

Cartridge Range

	Ref.	Size
CHISEL	R245-008	A = 2,2 x 1 mm B = 11,5 mm
	R245-007	A = 4 X 1,5 mm B = 11,5 mm
BARREL	R245-009	A = 0,8 mm B = 1,8 mm C = 11,5 mm
	R245-014	A = 1,1 mm B = 4,5 mm C = 11,5 mm
	R245-010	A = 1,5 mm B = 3 mm C = 11,5 mm
	R245-011	A = 2,5 mm B = 4 mm C = 11,5 mm
	R245-012	A = 3,5 mm B = 5 mm C = 11,5 mm
DRAG	R245-013	A = 1,25 mm B = 3,25 mm C = 11,5 mm

	Ref.	Size
CHISEL	R470-018	A = 1 mm B = 2,5 mm C = 16,9 mm
	R470-019	A = 1,5 mm B = 16,9 mm
	R470-016	A = 1,5 mm B = 3 mm C = 16,9 mm
	R470-020	A = 2 mm B = 16,9 mm

	Ref.	Size
CHISEL	R470-021	A = 2,5 mm B = 16,9 mm
	R470-017	A = 2,5 mm B = 4 mm C = 16,9 mm
	R470-022	A = 4 mm B = 16,9 mm
	R470-029	A = 2,5 mm B = 16,9 mm
	R470-023	A = 5 mm B = 16,9 mm
	R470-024	A = 6 m B = 16,9 mm
	R470-025	A = 7,5 mm B = 16,9 mm
	R470-028	A = 3,8 mm B = 7,4 mm C = 16,9 mm
	R470-030	A = 2 mm B = 4 mm C = 16,9 mm
	R470-031	A = 3 mm B = 5 mm C = 16,9 mm
BARREL	R470-032	A = 4 mm B = 6 mm C = 16,9 mm
	R470-026	A = 0,75 mm B = 2 mm C = 6 mm
DRAG	R470-027	A = 1,25 mm B = 3,25 mm C = 6 mm

» Cost Saving » Highly Reliable » Fast Heating  
» Improved Yield » Consistent Quality



AUTOMATIC  
SOLDERING ROBOT



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# FEATURES & SPECIFICATIONS

SolderBot is a Robotic Soldering System offering precise, repeatable and high-quality soldering. It offers point and drag soldering options with a wide variety of soldering cartridges/tips. The solution also comes with an automated programmable wire feeder and an integrated motorised tip cleaner.

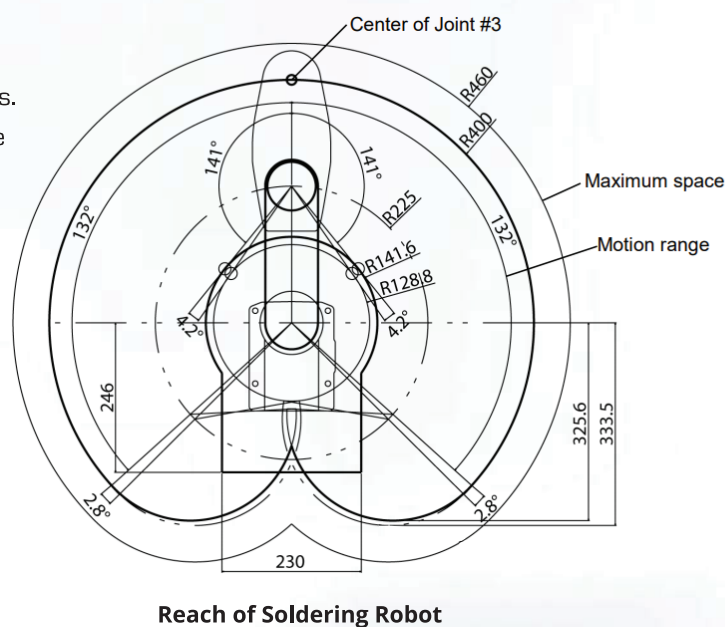
- 4 Axis SCARA Robot
- Adjustable angle of solder head
- Up to 15 solders per minute
- Programmable soldering time
- Wide variety of soldering cartridges



Point Soldering



Drag Soldering



Work Area	250 x 215mm; 400 x 180mm
Max Range of Operation	J1: +/- 132°, J2: +/- 141°, J3: 150 mm, J4: +/- 360°
Max Speed of Operation	J1,J2: +/- 3,700 mm/s, J3: +/- 1,000 mm/s, J4: +/- 2,600°/s
Repeatability	0.05mm
Soldering Unit	Maximum output peak power 250W
Feeder	Spool based. Feeding length and speed programmable. Suitable for wire diameter of 0.5mm - 1.5mm
Input Voltage	Power Adaptor: 110V - 240VAC, 50/60Hz
I/O	12 Digital Outputs, 18 Digital Inputs. Fieldbus Optional (DeviceNet, Profinet, Ethernet/IP)
Environmental Conditions	Temperature: 10 - 40° C, Humidity: 20% - 80% (No Condensing)

