concentrate the magnetic field in a way so the tool holder will open up faster. The interchangeable discs are inserted in the RH side of the coil and locked in place with a clockwise turning motion. They will serve as a limiter for the toolholder.



A complete set of interchangeable discs comes with the unit.

19.2. Shrinking Process

The shrinking and un-shrinking of a tool works as:

- Clamp the shrink chuck in the tool adaptor
- Move the induction coil to the required shrink position and lock it by turning the lock handle
- Select shrinking parameters (see 19.4)
- Start the heating process by pressing the "Start/Stop" button. When the heating cycle is completed, push the tool in or pull out the tool.
- The induction coil may now be pushed back and the (hot) shrink fit chuck may be removed for cool down.
  Always use the gloves supplied with the unit.

ATTENTION! To prevent damage to the device, the induction coil should never be moved relative to the chuck during the shrinking process.

19.3. LCD-Messages

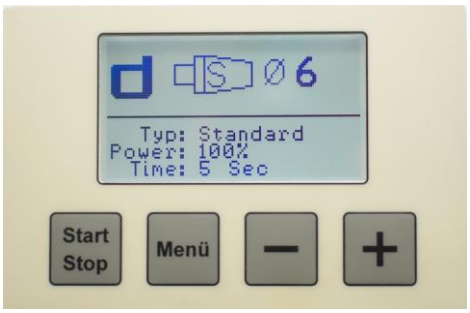
After switching on the device the
Software version (in picture "v02.1")
and the
Number of shrink cycles (in picture "82")
will be displayed for approx. 3 seconds.

The following messages may appear in the LC display:

- ATTENTION! Heating time too long !!
  the maximum permissible heating time has been exceeded. Heating of the shrink chuck will automatically be stopped
- • Max. temp. coil, please wait -
  the maximum permissible coil temperature has been exceeded. Please wait a few minutes until the inductor has cooled down
- • Max. temp. IGBT, please wait -
  the maximum permissible IGBT temperature (transistors in the generator) has been exceeded. Please wait a few minutes until the IGBTs have cooled down
- Fault !! -
  a fault has occurred
- Overload -
  the generator is overloaded
- IGBT Error -
  an IGBT error has occurred

If error messages continue even after switching the unit off and back on, please contact the manufacturer.
(Observe the cool down of the generator!)

19.4. Shrinking with Parameters



21. Turn on the unit with the main switch

22. Select the shrink chuck type using the ”Menü“ button

- Menu and the shrink chuck types will appear:
  - Manual: Shrinking without parameters
  - Standard: DIN holder contour (without grooves)
  - II TSF: Slim holders (2 grooves)
    (To shrink Carbide tools only, not HSS shanks!)
  - IIII Pyroquart: Holders with Pyroquart contour (4 grooves)
  - TER 11 to 32: Shrink Collet TER / ER 11 to ER 32

23. Select the tool shank-Ø with the „+“ or „–“ button

24. Insert the correct ferrite interchangeable disc in the coil

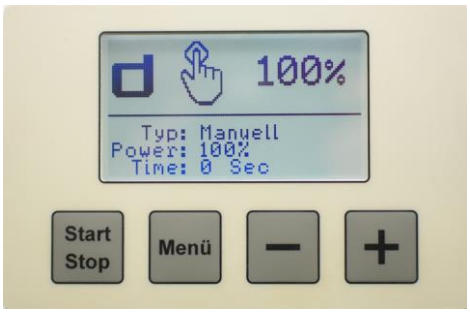
- Disc selection:
  - Ø3-5
  - Ø6-12
  - Ø14-22
  - Ø25-32

25. Set the induction coil in the position over the heat shrink tool so that the shrink chuck is in contact with the ferrite interchangeable disc

26. Start the shrinking process with the “Start/Stop“ button

27. At the end of the shrink cycle, shrink or un-shrink the tool

19.5. Shrinking without Parameters with indicating the power level



28. Turn on the unit with the main switch

29. Press the “Menü“ button until “Manuell“ is shown in the display

30. Select the Power level with the “+“ or “–“ button

- Power level:
  - 30%
  - 40%
  - 50%
  - 75%
  - 100%

Full power (100%):

When shrinking HSS tools, full power must be applied, otherwise releasing of the tool will not work. Most carbide tools may also be heated at full power.

