Bogotá, 01 de julio del 2022

SEÑORES:
Universidad de Nariño
contratacion@udenar.edu.co
Pasto

ASUNTO: OBSERVACIONES AL INFORME DE EVALUACIÓN PROCESO DE CONVOCATORIA PÚBLICA No. 222749

Objeto: CONTRATAR LA ADQUISICIÓN DE EQUIPOS PARA LOS LABORATORIOS DE FÍSICA, BIOLOGÍA Y QUÍMICA DE LA UNIVERSIDAD DE NARIÑO SEDE PASTO

Cordial saludo,

Estando dentro del plazo establecido por la entidad en los documentos del proceso, por medio de la presente, atentamente nos permitimos presentar las siguientes observaciones al informe de evaluación de las propuestas del proceso de la referencia:

1. **FRENTE A LA PROPUESTA PRESENTADA POR NOSOTROS INSTRUMENTACIÓN Y SERVICIOS SAS**

1.1. Manifiesta la entidad en su informe de evaluación incial lo siguiente frete a nuestra propuesta:

Caracteristicas Tecnicas

Temperatura plancha:	50°C a 350°C
Rotación:	100 a 2000 RPM
Control rotación y temperatura:	Digital microprocesado PWM con control de 1 a 99% en la pantalla
Capacidad de agitación:	Hasta 20 litros de agua
Plancha calentadora:	En aluminio 6351 - diámetro de 200mm
Gabinete:	En acero carbono con tratamiento anti-corrosivo y pintura lisa
Dimensiones:	Ancho 210 x Profundidad 250 x Alto 130 mm
Peso:	6 KG
Potencia:	400 watts
Tensión:	220 volts o 127 Volts
Acompaña:	- 01 Barra Magnética revestida de teflón - 02 Fusibles extras - Manual de instrucciones y Témino de garantía

Aunado a lo anterior, se realizó una observación por parte de un oferente al Proyecto de Pliego de Condiciones, solicitando la modificación a esta especificación técnica:

5. ITEM 8) AGITADOR MAGNÉTICO CON CALENTAMIENTO: Permitir que el el display indique el porcentaje de velocidad y de temperatura utilizado, el cual puede ser usado como referencia del proceso, proporcionando practicidad.

La respuesta por parte del Comité Técnico ante esta observación fue la siguiente:

Respuesta a Observación No. 5: No ha lugar. Se mantienen las especificaciones técnicas en los términos de la convocatoria establecidas en el proyecto del pliego de condiciones.

Finalmente, y en ese orden de ideas, la propuesta remitida por el oferente **INSTRUMENTACIÓN Y SERVICIOS S.A.S.**, se rechaza con base en la siguiente causal, contenida en los pliegos de condiciones:

16.2.18. CAUSALES DE RECHAZO

A. Si dentro del término establecido por la Universidad en el pliego, para subsanar la ausencia o falta de requisitos, el proponente que debiera hacerlo no lo hiciera o realiza la subsanación de forma incorrecta o no allegue los documentos y/o aclaraciones requeridas.

Al respecto, manifestamos que realizamos la revisión de la totalidad de las especificaciones de la ficha técnica solicitadas por la entidad en donde solicita que el agitador magnético con calentamiento cuente con las características establecidas en el numeral 8. Especificaciones técnicas.

AGITADOR MAGNÉTICO CON CALENTAMIENTO	• Rango de agitación: 100 a 2000 rpm • Rango de Temperatura: 50 a 350 °C • Display indicador de RPM y temperatura. • Ajuste de RPM y temperatura • Volumen de agitación: Hasta 20L • Plancha en aluminio o cerámica • Voltaje: 110 V • Mínimo una barra magnética

Según la especificación del pliego de condiciones definitivo no indicaba que el Display deba indicar el valor de las RPM y TEMPERATURA °C ó °F.

El instrumento ofertado especifica que contiene una pantalla o Display, en la cual se indica la VELOCIDAD y TEMPERATURA en PORCENTAJES, **lo cual aumenta la precisión de las condiciones de trabajo de la plancha de agitación con calentamiento, a su vez hace mucho más fácil reproducir dichas condiciones, por cualquier usuario en los laboratorios de la Universidad**. **Esto gracias al microprocesador de modulación por pulso que posee y que no se logra con perillas o botones que controlan resistencias variables**. Adicionalmente se proporcionará una tabla de conversión de **PORCENTAJE** a VELOCIDAD (RPM) y **PORCENTAJE** a TEMPERATURA (ºC), que aumentará la practicidad en los procesos que se realizan dentro de los laboratorios de la Universidad.

Por lo tanto, le solicitamos a la entidad habilitar técnicamente nuestra propuesta toda vez que está demostrado que el equipo ofertado cumple con la totalidad de los requisitos exigidos en el pliego de condiciones definitivo.

2. FRENTE A LA PROPUESTA PRESENTADA POR EL PROPONENTE SUMINISTROS DE LABORATORIO KASALAB S.A.S

2.1. Al revisar la propuesta presentada por el proponente **SUMINISTROS DE LABORATORIO KASALAB S.A.S** pudimos evidenciar unas inconsistencias en las especificaciones técnicas indicadas en la ficha técnica del **ÍTEM 8 AGITADOR MAGNÉTICO CON CALENTAMIENTO** ofertado por este proponente el equipo con marca **SCILOGEX** - Referencia: **SCI380HS-Pro**, frente a la información técnica oficial que se encuentra en la página Web del fabricante.

