

Cartridge Guide for Selective Soldering

The best soldering technology applied to automation

A global organization at your service JBC is a global company with a distributor network spanning 5 continents that guarantees a solid commercial organization with guick and efficient service.

The power of experience

More than 95 years of experience have placed JBC at the technological forefront of tools for soldering and rework operations in electronics. Innovation, efficiency and reliability are the key features of a wide range of products which have been designed to satisfy the most demanding requirements of professionals.

High technology, superior quality Product perfection is one of the main objectives of JBC's improvement and development program. The R&D department has created the most innovative soldering technologies, which JBC is proud to present in this catalogue.

CE ESD safe

All JBC products comply with CE standards and ESD recommendations.

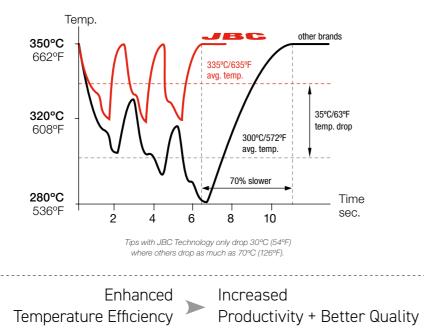


JBC Technology

Most Efficient Soldering System

JBC **Selective Soldering** works with JBC Most Efficient Soldering System, which **recovers tip temperature extremely quickly**. This increases work efficiency and allows the user to work with lower temperatures.

Efficient Temperature Control Comparative process of 3 solder joints



Cartridges with extended tip life

The essential part of the soldering iron is the tip. Therefore, JBC has **over 50 models of cartridges of different shapes and sizes** for automation.

JBC has developed the most advanced technology based on the following principles:

- Excellent Heat Transfer The compact element reduces thermal barriers.
- Instantaneous Heating A fully-integrated thermal sensor in the heater ensures quick temperature recovery.

Great Durability

The intelligent algorithm control program extends tip life.

We offer the possibility to **manufacture your special tip geometry**. Do not hesitate to ask for: **customtips@jbctools.com**.





Our Cartridge Range is steadily growing as we are determined to respond to our clients' specific needs, cooperating closely with them to create **the right solution.**

R245 Cartridge Range for TRA245 and TR245 Automated Processes

Ref.	Description	Image and dimensions	Suggested components	Compatible with
R245008	Chisel Cartridge 2.2 x 1 mm S1 0.087 x 0.039 in	6600 20	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245007	Chisel Cartridge 4 x 1.5 S1 mm 0.157 x 0.059 in	669000 (cs 51 0) (c4 53) (c4 53) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245009	Barrel Cartridge Ø 0.8 mm S1 Ø 0.031 in	004 155 164 164 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 160	Through-hole Cable soldering	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245028	Barrel Cartridge Ø 1 mm Ø 0.039 in	004 15,155 004 15,155 16,455 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,0	Through-hole Cable soldering	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245010	Barrel Cartridge Ø 1.5 mm S1 Ø 0.059 in	0.6 0.6 0.6 0.1 0.6 0.1 0.6 0.0 0.6 0.0 0.6 0.0 0.0 0.0	Through hole Cable soldering	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245011	Barrel Cartridge Ø 2.5 mm S1 Ø 0.098 in	9.5 (0.374) (0.374) (0.453) (0.453) (0.453) (0.453) (0.453) (0.453) (0.453) (0.453) (0.453) (0.453) (0.453) (0.453) (0.453) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.57) (0.5	Through-hole Cable soldering	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245012	Barrel Cartridge Ø 3.5 mm S1 Ø 0.138 in	95 95 95 95 0 11.5 10.453 11.5 10.453 11.5 10.453 11.5 10.453 11.5 10.453 11.5 10.453 11.5 10.453 11.5 10.453 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.1	Through-hole Cable soldering	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245

