



**Washstand Compact
Artikel No. 74-1000**



OPERATING INSTRUCTIONS

Thank you for purchasing the **METAFLUX Washstand Compact Artikel No. 74-1000**

This operating instruction has been designed to give you all information on the METAFLUX Washstand Compact 74-1000.

To ensure perfect functioning of your METAFLUX Washstand Compact, carefully read this operating instruction before using the machine. Familiarize yourself with this unit's operation, its particular features, applications and limitations. You will also find useful tips on safety and maintenance.

Should you need more information please call our

Tel.:
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TECHNO-SERVICE GmbH

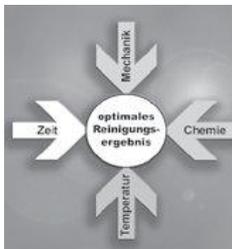
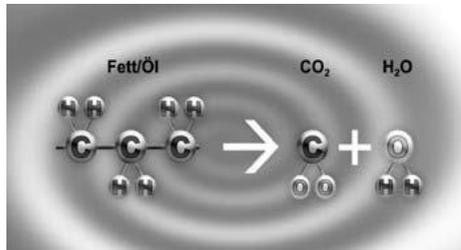


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1. General Points

These operating instructions are applicable to the **METAFLUX Washstand Compact**. It specifies the information necessary for its correct handling and usage and covers the initial set up, operation, maintenance, shut down and waste disposal. The warnings and advices mentioned in these instruction are to be observed and adhered to. If the product is used in accordance with the regulations corresponding to these operating instructions we will be liable in line with our guarantee conditions. Keep these operating instructions in a safe place. They are designed to help with practical usage of the **Washstand Compact** and should be at the users disposal at the location where the Washstand is being used. **No modifications or alterations must made to the product without authorisation from the manufacturer. The manufacturer will not be liable for any modifications made without its authorisation and the guarantee will expire and cease to be valid.**

Key to Safety Instructions

Danger symbol



You will find this symbol next to all safety instructions relevant to damage prevention (personal injury, material damage). Take note of this instruction and behave cautiously!



Prohibition symbol

You will find this symbol next to all prohibition instructions where failure to comply with these could result in direct personal injury and material damage. It is mandatory that prohibition symbols are complied with!



2. Fundamental Safety Instructions

Every person who works with the product must be familiar with the content of the operating instructions. These operating instructions are a part of the unit and must be available to the operating staff at all times. The operating staff are to be shown the operating instructions and the danger symbols and prohibition symbols in particular must be pointed out to them.



This unit is equipped with a 3-conductor power cord and 3-prong grounding cap. It must be connected to a correspondingly grounded power outlet protected by a class A Ground Fault Circuit Interrupter (GFCI) to prevent electric shock hazard. Please have this checked and tested by a specialist in electrics! Before connecting this unit, check that the voltage shown on the rating plate is the same as of the power source. Operating this unit on a voltage other than specified on its rating plate may result in personal injury to the user and damage to the unit.



The unit must only be operated by those people authorised to do so.

