Operating Instructions

RETOCAST T
Dear Customer!

The RETOCAST T flame casting centrifuge is a space-saving benchtop unit with a double wall stainless steel housing and electronic timer for precision casting that is suitable for both precious and non-precious alloys and model casting. The proven technology of a centrifugal arm, in combination with different starting speeds and timer control ensure that alloys are cast even into the thinnest cavities within the casting ring, excluding metal waste. Any other use or usage beyond this scope is considered unintended use. The manufacturer shall not be responsible for any damages that may result thereby.

Prior to installation of the device operating instructions and especially the safety instructions must be read and followed by all personnel who use this device.

After having unpacked the device, please check carefully whether transportation damages of any kind have occurred. If that is the case, the carrier or manufacturer must be notified within 3 days. The company will not be responsible for any damages found after that.

These operating instructions must be read and followed by all personnel who use this device.

Store it at a safe place near the device. This documentation is protected by copyright.

Transmittal or reproduction of this document in whole or in part and disclosure of its contents is not permitted. If the operation manual gets lost an extra copy can be ordered from the manufacturer.
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# 1 Technical Description

## 1.1 Basic Equipment

- RETOCAST T Flame casting centrifuge with electronic timer
- 1 melting crucible (normal)
- 1 lid opener for manual opening

## 1.2 Special Accessories

- Order-No.: 20509 Melting crucible normal (5 pcs./pack)
- Order-No.: 20510 Melting crucible extra deep (5 pcs./pack)
- Order-No.: 20501 Melting kit (propane/oxygen)
- Order-No.: 20518 Melting kit (natural gas/oxygen)
- Order-No.: 20502 Gas economizer propane
- Order-No.: 20512 Gas economizer natural gas
- Order-No.: 20506 Melting device for noble metal and non-precious metal
- Order-No.: 20506.1 Melting device for noble metal
- Order-No.: 20514 Torch handle propane
- Order-No.: 20514.1 Torch handle natural gas
- Order-No.: 20507 Universal insert (propane/oxygen), for melting and soldering noble metal and non-precious metal
- Order-No.: 20507.1 Universal insert (natural gas/oxygen), for melting and soldering noble metal
- Order-No.: 20503 Solder insert, 0,5 mm nozzle
- Order-No.: 20504 Solder insert, 1,0 mm nozzle
- Order-No.: 20505 Mikroflam propane, incl. 3 precision needles, for soldering
- Order-No.: 20505.1 Mikroflam natural gas, incl. 3 precision needles, for soldering
- Order-No.: 20516 Solder insert propane, with 3 changeable nozzles
- Order-No.: 20516.1 Solder insert, natural gas, with 3 changeable nozzles
1.3 Device Components

1. Lid support
2. Control lamp „Ready for centrifugation“
3. Button „START“
4. Locking bolt
5. Locking block
6. Power switch
7. Selector switch for starting speed
8. Timer
9. Timer display
10. Emergency switch
11. Overload fuse for lid opener
12. Device’s fuse 4A – delayed action (2 pcs.)
13. Solder insert
14. Locating fork
15. Torch valve: oxygen
16. Torch valve: fuel gas
17. Torch handle
18. Pilot orifice
19. Securing spring for locating forks
20. Ignition flame controller
21. Bottle pressure gauge
22. Thumb screw for pressure setting
23. Bottle pressure display
24. Connecting nut for oxygen bottle
25. Connecting nut for gas bottle
26. Shut-off valve pressure reducer
27. Flashback and burst pipe preventer with hose coupling
28. Melting crucible holder
29. Casting mould table
30. Isolation on rear of mould
31. Counterweight
32. Toothed counter holder/snap-in hole
33. End stop curve for counterweight
34. Height adjustable casting mould table
Gas economizer

Pressure reducer

Interior of the unit
Torch handle natural gas

Torch handle propane

Flame adjustment

Gas bottle installation
The flame casting centrifuge is suitable for the following moulds:

