ROTFIL Group’s international sales network continues to expand globally and with strategic focus on the emerging Asian and Chinese markets.

ROTFIL has a capillary worldwide distribution network ranging, from Australia to Central North and South America.

Growth trend on foreign markets is consistently positive, with competitiveness sustained by the assurance of quality.

The worldwide sales prestige earned by ROTFIL is also due to the development of solutions that meet production standards and international regulations, as has been proven by a wide range of product certifications, including VDE, UL, CSA.

ROTFIL guarantees maximum sales collaboration with the client by developing made-to-measure samples and prototypes.

A fundamental plus is product delivery speed through automated warehouses that handle daily dispatch to all parts of the world.
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# Rollmax 1.8 x 3.2

**Coil heater with flat cross section**

**Specifications**
- **Sheath material**: Stainless steel
- **Connection head dimensions**: Ø 5.5 x 16.5
- **Unheated Length UL**: 45 mm
- **Length tolerance unheated zone**: ± 5%, least ± 2 mm
- **Length tolerance heated zone**: ± 3%
- **Minimum inner bending radius**: 4 mm
- **Cable Length**: 1mt (Brown glass silicon sleeve)
- **Standard Wattage tolerance (cold)**: ± 10% (Different tolerances available upon request)
- **High Voltage strength**: 1000V before coiling - 800 V after coiling

<table>
<thead>
<tr>
<th>Total length L [mm]</th>
<th>Wattage [W] at 230 V</th>
<th>without Thermocouple part number</th>
<th>unheated length UL [mm]</th>
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<td>SPPR000008</td>
<td>45</td>
</tr>
</tbody>
</table>

**Other Watts and Lengths Available Upon Request (Until 3000 mm)**

### Rollmax 2.2 x 4.2

**Coil heater with flat cross section**

**Specifications**
- **Sheath material**: Stainless steel
- **Connection head dimensions**: Ø 7.5 x 23.5 mm
- **Unheated Length UL**: 45 mm
- **Length tolerance unheated zone**: ± 5%, least ± 2 mm
- **Length tolerance heated zone**: ± 3%
- **Minimum inner bending radius**: 4 mm
- **Cable Length**: 1mt (Brown glass silicon sleeve)
- **Standard Wattage tolerance (cold)**: ± 10% (Different tolerances available upon request)
- **High Voltage strength**: 1000V before coiling - 800 V after coiling

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<td>SPRC000012</td>
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</table>
**Specifications**

- **Sheath material**: Stainless steel
- **Connection head dimensions**: Ø 7.5 x 23.5 mm
- **Unheated Lenght**: UL 45 mm
- **Length tolerance unheated zone**: ± 5%, least ± 2 mm
- **Length tolerance heated zone**: ± 3%
- **Minimum inner bending radius**: 4 mm
- **Cable Lenght**: 1mt (Brown glass silicon sleeve)

**Standard Wattage tolerance (cold)**

- ±10% (Different tolerances available upon request)
  - 1000V before coiling - 800 V after coiling