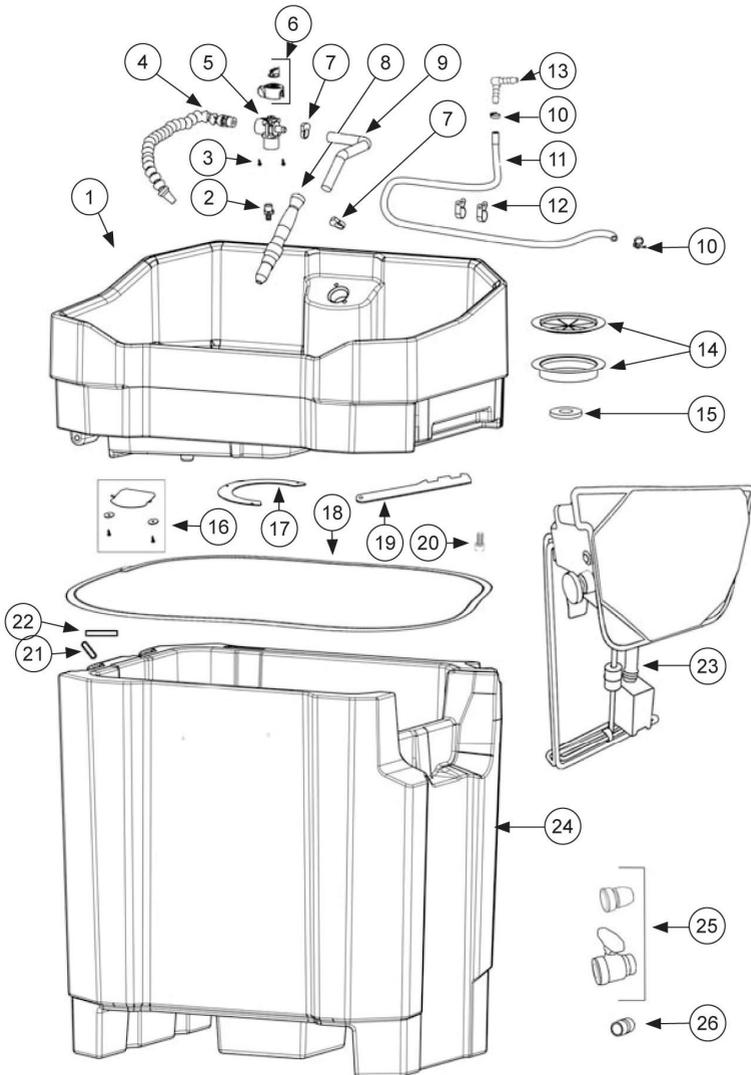
Your METAFLUX machine is equipped with magnet inserted underneath the course filter in the sink, always handle it with care, as it will shatter if dropped and may cause injuries. Keep magnet away from electronic devices and magnetic media such as floppy disc, credit cards and computer monitors.



Keep magnet away from pacemakers.