<table>
<thead>
<tr>
<th>No.</th>
<th>Diameter [mm]</th>
<th>Steel cylinder</th>
<th>Length [mm]</th>
<th>Weight + / -10% [g]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30</td>
<td>yes</td>
<td>55</td>
<td>75</td>
</tr>
<tr>
<td>3</td>
<td>48</td>
<td>yes</td>
<td>55</td>
<td>200</td>
</tr>
<tr>
<td>6</td>
<td>65</td>
<td>yes</td>
<td>55</td>
<td>400</td>
</tr>
<tr>
<td>9</td>
<td>80</td>
<td>yes</td>
<td>55</td>
<td>600</td>
</tr>
<tr>
<td>12</td>
<td>95</td>
<td>no</td>
<td>75</td>
<td>950</td>
</tr>
</tbody>
</table>

Using other mould systems adjust the counterweight according to your own experience and after test trials, possibly referring to the weight of the standard rings.
## 1.4 Technical Data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line voltage</td>
<td>230 V/50-60 Hz</td>
</tr>
<tr>
<td>Current consumption</td>
<td>500 W</td>
</tr>
<tr>
<td>Height/width/depth</td>
<td>350(800)+550/710 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>44 kg</td>
</tr>
<tr>
<td>Speed</td>
<td>500 rpm</td>
</tr>
<tr>
<td>Mould size</td>
<td>1-12</td>
</tr>
<tr>
<td>Capacity:</td>
<td>- noble metal 130 g</td>
</tr>
<tr>
<td></td>
<td>- non-precious metal 60 g</td>
</tr>
<tr>
<td>Material</td>
<td>- noble metal/non-precious metal/model casting</td>
</tr>
<tr>
<td>Centrifugal time</td>
<td>programmable</td>
</tr>
<tr>
<td>Starting speeds</td>
<td>3</td>
</tr>
<tr>
<td>Sound level</td>
<td>≤ 70 dB(A)</td>
</tr>
<tr>
<td>Housing</td>
<td>stainless steel and white stove-enamelled steel</td>
</tr>
<tr>
<td>Order-No.:</td>
<td>10502</td>
</tr>
</tbody>
</table>

Made in Germany (Subject to modifications)
2 Safety Notes

2.1 General Safety Notes

- All equipment undergoes final inspection and testing before leaving our factory. However, if equipment is damaged during shipping or through any other circumstances, it must not be used in service. Please check the device regularly for damages. Damaged parts should be replaced immediately.

- All power/air/water/gas sources should be rated for the demands of the device as listed in the technical data sheets. Maximum ratings must not be exceeded. All VDE (Verein Deutscher Elektro-Ingenieure) standards should be followed. Equipment should be grounded according to standards.

- Adherence to valid regulations regarding necessary checks (e.g. according to Accident Prevention & Insurance or electrical equipment) is exclusively taken over by the buyer/user of this product.

- This device has been designated to be used only for its intended purpose. All other applications must be prohibited for safety reasons as otherwise the manufacturer’s warranty expires.

- The device should be set-up in a clean, well-ventilated room, if necessary under a hood.

- Supporting surfaces should be straight, flat and adequately stable.

- Don’t place anything on top of the machine.

- To avoid injury, appropriate protection should be worn (e.g. gloves, safety glasses, safety shoes, hearing protection etc.)

- If the machine is defective or working improperly it must be taken out of service. In case of further use of the machine the owner will be held responsible for any consequential damage.

- To prevent accidents from water, fire or explosion, all power/air/water/gas sources should be turned off after working hours and during breaks, and secured against unauthorized access.

- When carrying out maintenance works or repairs or when opening the device always turn off the main power switch and unplug the whole unit.

- Repairs should be carried out only by the manufacturer or by qualified and certified personnel appointed according to chapter 7 – warranty.

- In case of leaking water out of housing or tank shut down device and call service.