**Total length L[mm]** | **Wattage at 230 V [W]** | **Without Thermocouple p.n.** | **With Thermocouple p.n.** | **Unheated length UL [mm]**
---|---|---|---|---
250 | 125 | SRLX000001 | SRLC000001 | 45
300 | 150 | SRLX000003 | SRLC000003 | 45
350 | 175 | SRLX000005 | SRLC000005 | 45
400 | 200 | SRLX000007 | SRLC000007 | 45
450 | 225 | SRLX000009 | SRLC000009 | 45
500 | 250 | SRLX000010 | SRLC000010 | 45
550 | 300 | SRLX000013 | SRLC000013 | 45
600 | 350 | SRLX000015 | SRLC000015 | 45
650 | 400 | SRLX000017 | SRLC000017 | 45
700 | 450 | SRLX000019 | SRLC000019 | 45
750 | 500 | SRLX000020 | SRLC000020 | 45
800 | 550 | SRLX000021 | SRLC000021 | 45
850 | 600 | SRLX000022 | SRLC000022 | 45
900 | 650 | SRLX000023 | SRLC000023 | 45
950 | 700 | SRLX000024 | SRLC000024 | 45
1000 | 750 | SRLX000025 | SRLC000025 | 45
1050 | 800 | SRLX000026 | SRLC000026 | 45
1100 | 850 | SRLX000027 | SRLC000027 | 45
1150 | 900 | SRLX000028 | SRLC000028 | 45
1200 | 950 | SRLX000029 | SRLC000029 | 45
1250 | 1000 | SRLX000030 | SRLC000030 | 45
1300 | 1050 | SRLX000031 | SRLC000031 | 45
1350 | 1100 | SRLX000032 | SRLC000032 | 45
1400 | 1150 | SRLX000033 | SRLC000033 | 45
1450 | 1200 | SRLX000034 | SRLC000034 | 45
1500 | 1250 | SRLX000035 | SRLC000035 | 45
1550 | 1300 | SRLX000036 | SRLC000036 | 45
1600 | 1350 | SRLX000037 | SRLC000037 | 45
1650 | 1400 | SRLX000038 | SRLC000038 | 45
1700 | 1450 | SRLX000039 | SRLC000039 | 45
1750 | 1500 | SRLX000040 | SRLC000040 | 45
1800 | 1550 | SRLX000041 | SRLC000041 | 45
1850 | 1600 | SRLX000042 | SRLC000042 | 45
1900 | 1650 | SRLX000043 | SRLC000043 | 45
1950 | 1700 | SRLX000044 | SRLC000044 | 45
2000 | 1750 | SRLX000045 | SRLC000045 | 45
2050 | 1800 | SRLX000046 | SRLC000046 | 45
2100 | 1850 | SRLX000047 | SRLC000047 | 45
2150 | 1900 | SRLX000048 | SRLC000048 | 45
2200 | 1950 | SRLX000049 | SRLC000049 | 45
2250 | 2000 | SRLX000050 | SRLC000050 | 45
2300 | 2050 | SRLX000051 | SRLC000051 | 45
2350 | 2100 | SRLX000052 | SRLC000052 | 45
2400 | 2150 | SRLX000053 | SRLC000053 | 45
2450 | 2200 | SRLX000054 | SRLC000054 | 45
2500 | 2250 | SRLX000055 | SRLC000055 | 45
2550 | 2300 | SRLX000056 | SRLC000056 | 45
2600 | 2350 | SRLX000057 | SRLC000057 | 45
2650 | 2400 | SRLX000058 | SRLC000058 | 45
2700 | 2450 | SRLX000059 | SRLC000059 | 45
2750 | 2500 | SRLX000060 | SRLC000060 | 45
2800 | 2550 | SRLX000061 | SRLC000061 | 45
2850 | 2600 | SRLX000062 | SRLC000062 | 45
2900 | 2650 | SRLX000063 | SRLC000063 | 45
2950 | 2700 | SRLX000064 | SRLC000064 | 45
3000 | 2750 | SRLX000065 | SRLC000065 | 45

*TC* type J ungrounded
**Rollmax 3 x 3**
with and without thermocouple

**Rollmax 2,5 x 4**
with and without thermocouple

**Rollmax Ø 3 - Ø 3,3 - Ø 3,7 - Ø 4**
with and without thermocouple

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**Coil heaters with square/flat/round cross section**

**Specifications**
- **Sheath material**: Stainless steel
- **Connection head dimensions**: see page 11
- **Unheated length UL**: upon request
- **Unheated length tolerance**: ± 5%, at least ± 2 mm (different tolerances available upon request)
- **Heated length tolerance**: ± 3% (different tolerances available upon request)
- **Minimum inner bending radius**: 4 mm
- **Cable protections/options**: see page 12
- **Standard Wattage tolerance (cold)**: ± 10% (different tolerances available upon request)
- **High Voltage strength**: 1000 V before cooling – 800 V after cooling (for Ø 3,7mm 1500 V available upon request)
- **Max supply voltage**: 260 V
- **Max straight length**: 3000 mt