R245 Cartridge Range for TRA245 and TR245 Automated Processes



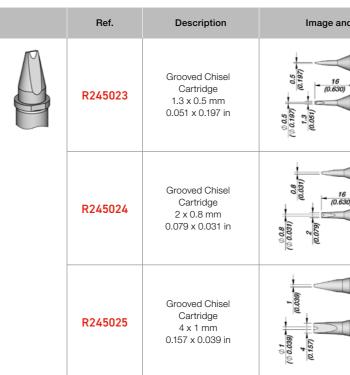
nd dimensions	Suggested components	Compatible with
11.5 (0.453)	Through-hole Cable soldering	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
17 79)	Drag soldering	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
4.7 579 -	Drag soldering	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
mm (n)	Drag soldering	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245

R245L Cartridge Range for TRA245 and TR245 Automated Processes

R245L Cartridges have a longer and sharper design on the tip for easier access on hard-to-reach applications.

Ref.	Description	Image and dimensions	Suggested components	Compatible with
R245016	Chisel Cartridge 1 x 0.5 mm 0.039 x 0.020 in	16 (0.50° 0) 5°0 (650° 0) (650° 0) (650	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245017	Chisel Cartridge 1.5 x 0.5 mm 0.059 x 0.020 in	16 16 16 16 16 16 16 16 16 16	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245018	Chisel Cartridge 2 x 0.5 mm 0.079 x 0.020 in	16 (0.630) (n) (n)	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245019	Chisel Cartridge 2.5 x 0.8 mm 0.098 x 0.031 in	16 16 16 16 16 16 16 16 16 16	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245020	Chisel Cartridge 3 x 1 mm 0.118 x 0.039 in	(in)	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245021	Chisel Cartridge 4 x 1 mm 0.157 x 0.039 in	(n) (6000) (0.630) (0.630) (n) (n)	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
R245022	Grooved Chisel Cartridge 1 x 0.4 mm 0.039 x 0.016 in	m (in)	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245

R245L Cartridge Range for TRA245 and TR245 Automated Processes



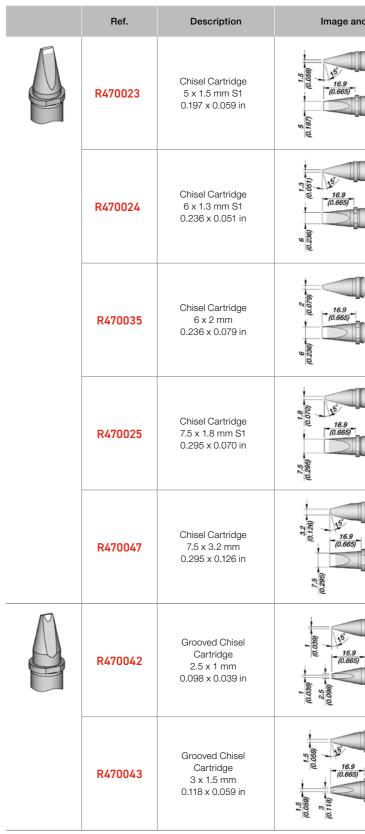
nd dimensions	Suggested components	Compatible with
mm (n)	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245
mm (in)	General use	Soldering Unit: HA245, HM245 Cartridge Stand: CS2R245

R470 Cartridge Range

for TRA470 and TR470 Automated Processes

Ref.	Description	Image and dimensions	Suggested components	Compatible with
R470019	Chisel Cartridge 1.5 x 1 mm S1 0.059 x 0.039 in	6600 00 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470020	Chisel Cartridge 2 x 1 mm S1 0.078 x 0.039 in	16.9 10.6655 0.6655 0.6655 0.6655 0.6655 0.6655 0.6655 0.6655 0.6655 0.6655	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470021	Chisel Cartridge 2.5 x 1 mm S1 0.098 x 0.039 in	16.9 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 10.95 1	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470029	Chisel Cartridge 2.7 x 1 mm 0.098 x 0.039 in	16.9 (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (0.675) (General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470048	Chisel Cartridge 2.9 x 1 mm 0.114 x 0.039 in	10.000 (m)	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470034	Chisel Cartridge 3 x 1.2 mm 0.118 x 0.047 in		General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470022	Chisel Cartridge 4 x 1.5 mm S1 0.157 x 0.059 in	(n) (n) (n) (n) (n) (n)	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470