- Check all hose connections for leak tightness, if necessary tighten hose clamps again.
2.2 Specific Safety Instructions

- The RETOCAST T is a benchtop unit. Place the machine on a flat, level and stable surface so that the device won’t fall down from the surface in case of improper counterweight adjustment (unbalance).
- Please make sure that the device is only taken into operation with a closed lid.
- Always use pliers when inserting or taking out the mould or the melting crucible because of danger of being burnt.
- Never open lid before the centrifugal arm has totally stopped. Do not reach into running machine. Danger of injury.

2.3 Safety Instructions for handling of gases

**Warning:**

Propane is heavier than air and therefore, when accumulated it can catch fire.

- Don’t store any explosives, highly flammable or burnable materials in the work area.
- Be careful when handling gas and oxygen bottles. Don’t heat them up or throw them and take care that they won’t fall down.
- When working with gases it’s important that the necessary installation works are carried out by a gas fitter.
- Don’t touch or heat other parts and living beings than crucible and melting material with the flame.
- The torch has to be stored the way that it would be impossible that anything else catches fire.
- Always wear suitable goggles and gloves when working with the torch.
- Only connect gas type and gas connections according to operating instructions. Warning: Danger of explosion if improperly handled. Make sure that the gas connection is absolutely tight and check this regularly.
- Always close main valves at gas bottles and gas supply after melting procedure.
2.4 Safety Instructions for pressure reducer

- Parts in contact with oxygen must not come into contact with oil or grease.
- The relief valve adjustment must not be changed.
- Take care that sealing surfaces, connection seals and gauges are always in perfect condition.
- In case of failure take the pressure reducer immediately out of service and shut the gas bottle valve.
- Pressure reducers may only be used with appropriate gas type.
- Pressure reducers are to be used gas-specific for gas bottles with a max. filling pressure of 200 bar.
- Pressure reducers may not be modified without permission of the manufacturer and are to be used at the specified ambient temperature.
- Pressure reducers may not be operated with adapters between gas bottle valve and pressure reducer inlet.
- Improper use of the pressure reducer may result in damage, endangering users or other persons.
- Pressure reducers shall be used in compliance with the accident prevention regulations UVV for welding, cutting and allied processes (VGB15).
- Pressure reducers are subject to regular visual inspection. According to the Industrial Safety Regulations the commercial user is responsible for this.
3 Installation

The electrical equipment is being delivered fully installed. The sealed plug can be connected directly to the mains supply 230 V/16 A. For installation please refer to Safety Notes in chapter 2.

3.1 Gas Installation propane/oxygen

Note:
Properly arrange gas supply according to description. Fasten the screws tightly. Follow the safety instructions in chapter 2.

1. Clean the connectors of the propane gas bottle by means of oil-free compressed air prior to connection to the pressure reducer.
2. Briefly open bottle valve of the oxygen bottle prior to connection to the pressure reducer, in order to blow out impurities.
3. Check the gas bottle’s thread for damage.
4. Connect pressure reducer with connecting nuts (24)+(25) to the closed gas bottle valve and tighten with a flat wrench.
   (oxygen: right-hand thread; propane gas: left-hand thread)
5. Check whether the shut-off valve (26) is closed.
6. Completely unscrew T-screw for pressure adjustment (22) to completely relieve pressure.
7. Ensure gas-tight connection of the supply hose to the hose coupling (27).
8. Slowly open the gas bottle valve. Oxygen bottle pressure is indicated on the pressure gauge (21).
9. Use the T-screw (22) to adjust working pressure. The adjusted working pressure is indicated on the bottle’s pressure gauge (23).
10. Slowly open the shut-off valve (26) of the pressure reducer.
11. In case of free flow a pressure drop might occur. Use the T-screw (22) to readjust pressure.
Gas pressure settings according to chart:

<table>
<thead>
<tr>
<th>Gas Type</th>
<th>Pressure Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygene</td>
<td>2.5–3.0 bar</td>
</tr>
<tr>
<td>Propane</td>
<td>1.0–1.5 bar</td>
</tr>
<tr>
<td>Natural gas</td>
<td>depending on gas line 300 mbar–500 mbar</td>
</tr>
</tbody>
</table>

12. For bottle replacement unscrew the pressure reducer from the bottle valve. The pressure reducer must be depressurized to prevent damages!