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**Maxi Rollmax 4 x 8.5**
Coil heater with flat cross section - SPECIAL APPLICATION FOR DIE CASTING NOZZLES

**Specifications**
- **Sheath material**: Stainless steel
- **Connection head dimensions**: Ø 12,5 x 45 mm
- **Unheated length**: upon request
- **Unheated length tolerance**: ± 5%, at least ± 2 mm (different tolerances available upon request)
- **Heated length tolerance**: ± 3% (different tolerances available upon request)
- **Minimum inner bending radius**: 10 mm
HOW TO ORDER ROLLMAX

STRAIGHT

TOTAL STRAIGHTLENGTH L: ............................................................
UNHEATED LENGTH UL: ......................................................
CABLE LENGTH C: .................................................................
WATT: ..........................................................................
VOLT: ...........................................................................
CABLE OPTION SEE PAGE 12
CABLE PROTECTION SEE PAGE 12

□ CGS □ CGM □ CTF □ CFL □ CMR

SECTION  | WITHOUT TC | WITH TC
----- | ------- | -------
3 x 3 | AVAILABLE | AVAILABLE
3.3 x 3.3 | AVAILABLE | AVAILABLE
1.8 x 3.2 | AVAILABLE | NOT AVAILABLE
2.2 x 4.2 | AVAILABLE | AVAILABLE
2.5 x 4 | AVAILABLE | AVAILABLE
Ø 3 | AVAILABLE | AVAILABLE
Ø 3.3 | AVAILABLE | AVAILABLE
Ø 3.7 | AVAILABLE | AVAILABLE
Ø 4 | AVAILABLE | AVAILABLE

SECTIONS WITH THERMOCOUPLER
TC type J □ K □

COILED

INTERNAL DIAMETER ID: ......................................................
COILED LENGTH CL: ............................................................
NUMBER OF PIECES: ............................................................

unheated length UL :................. (STANDARD 45 MM)

COILING OPTIONS

□ UNIFORM COIL
Total no of coils ............

□ COMPACT COILING

□ CUSTOMIZED COILING
Total no of coils ............

CABLE EXIT OPTIONS

□ S RADIAL
□ R TANGENTIAL
□ N AXIAL 45°
□ L AXIAL 90°
Mini RollMax

Mini Coil Heaters

**minirollmax 1.3 x 2.3**

**minirollmax Ø 1.4**

**minirollmax Ø 1.8**

**Specifications**

- **Sheath material:** CrNi Steel or Nickel
- **Resistive wire:** NiCr 8020
- **Max supply voltage:** 260V
- **Watt tolerance (cold) standard:** ± 10% (other tolerances upon request)
- **High voltage strength (cold):** 800V
- **Max total straight length L:** 3000 mm
- **Unheated Length tolerance:** ± 5%, at least ±2 mm
- **Heated Length tolerance:** ± 3%
- **Minimum bending radius:** 3 mm
- **Cable connector** see page 11

**CAN BE SUPPLIED STRAIGHT “U” BENDED OR COILED**

**“U” bended with equal unheated lengths**

Straight length L:= 2(UL+HL)

```
C  UL  HL
```

**“U” bended different unheated lengths**

Straight length L:= UL1+UL2+2HL

```
C  UL1  HL
    UL2
```

**COILED equal unheated lengths**

```
C  UL  W
```

**COILED different unheated lengths**

```
C  UL1  W
    UL2
```
mini rollmax 1,3 x 2,3 with axial screw clamping band
for PET preform nozzles

Specifications

PTFE supply cables length : C=............(STD 1000mm)
INTERNAL DIAMETER ID: .....................(STD 19.05mm and 22.20mm)
CLAMPING BAND WIDTH W:...................(STD 30.05mm and 40mm)
Watt
Volt
Sheath material of the Mini Rollmax (CrNi steel or Ni) ..............