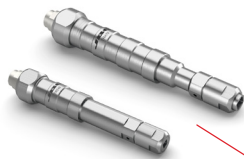
- Easy to use software. No complex programming required
- Multiple program storage with cloning option
- Define temperature, solder time, wire feeding parameters per solder
- Quick point teaching using joystick
- Library of standard components for faster teaching
- Traceability by barcode / serial number of every part
- Real-time process display

S.No	Soldering Type	Solder Cycle No	Initial Point	Final Point	Robot Speed	No Of Rows	No Of Columns	Ptn To Pin Distance	Soldering Time(S)	Temperature	Wire Feeding Speed	Tip Movement	Tip Cleaning
1	Home	1											
2	Drag Soldering	2	112.626.210.077..55.735...	88.125.210.077..55.73...	1.5					380	3.6		
3	Drag Soldering	3	121.180.223.572..55.508...	97.179.223.571..55.50...	1.5					380	3.6		
4	Cleaning	4											
5	Drag Soldering	5	121.480.233.672..55.508...	96.480.233.672..55.50...	1.5					380	3.6		
6	Drag Soldering	6	124.279.244.272..55.308...	99.480.243.672..55.30...	1.5					380	3.6		
7	Cleaning	7											
8	Drag Soldering	8	120.979.251.772..55.308...	95.780.251.772..55.30...	1.5					380	3.6		
9	Drag Soldering	9	121.380.259.372..55.308...	95.380.259.372..55.30...	1.5					380	3.6		
10	Cleaning	10											
11	Drag Soldering	11	85.679.196.572..55.508.3...	60.679.196.572..55.50...	1.5					380	3.6		
12	Drag Soldering	12	85.678.204.572..55.508.3...	60.679.204.572..55.50...	1.5					380	3.6		
13	Cleaning	13											
14	Drag Soldering	14	84.678.215.272..55.508.3...	59.679.215.272..55.50...	1.5					380	3.6		
15	Drag Soldering	15	84.679.222.772..55.508.3...	59.679.222.771..55.50...	1.5					380	3.6		
16	Cleaning	16											
17	Drag Soldering	17	84.678.233.272..55.258.3...	59.677.233.272..55.25...	1.5					380	3.6		
18	Drag Soldering	18	83.679.240.772..55.258.3...	58.679.240.772..55.25...	1.5					380	3.6		
19	Cleaning	19											
20	Drag Soldering	20	83.177.251.022..55.258.3...	59.177.251.022..55.25...	1.5					380	3.6		
21	Drag Soldering	21	83.677.258.522..55.258.3...	59.268.258.023..55.25...	1.5					380	3.6		
22	Cleaning	22											

# SOLDERING TOOLS

## Ref. TR245-A & TR470-A Soldering Iron

These tools are used with the newly designed cartridges, which have been specially developed for automated soldering processes. They feature a quick cartridge extraction and a very precise positioning system.



## Ref. SFR-A Solder Feeder

Compact unit compatible with several solder wire diameters. Control parameters such as wire length and dispensing speed are adaptable. It features a wire detector sensor (blocked up or finished).



## Ref. GSFR Guide Kit

The solder feeder works with GSFR-Kits. These kits are compatible with solder wire diameters Ø 0.8, 1, 1.5 and 1.6mm (with solder wire perforation) and from Ø 0.4 to 1.6mm (without solder wire perforation).



## Ref. CLMR-A Tip Cleaner

Features a large capacity tank with easy extraction and a wide opening for an easy tip access. Its position can be pivoted up to 35° in both directions to facilitate the robot arm access. Brushes are exchangeable and are available in different types.



## Ref. RBA-A Soldering Head

Can be combined with peripheral modules such as solder feeder, solder reel, fume extractor tube and soldering irons, as well as a camera to monitor the process. Its lifting unit allows a fast movement in Z-axis direction. It also features a system to soften collision. The dispenser pivoting unit facilitates cleaning and removal of the cartridge.

## Ref. UCR245-5A & UCR470-5A Control unit

This high power Control Unit can be connected to a robot by means of an M8-5pins connector, using the RS232 JBC communication protocol.



Ref. CLMU-A8



Ref. CLMU-P1 Non-metal brushes



Ref. CLMU-A7



Ref. CLMU-P7 Non-metal brushes

## Ref. CLMU-A8 & A7 & P1 & P7 Brushes

Choose between metal and non-metal brushes. Black and blue-core brushes are used to distinguish when doing lead-free and leaded soldering.