### 3.2 Installation of gas supply natural gas/oxygen

1. Installation of the oxygen bottle according to parameters described in chapter 3.1.
2. Using natural gas, attach the fuel gas hose at the gas economizer directly to a fuel gas fitting (left-hand thread).

In Germany there’s no need for the customer to install a pressure reducer and a flashback preventer since this is already installed by the gasworks.

### 4 Operation

#### 4.1 Torch handling and gas adjustment

1. Open the valves at the propane and oxygen bottle or open natural gas supply. Pressure gauge (21) indicates the pressure.
2. Hold the torch handle (17) in your hand. If a gas economizer is available, take the torch off the locating fork (14) of the gas economizer. The locating fork (14) is unlocked by unlatching the securing spring (19).
3. Gas pressure settings with opened valves on the torch’s handle (15)+(16) according to chapter 3.1.
4. After finishing work close gas. Close bottle valve and shut-off valve (26). Ensure that the residual gas is completely discharged.
5. Completely unscrew T-screw for pressure adjustment (22) to completely relieve pressure.
4.2 Flame Adjustment

1. Ignite the flame at the tip of the solder insert (13) with a gas lighter.
2. Adjust the flame with the valves on the torch’s handle (15)+(16) until the flame is hissing and blue (refer to chapter 1.3 Flame adjustment).

4.3 How to ignite a torch using a gas economizer

1. Open ignition flame controller (20) and use a gas lighter to ignite the gas at the pilot orifice (18).
2. Ignite the torch at the pilot flame from below.

4.4 How to put the torch down again

1. Before putting down the torch again, close the fuel gas valve (16) and the oxygen valve (15) on the handle.
2. Close the valves at the propane and oxygen bottles or if applicable close the gas line.

4.5 Placing the torch on the holder of the gas economizer

1. Put the torch onto the holder (14). Press it down (14) until it’s secured by the clamp (19).
2. Don’t change the valves’ adjustment on the torch’s handle. The gas economizer eliminates repeated adjustment of the torch flame.
3. Before putting the torch onto the holder of the gas economizer close the fuel gas valve with the connecting nut (25) and the oxygen valve (15) on the torch’s handle.
4. Close the valves at the propane and oxygen bottles or if applicable close the gas line.

4.6 Casting Procedure

1. Open valves of gas and oxygen bottles (see chapter 1.3 Device Components).
2. Turn power switch (6) to position „I“.
3. After 15 seconds the lid opens.
4. Adjust the counterweight (31) for the moulds (sizes 1-12 are matching with the steel ring mould system). Adjust the mould size 1-12 and end-stop curve (33) the way that the rest hole (32) of the counterweight can slip into the nose of the stop curve (33).
5. Adjust the casting mould table (29) according to mould sizes 1-12. Adjust the height of the lever (34) so that the neck of the melting crucible is exactly aligned with the mould’s funnel.
6. Adjust starting speed, press switch (7):
   - „0“ = especially gentle start (for gypsum based investment material);
   - „I“ = gentle start (for noble metal);
   - „II“ = quick start (for non-precious metal).
7. Set centrifugal time with the keys (+) and (-), min. 20 sec.
8. Insert pre-heated melting crucible. (New melting crucibles should perhaps be glazed with melting powder before being used.)
9. Fill in weighed metal quantity (maybe use an alloy tray and add a little melting powder).
10. Take the torch up (according to chapter 4.1). Ignite and adjust the flame.
11. Heat the metal up to red heat. Keep a distance of at least 70 mm to the flame until it starts melting.
12. Use pliers to take the mould out of the furnace, put it onto the adjusted casting mould table (29). Slide the crucible forward.
13. Heat metal up to the casting temperature. (Some experience necessary: Please make some trial castings at different temperatures and reheating time.)
14. Start casting procedure: Close the lid and press key „START“ (3) in lid’s support (1) at the same time. The control lamp (2) shines, casting is started.
15. Turn the torch off and if applicable also the gas economiser (see chapter 4.4 und 4.5).
16. After the set time has elapsed (lid will unlock itself after 15 sec.), take out the mould with the casting object. If machine shall be stopped earlier: press the Mode key of the timer switch.
17. After finishing work turn power switch (6) off to „0“ and close gas and oxygen bottles.
## 5 Troubleshooting