Instrumentación Y Servicios S.A.S ingresó el día 30 de junio de 2022 a las 12:00 PM., a la página web del fabricante **Scilogex:** **https://www.scilogex.com/scilogex-sci380h-pro-lcd-digital-5-6-x-5-6-in-hotplate-ceramic-plate.html** y se evidenció que la ficha técnica presentada por el oferente mencionados anteriormente **(Imagen No.1)** no corresponde con la información registrada en los manuales **(Imagen No.2)** y fichas técnicas **(Imagen No.3)** a la del fabricante, ya que el equipo solicitado por la entidad es de **20L** de capacidad y el presentado corresponde a una capacidad de **5L** de igual manera el equipo solicitado requiere un rango de velocidad de **100-2000RPM** y el equipo presentado por el oferente es de **200-1500 RPM.**

SCILOGEX

Características del agitador magnético digital con placa calefactora LCD SCI380HS-Pro:

Dimensión de la placa de trabajo	140x140mm
material de la placa de trabajo	Cubierta de aluminio con revestimiento cerámico
Tipo de motor	Motor CC sin escobillas
Potencia de entrada del motor	2.4W
Potencia de salida del motor	1.8W
Energía	510W
Salida de calefacción	500W
Voltaje	110V 60Hz
Posiciones de agitación	1
máx. cantidad de agitación	20L
máx. barra magnética[longitud]	50 mm
Rango de velocidad	20-2000rpm
Pantalla de velocidad	LCD
Pantalla de temperatura	LCD
Rango de temperatura de calentamiento	Tª ambiente +5℃ a 380℃

Imagen 1 Ficha técnica presentada por Kasalab

2.2 Technical Parameters

Table 2.2

Items	SCI380HS-Pro	SCI380H-Pro	SCI6-Pro
Work plate dimension	140x140mm	140x140mm	140x140mm
Plate material	Aluminum with	Aluminum with	Aluminum with

5

	ceramic coating	ceramic coating	ceramic coating
Motor type	Brushless DC motor	Brushless DC motor	\
Motor rating input[W]	2.4	2.4	\
Motor rating output[W]	1.8	1.8	\
Power[W]	510	10	510
Heating Power[W]	500	\	500
Voltage	100-120/60Hz 200-240V/50Hz	100-240V 50/60Hz	100-120/60Hz 200-240/50Hz
Stirring positions	1	1	\
Max. stirring quantity(H2O) [L]	5	5	\
Max. magnetic bar[mm]	50	50	\
Speed range[rpm]	200-1500	200-1500	\
Speed display	LCD	LCD	\
Temperature display	LCD	\	LCD
Control accuracy of sensor[rpm]	±20rpm	±20rpm	\

Imagen 2 Especificaciones del manual del fabricante

Specifications	SCI380HS-Pro	SCI6-Pro	SCI380H-Pro
Work plate Dimension	140x140mm	140x140mm	140x140mm
Work plate material	Aluminum cover with ceramic coating	Aluminum cover with ceramic coating	Aluminum cover with ceramic coating
Motor type	Brushless DC motor	Brushless DC motor	-
Motor rating input	2.4W	2.4W	-
Motor rating output	1.8W	1.8W	-
Power	510W	10W	510W
Heating output	500W	-	500W
Voltage	100-120/200-240V, 50/60Hz	100-240V, 50-60Hz	100-120/200-240V, 50/60Hz
Stirring positions	1	1	-
Max. stirring quantity[H_2O]	5L	5L	-
Max. magnetic bar[length]	50mm	40mm	-
Speed range	200-1500rpm	200-1500rpm	-
Speed display	LCD	LCD	-
Temperature display	LCD	-	LCD
Heating temperature range	Room temp.+5°C - 380°C	-	Room temp.+5°C - 380°C
Over heat Protection	420°C	-	420°C
Temperature display accuracy	±0.1°C	-	±0.1°C
External temperature sensor	PT1000 (accuracy ±0.5°C)	-	PT1000 (accuracy ±0.5°C)
Control accuracy of sensor	±20rpm	±20rpm	-
Protection class	IP21	IP21	IP21
Dimension [W x D x H]	320x180x108mm	320x180x108mm	320x180x108mm
Weight	2.2kg	2.2kg	2.2kg
Permissible ambient temperature and humidity	5-40°C 80%RH	5-40°C 80%RH	5-40°C 80%RH

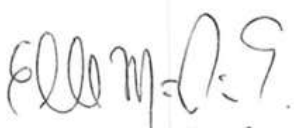
Imagen 3 Ficha técnica del fabricante. pag.29

Así las cosas y toda vez que esta demostrado una alteración en la documentación aportada por el proponente **SUMINISTROS DE LABORATORIO KASALAB S.A.S,** atentamente le solicitamos a la entidad rechazar a este proponente, de conformidad con lo

establecido en el literal Q del numeral 16.2.18 CAUSALES DE RECHAZO del pliego de condiciones el cual señala:

"Q. Cuando se advierte o compruebe discrepancia entre la información contenida en los documentos que componen la oferta, o que esta no corresponda con la realidad."

Atentamente,



Elba María Peña Gómez
INSTRUMENTACIÓN Y SERVICIOS SAS. PBX. 4 67 28 10
CEL. 300 212 75 77 gerencia@instruservltda.com

ANEXOS
Anexo 1. Manual del fabricante
Anexo 2. Ficha técnica del fabricante (PAG 29)

ANEXO 1 MANUAL DEL EQUIPO

www.instruservltda.com
ventas@instruservltda.com
Calle 151 No 18A - 34 Oficina 302 / Edificio Santelmo
PBX: 57-1- 4 67 28 10 – Cel 57 - 300 212 75 77 – 311 848 55 86

Magnetic Hotplate Stirrer

SCILOGEX

User Manual

SCI380HS-Pro	LCD Digital Hotplate Magnetic Stirrer
SCI380H-Pro	LCD Digital Magnetic Stirrer
SCI6-Pro	LCD Digital Hotplate

Please read and follow the user manual operation and safety instructions provided. Please keep this manual for future reference.

Technical specifications and outline are subject to change without prior notice.

Table of Contents

Preface

Thank you for purchasing our hotplate magnetic stirrer. Please read the entire instruction manual before operating the Hotplate, Stirrer, and be aware of all the cautions while using this instrument.

Service

Please provide the customer care representative with the

following information：

• Serial number（on the rear panel）

• Certification
• Description of problem (i.e., hardware or software)
• Methods and procedures adopted to resolve the problems
• Your contact information

Unpacking

Unpack the instrument carefully and check for any damages which may have arisen during transport. Please contact manufacturer/supplier for technical support:

Note: If there is any apparent damage to the system, please do not plug it into the main power line.