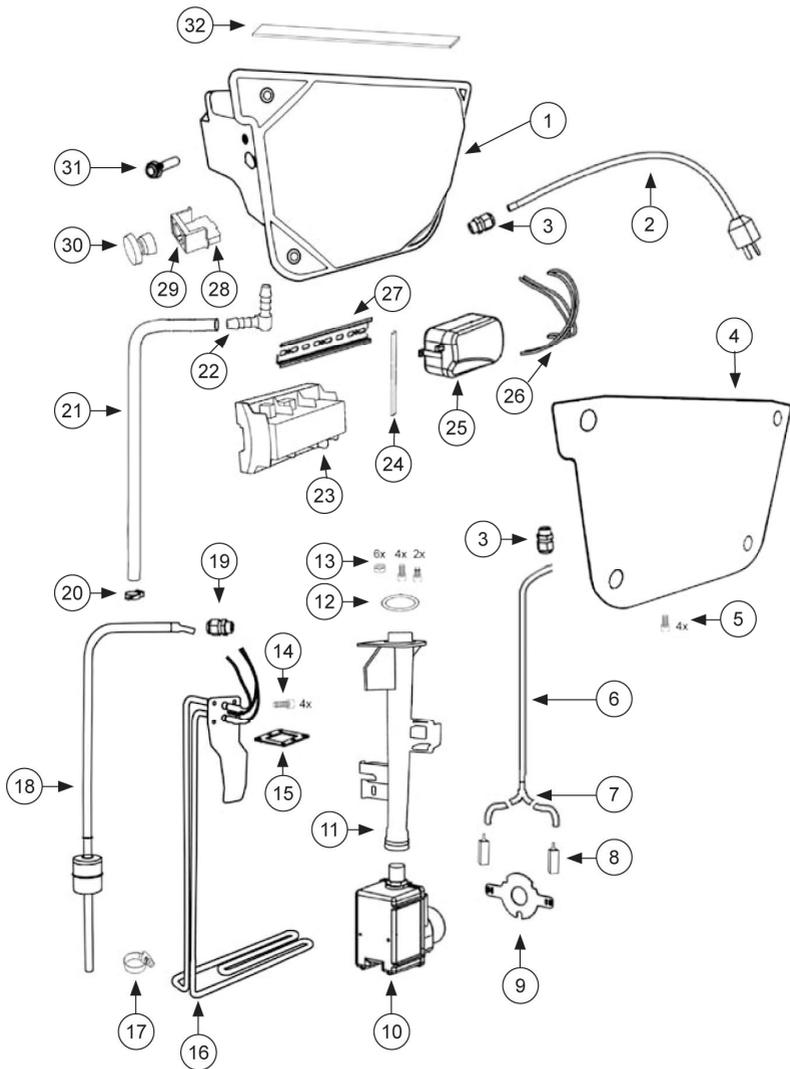
3. Product Description

3.1 Assembly and Mode of Operation



Machine

- 1 Sink
- 2 Fitting 1/2" external thread
- 3 Pan head screw
- 4 Flex faucet
- 5 3-way valve
- 6 3-way valve cap and knob, grey
- 7 Hose clamp size F
- 8 Flowthrough brush
- 9 Flowthrough brush hose, length 80 cm
- 10 Hose clamp size H
- 11 Hose 12 x 4, length 180 cm
- 12 Loop strap inside diameter 22 mm
- 13 1/2" hose connector, angled
- 14 Drain filter insert kit, plastic
- 15 Magnet
- 16 Damper
 - Washer
 - Pan head screw, 4,8 x 16 mm
- 17 Filter bag bracket
- 18 Sink gasket
- 19 Sink rod
- 20 Allen screw, M6x8
- 21 Connecting bolt short
- 22 Connecting bolt long
- 23 Replacement control box
- 24 Tank
- 25 Drain cock (clamp screw)
- 26 Threaded nipple 1"



Control box

- 1 Housing
- 2 Power cord
- 3 Cable gland M16
 - Lock nut M16
- 4 Lid
- 5 Allen screw M5x10
- 6 Nitril hose inside diameter 4 mm
- 7 Y-hose connection
- 8 Wooden air diffuser
- 9 Air diffuser bracket
- 10 Pump 40 W, 230 W
- 11 Pump bracket
- 12 O-Ring for pump bracket
- 13 Allen screw M6x10
 - Allen screw M6x16
 - Nut M6
- 14 Allen screw M5x6
- 15 Gasket for heater
- 16 Heater 230 V, 650 W
- 17 Sensor clamp
- 18 Multifunctional sensor GT
- 19 Cable gland M20
 - Lock nut M20
- 20 Hose clamp size H
- 21 Nitril hose inside diameter 12 mm
- 22 Fitting 1/2" angeled
- 23 controls
- 24 Cellular rubber strip
- 25 Air pump, 5 W, 230 V
- 26 O-Ring for fixing air pump
- 27 Top-hat rail
- 28 Module connector
- 29 Module bracket
- 30 Push button for pump switch
- 31 Red LED
- 32 Gasket between control unit and tank

The pump is electrically operated and pumps the cleaning liquid through the connecting tube to the 3-way ball valve. Depending on its position the cleaner can either be propelled to the sink via the tube with the brush or via the versatile jointed hose. The work piece is located in the interior of the table and can be cleaned there. The used cleaning liquid runs through the sinks centered filter back into the container. Microorganisms then break down the oil and fat impurities.

Comparison between conventional Parts Cleaner with Cold Cleaner and METAFLUX Washstand Compact 74-1000

	Cold Cleaner	METAFLUX Washstand Compact
What is the effect of increased contamination?	saturation of the cleaning liquid – cleaning effect falls off	good stable results the whole time ☺
What contaminations can be removed ? Organique, apolar (grease, oil) Inorganique, polar (salts) Inorganique, apolar (iron fillings, dust)	Very good results Poor results Poor results	Very good results Very good results Good results ☺
What materials can be cleaned? Stainless steel Steel Aluminium Non-ferrous heavy metals	Very good results Very good results Very good results Very good results	Very good results Very good results Very good results Very good results ☺
Safety and health provisions for workers	  	