Reduced power (30% - 75%):

When shrinking carbide tools in holders with thin nose type or slim chucks (especially shrink extensions), it is recommended to heat with reduced power to avoid overheating of the shrink chuck

Shrink chucks with D1<17 mm should always be heated with reduced power

If it is not possible to shrink a carbide tool using reduced power, then the shrink process with full power may be used

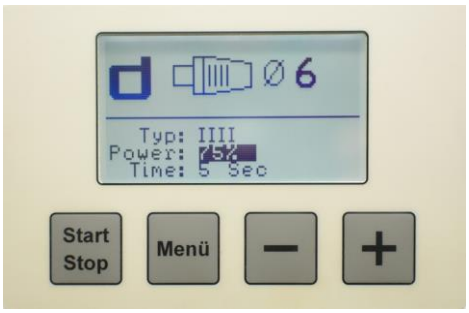
31. Insert the correct ferrite interchangeable disc

- Disc selection:
  - Ø3-5
  - Ø6-12
  - Ø14-22
  - Ø25-32

32. Set the induction coil in the position over the heat shrink tool so that the shrink chuck is in contact with the ferrite interchangeable disc

33. Press and hold the “Start/Stop“ button until shrink or un-shrinking the tool

19.6. Changing Standard Parameters



34. Turn on the unit with the main switch

35. Select the shrink chuck type with the ”Menü“ button

- Menu and the shrink chuck type will appear:
  - Manual: Shrinking without parameters
  - Standard: DIN holder contour (without grooves)
  - II TSF: Slim holders (2 grooves)
  - IIII Pyroquart: Holders with Pyroquart contour (4 grooves)
  - TER 11 to 32: Shrink Collet TER / ER 11 to ER 32

36. Select the tool shank-Ø with the ”+“ or ”–“ button

37. Press the ”+“ and ”–“ button simultaneously

38. The power level flashes in the display when you release the buttons:
Select the required power level with the ”+“ and ”–“ button and confirm by pressing the ”Menü“ button

39. The time flashes in the display:
Select the required time with the ”+“ and ”–“ button and confirm by pressing the ”Menü“ button

40. Parameter is successfully stored

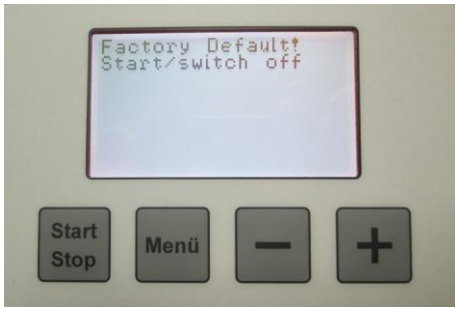
ATTENTION!
The shrink fit chucks can be damaged by overheating through changing the default parameters.

19.7. Reset to Factory Settings

41. Turn on the unit with the main switch

42. Hold down the ”+“ and ”–“ button simultaneously and press the ”Menü“ button

43. When releasing the ”+“ and ”–“ button the display shows:



44. Confirm by pressing the “Start/Stop“ button
when released, the display shows:

45. Confirm by pressing the ”Menü“ button
when released, the display shows:

46. Turning off and turning back on the unit with the main switch

47. The factory settings are being restored

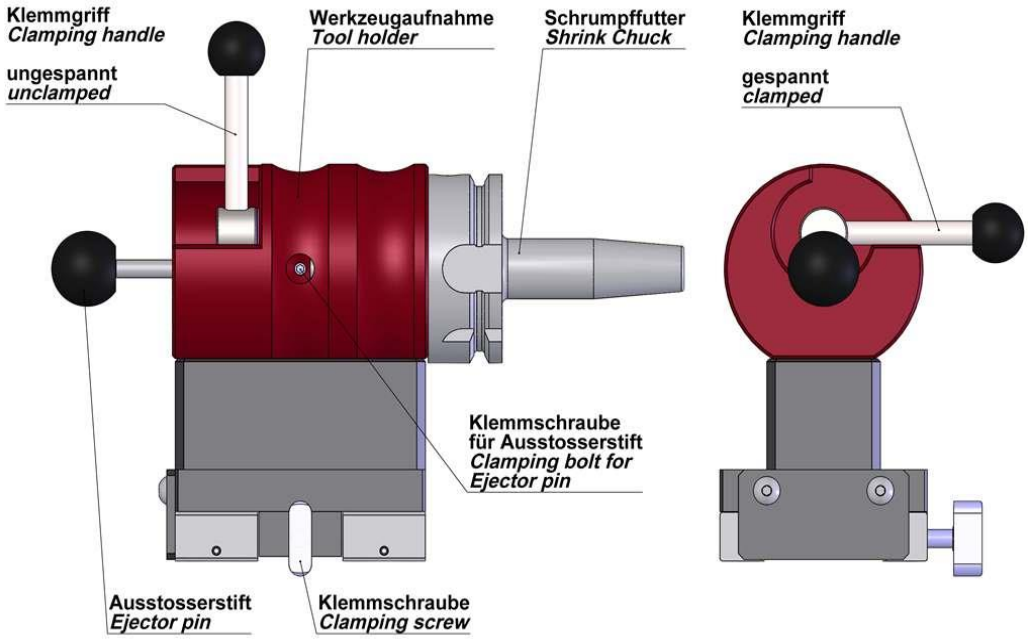
20. Handling tool holders

The different tool holders are inserted up to the stop on the receiving rail and secured with the clamping screw against displacement.

The tool holders for HSK and SK / BT have a Ejector pin to push the cutting tools during unshrinking from the clamping bore.