Unheated Lenght: UL 1:....... UL 2:....... 
Cable connector see page 11
**Formax** is the ultimate answer in the field of precision heating of hot runner nozzles. Formax is based on the established system of minirollmax, with an individual slot on a turning part for the realization of an optimal temperature distribution. A sheath surface up to 12.5 W/cm² and a minimum thickness of the wall of 1.5 mm, makes formax a very efficient heater and open a new dimension of electrical heating.

- Pressed-in coil heater with user-defined groove profile
- Reproducible power distribution
- Minimal wall thickness for reduced clearances
- Lowest power available in the middle of a nozzle
- Brass as cylinder raw material
- See connection options in next page

**Specifications**

- Bush material: brass
- Internal diameter upon request (from 6.0 to 40 mm)
- Min wall thickness of brass 1.5 or 2.00 mm
- Tolerance of internal diameter ± 0.05 mm
- Bush length upon request (from 25 to 150 mm)
- Bush length tolerance ± 0.5 mm
- Sheath material of the incorporated rollmax: Nickel/Stainless steel
- Max surface temperature: 650°C
- Max watt density 12.5 W / sq cm
- Insulation resistance (cold): >10 M Ohm at 500 V DC
- External Thermocouple coiled upon request
- Other characteristics see page 8
cable options

PTNI: PTFE/NIKEL: MAX 260°

AVAILABLE COLOURS
- Brown
- Orange
- Grey

GLTE: GLASS-TEFLON/ NIKEL: MAX 300°

cable protection options

CGS
PTFE insulated Nickel cables protected by a strong, flexible, thick glass / silicone sheath

CGM
PTFE insulated Nickel cables protected by a flexible metal braid

CTF
PTFE insulated Nickel cables protected by a flexible metal

CFL
PTFE insulated Nickel cables non protected

CMR
Specific solution for Mini Rollmax with two single adapters
SC SEALING insulation system

Resistant to high temperatures (working temperature 400°C)

Since over 20 years an inimitable feature of Rotfil heaters.

SC SEALING crystal compound is a unique sealing which guarantees the maximum insulation and the longest life of the heaters also in extreme working conditions. SC SEALING represents a durable and efficient barrier preventing any contamination to get inside the heater.

Moisture, water, acid, oils, gas etc cannot get through the SC barrier whose main characteristic is the perfect adhesion to the metallic and ceramic walls inside the heater and can withstand to working temperatures up to 400°C.

Before applying the adaptor the ROLLMAX with SC Sealing stay 24 hours in condensing humidity test cabinet and after are tested at 100 G Ohm insulation.

Standard on all Mini Rollmax 1.3x2.3, - 1.4 - 1.8 available upon request on all other cross sections.

See page 11 for more details.
**standard clamping band**

**rollmax with reflector tube**

The heating elements with reflector tubes “easymax” are characterized by extreme mechanical precision and a thermal profile which corresponds perfectly to the requirements of each specific application.

**Technical data:**

Material of the reflector tube NiCr steel  
Applicable to all Rollmax and mini Rollmax cross sections  
Internal diameter, length, watt, volt, upon specific request of the customer  
Very tight internal diameter tolerance also (+/-0.02)  
Possibility to make also very long reflector tubes (500 mm max)  
Perfect contact of the Rollmax with the inner side of reflector tube  
Possibility to coil together with the Rollmax also an external T/C
Coiling Machine for Rollmax

This tool is available from stock.

It allows to coil ROLLMAX heaters precisely and easily preserving all electrical characteristics of the heaters as well as a good contact between the internal surface of the ROLLMAX and the surface of the cylinder to be heated. It also foresees a screw device that with the help of a graduated scale which allows a precise spacing of the coils and the desired orientation of the cable outlet. The machine is supplied together with an instruction manual which allows immediate and easy operation.

These instructions are also available on our internet web page under “Rollmax” section.

In case of order please specify the diameter of cylinder on which the ROLLMAX must be assembled. Every diameter requires a specific mandrel.