Health damage <small>(Source: Reinigen und Entfetten, BG Maschinenbau- und Metall-BG 1997)</small>	Cold Cleaner	METAFLUX Washstand Compact
Damage to the nervous system	Toluene, xylenes, trichlorethylene, benzenes (hexane isomers, pentane, heptane, octane)	none ☺
Damage to the skin	Yes	none ☺
Damage to the liver	Dichlormethane, Trichlorethylene, Toluene, xylenes, methanol, ethanol	none ☺
Damage to the kidneys	Trichlorethylene, Kerosene, Petrol/ gasoline, Hexane, heptane, toluene, xylene, alcohols	none ☺
Damage to the blood cells	Toluene, benzene	none ☺
Mutagens and teratogenes	Organic solvents	none ☺
Cancerogen	Benzene	none ☺

3.2 Intended Use

The METAFLUX Washstand 74-1000 is used to clean work pieces that are soiled with oil and grease, using only the Metaflux Washstand cleaning fluid.

4. Technical Data

Dimensions	approx. H (back) 1060, (front) 940 x B 840 x T 600 mm
Working height	940 / 800 mm
Useable workspace	740 x 450 mm
Weight when empty	approx. 55 kg
Load capacity	100 kg
Minimum tank capacity	60 l
Maximum tank capacity	100 l
Tank material	PE LD
Power Input	approx. 700 W
Electrical connection	230 V, 50 Hz
Heating	stainless steel, 650 W
Level switch	Minimum fill level (approx. 60 l)
Pump	40 W, 380 l/h
Temperature	approx. 41 °C – factory set
Operating temperature	15 to 48 °C

5. Start Up

After removing the packaging, check the casing and control for any possible transport damage. Should transport damage be detected, do not connect the machine to the mains. Instead report the damage to the carrier and to Techno-Service GmbH. The original packaging must be retained. Place the unit in a dry and stable place of your choice. The ground must be even. If necessary level the ground out with suitable material. Ensure that the drain valve is closed. Use only the genuine Metaflux Cleaning Liquid. To fill to the optimum volume, 90 l should be required.



Do not overfill!



Other cleaning liquids, such as cleaner solvents, disinfectants and alkaline cleaner, for example must not be used!

On/Off Power switch Pump



Connect the unit to the electricity supply.
Please ensure that the current entry provided by the customer is furnished with an ELCB (Earth Leakage Circuit Breaker - FI switch).



Note: Do not connect to the power supply with no liquid inside the machine

The heater starts to warm up the cleaning liquid to operating temperature. Allow heater to warm the cleaning liquid to working temperature for optimal cleaning efficiency. When the solution has reached its proper working temperature of approx. 41° C (This will take approx. 4 hours with a liquid at 20 °C), periodically, the heater will turn itself ON.



Never turn off the Metaflux unit unless for servicing or longer periods of non-use (more than two weeks, see chapter 6. Operation instructions). Once the correct temperature has been reached, the unit is ready for use.

6. Operation Instruction

Turn the cleaning pump ON pressing pump switch. Wet the sink, parts to be cleaned and any brushes prior to cleaning; this will prevent grease and dirt from sticking to the surfaces.



The maximum load of 100 kg must not be exceeded!

Depending on the positioning of the 3-way control valve, cleaning can occur via:

- Washing by means of a versatile jointed hose with nozzle.
- Cleaning with flow-through cleaning brush.
- In middle position both outlets are open.



After the cleaning process has ended switch off the pump again.

The unit is equipped with an electronic timer which stops the pump automatically after 30 minutes. The timer range can be set between 5 and 60 minutes.



Note: Any parts susceptible to corrosion should not be left in the sink after cleaning.



As with all parts cleaners, **excess grease and oil** should be disposed of prior to washing. **Do not use this unit as a waste dump.** Do not introduce disinfectants, solvents, brake fluid, engine coolant, chlorinated, acidic or alkaline solutions into this system. **Do not add water.**



The **optimal temperature** for the activity of microorganisms and therefore for the breakdown of oil is **approx. 41 °C**. Therefore leave the **unit always switched on**.

For optimal activity of microorganisms and thus of the breakdown of oil, it is essential that the microorganisms have a supply of oxygen. This is why an **air sprinkler has to be permanently switched on**, which guarantees the required oxygen supply for the microorganisms. If the unit is switched off, or fails because of a defect, the result is that the microorganisms become inactive.