Table3.1

Item	**Qty**
Main unit	1
Power cable	1
User Manual	1

Symbol	Additional Description
	**Warning!** • **Please check the instrument working condition before use.** • Ensure that every user is aware of the instrument operation. • Operate the instrument according to the instructions provided in this user manual.
	**Caution!** • Do not touch the work plate or housing parts during operation as the work plate temperature can reach up to 380 ℃ during operation. • Keep the instrument away from explosive and flammable materials.
	**Protective ground contact！** • Make sure that socket is earthed before use (protective from ground contact)

1. Safety Instructions

- Please check whether the instrument's working condition as soon as you receive it.
- Ensure that label indicated the correct voltage before connecting the instrument to power supply
- Do not operate the unit with a damaged power cord
- Set-up and install the magnetic stirrer on a stable and temperature resistant surface
- Ensure good working environment free of explosive, hazardous and inflammable substances or water.
- Ensure that the main power supply cable does not touch the hotplate.
- Keep the magnetic Stirrer away from the effects of high magnetic field.
- Do not cover the instrument and do not splash water on the components
- When working wear personal safety guards to avoid the risk of splashing and evaporation of liquids, release of toxic or combustible gases.
- Heating temperature must be set to atleast 50 ℃ lower than the fire point of the chemicals used.

- Pathogenic materials processing must be done in closed vessels only.
- Ensure that the tip of the external temperature sensor is at least 5-10mm away from the bottom of the vessel.
- Always disconnect the main power supply after use.
- Make sure of the instrument and its accessories working condition every time before it's operation.
- Please use the accessories described in the "Accessories" chapter and running as the user manual to guarantee the safe operation. Accessories must be securely attached to the instrument and cannot come off by themselves.
- The manufacturer does not accept responsibility for any mishandling of the instrument and for any potential risk taken by the user.

2. Specifications

2.1 Proper use

The instrument is designed for mixing and heating applications

- The altitude can't exceed 2000 meters.
- Environmental temperature between 10 ℃ to 40 ℃
- Installation type: the product is to connect thee indoor outlet.
- Voltage fluctuation is not more than ±10%
- The distance from the other equipments and the wall should be more than100mm.

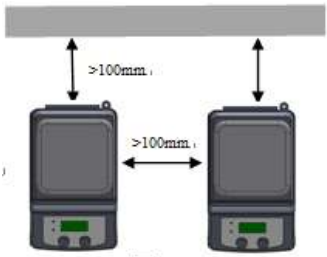


图 2.1

This instrument is not suitable for using in residential areas or other constraints mentioned in Chapter 1.

2.2 Technical Parameters

Table 2.2

Items	SCI380HS-Pro	SCI380H-Pro	SCI6-Pro
Work plate dimension	140x140mm	140x140mm	140x140mm
Plate material	Aluminum with	Aluminum with	Aluminum with

	ceramic coating	ceramic coating	ceramic coating
Motor type	Brushless DC motor	Brushless DC motor	\
Motor rating input[W]	2.4	2.4	\
Motor rating output[W]	1.8	1.8	\
Power[W]	510	10	510
Heating Power[W]	500	\	500
Voltage	100-120/60Hz 200-240V/50Hz	100-240V 50/60Hz	100-120/60Hz 200-240/50Hz
Stirring positions	1	1	\
Max. stirring quantity(H2O) [L]	5	5	\
Max. magnetic bar[mm]	50	50	\
Speed range[rpm]	200-1500	200-1500	\
Speed display	LCD	LCD	\
Temperature display	LCD	\	LCD
Control accuracy of sensor[rpm]	±20rpm	±20rpm	\
Temperature range[℃]	Room temperature +5 - 380	\	Room temperature +5 - 380
Over temperature protection[℃]	420	\	420
Temperature display accuracy[℃]	±0.1	\	±0.1
External temp. sensor	PT1000 Accuracy ±0.5 ℃	\	PT1000 Accuracy ±0.5 ℃
IP Protection class	IP42	IP42	IP42
Dimensions[WxDxH][mm]	320*180*108	320*180*108	320*180*108
Weight[kg]	2.2	2.2	2.2
Permissible ambient temperature[℃]	5-40	5-40	5-40
Permissible relative humidity	80%RH	80%RH	

2.3 Structure

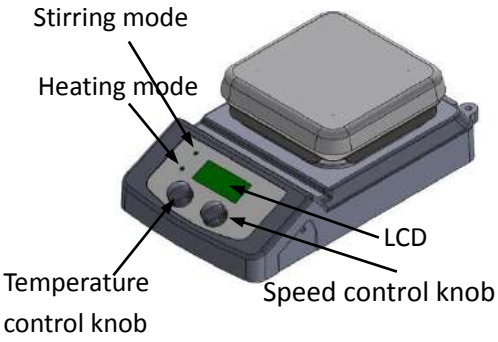


Figure 2.3.1 Hotplate magnetic stirrer

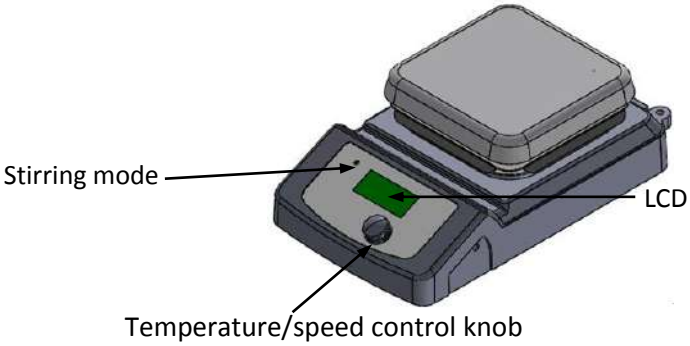


Figure 2.3.2 Magnetic stirrer/hotplate

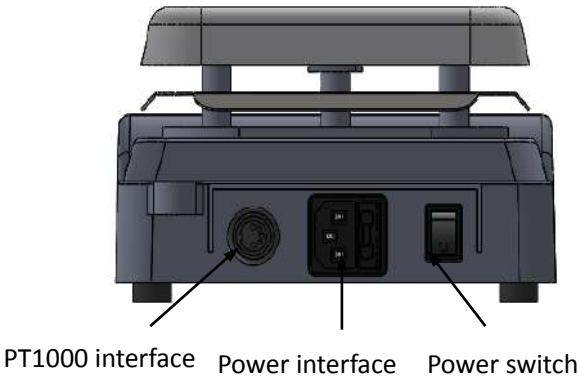


Figure 2.3.3

2.4 Control Display

2.4.1 Control

Table 2.4.1

	Item	Description
Hotplate magnetic stirrer	Temperature control knob Heat	Set the temperature by rotating the temp. control knob slowly to desired setting and confirm it by pushing the temp. control knob.
	Speed control knob Stir	Set the target speed by rotating the speed control knob slowly to desired setting and confirm it by pushing the speed control knob.
	LCD	LCD displays the actual and set values of temperature and speed.
	PT1000 Indicator	Plug PT1000,display shows "Probe" is on
	Power Switch	Switch ON or OFF the instrument.
Magnetic stirrer	Speed control knob Stir	Set the target speed by rotating the speed control knob slowly to desired setting and confirm it by pushing the speed control knob.
	LCD	LCD displays the actual and set values of temperature and speed.
	Power Switch	Switch ON or OFF the instrument.
Hotplate	Temperature control knob Heat	Set the temperature by rotating the temp. control knob slowly to desired setting and confirm it by pushing the temp. control knob.
	LCD	LCD displays the actual and set values of temperature and speed.
	Power Switch	Switch ON or OFF the instrument.