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit doesn’t start.</td>
<td>a. Check the building’s main fuse. &lt;br&gt;b. Check the device’s fuse.</td>
</tr>
<tr>
<td>Burner bangs when gas supply is interrupted.</td>
<td>Check pressure at pressure minimizer. &lt;br&gt;Locating fork (14) of gas economizer is not fully pressed down → try to lower the lock. &lt;br&gt;Not enough oxygen pressure, flame comes back →</td>
</tr>
<tr>
<td>Burner’s tip is molten.</td>
<td>Not enough oxygen pressure. &lt;br&gt;Flame isn’t adjusted correctly, burner comes too close to the metal → Take care that the minimum distance is 60-80 mm.</td>
</tr>
<tr>
<td>Casting model is not fully filled up.</td>
<td>The metal is not liquid enough → no homogeneous melting. Check investment: casting channels, feeder and so on.</td>
</tr>
<tr>
<td>Metall won’t become liquid.</td>
<td>Maybe wrong burner → check gas pressure and the flames (see chapter 1.3).</td>
</tr>
<tr>
<td>Porous casting model structure.</td>
<td>Metal might be overheated. Melting time was too long → shorten melting time.</td>
</tr>
<tr>
<td>Loss in metal.</td>
<td>Crucible neck and mould funnel are not aligned → try extra deep melting crucibles (from about 40 g material). &lt;br&gt;Return spring at centrifugal arm might be broken → replace it. Centrifugal arm no longer low-friction → Contact customer service.</td>
</tr>
<tr>
<td>Centrifuge runs jerkily.</td>
<td>Adjust the counterweight so that it runs smoothly (see chapter 4.6).</td>
</tr>
<tr>
<td>Centrifugal process doesn’t start.</td>
<td>Check switch on lid, timer (8), device’s fuse (12) and power supply.</td>
</tr>
<tr>
<td>Lid doesn’t open.</td>
<td>Press overload protection (11) on the rear side of the device. Locking bolt (4) may be stuck or locking bolt’s support (5) has to be re-adjusted. Open lid by pressing the bolt back (4) when opening the lid use tools sent with the machine.</td>
</tr>
</tbody>
</table>
6 Maintenance

- Regularly check the device. Pay attention to visible damages to the housing, power cord or pressure tubing.
- Regularly clean or hoover the centrifuging chamber.
- Change isolation on rear of mould (30) when worn.
- Clean the housing regularly with a damp cloth or with REITEL stainless steel care spray.
7 Warranty

We, REITEL Feinwerktechnik GmbH, offer a 1 year’s warranty beginning from the proven date of purchase. This warranty covers all defects traceable to materials, design or workmanship. The following warranty regulations are applicable:

Within the warranty period Reitel Feinwerktechnik GmbH or an authorized distributor agrees at its sole option, to perform repair or replace this product at no charge covering all defects traceable to materials, design or workmanship. Warranty only applies to appropriate use and regular maintenance of this product according to the operating instructions. Claims under warranty are restricted to complementary performance. Additional claims, especially claims for indemnifications, are not covered by this warranty.

1. Warranty claims have to be addressed to the distributor the product was purchased from or directly to our service department.

Contact:

REITEL Feinwerktechnik GmbH
Senfdamm 20
49152 Bad Essen
Germany

Phone: +49(0)5472-9432-32 (Service Department)
Phone: +49(0)5472-9432-0 (Reception)
Fax-No: +49(0)5472-9432-40

2. In case of warranty claim application the sales receipt or your purchase invoice showing the date of purchase of the product and the serial number must be furnished. Securely pack and ship the device, freight charges prepaid, at your own risk to us, along with a report describing the defect. We reserve the right to decline warranty if this information has been removed or modified after purchase of the product or if they are not included in case of warranty claims.