If the unit is to be idle for more than two weeks, it is recommended to turn the unit off. Make sure the surface of the liquid is not covered with oil. If necessary skim off or absorb any accumulation of oil.

7. Maintenance



Warning! Before beginning to work on fixtures, make sure that there is no electrical current. Pull the plug from the mains! Check that the unit has no current!

For maintenance purposes the table can be opened sideways. The sink will be kept into open position via sink rod, make sure the sink is lifted up to end position.



Maintenance position (table)

Aeration

The build-in aeration feature is vital to the performance of the bioremediation process. Therefore check weekly the air input, air bubbles should be visible at the surface of the liquid. If necessary clean or change the air sprinkler.

Fill Level

Monitor the fill level regularly by means of the markings on the wall of the container, because of liquid losses due to evaporation and manual take out. If the fill-up height falls below the minimum level, heating and pump will be switched off automatically for safety reasons, this will be indicated by flashing red LED. Ensure that float switch floats freely in the liquid.



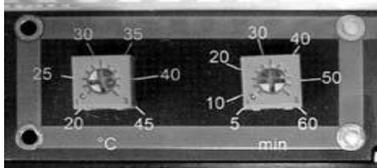
Maximum 100 l

Minimum 60 l



Setting the temperature and the pump running time

For the setting disconnect the device from the power supply and set the desired value



The temperature can be adjusted between 20 and 45 °C by turning the setting wheel. The running time of the liquid pump can be adjusted between 5 and 60 minutes by turning the setting wheel.

Filters

The washstand is equipped with three-part filtration system: a coarse filter on the surface of the sink, underneath a mesh filter for finer material or other impurities and then a magnet. It is recommended to clean these filters and the magnet outside the parts washer daily. Take the filters and the magnet out of the sink, wash out and clean with water. Underneath the sink a filter bag can be installed, check this regularly and empty or change if necessary.

For order/re-order:

Art. No.

74-1031 filterbag polypropylene, felt 5 µm

74-1032 filterbag polypropylene, felt 25 µm

74-1033 filterbag nylon 50 µm, re-useable

74-1034 filterbag nylon 100 µm, re-useable

Liquid Filter (optional)

The filter housing can be installed on the right back of the unit. It is to be checked weekly and if necessary changed. Release the filter cartridge by turning anti-clockwise. Remove the filter and put in a new one. When screwing on the filter cartridge take care that it fits correctly. Alternatively a reusable Nylon filter can be installed.

For order/re-order:

Art. No.

74-1035 replacement filter 100 µm (6 pack)

74-1036 replacement filter 200 µm (6 pack)

74-1037 Nylon filter support

74-1038 Nylon filter 350 µm

Drain flap

This unit is equipped with a flap located underneath the coarse filter and magnet to slow down evaporation, if too much evaporation occurs, verify that flap moves freely.

Annual maintenance

It is recommended that your Metaflux Washstand is inspected and cleaned annually to perform at optimal efficiency. Depending on the application non-digestible matter can accumulate as sludge at the bottom of the tank over time, which can negatively affect the bioremediation activity.

To facilitate the removal of the sludge unplug unit. Connect a hose to drain valve and fully open the valve, wait a few seconds and then close the valve. Repeat these steps 3 times to remove most of the sludge. Alternatively open the sink and empty the unit from all the cleaning solution using a hand pump until the sludge becomes visible.

If cleaning solution is still cleaning well, save it for re-use. Remove the sludge and clean the tank walls and pumps. After that refill the unit, turn it on and allow solution to warm-up to its proper working temperature of approx. 41 °C before cleaning parts .

Visually inspect pumps, tubing and connections. Replace parts that show excessive wear.

8. Notes for Waste Disposal

Cleaning of the parts takes place with an alkalescent, biodegradable, non-toxic cleaning agent in a warm aqueous solution. Used Metaflux washstand cleaning liquid can usually be added to your other oil-water waste (such as water soluble cutting fluids) for disposal. Taking into account local regulations, residual liquid can be supplied to a purification plant. The waste code numbers that are valid for the application can be extracted from the European Waste Directive and should be adhered to at all times.

