

TECHNICAL SHEET



RO-4000

ELECTRIC CRIMPING STATION BY ROLLING

CHARACTERISTICS & ADVANTAGES :

Our RO-4000 crimping station combines accuracy of the adjustment parameters, a modular approach, and regularity, with a reproducible crimp result that leaves no marks or traces of distortion on your caps.

- Suitable for all models of closures on the market
- Compact, easy-to-use station
- Recommended for standard and Flip-off caps from 7.5 – 32 mm
- Built-in power supply
- Particularly sturdy and reliable
- Safety features include a transparent window and IR barrier
- Easy, effortless use
- Fitted with electric drive system allowing the crimping parameters to be accurately and reproducibly adjusted along 3 axes
- All the crimp parameters are perfectly controlled (vial rotation, crimp roller speed, cap and seal pressure, etc.)
- Progressively-adjustable crimping travel according to the type of cap and hardness of the seals
- Fast, easy changing of heads and bases for vials and types of caps without the use of tools
- Developed and manufactured in France



The RO-4000 is versatile and stable, and lets you obtain the best crimping results available on the market.

The interchangeable locating heads and vial bases for crimping are quick to change without tools and are specially suited to standard or Flip-Off aluminium closures with a diameter of 7.5 mm, 8 mm, 11 mm, 13 mm, and 20 mm, as well as 13, 15, 18, and 20 mm FEA pumps.

The seal compression can be adjusted progressively by means of an electric motor, according to the hardness of the seals and type of caps used.

The RO-4000 is compatible with standard aluminium caps, the safety caps used in Headspace, magnetic caps, and Flip-Off caps.

All the working parameters are controlled and can be modified (vial rotation, crimp roller speed, descent of the locating head), thereby ensuring perfect, reproducible crimping without leaving marks on the cap.

The instrument is also used as a test bench for qualifying caps, stoppers, and vials.



Don't hesitate to contact us for further details

DESCRIPTION	CAT. NO.
Rolltronic RO-4000 electronic crimping station (Complete station, less cap locating head and vial base) RO-4000	RO-4000
ACCESSORIES	CAT. NO.
Precision stainless-steel adaptor for XXØ vials Manufactured on request (Ø & Height of the vials)	AD-RO- XX
Holding head pour capsule Ø XX Réalisation sur demande suivant diamètre et spécificité de la capsule	TM-RO- XX



Force adjustable according to the type of caps and seals



Increased stability



Requires only a simple 230 V / 50 Hz supply



Average rate vials / hour



Crimping for all types and sizes of vials



Compact
Can be installed on table or lab bench
H 52 cm x W 31.5 cm x D 43 cm



Allows crimping without distorting or marking the cap



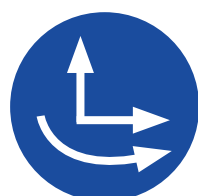
French manufactured



Machine can be repaired for 10 years



Report and protocol of Installation & Operational Qualification (IQ / OQ)



X, Y, Z axis control



Demonstration video

THE CONDENSED

	Average rate / hour	Can Crimp Can Decrimp	Dimensions (cm) (H x W x D)	Weight (Kg)
CR-1 CR-100 	350	 	21 x 4/6 x 8	0,45
CR-1000 	400	 	50 x 16 x 20	10
CR-4000 	450	 	60 x 22 x 28	19
CR-4000S 	750	 	60 x 32 x 42	30
CR-4000SL 	550	 	70 x 32 x 43	30
CR-5000 	750		60 x 27 x 33	22
CR-5000S 	750		60 x 32 x 42	30
CR-6000 	900		56 x 43 x 49	37
RO-4000 	360		52 x 32 x 43	29