3. Warranty repairs have to performed by REITEL Feinwerktechnik GmbH or by authorised distributors. Repairs performed by non-authorised companies will void the claim for refund since damages to the product resulting hereof are not covered by warranty.

4.
If the unit sent in for repair or replacement is still under the original warranty then warranty is to the end of the original 1 year warranty.

5. If the unit is destined to be operated in another country than originally intended and manufactured for, modifications to the product might be necessary to comply to special technical and/or safety standards of that specific country. Such modifications are no defects traceable to materials, design or workmanship and are therefore expressly excluded from warranty claims. Modification costs or damages arising from operation of the product under deviating conditions are not covered by warranty.

6. Exclusions from warranty:

− Service and maintenance work as well as repair and replacement of consumables according to our consumables’ list
− Transportation cost of the machine or installation and dismounting expenses incurred
− Damages due to use of the product other than for its intended purpose
− Damages due to faulty installation or insufficient maintenance of the product (e.g. decalcification)
− Damages due to natural disaster e.g. lightning, water, fire, act of nature beyond control, war, inadequate line voltage, insufficient ventilation, no decalcification, insufficient care and cleaning or non-adherence to operation and maintenance instructions according to the accompanying operation guide.
− Damage due to use of the product other than in accordance with the instructions provided by REITEL Feinwerktechnik GmbH;
− The warranty does not cover the cost of removal and replacement of parts and accessories, unless supplied as original equipment by REITEL Feinwerktechnik GmbH
− All kind of damages occurred not directly at the device as well as consequential damages (e.g. damages to furniture due to a lack of water, downtime of the machine, material, lost working hours, wages and other consequential damages).

This warranty shall be rendered null and void if:

− the product has been subject to any modification, repair or replacement other than as authorised by REITEL Feinwerktechnik GmbH
− the product is continued to be operated despite a functional defect
7.
The warranty is device specific and may be claimed, within the warranty period, by any person who has legally acquired the device.

8.
Consumables are excluded from warranty. Spare parts are subject to a warranty coverage of 6 months against all defects traceable to materials, design or workmanship according to these warranty regulations.

9.
Legal default claims on the part of the purchaser remain unaffected by this warranty.

10.
We reserve the right to charge a fee of 30 € if repair of the device is rejected and the device is destined to be sent back unrepaired.

11.
**Please note:**
Upon repair or replacement of this unit, personal data and settings might get lost or damaged. We don’t accept liability for all kind of data loss. The customer is advised to backup essential programs and data before sending for service.

12.
This warranty shall be interpreted in accordance with German law to the exclusion of UN sales law. Place of jurisdiction is our business location.

13.
If any provisions of this warranty are judged to be illegal or unenforceable, the continuation in full force and effect of the remaining provisions will not be prejudiced. The provisions of this warranty judged to be illegal or unenforceable shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable and to give effect to section 13 hereof.

14.
Should you need to borrow a device while your device is being repaired, please contact Messrs. REITEL or your distributor. These loans are a service for which availability cannot necessarily be guaranteed. After the warranty period, a free may be charged for loan equipment as well as for shipping and packaging.
8 Disposal Regulations

According to valid regulations our devices are properly disposed of according to B2B-Regulations for proper disposal. For further information please contact your local distributor.
## Spare Parts List