9. Trouble Shooting Guide



Warning! Before beginning to work on fixtures, make sure that there is no electrical current. Pull the plug from the mains! Check that the unit has no current!

Sink fills up

Sink will fill up if the filters or magnet are dirty or clogged. Remove filters and clean all parts. Ensure the drain flap moves freely.

No or weak liquid flow from nozzle or flow-through brush

The rubber hose may be pinched along its length. Ensure the hose is not kinked or squeezed. Also, filter could be dirty or clogged, remove filter cartridge and replace with new one.

Cleaning pump does not work

Please check for blocked pump filter or filter cartridge. Check electrical connections. Check liquid level, pumps stops if level is low.

No more aeration

Aeration has stopped but air pump is still running.

- Check if the air hose is pinched somewhere along its length.
 - Check if the air diffuser is attached to the end of the air hose next to the pumps and clean or replace it if necessary.
 - Unplug the unit, remove the cover of control module and check whether the air hose is not disconnected from the air pump or pinched somewhere along its length.

No pump noise: check electrical connection, change pump if necessary.

No heating

The failure of the heater could have different causes:

1. The level is below minimum (indicated by red LED flashing): the heater will be stopped automatically.
2. Heater defect: check for electrical flux and connections. The resistance of the heater should be approx. 81 Ohm, if the value varies significant, the heater needs to be changed.
3. The high temperature switch is activated: Check for level and functionality of level switch. For reset unplug device, wait a short while and plug in again. If LED is still enlightend, there is an defect on temperature limiting switch or electrical board. .



Attention: the high limit switch can only be reset, if the temperature has fallen below approx. 40 °C.

Causes for the high limit switch release:

1. The aeration has stopped, because of low convection the temperature at the heater raised to much.
2. The level is to low and, due to a level sensor failure, the heater was not switched of.
3. The electronic board or temperature sensor are defect, please check the liquid temperature.



Attention: A reset is only possible after cooling down!

Solution does not clean well anymore

The bioremediation process may have been reduced or prevented by the introduction of inadequate substances or an unfavourable environment. Depending on the situation, replacing all or part of the cleaning solution to re-start the system may be required.

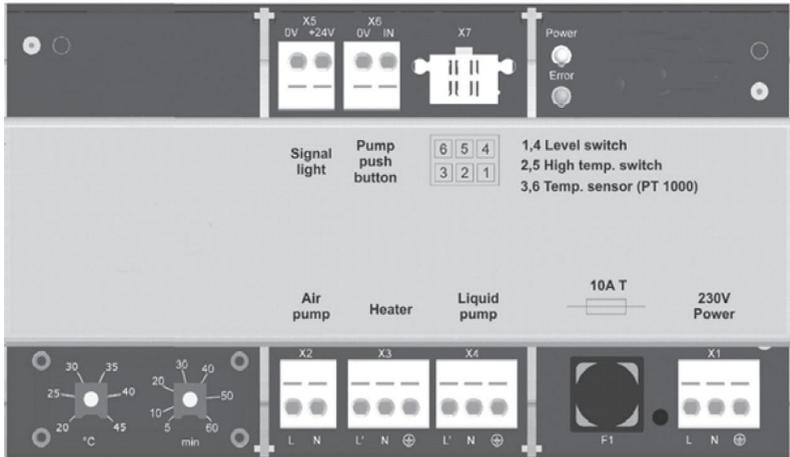
For a re-start take approx. 40 l **out of the tank and** replace by new Metaflux Washstand Cleaner. After approx. 5 days the liquid gains its original ability to break down oil and fat impurities. A restart with part of the used liquid will only be possible, if the microorganisms are not "poisoned" (for example by solvents, disinfectants or alkaline cleaner).

In case of doubt better change the complete liquid.

Solution Odour

It is normal that the solution may emit a apple odour at start-up. As oil and grease are introduced into the cleaning solution, this odour will diminish leaving only a faint, pleasant scent.