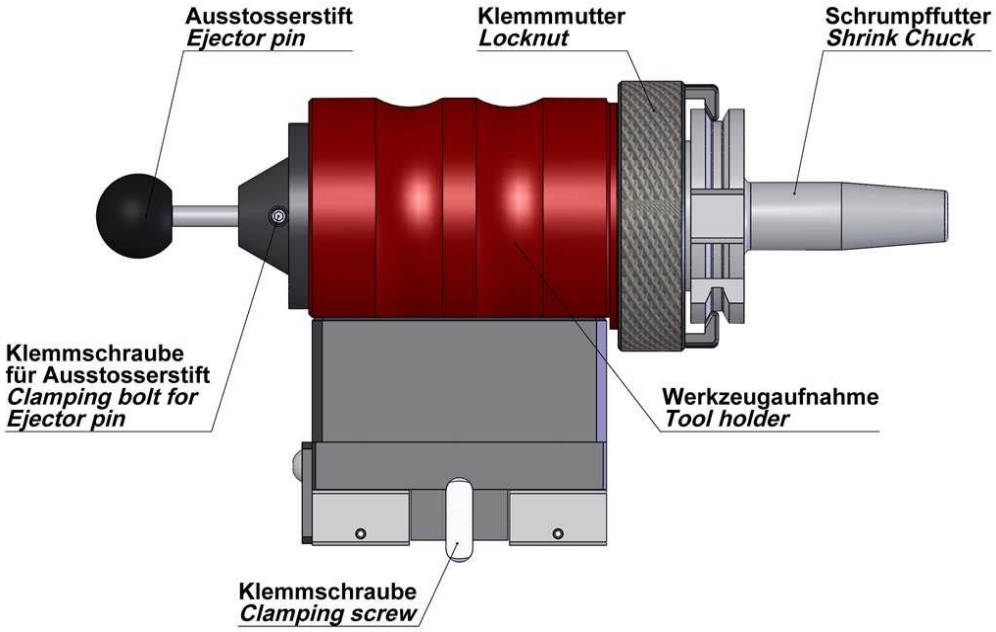
Clamping the Ejector pin with the clamping bolt for Ejector pin you will get a length stop of the tools while shrinking.

20.1. Tool holder HSK-40 to HSK-100



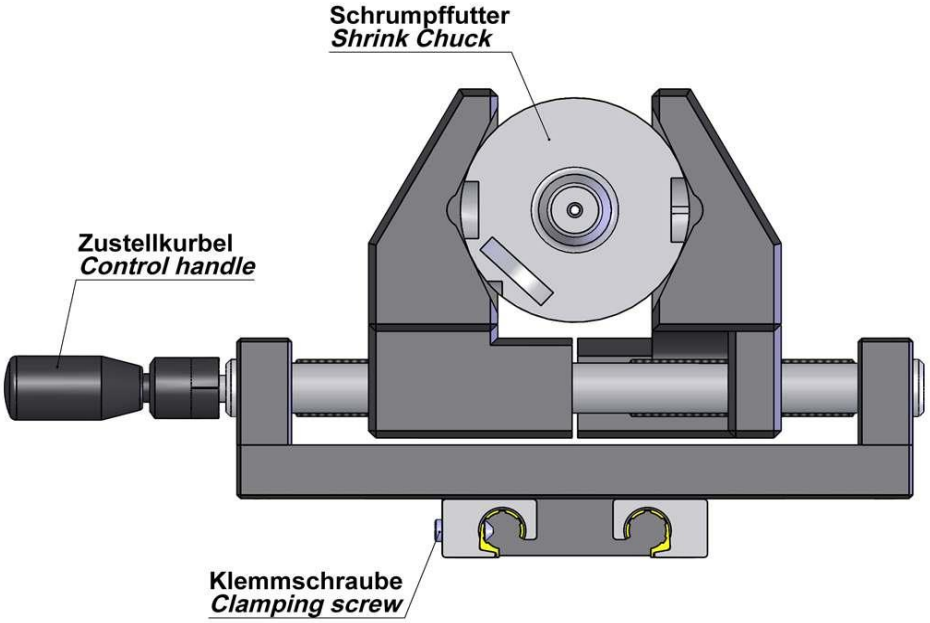
Shrink fit chucks with HSK taper are inserted into the tool holder and the clamp handle is swung down. By this means the shrink fit chuck is clamped by an internal cam.