R470 Cartridge Range for TRA470 and TR470 Automated Processes



nd dimensions	Suggested components	Compatible with
mm (m)	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
mm (in)	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
N N M M M M M M M M M M M M M M M M M M	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
mm (in)	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
mm (m)	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
mm (m)	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470

R470 Cartridge Range for TRA470 and TR470 Automated Processes

R470 Cartridge Range for TRA470 and TR470 Automated Processes

Ref.	Description	Image and dimensions	Suggested components	Compatible with
R470044	Grooved Chisel Cartridge 4 x 1.8 mm 0.157 x 0.071 in	189 199 199 199 199 199 199 199 199 199	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470041	Barrel Cartridge Ø 1.5 mm Ø 0.059 in	9354) 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 10000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 10000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 100000 1000000 1000000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 10000000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 1000000 100000 100000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 1000000 10000000 100000000	Through-hole Cable soldering	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470030	Barrel Cartridge Ø 2 mm Ø 0.079 in	10.4 10.4 10.4 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5	Through-hole Cable soldering	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470031	Barrel Cartridge Ø 3 mm Ø 0.118 in	127 (0.560) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0.665) (0	Through-hole Cable soldering	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470028	Barrel Cartridge Ø 3.8 mm Ø 0.150 in	318 16.9 16.9 16.9 16.9 16.9 16.9 10.5655 10.5655 10.5655 10.5655 10.5655 10.5655 10.5655 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.57 10.	Through-hole Cable soldering	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470032	Barrel Cartridge Ø 4 mm Ø 0.157 in	122 0.450 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.00000 10.0000 10.00000 10.00000 10.00000 10.00000 10.00000 10.00000 10.00000 10.00000 10.00000 10.00000 10.00000 10.00000000	Through-hole Cable soldering	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470045	Drag Cartridge 0.75 mm S2 0.029 in	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 000000	Drag soldering	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
R470036	Drag Cartridge 1 mm 0.039 in	110 33 10 10 10 10 10 10 10 10 10 10	Drag soldering	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470

	Ref.	Description	Image and dimensions	Suggested components	Compatible with
	R470046	Drag Cartridge 1.3 mm S2 0.051 in	0118 10222 10229 10229 10229 10229 10229 10229 10229 10229 10229 10229 10229 10229 10229 1022 102 102 102 102 102 102 10	Drag soldering	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
	R470037	Bevel Cartridge Ø 3 mm Ø 0.118 in	16.9 10 10 10 10 10 10 10 10 10 10 10 10 10	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
	R470038	Bevel Cartridge Ø 4 mm Ø 0.157 in	27 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16.9 16	General use	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
	R470039	Bevel Cartridge Ø 6 mm Ø 0.236 in	16.9 9 16.9 9 16.665 16.655 10 10 10 10 10 10 10 10 10 10 10 10 10	General use Sheet metal	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
	R470040	Bevel Cartridge Ø 9 mm Ø 0.354 in	9 (0.354) 10.665) 10.665) 10.6655 10 (10.6655) 10.6655 10 (10.6655) 10 (10.6655) 10 (10.6655) 10 (10.655) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.755) 10 (10.7	General use Sheet metal	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
Y	R470049	Faston Terminal Cartridge 28.4 mm 1.118 in	14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2 14.2	Connectors	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
	R470056	Faston Terminal Cartridge 20 mm 0.787 in	16.9 16.665 0.565 0.565 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575 0.575	Connectors	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470
	R470058	Faston Terminal Cartridge 20.2 mm 0.795 in	16.00 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.0000 10.00000 10.00000 10.0000 10.0000 10.000	Connectors	Soldering Unit: HA470, HM470 Cartridge Stand: CS2R470