10. Wiring diagram



BELEGUNG

- X1 Power
- X2 Air pump
- X3 Heater
- X4 Liquid pump
- X5 Signal light
- X6 Pump push button
- X7 Sensor plug

Error

Red LED blinking: Level low, top up device

Red LED permanently on: Unplug device, check for possible overheating, check level switch and level, if necessary let cool down and plug in again for reset. If reset is not possible, there is an error in the temperature switch or control board.

11. Regulations

The units are subject to strict safety regulations. Therefore, faulty parts must be replaced by original spare parts only.

The Metaflux washstand 74-1000 comply with the CE criteria, see last side of this manual.



12. Terms of Guarantee

All Techno-Service GmbH articles are inspected and tested before shipment and are warranted to be free from any defect in material and faulty workmanship. Techno-Service GmbH gives guarantee of 12 months on the machines, except wear parts.

This warranty does not apply when normal maintenance is required, repairs or replacements have been made by anyone other than Techno-Service GmbH authorized personnel, and does not cover any damage caused by accidents, modifications, use of improper accessories, and abuse or misuse, this also includes the use of detergents, which have not been released from Techno-Service GmbH. If an examination shows that the malfunction was caused by defective material or faulty workmanship, Techno-Service GmbH will repair (or at our option, replace).

EG-Konformitätserklärung

im Sinne der EG-Richtlinie Maschinen 98/37/EG, Anhang II A

CE Declaration of Conformity

according to the EC Machinery Directive 98/37/EC, appendix II A

Déclaration de conformité CE

au regard de la directive européenne relative aux machines 98/37/CE, annexe II A

Dichiarazione di conformità CE

ai sensi della direttiva europea relativa alle macchine 98/37/CE, allegato II A

Wir / We / Nous / Noi:

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erklären hiermit, dass die Produkte/ declare that the products/ déclarons que les produits/ dichiariamo che i prodotti

METAFLUX Kompakt-Waschtisch
Artikel Nr. 74-1000

folgenden einschlägigen Bestimmungen entsprechen / comply with the following directives / sont conformes aux dispositions des directives des produits / sono conformi con le relative disposizioni delle direttive CE

Richtlinie / directive / 2006/42/EG (EEC)
directive / direttiva: Maschinenrichtlinie / Machinery Directive / Directive « Machines » / Direttiva
Macchine

2006/95/EG (EEC)
Niederspannungsrichtlinie / Low Voltage Directive /
Directive « Basse Tension » / Direttiva Bassa Tensione

2004/108/EG (EEC)
Elektromagnetische Verträglichkeitsrichtlinie / EMC Directive /
Directive CEM / Direttiva Compatibilità Elettromagnetica

und harmonisierte Normen / and harmonised reference standards / et les normes harmonisées / e norme armonizzate

EN ISO 12100-1:2010 EN ISO 12100-2:2010
EN 12921/1 + 2:2005 EN 60204-1:2007

Angewendete nationale Normen, Richtlinien und Spezifikationen insbesondere:
Employed national standards, directives and specifications, in particular: Normes
nationales, directives et spécifications appliquées, en particulier: Norme nazionali,
direttive e specifiche applicate, in particolare:

BGV A 1, BGV A 8

Die Erklärung verliert ihre Gültigkeit bei nicht bestimmungsgemäßer Verwendung und bei Änderungen an dem Produkt, die nicht mit dem Hersteller abgesprochen werden.

The declaration loses its validity if the device is not used as intended or if changes in the product are made that are not discussed with the manufacturer.

La déclaration perd sa validité lorsque le produit n'est pas utilisé comme prévu et en cas de modifications qui ne sont pas convenues avec le fabricant.

La dichiarazione perde la sua validità quando il prodotto non è utilizzato come previsto e in caso di modifiche non concordate con il costruttore.

Für die Zusammenstellung der technischen Unterlagen ist bevollmächtigt:

Institution authorized for compiling the technical documents:

institution autorisée à constituer le dossier technique:

istituzione autorizzata a mettere insieme i documenti tecnici:

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Bielefeld, Oktober / October / octobre / ottobre 2018



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