Installation Qualification
& Operational Report &
Protocol







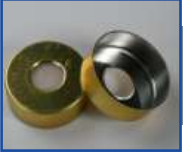




Made in France



Machine can be
repaired for
10 years

CHOOSE THE HEAD ACCORDING THE CAPS

	Kind of caps Can be crimped or decrimped	Characteristics	Crimping head
	Flip-Off Can be crimped or decrimped ^{*(1)}	Equipped with a plastic cover that protrudes from the aluminum part	Ref. ending with -FLO TS11FLO, TS20FLO, ...
	Flip-Tear-Up Can be crimped	Equipped with a plastic cover that protrudes from the aluminum part AND a tab	Ref. ending with -FTU TS13FTU, TS20FTU, ...
	Flush-Side Can be crimped or decrimped ^{*(1)}	Equipped with a plastic cover which is flush with the aluminum part	Ref. ending with -FS TS13FS, TS20FS, ...
	Central hole Can be crimped or decrimped ^{*(1)}		Ref. classic without termination TS08, TS11, TS20, ...
	Central tear-off lid Can be crimped or decrimped ^{*(1)}		Ref. classic without termination TS20, ...
	Fully tearable Can be crimped or decrimped ^{*(1)}		Ref. classic without termination TS20, ...
	Magnetic Can be crimped or decrimped ^{*(1)}		Ref. classic without termination TS11, TS20, ...
	Bi-metal Can be crimped or decrimped ^{*(1)}		Ref. classic without termination TS11, TS20, ...
	FEA Pump Can be crimped		Ref. ending with -FEA TS15FEA, TS16FEA, TS20FEA, ...

* (1) The caps that can be decrimp are decrimped using heads whose reference does not have a specific termination. For example, to decrimp a Ø20mm flip-off caps, you must manually remove the plastic cover and then you can decrimp using a decrimping head (TDØ) (TD08, TD11, TD13, TD20 , ...)

OPTIONS COMPATIBILITY						
OPTION	DESCRIPTION	CR-1000	CR-4000	CR-5000	CR-6000	...
Option «A»	LCD display with 5 adjustable levels and total counter		X			
Option «C»	Electric cycle / total counter		X			SC-4000
Option «D»	Two-position sliding guide mounted on ball screw			X		
Option «I»	316 L stainless-steel case	X	X	X	X	SC-4000
Option «L»	Wide working area opening. Particularly suitable for using 50 and 100 ml vials, the area is protected by 3 IR sensors		X			SC-4000
Option «T»	Temperature probe		X	X		SC-4000
Option «USB»	Option "USB" Machine control by microprocessor, with USB link Force curves can be saved Configuration and saving of the various force levels according to the type of closure. Statistics and monitoring of the number of crimping and decapping operations performed, the average force applied, usage time Any other functions can be produced upon request (Statistics, operation, display, etc.)		X			
Option «V»	Fan (recommended for intensive use)		X	X		SC-4000
CT-6000	Electrical transport, guidance, and positioning system for automatic cap fitting				X	
Option «R»	Networking using a server for statistical monitoring of manufacturing batches			CR-5000S	CR-6000	
Option «PCD»	Remote control			CR-5000S	CR-6000	RO-4000

TORQUING HEAD FOR SC-4000	CAT. No.
Torquing head for DIN 18 neck	TV18
Torquing head for DIN 20 neck	TV20
Torquing head for DIN 22 neck	TV22
Torquing head for DIN 24 neck	TV24

CRIMPING HEAD	CAT. No.	COVER*
Crimping head for 8 mm Ø caps	TS08	CAO08S
Crimping head for 11 mm Ø caps	TS11	CAO11S
Crimping head for 13 mm Ø caps	TS13	CAO13S
Crimping head for 13 mm Ø overflowing flip-off caps	TS13FLO	CAO13FLOS
Crimping head for 13 mm Ø flip-off with tongue caps	TS13FTU	CAO13FTUS
Crimping head for 13 mm Ø not-overflowing flip-off caps	TS13FS	CAO13FSS
Crimping head for 20 mm Ø caps	TS20	CAO20S
Crimping head for 20 mm Ø overflowing flip-off caps	TS20FLO	CAO20FLOS
Crimping head for 20 mm Ø flip-off with tongue caps	TS20FTU	CAO20FTUS
Crimping head for 20 mm Ø not-overflowing flip-off caps	TS20FS	CAO20FSS
Crimping head for 28 mm Ø caps	TS28	CAO28S
Crimping head for 32 mm Ø caps	TS32	CAO32S
Crimping head for 32 mm Ø overflowing flip-off caps	TS32FLO	CAO32FLOS
Crimping head for 32 mm Ø not-overflowing flip-off caps	TS32FS	CAO32FSS



Add «-I» after the reference of the standard cover to benefit from the stainless steel finish

* **Note :** Accessories | Safety covers for crimping/decapping heads.