<table>
<thead>
<tr>
<th>Z.-Nr.: Dr.-No.:</th>
<th>Best.-Nr.: Ref.:</th>
<th>Menge Qty.</th>
<th>ME Unit</th>
</tr>
</thead>
</table>
| E60938         | Buchse, incl. Achse für Scharnier  
Jack incl. axle for | 2 | Stck piece |
| E60920         | Dichtung-Gummi  
Rubber sealing | 1 | Satz set |
| E71114         | Druckfeder und Teflongleitscheiben  
Compression spring and slip washers | 1 | Stck piece |
| E60312         | Feder für Verriegelungsboizen  
Spring for locking bolt | 1 | Stck piece |
| E60959         | Filzgleiter 2 Stück im Pack  
Felt glider 2 pcs./pack | 2 | Stck piece |
| E70496         | Gerätestecker mit Sicherungshalter  
Plug with fuse holder | 1 | Stck piece |
| E60325         | Griff inclusive Scheiben  
Handle incl. discs | 1 | Stck piece |
| E60415         | Gummi-Puffer (4 Stück/Pack)  
Rubber-feet (4 pcs./pack) | 1 Pack |
| E60434         | Halteblech für Gassparer  
Support plate for gas economizer | 1 | Stck piece |
| E71155         | Heber für Muffelhöhenverstellung  
Lever for adjusting the mould's height | 1 | Stck piece |
| E71160.5       | Knickarm Baugruppe komplett (Teil von E71160)  
Articulated arm, complete (part of E71160) | 1 Satz set |
| E60921         | Leuchte grün  
Green lamp | 1 | Stck piece |
| E71100         | Knopf für Muffelhöhenverstellung (rot)  
Red button for mould's height adjustment | 1 | Stck piece |
| E60430         | Kondensator 4,5µF  
Condenser 4,5µF | 1 | Stck piece |
| E61543.1       | Kondensator 8µF (ab No.8118357)  
Condenser 8µF (from no.8118357) | 2 | Stck piece |
| E62724         | Magnetspule Deckelöffner  
Solenoid coil cover opener | 1 | Stck piece |
| E60940         | Mikroschalter mit Hebel  
Micro switch with lever | 1 | Stck piece |
| E71158         | Muffelaufgabe, incl. E60396, Federn, Scheiben, Muttern  
Mould's tray, incl. E60396, springs, washers, nuts | 1 | Stck piece |
| E60396         | Muffelrückenisolierung  
Mould's back isolation | 1 | Stck piece |
| E61437         | Not Aus mit Kontaktblöcken  
Emergency switch with contact blocks | 1 | Stck piece |
| E60383         | Profilgummi  
Outline rubber | 1 | Stck piece |
| E62146         | Relais 230V mit Sockel  
Relay 230V with socket | 1 | Stck piece |
| E76161         | Riegelblock für Deckelverriegelung, zzgl. E60974  
Locking bolt for lid locking, plus E60974 | 1 | Stck piece |
<table>
<thead>
<tr>
<th>Artikelnummer</th>
<th>Artikelbeschreibung</th>
<th>Stückzahl</th>
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</thead>
<tbody>
<tr>
<td>E60354</td>
<td>Riemenscheibe Motor Band pulley for motor</td>
<td>1</td>
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<tr>
<td>E71112</td>
<td>Rückholfeder mit Schutzhülse Return spring with protection sleeve</td>
<td>1</td>
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<tr>
<td>E60648</td>
<td>Schalter beleuchtet grün Green illuminated switch</td>
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<tr>
<td>E71160</td>
<td>Schleuderarm komplett (incl. Gewicht) Ret. T/TE Centrifugal arm, complete (incl. counterweight) Ret. T/TE</td>
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<tr>
<td>E60352</td>
<td>Schleudermotor Centrifugal motor</td>
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<tr>
<td>E71107</td>
<td>Schmelzmuldenhalter Crucible holder</td>
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<tr>
<td>E60650</td>
<td>Schutzkappe für Schalter se8 Protective cap for switch se8</td>
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<tr>
<td>E70493</td>
<td>Sicherung Fuse</td>
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<tr>
<td>E76001</td>
<td>Spulenhalter für Magnetventil (Zusammenbau) Coil holder for solenoid</td>
<td>1</td>
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<tr>
<td>E60377</td>
<td>Taster Orange Orange push button</td>
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<tr>
<td>E71156</td>
<td>Tiegelaufnahme Crucible's support</td>
<td>1</td>
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<tr>
<td>E60974</td>
<td>Türöffner Stößel, zzgl. E76161 Door opener pin, plus E76161</td>
<td>1</td>
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<tr>
<td>E60395</td>
<td>Überstromschutzschalter 0,8 A Overcurrent protection switch 0,8 A</td>
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<tr>
<td>E60894</td>
<td>Unterlegscheiben 4 Stück im Pack Washers 4 pcs./pack</td>
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<tr>
<td>E60311.1</td>
<td>Verriegelungsbaugruppe komplett Complete locking unit</td>
<td>1</td>
</tr>
<tr>
<td>E60311</td>
<td>Verriegelungsbolzen inclusive Zubehör Locking bolt incl. accessories</td>
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<tr>
<td>E71105</td>
<td>Verschlußkappe Lock cap</td>
<td>1</td>
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<tr>
<td>E60421</td>
<td>Wahlschalter I-0-II Selector switch I-0-II</td>
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<tr>
<td>E60374</td>
<td>Zeitrelais Time relay</td>
<td>1</td>
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<tr>
<td>E60376</td>
<td>Zeitschaltuhr Timer</td>
<td>1</td>
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<tr>
<td>E71118</td>
<td>Zugfeder VA Tension spring, stainless steel</td>
<td>1</td>
</tr>
<tr>
<td>E70481</td>
<td>Zuleitung mit Stecker und Gerätekupplung Feed with plug and coupling</td>
<td>1</td>
</tr>
</tbody>
</table>
EG-Konformitätserklärung
EC-Conformity Declaration
CE-Déclaration de Conformité