20.2. Tool holder SK / BT 30 to SK / BT 50



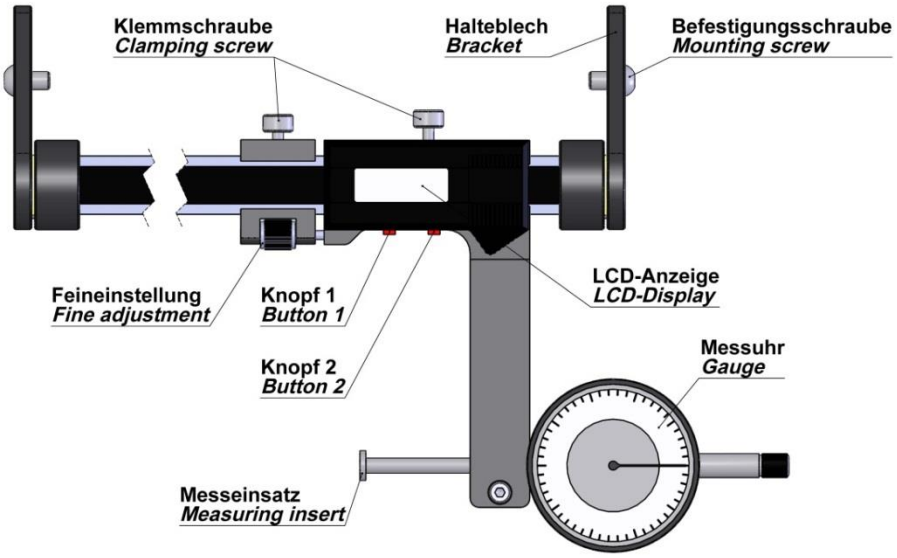
The shrink fit chuck is inserted into the tool holder and the lock nut is turned clockwise while the shrink fit chuck is clamped in the gripper groove or flange. By adjusting the clamping nut SK or BT shrink fit chucks can be tightened.

20.3. Universal Adaptor for Clamping range Ø12 to Ø100



The shrink fit chucks are clamped in the universal Adaptor by adjusting the jaws with the control handle. In the jaws there are different entry and contact surfaces available to clamp diameters of Ø12 to Ø100.

21. Operation of the Length Setting Unit (Optional)



21.1. Assembly

The Length Setting Unit is fixed with 4 screws on the side panel. The device must be aligned so that the center of the gauge is approximately in the middle when using short and long cutting tools

21.2. Measuring

After the correct tool holder has been mounted on the shrinking device, the LCD display reference dimension (leading edge of the tool holder) has to be set to "zero" first. For this purpose, the gauge sensor contacts the front edge of the tool holder. The fine adjustment should be adjusted so that the flat side is contacted. Set the dial indicator to "zero" position and the LCD display with "Button 2" to "zero". Then the required extension length "Z dimension" can be set. Tighten the clamping screws on the LCD display and fine adjustment.

21.3. Shrink on length

Insert the cutting tool into the opening of shrink fit chuck. Use the appropriate ferrite disc inside the coil. Push the coil stop (disc) above the shrink fit chuck. Start shrinking process with the “Start/Stop” button.

For small cutting tools with a short shank, insert the cutting tool into the receiving bore , pull back and lock the gauge. Then insert the cutting tool until the gauge reaches the "zero" position. By tracking the dial gauge with fine adjustment check whether cutting tool has not been pushed too far.

For large shafts first heat the shrink chuck then insert the cutter, swivel the dial gauge and set the cutting tip against the dial plate or slide cutter with dial plate in position.

22. Appendix

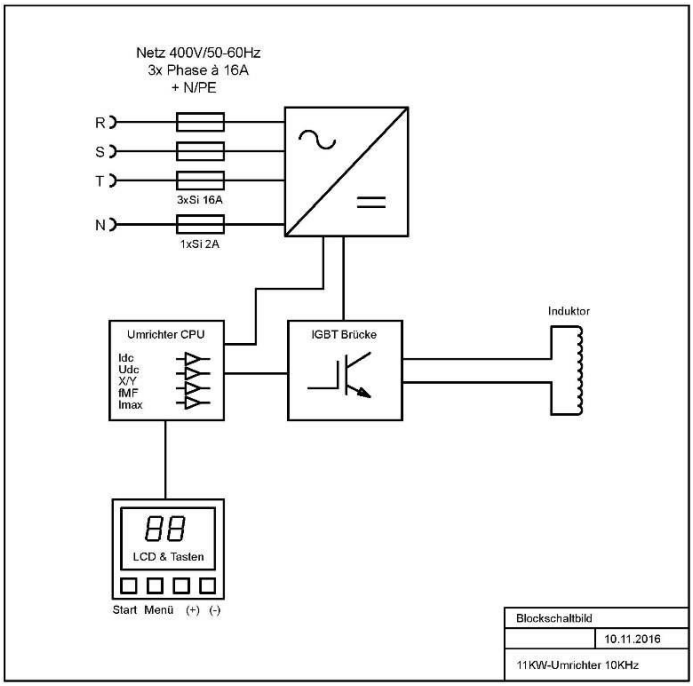
22.1. Technical data

Voltage / Charging rate, max.	400 V or 480V, 50-60 Hz / 16 A
Nominal power / Working frequency	11 kW / 10 kHz
Dimensions (Depth x Width x Height) / Mass	600 x 470 x 260 / ca. 26 kg
Tool Adaptor for shrink fit chucks	HSK 40 to HSK 100 SK 30 to SK 50 Universal Adaptor
Shaft diameter	ø3 –ø32 (Carbide) ø6 –ø32 (HSS)
Cutter material	Carbide and HSS