2.4.2 Display

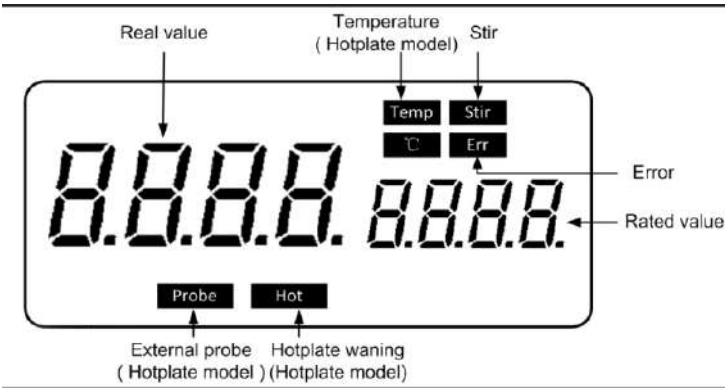


Table 2.4.2

Display	Descriptions
Temp & ℃	Displays set/actual temperature when the heating function is switched ON.
Stir	Displays stirring speed when the stirring function is switched ON.
Hot	Displays hot warning if the heating plate temperature is above 50 ℃ even after switching OFF the heating function.
Probe	Displays when external probe is connected.
Err	Displayed in case if any error occurs.
Set/Actual value	Displays set/actual values in case heating or stirring function is switched ON.

3. Operation Instructions

- Ensure that the label indicated the correct voltage before connecting the instrument to power supply
- Ensure the socket is properly grounded.
- Plug in the power cable，ensure the power is on and begin initializing.
- Add the medium into the vessel with an appropriate stirring bar(hotplate stirrer/stirrer)
- Place the vessel on the work plate.
- Set the target stirring speed and begin (hotplate stirrer/stirrer).
- Observe the stirring bar and LCD display (hotplate stirrer/stirrer).
- Set the target temperature and start heating (hotplate stirrer/hotplate).
- Observe the actual temperature on LCD display (hotplate stirrer/hotplate).
- Stop heating (hotplate stirrer/hotplate) and stirring functions (hotplate stirrer/stirrer).

If the above operations are normal, the instrument is ready to operate. If there is any problem during above operations, then instrument may be damaged during transportation, please contact manufacturer/supplier for technical support.

Warning!
Forbid to transfer the vessel when the instrument working.

2 Function

4.1 Heating（hotplate stirrer/hotplate）

The instrument is controlled by digital temperature control technology, which has two separate safety circuits. The hotplate is kept at a constant temperature by a digital control circuit. The hotplate temperature can also be monitored from a separate, adjustable safety circuit. The two temperature sensors PT1000 internal builds temperature control into the hotplate and PT1000 external can monitor the temperature of sample.

Set the target temperature and start heating:

- Set the temperature by rotating the temperature control knob slowly to desired setting.

- The set value is confirmed and heating is switched ON by pushing the temp. Control knob.
- The LED displays the temperature value on the left-hand side during heating.
- The heating function is switched OFF by pushing the same temperature control knob again.
- The last set temperature is displayed once the instrument is shutdown and restarted.

4.1. 1 EXTERNAL SENSOR INSTALLATION

- The external temperature sensor PT1000 is the manufacturer's standard accessory
- Install the sensor support on the instrument.
- Connect the external sensor in the port provided at the back of the unit.
- If the sensor is plugged in, "Probe" will be shown on the digital display indicating the sensor operation.
- Fix sensor on the support and adjust its position.
- Put the External sensor probe into the vessel on the hotplate.
- . If any abnormal situation is detected, the heating mode will automatically shut down. Then please do the following:
  • Turn off the power supply,
  • Ensure the external temperature controller stay in the heating samples
  • Open the power supply, to set the target temperature and heating function

If the instrument cannot work again, please contact the manufacturers/suppliers.

4.2 Stirring（hotplate stirrer/stirrer）

Instrument adopts closed loop control motor, motor drive mechanism to the permanent magnets, and can set the motor speed through speed control knob

- **Set the target stirring speed and start stirring:**
- Set the target speed by rotating the speed control knob slowly to desired setting.
- The set value is confirmed and stirring is switched ON by pushing the stirring control knob.
- The LED displays the target speed value on the right-hand side during stirring.

- The stirring function is switched OFF by pushing the same stirring control knob again.

When both heating and stirring are switched ON and those above operations are done, the LCD will shift to the speed value and come back to the temperature value in about 5 seconds.

3 Maintenance and Cleaning

Proper maintenance can keep instruments work properly and increase its lifetime.

- Please keep the instrument in dry and clean surface.
- Please do not connect the power supply before the surface dry.
- If the instrument is wet then any solid or liquid particles might have got into the instrument, please disconnect the power supply quickly and contact the manufacturer/supplier for more advice.
- Do not spray cleanser into the instrument when cleaning.
- Unplug the power line before cleaning. Please use the recommended cleansers.

Dyes	Isopropyl alcohol
Construction materials	Water containing tenside / Isopropyl alcohol
Cosmetics	Water containing tenside / Isopropyl alcohol
Foodstuffs	Water containing tenside
Fuels	Water containing tenside

- Before using other method for cleaning or decontamination, the user must ascertain with the manufacturer that this method will not harm the instrument.
- Wear the proper protective gloves during cleaning of the instrument.
- Before sending the instrument for repair, it must be cleaned to avoid the pollution of hazardous substances. Please send back with the original packaging.
- If the product is not in use for long time, please store it in a dry, clean, stable and room temperature environment.
- For machine maintenance details, please refer to “product service manual”
  Warning！ Switch OFF the instrument before maintenance and cleaning.