im Sinne der EG-Richtlinie 2006/42/EG über Maschinen (Anhang II A)
according to Machinery Directive 2006/42/EC (Appendix II A)
aus sens de la Directive Machines 2006/42/CE (Annexes II A)

Name und Anschrift des Herstellers/Name and address of manufacturer/Nom et adresse du fabricant:

Reitel Feinwerktechnik GmbH
Senfdamm 20
46152 Bad Essen

Diese Erklärung bezieht sich nur auf die Maschine in dem Zustand, in dem sie in Verkehr gebracht wurde; von Endnutzer nachträglich angebrachte Teile und/oder nachträglich vorgenommene Eingriffe bleiben unberücksichtigt. Die Erklärung verliert ihre Gültigkeit, wenn das Produkt ohne Zustimmung umgebaut oder verändert wird. /This declaration relates exclusively to the machinery in the state in which it was placed on the market and excludes components which are added and/or operations carried out subsequently by the final user. This declaration will become invalid if any unauthorised modification is made to the product. /Cette déclaration concerne exclusivement les machines dans l'état dans lequel elles ont été mises sur le marché et exlud des composants ajoutés et/ou les opérations effectuées par la suite par l'utilisateur final. La présente déclaration perd sa validité si des modifications non-autorisées ont été apportées à la machine.

Hiermit erklären wir, dass die nachstehend beschriebene Maschine/We hereby declare that the machine described

Produktbezeichnung/Product name/Nom du produit: Gusschleuder/
Flame casting centrifuges/
Fronde électrique

Typenbezeichnung/Type/Type: RETOCAST T


Angewandte harmonisierte Normen/Harmonised standards applied/Nommes harmonisées appliquées:

EN 12100:2010
EN 60204-1:2006
EN 61000-6-1:2007
EN 61000-6-3:2007

Bevollmächtigter für die Zusammenstellung der relevanten technischen Unterlagen/Representative authorised
to compile the relevant technical documentation/Personne autorisée à constituer la documentation technique

Daniel Reitel
Reitel Feinwerktechnik GmbH
Senfdamm 20
46152 Bad Essen

06.02.2014

Ort, Datum/Place, Date/Lieu, Date
Daniel Reitel, Geschäftsführender Gesellschafter/Managing Director/Directeur Gérénal
Unterschrift/Signature/Signature
We manufacture in compliance with Quality Management ISO 9001:2008 incorporating established standards.