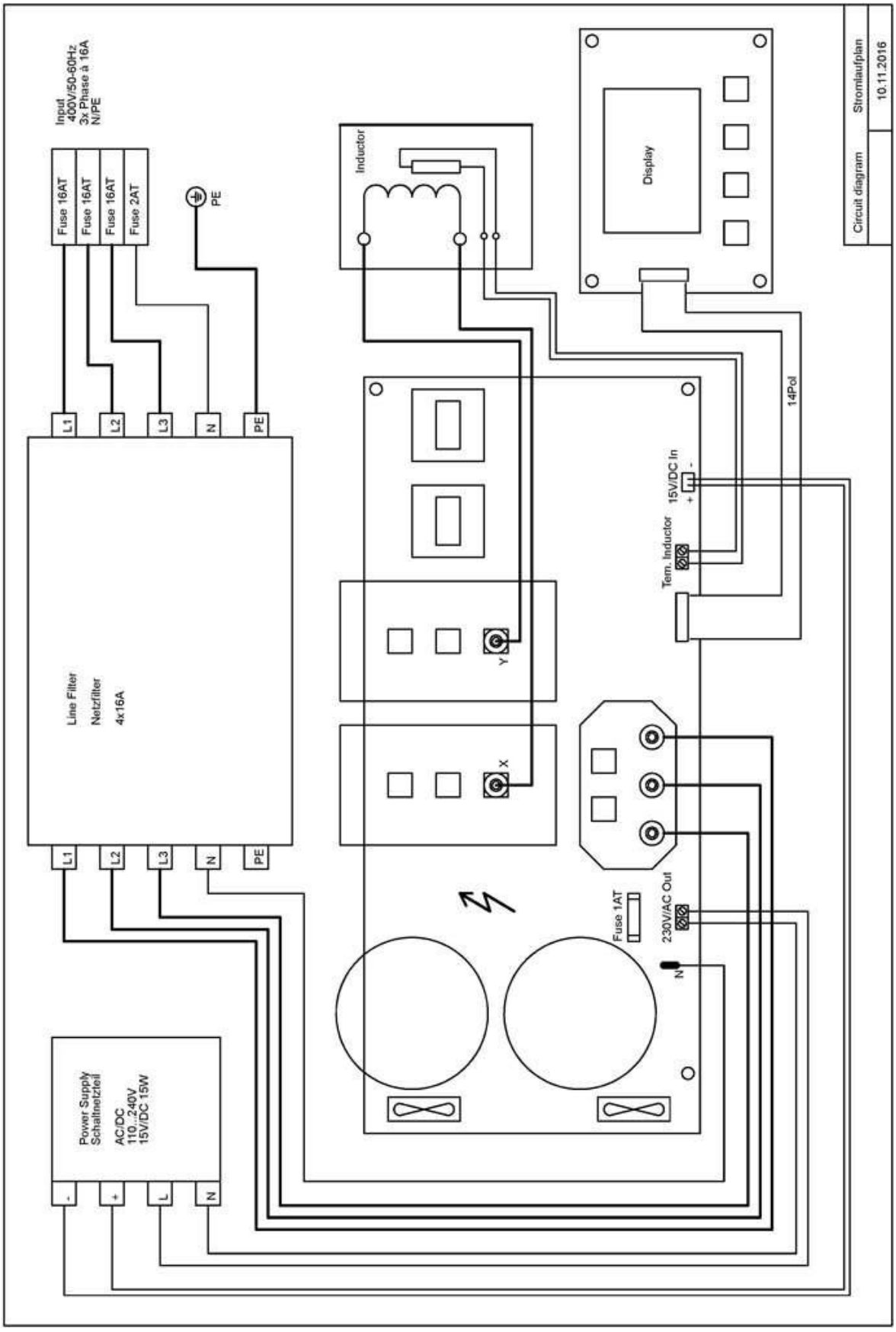
The shrink equipment can be operated with three-phase current either at 400 V or at 480 V. This merely requires a fuse to be exchanged on the large generator board in the equipment housing.

ATTENTION!
Always disconnect power before do this!
(Disconnect the mains plug!)

22.2. Block diagram



22.3. Wiring diagram

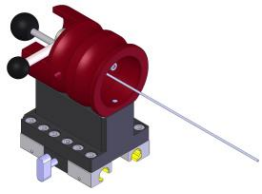
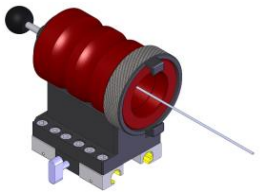
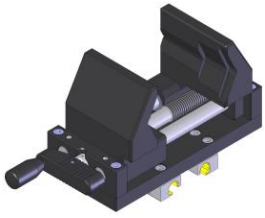


22.4. Scope of delivery and accessories

Description		Item-No.	Picture
Shrinking Device including coil and drip tray Operating Instructions English / German		79.329	
Ferrite interchangeable discs	ø3-5 ø6-12 ø14-20 ø25 ø32	79.327.810 79.327.820 79.327.830 79.327.840 79.327.850	
Set of gloves		79.141	