1. Faults

The instrument adopts the advanced production technology and testing methods. Each unit had been tested thoroughly before dispatch, with good reliability.
The common errors generally occur due to improper operation.

Errors	Problem	Process
Not functioning in switch ON mode	The power cord connection is unreliable	Ensure the power cord is connected well
	Power supply insurance tube damage or loose	Check if the tube is damaged or loose
ERR4	The sensor circuit error	Check the sensor
ERR5	Temperature exceeds hardware protection	Sensor fault or heating element circuit short
ERR6	The instrument does not work when switched ON or the temperature rises above 30 degrees in 15s	Uncontrolled thyristor short circuit
ERR7	When switched ON, temperature rises less than 10 degrees in 15s	Heating circuit breakers or sensor failure
ERR8	When switched on, motor speed is not detected	Motor does not run or speed sensor failure

If the error occurred cannot be handled, please contact the local dealers or can contact us directly.

Spare Parts

Description	Specification
PT1000-A The external temperature probe	Length 230mm
PT1000-B Glass external temperature probe	PT1000-B Glass external temperature probe for LCD hotplate magnetic stirrer, length 230mm
Temperature probe support components	Fit for PT1000
Round bottom flask heating block	50ml
	100ml
	250ml
	500ml
Magnetic stirrer bar, To be used below150 ℃	10mm x 6mm
	15/20/25mm x 8mm
	30mm x 6mm
	40/51mm x 8mm
Stirrer bar remover	200mm

Certificates

SCILOGEX certifies that the production of this product conforms to ISO9001 standards, and other international standards

Structure in accordance with the following safety standards:
EN 61010-1
UL 61010-1
CAN/CSA C22.2No.61010-1
EN 61010-2-010
Construction in accordance with the following EMC standards:
EN 61326-1
Associated EU guidelines:
EMC standard： 2014/30/EU
LVD standard： 2014/35/EU

Warranty policy

All SCILOGEX products are supplied with a warranty of 12 Months for Liquid handling range and 24 Months for instruments range from the date of shipment.

This instrument is warranted to be free from defects in material and workmanship and it must be operated in accordance with our operating guidelines, serviced and maintained on a regular basis in accordance with the terms specified in the relevant user manual.

Warranty shall not apply to any product or parts which have been damaged due to mishandling or improper installation or abnormal conditions of operation.

Although great care is used when packaging items for shipment, SCILOGEX cannot accept liability for transportation of goods from SCILOGEX and transit damage is not covered by warranty.

Only approved spare parts should be used in the SCILOGEX system and these should be changed on a regular basis as specified in the relevant user manual. Details of the approved spare parts and accessories for each system are shown in the user manual or alternatively this information can be obtained from SCILOGEX.

For claims under the warranty please contact your local supplier. You may also send the instrument directly to manufacturer, enclosing the invoice copy and giving reasons for the claim. Manufacturer will not be liable for freight costs.

SCILOGEX, LLC
1275 Cromwell Ave.
Suite C6
Rocky Hill, CT 06067 USA
Tel: +1(860) 436-9221
Fax: +1(860) 436-9745
info@scilogex.com
www.scilogex.com

ANEXO 2 FICHA TECNICA DEL EQUIPO

Magnetic Hotplate Stirrers

SCILOGEX 550°C series magnetic stirrer is developed for demanding applications. It is widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals etc. Combining with glass ceramic work plate, brushless DC motor and external temperature sensor, the work plate temperature is optimized up to 550°C.

SCI550-Pro

LCD Digital Magnetic Hotplate Stirrer

Features

- LCD display for precise monitoring of speed and temperature
- Built-in PID controller ensures safe heating of the medium with overheating protection
- Max. heating plate temperature 550°C
- Glass ceramic work plate provides excellent chemical resistant performance and most efficient heat transfer
- External temperature control is possible by connecting the temperature sensor(PT1000) with an accuracy at ±0.2°C
- Digital speed controlling, max. speed at 1500rpm
- Outstanding brushless DC motor enables more stirring power
- Two rotating knobs enable easy adjustment of speed and temperature
- The "HOT" warning will flash when the work plate temperature is above 50°C even when the hotplate is turned off
- Remote function provides PC control and data transmission

SCI550-S

LED Magnetic Hotplate Stirrer

Features

- LED display for precise monitoring of temperature
- A wide speed range of 0 to 1500rpm
- Max. Heating plate temperature 550°C
- External temperature control is possible by connecting the temperature sensor(PT1000) with accuracy at ±0.2°C
- The "HOT" warning will flash if the work plate temperature is above 50°C

Magnetic Hotplate Stirrers

Overheating protection

External sensor

Wide range of accessories

Chemical resistance

Specifications

	SCI550-Pro	SCI550-S
Work plate Dimension [W x D]	184x184mm (7 inch)	184x184mm (7 inch)
Work plate material	Glass ceramic	Glass ceramic
Motor type	Brushless DC motor	Shaded pole motor
Motor rating input	18W	15W
Motor rating output	10W	1.5W
Power	1050W	1030W
Heating output	1000W	1000W
Voltage	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz
Stirring positions	1	1
Max. stirring quantity, [H_2O]	20L	10L
Max. magnetic bar[length]	80mm	80mm
Speed range	100-1500rpm resolution ±1rpm	0-1500rpm
Speed display	LCD	Scale
Temperature display	LCD	LED
Heating temperature range	Room Temp.-550°C, increment 1°C	Room temp.-550°C, increment 5°C
Temperature control accuracy	±1°C(<100°C) ±1%(>100°C)	±10°C
Overheating protection	580°C	580°C
Temperature display accuracy	±0.1°C	±1°C
External temperature sensor	PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)
"Hot" warning	50°C	50°C
Data connector	RS232	-
Protection class	IP21	IP21
Dimension [WxDxH]	215x360x112mm	215x360x112mm
Weight	5.3kg	4.5kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH

Magnetic Hotplate Stirrers

SCILOGEX 340°C magnetic hotplate stirrers include all leading safety standards and features for superior ease of use and are cost-effective. They are widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals, etc.