Whether or not a cover is used does not affect the crimp quality but will allow you to use the unit in complete safety.

DECAPPING HEAD	CAT. No.	COVER*
Decapping head for crimp-top vials using an 8 mm Ø neck	TD08	CAO08D
Decapping head for crimp-top vials using an 11 mm Ø neck	TD11	CAO11D
Decapping head for crimp-top vials using an 13 mm Ø neck	TD13	CAO13D
Decapping head for crimp-top vials using an 20 mm Ø neck	TD20	CAO20D

HOLDING HEAD FOR CAPS ROLLTRONIC RO-4000	CAT. NO.
Holding head for 13 mm Ø caps	TM-RO-13
Holding head for 13 mm Flip-Off Ø caps (overflowing)	TM-RO-13FLO
Holding head for 13 mm Flip-Off Ø caps (not overflowing)	TM-RO-13FS
Holding head for 13 mm Flip-Off Ø caps (flat surface)	TM-RO-13OVb
Holding head for 20 mm Ø caps	TM-RO-20
Holding head for 20 mm Flip-Off Ø caps (overflowing)	TM-RO-20FLO
Holding head for 20 mm Flip-Off Ø caps (not overflowing)	TM-RO-20FS
Holding head for XXØ caps Manufactured on request (Ø & specificity of the caps)	TM-RO- XX

PRECISION ADAPTOR FOR VIALS ROLLTRONIC RO-4000	CAT. NO.
Precision stainless-steel adaptor for XXØ vials Manufactured on request (Ø & Height of the vials)	AD-RO- XX



**Burn both sides of your security cover
with the text of your choice !**

example :



The quality of your crimping varies depending on several criteria :

- the height of the vial neck
- the type of neck (DIN or HS)
- seal thickness (from 0.25 mm to 3.25 mm)
 - height of the cap
 - the force applied

Poor crimping can be indicated by :

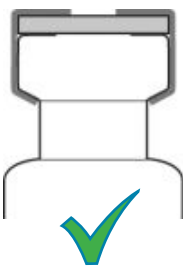
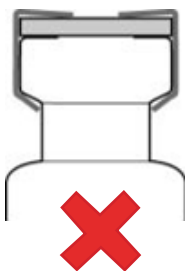
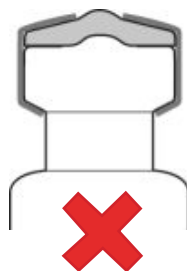
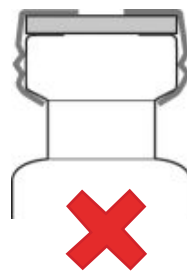
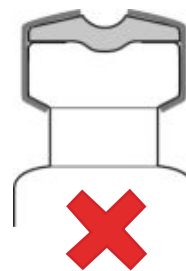
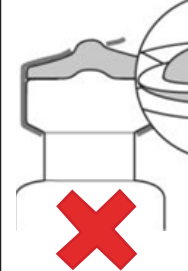
- a bulging cap and a deformed seal preventing proper sampling
- a cap that turns on the vial; it is not perfectly pressed down onto the vial and the crimp is not hermetically sealed

For Headspace analyses in particular, vial sealing affects the reproducibility of the result. Certain autosamplers like the CTC use magnetic caps that require perfectly flat crimping, to allow the vial to be transported using a magnet.

PRACTICAL TIPS:

It is easy to recognize a non-compliant crimp from the following points :

- the crimp cap appears convex
- the side of the cap is deformed
- the seal appears concave

					
Perfect crimp					
Vial cap surface flat	Edges of aluminium cap not fitting snug against the vial neck	Convex deformation of the crimp caps	Cap sides-deformed	Concave deformation of the seals	Cap edges rounded / Convex deformation of the crimp caps / Seal sticking up
Septum surface flat					
Even crimping of crimp cap side walls	Crimping too weak	Crimping too strong	Crimping too strong	Crimping too strong	Crimping too strong
Sides of the cap flat, undamaged					

DON'T HESITATE TO CONTACT US :

Monday to Friday
09:00 am - 12:00 am
02:00 pm - 06:00 pm

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