22.5. Expansion options and optional accessories

22.5.1. Tool Adaptor

Description	Item-No.	Picture
Tool Adaptor HSK-40	79.325.040	
Tool Adaptor HSK-50	79.325.050	
Tool Adaptor HSK-63	79.325.063	
Tool Adaptor HSK-80	79.325.080	
Tool Adaptor HSK-100	79.325.100	
Tool Adaptor SK/BT 30	79.325.130	
Tool Adaptor SK/BT 40	79.325.140	
Tool Adaptor SK/BT 50	79.325.150	
Universal Adaptor (Clamping range Ø12 - Ø100)	79.325.U	

22.5.2. Length Setting Unit

Description	Item-No.	Picture
Length Setting Unit	79.325.300	

22.5.3. Chiller Unit

For rapid cooling of the tools we recommend you to use the Chiller Unit FKS 04

Description	Item-No.	Picture
Chiller Unit FKS 04 automatic	79.400	
Chiller Unit FKS 04 manual	79.401	
Coolant Additive Filling quantity: 1000 ml	79.220.001.HF	
System Cleaner Filling quantity: 5000 ml	79.220.002	

23. Cleaning and maintenance

The unit should be cleaned regularly. Always disconnect power before cleaning!
The unit may be cleaned using a cloth and (solvent-free) cleaning agent.

Please do not use compressed air or solvents!
Opening the housing of the unit will void warranty.

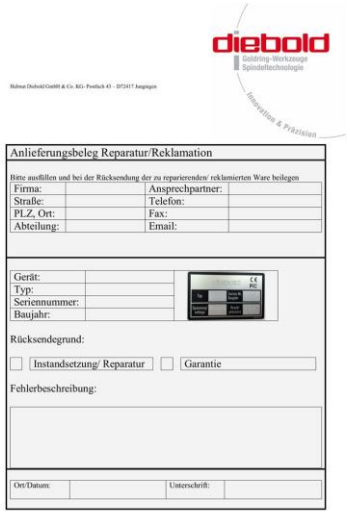
24. Service and repair / Contact the Manufacturer

This operating manual can only provide a general description of the functions and controls of the Horizontal Shrinking Device HS 1100HS 1100-P.

For special applications and for repairs or modifications not described in this manual, please contact Helmut Diebold GmbH & Co.

In case of problems or questions, please have the serial number and the software version ready. You can find the serial number either on the nameplate on the side of the machine, or displayed on the control display after switching on the unit.

24.1. Repair process



Anlieferungsbeleg Reparatur/Reklamation

Bitte ausfüllen und bei der Rücksendung der zu reparierenden/ reklamierten Ware beilegen

Firma:		Ansprechpartner:	
Straße:		Telefon:	
PLZ, Ort:		Fax:	
Abteilung:		Email:	

Gerät:	
Typ:	
Seriennummer:	
Baujahr:	

Rücksendegrund:

☐ Instandsetzung/ Reparatur ☐ Garantie

Fehlerbeschreibung:

Ort/Datum:		Unterschrift:	

- Phone consultation
- Send the devices with Inbound delivery document to us. Inbound delivery document can be downloaded here
  www.diebold-hsk.de/geraetereparatur
- Inspection and diagnosis through Diebold
- Cost estimate to customer
- Within the guarantee period we will provide you a loaner free of charge. Can be used for non-warranty repairs. You will receive a replacement unit for a rental fee from us.

Helmut Diebold GmbH & Co.
Goldring Werkzeugfabrik
An der Sägmühle 4
D-72417 Jungingen

Fon: +49 (0) 74 77 - 871 - 0
Fax: +49 (0) 74 77 - 871 - 30
Mail: kontakt@diebold-hsk.de

25. EC Declaration of Conformity

Within the meaning of the EC Machinery Directive 2006 / 42 / EC

Helmut Diebold GmbH & Co. KG hereby declare that, on the basis of its concept and construction and the model we have launched, the following named machine complies with the relevant health and safety requirements of the EU Machinery Directive.

- **Machine designation : Horizontal Shrinking Device**
- **Machine type: HS 1100-P**
- **Serial-No. / Year: _____**

Relevant provisions
- Low-Voltage Directive 2006/95/EU
- EMC Directive 2004/108/EU

Applied harmonised standards, in particular:
- DIN EN 61000-6, Part 2 and 4
- DIN EN 55011:2009 + A1:2010, Group 2, Cl. A
- DIN EN 60519, Part 1 and 3

Applied national standards (USA):
- FCC 47 CFR Ch. I (Edition 10-1-01), Part 18 C

This declaration will no longer be valid if the machine is subject to unauthorised modifications.