SCI340-ProT

LCD Digital Magnetic Hotplate Stirrer with Timer

SCI340-Pro

LCD Digital Magnetic Hotplate Stirrer

Features

- Brushless DC motor is maintenance free
- Digital temperature control with max. temperature at 340°C
- Digital speed control with max. speed up to 1500rpm
- Max. stirring quantity of H2O at 20L
- Safety circuits provide overheating protection
- The "HOT" warning will flash if the plate temperature is above 50°C even when the hotplate is turned off
- Wide range timer function from 1min to 99h59min(MS-H-ProT only)
- High-resolution LCD display shows actual temperatures and speed (MS-H-ProT displays the time also)
- External temperature control is possible by connecting the temperature sensor(PT 1000) with accuracy at ±0.2°C
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- Remote function provides PC control and data transmission
- A wide variety of accessories are available

SCI340-HS

Magnetic Hotplate Stirrer

Features

- Maintenance free brushless DC motor
- Max. temperature to 340°C
- Stirring speed up to 1500 rpm
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- Safety circuits provide overheating protection
- A wide variety of accessories are available

External sensor

Brushless DC motor

Wide range of accessories

RS232 connector

Chemical resistance

Specifications

	SCI340-Pro	SCI340-ProT	SCI340-HS
Work plate dimension	ϕ135mm(5 inch)	ϕ135mm(5 inch)	ϕ135mm(5 inch)
Work plate material	stainless steel cover with ceramic	stainless steel cover with ceramic	stainless steel cover with ceramic
Motor type	Brushless DC motor	Brushless DC motor	Brushless DC motor
Motor rating input	18W	18W	18W
Motor rating output	10W	10W	10W
Power	550W	550W	530W
Heating output	500W	500W	500W
Voltage	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz
Stirring positions	1	1	1
Max. stirring quantity[H_2O]	20L	20L	20L
Max. magnetic bar[length]	80mm	80mm	80mm
Speed range	100-1500rpm resolution±1rpm	100-1500rpm resolution±1rpm	0-1500rpm resolution±1rpm
Speed display	LCD	LCD	Scale
Temperature display	LCD	LCD	Scale
Heating temperature range	Room temp.-340°C, increment 1°C	Room temp.-340°C, increment 1°C	Room temp.-340°C
Temperature control accuracy	±1°C(<100°C) ±1%(>100°C)	±1°C(<100°C) ±1%(>100°C)	-
Over temperature protection	360°C	360°C	350°C
Temperature display accuracy	±0.1°C	±0.1°C	±0.5°C
External temperature sensor	PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)	-
"Hot" warning	50°C	50°C	-
Timer function	-	1min to 99h 59min	-
Data connector	RS232	RS232	-
Protection class	IP42	IP42	IP42
Dimension[WxDxH]	160×280×85mm	160×280×85mm	160×280×85mm
Weight	2.8kg	2.8kg	2.8kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH

Magnetic Hotplate Stirrers

SCILOGEX SCI280-Pro is a perfect device for handling small volume task on daily application, as a low temperature magnetic stirrer with max. temperature at 280°C.

SCI280-Pro

LED Digital Magnetic Hotplate Stirrer

Features

- Digital temperature control with max. temperature up to 280°C
- Digital speed control with max. speed up to 1500rpm
- Stainless steel work plate with ceramic coating provides good chemical resistant performance
- External temperature control is possible by connecting the temperature sensor(PT1000) with an accuracy at ±0.5°C
- LED display shows temperature and speed
- The "HOT" warning will flash when the work plate temperature is above 50°C even if the hotplate is turned off

External sensor

Wide range of accessories

Chemical resistance

LED display

Specifications

	SCI280-Pro
Work plate Dimension	ϕ135mm(5 inch)
Work plate material	stainless steel cover with ceramic
Motor type	Brushless DC motor
Motor rating input	5W
Motor rating output	3W
Power	515W
Heating output	500W
Voltage	100-120/200-240V 50/60Hz
Stirring positions	1
Max. stirring quantity	3L
Max. magnetic bar[length]	50mm
Speed range	200-1500rpm
Speed display	LED
Temperature display	LED
Speed display resolution	±1rpm
Heating temperature range	Room temp.-280, increment 1°C
Control accuracy of work plate	±1°C(<100°C) ±1%(>100°C)
Overheating protection	320°C
Temperature display accuracy	±1°C
External temperature sensor	PT1000 (accuracy ±0.5°C)
"Hot" warning	50°C
Protection class	IP21
Dimension[WxDxH]	150×260×80mm
Weight	1.8kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

Magnetic Hotplate Stirrers

SCI380H-Pro
LCD Digital Hotplate

SCI6-Pro
LCD Digital Magnetic Stirrer

SCI380HS-Pro
LCD Digital Magnetic Hotplate Stirrer

SCILOGEX 380°C magnetic hotplate stirrers include all leading safety standards and is chemically-resistant with white ceramic work plate. They can be used in physical, chemical, analytical and biological laboratories.

Features:

- Max. heating temperature is 380°C
- High resolution LCD displays actual temperature and speed.
- Brushless DC motor is maintenance free
- Aluminum cover with ceramic work plate, allows for immediate heat transfer
- External temperature control is possible with temperature sensor PT1000
- Digital temperature control with max. temperature at 380°C
- Digital speed control with max. speed up to 1500rpm
- Max. stirring quantity of H2O at 5L

Specifications	SCI380HS-Pro	SCI6-Pro	SCI380H-Pro
Work plate Dimension	140x140mm	140x140mm	140x140mm
Work plate material	Aluminum cover with ceramic coating	Aluminum cover with ceramic coating	Aluminum cover with ceramic coating
Motor type	Brushless DC motor	Brushless DC motor	-
Motor rating input	2.4W	2.4W	-
Motor rating output	1.8W	1.8W	-
Power	510W	10W	510W
Heating output	500W	-	500W
Voltage	100-120/200-240V, 50/60Hz	100-240V, 50-60Hz	100-120/200-240V, 50/60Hz
Stirring positions	1	1	-
Max. stirring quantity[H_2O]	5L	5L	-
Max. magnetic bar[length]	50mm	40mm	-
Speed range	200-1500rpm	200-1500rpm	-
Speed display	LCD	LCD	-
Temperature display	LCD	-	LCD
Heating temperature range	Room temp.+5°C - 380°C	-	Room temp.+5°C - 380°C
Over heat Protection	420°C	-	420°C
Temperature display accuracy	±0.1°C	-	±0.1°C
External temperature sensor	PT1000 (accuracy ±0.5°C)	-	PT1000 (accuracy ±0.5°C)
Control accuracy of sensor	±20rpm	±20rpm	-
Protection class	IP21	IP21	IP21
Dimension [W x D x H]	320x180×108mm	320x180×108mm	320x180×108mm
Weight	2.2kg	2.2kg	2.2kg
Permissible ambient temperature and humidity	5-40°C 80%RH	5-40°C 80%RH	5-40°C 80%RH

Magnetic Hotplate Stirrers

SCI340H-4

LCD 4-Channel Digital Magnetic Hotplate Stirrer

It is widely used in chemical synthesis, physical and chemical analysis, bio-pharmaceuticals etc.