THE COMPANY

Company name:	Helmut Diebold
Legal status:	GmbH & Co. KG
Company was founded in:	1952
Commercial register:	HRA 420751, Local Court Stuttgart
Registered address:	An der Sägmühle 4 72417 Jungingen, Germany
Fon:	+49 (0) 7477 - 871 - 0
Fax:	+49 (0) 7477 - 871 - 30
Mail:	kontakt@diebold-hsk.de
Web:	www.diebold-hsk.de
Name of representative for documentation:	Hermann Diebold

Jungingen, 2017-04-24
(Place, Date)

_____
(Hermann Diebold / CEO)

26. 5 Finger-Safety-Glove

26.1. Instructions for use

INSTRUCTIONS FOR USE — EN

ANSELL GENERAL PURPOSE GLOVES & SLEEVES

A. Use

This Instruction for Use note is to be used in combination with the specific information that is mentioned on or inside each packaging enclosure.
These gloves, sleeves are designed to protect the hands and/or forearms against mainly mechanical and/or thermal risks. They are in conformity with, and are marked per the requirements, of the European Directive 89/686/EEC and its amendments. They also comply (=gloves) and are tested (=sleeves) in accordance to the applicable European Standards.
Gloves or sleeves which are accompanied with the pictogram which designates contact with foodstuffs, are also in conformity with the European Regulations 1935/2004 and 2023/2006 as well as with all applicable National Regulations for Food-contact materials.
Please ensure the gloves/sleeves are used only for the designated purposes.
Explanation of pictograms:

A B C D EN 388: 2003	Protection from mechanical risks A: Abrasion resistance B: Cut resistance C: Tear resistance D: Puncture resistance	A B C D E F EN 407: 2004	Protection against heat A: Flammability B: Contact heat C: Convective heat D: Radiant heat E: Small splashes of molten metal F: Large quantities of molten metal
A B C EN 511: 2006	Protection from cold A: Convective cold B: Contact cold C: Water penetration		Suitable for contact with foodstuffs

EC-Type examination certificate from Centexbel Belgium (I.D. 0493), Technologiepark 7, B-9052 Zwijnaarde.
For more detailed information on the product's performance and to obtain a copy of the Conformity Declaration, please consult Ansell.

B. Precautions for use

1. NEVER USE THESE GLOVES/SLEEVES WITH CHEMICALS.
2. Gloves/sleeves should not be used when there is a risk of entanglement with moving machine parts.
3. Before usage, inspect the gloves/sleeves for any defects or imperfections. Avoid wearing damaged, dirty or worn out gloves/sleeves.
4. The gloves/sleeves should not come in contact with a naked flame.
5. Not all gloves/sleeves that are suitable for contact with foodstuffs can be used against all foodstuffs. Some gloves/sleeves may show excessive migration towards certain types of foodstuffs. To know which restrictions apply and for which specific foodstuffs the gloves/sleeves can be used, please obtain advise from the Ansell technical department or consult the Ansell Food Conformity declaration.
6. If gloves/sleeves are marked, the printed surfaces shall not come in contact with food.
7. Some glove type versions may have a length which falls below the minimum glove length as defined in EN 420:2003 – as shown in the table below. These gloves are 'Fit for Special Purpose gloves' because they are to be used to protect the hand ONLY from mechanical actions. Do not use these gloves when protection in the cuff area is needed. Please consult the Ansell Technical department or ask for the technical datasheet should you want to know the glove length of the glove(s).

Size	6	7	8	9	10	11
Minimum glove length (mm)	220	230	240	250	260	270

C. Ingredients/Hazardous ingredients

Some gloves/sleeves might contain ingredients which are known to be a possible cause of allergies in sensitised persons, who may develop irritant and/or allergic contact reactions. If allergic reactions should occur, obtain medical advice immediately.

WARNING: THIS PRODUCT CONTAINS NATURAL RUBBER LATEX WHICH MAY CAUSE ALLERGIC REACTIONS

For more information, please contact Ansell's Technical department.

D. Care instructions

Storage: Keep away from direct sunlight; store in a cool dry place.
Keep away from ozone sources or naked flame.

Cleaning: Gloves/sleeves that can be laundered will carry Care pictograms, which will be depicted on the specific information on or inside each packaging enclosure. For these gloves/sleeves, the performance levels of the unused glove/sleeve will not be reduced after 1 laundering cycle.
However, the customer or launderer is responsible for the performance of the gloves after laundering. Ansell cannot be held liable for this.

E. Disposal

Used gloves/sleeves may be contaminated with infectious or other hazardous materials.
Dispose of according to Local Authority Regulations.
Landfill or incinerate under controlled conditions.

Ansell

26.2. EC Declaration of Product Conformity

Ansell

Ansell Healthcare Europe N.V.
Riverside Business Park | Block J | Tel. 32 (0)2-528 74 00
Boulevard International 55 | B-1070 Brussels | Fax 32 (0)2-528 74 01

EC DECLARATION OF PRODUCT CONFORMITY

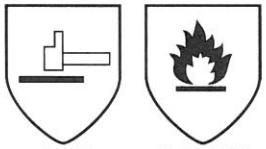
Category III

The manufacturer, established in the European Economic Community:

ANSELL HEALTHCARE EUROPE N.V.
RIVERSIDE BUSINESS PARK, BLOCK J
BOULEVARD INTERNATIONAL 55
B-1070 BRUSSELS

declares that the PPE described hereafter:

Neptune® Kevlar® 70-215



144X X1XXXX

is in conformity with the provisions of the Council Directive 89/686/EEC and with the European harmonised standards EN420:2003+A1:2009, EN388: 2003 & EN407: 2004, and is identical to the PPE which is subject to the EC Type Examination certificate number 3206107 issued by the Notified Body:

CENTEXBEL (0493)
TECHNOLOGIEPARK 7
B-9052 ZWIJNAARDE

is subject to the procedure set out in Article 11 point A of Directive 89/686/EEC under the supervision of the Notified Body

CENTEXBEL (0493)
TECHNOLOGIEPARK 7
B-9052 ZWIJNAARDE

Tuesday, October 18, 2016
Alison Arnot-Bradshaw
Senior Director – EMEA/APAC Regulatory Affairs
Ansell

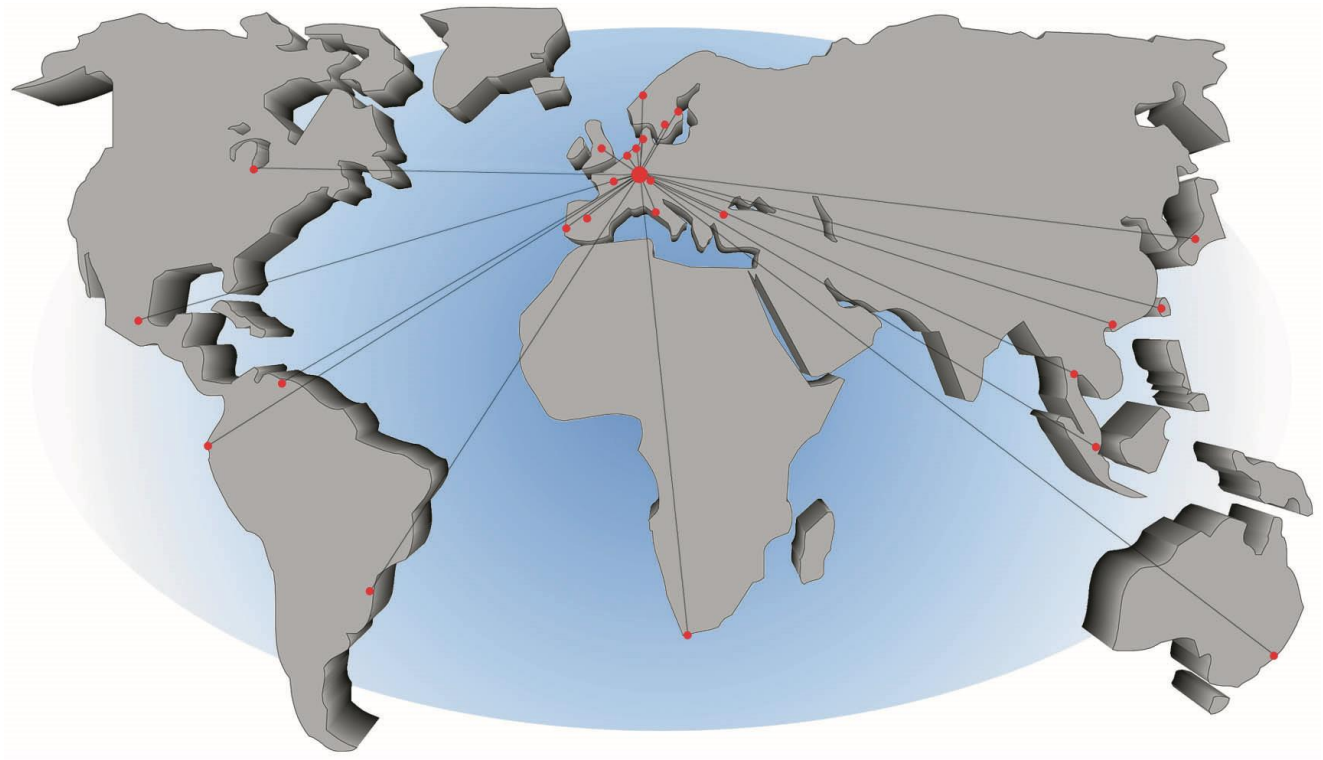
Notizen / Notes

Diebold Produkte:

- Schrumpfgeräte
- Werkzeugaufnahmen
- Messtechnik
- Spindeltechnologie
- Werkstatteinrichtung

Diebold Products:

- Shrink Units
- Toolholders
- Gauging
- Spindles
- Workshop Equipment



Helmut Diebold GmbH & Co.
Goldring Werkzeugfabrik
An der Sägmühle 4
D-72417 Jungingen (Germany)

Tel.: + 49 (0) 74 77-871-0
Fax: + 49 (0) 74 77-871-30
Web: www.hsk.com
Mail: diebold@hsk.com