Features

- Independent heating and stirring control
- LCD display shows actual temperatures and speed
- PID controller ensures a precise and steady heating process, Max. temperature up to 340℃
- Brushless DC motor enables more powerful speed control
- External temperature sensor(PT1000) with accuracy at 0.2℃
- Overheating protection temperature at 420℃
- Stainless steel work plate with ceramic coating provides good chemical-resistant performance
- A wide variety of accessories are available

Specifications	SCI340H-4
Work plate dimension	Φ134mm（5inch）
Plate material	Stainless steel with ceramic coating
Motor type	Brushless DC motor
Motor rating input[W]	1.8W×4
Power[W]	515W×4
Heating Power[W]	500×4
Voltage	100-120V,60Hz; 200-240V,50 Hz
Stirring positions	4
Max. stirring quantity of single position (H2O)	10L
Max. magnetic bar[mm]	40
Speed range[rpm]	200-1500
Speed display	LCD
Temperature display	LCD
Control accuracy of sensor[rpm]	±20
Temperature range[° C]	25-340℃
Over temperature protection[° C]	420
Temperature display accuracy[° C]	±0.1
External temp. sensor	PT1000（Accuracy±0.2℃）
IP Protection class	IP21
Dimensions[WxDxH][mm]	698*270*128
Weight[kg]	9.5kg
Permissible ambient temperature[° C]	5～40
Permissible relative humidity	80%

SCI120-HS

10-Position Magnetic Hotplate Stirrer

Features

- Maintenance-free brushless DC motor
- Max speed 1100rpm
- Max.temperature 120°C
- Stainless steel work plate, covered with silicone cushion, provides the excellent performance of heating uniformity and skid resistance

Skid resistance

Multiple position

Brushless DC motor

Specifications

	SCI120-HS
Work plate dimension[W x D]	180x450mm
Work plate material	Stainless steel with silicone
Motor type	Brushless DC motor
Motor rating input	12W
Motor rating output	4W
Power	490W
Heating output	470W
Voltage	100-120/200-240V 50/60Hz
Stirring positions	10
Max. stirring quantity	0.4Lx10
Max. magnetic bar[length]	40mm
Speed range	0-1100rpm
Speed display	scale
Temperature display	scale
Heating temperature range	Room temp.-120°C
Overheating protection	140°C
Protection class	IP42
Dimension[WxDxH]	182×622×65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

Hotplates

SCI550-H

LED Hotplate

Features

- LED screen shows temperature
- Max. temperature up to 550°C
- Separate safety circuits with fixed safety temperature of 580°C
- External temperature control is possible by connecting the temperature sensor(PT 1000) with an accuracy at ±0.5°C
- Glass ceramic work plate provides excellent chemical-resistant performance and most efficient heat transfer
- The "HOT" warning will flash if the work plate temperature is above 50°C even when the hotplate is turned off

Wide range of accessories

Chemical resistance

Overheating protection

"HOT" warning prevents burning

Specifications

	SCI550-H
Work plate dimension[WxD]	184x184mm(7 inch)
Work plate material	Glass ceramic
Power	1010W
Voltage Frequency	100-120/200-240V,50/60Hz
Heating Power	1000W
Heating position	1
Heating temperature range	Room temp.-550°C,increment 5°C
Control accuracy of work plate	±10°C
Safety temperature	580°C
Temperature display	LED
Temperature display accuracy	±1°C
External temperature sensor	PT1000(±0.5°C)
Heating warning	50°C
Protection class	IP21
Dimension[WxDxH]	215x360x112mm
Weight	4.5kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

SCI7-S

7" Square Magnetic Stirrer

Features

- Speed range of 0-1500rpm
- Max. stirring quantity of H_2O at 10L
- Ceramic work plate provides excellent chemical resistant performance

SCI-S

Magnetic Stirrer

Features

- Maintenance free brushless DC motor
- Speed range of 0-1500 rpm
- Max. stirring quantity of H_2O at 20L
- Stainless steel work plate cover with ceramic material provides good chemical resistance performance

F100 protective cover

for non-hotplate model, use with MS-S

Chemical resistance

Strong magnetism

Specifications

	SCI7-S	SCI-7
Work plate dimension[WXD]	184x184mm(7inch)	ϕ135mm(5 inch)
Work plate material	Glass ceramic	Stainless steel cover with ceramic
Motor type	Shaded pole motor	Brushless DC motor
Motor input power	15W	18W
Motor output power	1.5W	10W
Power	30W	30W
Voltage	100-120/200-240V,50/60Hz	100-240V,50/60Hz
Stirring positions	1	1
Max. stirring quantity[H_2O]	10L	20L
Max. magnetic bar[length]	80mm	80mm
Speed range	0-1500rpm	0-1500rpm
Speed display	Scale	Scale
Protection class	IP21	IP42
Dimension[WxDxH]	215x360x112mm	160×280×85mm
Weight	3.8kg	2.8kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH

Magnetic Stirrers

SCI-PA
LED Digital Magnetic Stirrer

Features

- Digital speed control within the range of 100-1500rpm
- Max. stirring quantity of H_2O at 3L
- LED display shows speed
- Nylon+GF housing provides a good performance of chemical resistance

SCI-PB
Magnetic Stirrer

Features

- A wide range of 0-1500rpm
- Max. stirring quantity of H_2O at 3L
- Nylon+GF housing provides a good performance of chemical resistance

Chemical resistance

Strong magnetism

LED display

Specifications	SCI-PA	SCI-PB
Work plate dimension[WXD]	ϕ135(5 inch)mm	ϕ135(5 inch)mm
Work plate material	N ylon+GF	N ylon+GF
Motor type	Brushless DC motor	DC motor
Motor input power	5W	5W
Motor output power	3W	3W
Power	15W	10W
Voltage	100-120/200-240V,50/60Hz	100-120/200-240V,50/60Hz
Stirring positions	1	1
Max. stirring quantity[H_2O]	3L	3L
Max. magnetic bar[length]	50mm	50mm
Speed range	200-1500rpm	0-1500rpm
Speed display	LED	Scale
Protection class	IP42	IP42
Dimension[WxDxH]	150×260×80mm	150×260×80 mm
Weight	1.8kg	1.8kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH

SCI-S10

10-Position Magnetic Stirrer

Features

- Maintenance-free brushless DC motor
- Speed range of 0-1100rpm
- Stainless steel work plate covered with silicone cushion, provides excellent performance of skid resistance

Skid resistance

Multiple position

Specifications	SCI-S10
Work plate Dimension[WxD]	180×450mm
Work plate material	Stainless steel with silicone coating
Motor type	Brushless DC motor
Motor input power	12W
Motor output power	4W
Power	20W
Voltage	100-120/200-240V,50/60Hz
Stirring positions	10
Max. stirring quantity[H_2O]	0.4LX10
Max. magnetic bar[length]	40mm
Speed range	0-1100rpm
Speed display	Scale
Protection class	IP21
Dimension[WxDxH]	622×205×65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

Magnetic Stirrers

SCI-Spin
Ultra-flat Compact Magnetic Stirrer

With excellent stirring functionality, the compact shape of FlatSpin takes less bench space and makes storage easier.

Features

- A wide range of speed from 15 to 1500rpm
- Automatic reverse rotation for excellent mixing
- Protection class (IP65)
- PET top provides excellent chemical resistance
- Ultra silence and vibration-free

EcoStir is a magnetic stirrer customized for liquid mixing, suitable for chemical analysis, biology reagent mixing, regular laboratory experiments and liquid handling.

SCI-Stir
Economical Magnetic Stirrer

Features

- Maintenance freebrushless DC motor
- Rare earth magnets give powerful stirring
- Stepless speed regulation 300-2000rpm
- Ultra silence and vibration-free design.
- PET top provides excellent chemical resistance
- Shaft can be fitted with a PH sensor or sensors for other purposes

Specifications	SCI-Spin	SCI-Stir
Work plate Dimension	ϕ90mm	ϕ120mm
Work plate material	PET	PET
Motor type	Motorless	Brushless DC motor
Motor output power	3W	1.2W
Power	5W	7.2W
Voltage	100-120/200-240,V50/60Hz	100-120/200-240V,50/60Hz
Stirring positions	1	1
Max. stirring quantity[H_2O]	0.8L	1.5L
Max. magnetic bar[length]	40mm	40mm
Speed range	15-1500rpm	300-2000rpm
Speed setting	button	scale
Protection class	IP65	IP21
Dimension [W x D x H]	175x120x15mm	150x145x50mm
Weight	0.3kg	0.3kg
Permissible ambient temperature and humidity	5-40°C,80%RH	5-40°C,80%RH

Magnetic Hotplate Stirrers | Accessories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	Cat. No.	Description	SCI550-Pro	SCI550-S	SCI340-Pro	SCI340-T	SCI340-HS	SCI280-Pro
①	18900001	Blue carrying plate, use with color quarter pies			■	■	■	■
②	18900065	Blue Fixed ring, use with color quarter pies			■	■	■	■
③	18900002	Red quarter pie, 11 holes, 4 mL reaction vessel, Ø15.2mm, 20mm depth	■	■	■	■	■	■
④	18900003	Purple quarter pie, 4 holes, 20 mL reaction vessel, Ø28mm, 24mm depth	■	■	■	■	■	■
⑤	18900004	Blue quarter pie, 4 holes, 30mL reaction vessel, Ø28mm, 30mm depth	■	■	■	■	■	■
⑥	18900005	Black quarter pie, 4 holes, 40mL reaction vessel, Ø28mm, 43mm depth	■	■	■	■	■	■
⑦	18900048	Green quarter pie, 6 holes, 8mL reaction vessel, Ø17.8mm, 26mm depth	■	■	■	■	■	■
⑧	18900049	Golden quarter pie, 4 holes, 16mL reaction vessel, Ø21.6mm, 31.7mm depth	■	■	■	■	■	■
⑨	18101006	Reaction block for 50mL round bottom flask (one flask capacity)			■	■	■	■
⑩	18101007	Reaction block for 100mL round bottom flask (one flask capacity)			■	■	■	■
⑪	18101008	Reaction block for 250mL round bottom flask (one flask capacity)			■	■	■	■
⑫	18101009	Reaction block for 500mL round bottom flask (one flask capacity)			■	■	■	■
⑬	18900019	F101 protective cover, temperature resistance of 135°C			■	■	■	■
⑭	18900016	PT1000-A, length of 230mm	■	■	■	■		■
⑮	18900136	PT1000-B, temperature sensor with glass coated, length of 230mm	■	■	■	■		■
⑯	18900017	Support clamp of PT1000	■	■	■	■		
⑰	18900148	Support clamp of PT1000						■

Magnetic Hotplate Stirrers | Accessories

Stirrer bars

Stirrer bars and stirrer bar remover(PTFE), use below 150°C

Cat. No.	Size of stirrer bars (LxØ)[mm]	Models: SCI550-Pro, SCI550-SS, SCI340-Pro, SCI340-T, SCI340-S, SCI-S — Suitable for max. stirrer bar 80mm	Models: SCI280-Pro, SCI--PA, SCI-PB — Suitable for max. stirrer bar 50mm	Models: SXCI120-HS, SCI-S10, SCI-Spin, SCI-Stir — Suitable for max. stirrer bar 40mm
18900006	10mmx6mm	■	■	■
18900007	15mmx8mm	■	■	■
18900008	20mmx8mm	■	■	■
18900009	25mmx8mm	■	■	■
12500005	30mmx6mm	■	■	■
18900011	40mmx8mm	■	■	■
12500004	50mmx8mm	■	■	
18900013	65mmx8mm	■		
18900014	80mmx13mm	■		
18900015	Stirrer bar remover, length of 200mm	■	■	■