

## STANDARD

LMC's Triclamp couplings are quick couplings used in working environments demanding high levels of hygiene; e.g. the food, pharmaceutical, chemical and life science industries. The Triclamp couplings are available in DIN 32676, INCH, IMPERIAL or ISO 1127 standards.

## OPERATION

Triclamp couplings are easily identified by their flange design. The transition from the flange side to the hose side is made by a conical profile. The flange side is used to connect to another flange of the same dimension and standard. Users should ensure that only Triclamp's complying with the same standard are connected together. The Triclamp seal (profiled or non-profiled) is fitted to one of the flanges. The second Triclamp is then brought together with the flange containing the seal. The heavy-duty clamp is applied to the flanges and closed. The coupling can easily be connected, disconnected and reused.

N.B.: Closing the heavy-duty clamp too tightly will alter the mechanical structure of the flange seal. Always use the recommended torque setting of 5 NM.



Triclamp coupling with welding end - type RTRIL ...

Triclamp seal profiled / non profiled type TRIX ...

Triclamp coupling with welding end - type RTRIL ...

Heavy duty clamp single bolt - type TRIK ...

## FEATURES



1. Lightly-grooved hose shank for assembly with EN 14420-3 RK safety clamps, HRRK or HRP-swage ferrules
2. Bacterial growth is prevented due to the sanitary transition of the inside of the hose shank
3. The rounded end of the hose shank prevents hose damage
4. Low internal Ra value of  $\leq 0.8 \mu\text{m}$  (Ra test report available)
5. Outer diameter in relation with inner flange dimension. No disconnection necessary to define the type of tube system.
6. All sizes are fully vacuum-resistant up to 130°C / 265°F
7. Transition is possible between Triclamp couplings with same flange size/standard, same ID flange side and different hose dimension
8. EN 10204-type 3.1 certificate available on request



## APPLICATION

For food, beverage, chemical, pharmaceutical and life science industry applications, as well as bio-engineering, filter and water treatment technology.

## WORKING PRESSURE

Coupling

ND 10 to ND 50: maximum 16 bar / 230 psi

ND 65 to ND 100: maximum 10 bar / 145 psi

## TEMPERATURE

-30°C / -22°F up to +300°C / 572°F

Hose, coupling, assembly method and seal must be chosen in relation with the desired application and temperature range.

## MATERIAL

### ■ Coupling

Triclamp coupling with hose shank

Stainless steel AISI 316Ti / 1.4571

Polypropylene or reinforced PTFE (on request)

HASTELLOY® C-276 alloy on request

HASTELLOY® is a registered trademark of Haynes International, Inc.

Triclamp coupling with butt weld

Stainless steel AISI 316L - 1.4404

### ■ Seals

DIN 32676: NBR, EPDM, FPM, PTFE, MVQ

INCH: NBR, EPDM, FPM, PTFE

ISO 1127: Silicone, EPDM, FPM, GYLON BIO-PRO®

IMPERIAL: NBR, EPDM, FPM, PTFE

Other materials on request

GYLON BIO-PRO® is a registered trademark of Garlock Sealing Technologies



## ASSEMBLY

- Stainless steel RK safety clamps EN 14420-3 / DIN 2817
- Stainless steel HRRK swage ferrules for rubber hoses
- Stainless steel HRP swage ferrules for PTFE hoses
- Butt welding

## RA TEST REPORT

A roughness test report for our standard range of Triclamp couplings is available on request. Ra value (or Roughness average value) is the average of a set of individual measurements of the peaks and troughs of a given surface.

Inner roughness average value (Ra)  $\leq 0.8 \mu\text{m}$

Outer roughness average value (Ra)  $\leq 1.2 \mu\text{m}$

Inner Ra value of  $\leq 0.3 \mu\text{m}$  available on request.



## TRICLAMP COUPLINGS



## TRICLAMP COUPLING WITH HOSE SHANK - ISO 1127

Standard	ND	For hose mm	OD Ø flange mm	ID Ø flange mm	ID hose shank mm	Reference
ISO 1127	8	8.0	34.0	10.3	5.5	RTRI0834ID10.3
ISO 1127	8	10.0	34.0	10.3	7.0	RTRI1034ID10.3
ISO 1127	8	12.0	34.0	10.3	9.0	RTRI1234ID10.3
ISO 1127	8	20.0	34.0	10.3	15.0	RTRI2034ID10.3
ISO 1127	8	25.0	34.0	10.3	21.0	RTRI2534ID10.3
ISO 1127	10	8.0	34.0	14.0	5.5	RTRI0834ID14.0
ISO 1127	10	10.0	34.0	14.0	7.0	RTRI1034ID14.0
ISO 1127	10	12.0	34.0	14.0	9.0	RTRI1234ID14.0
ISO 1127	10	20.0	34.0	14.0	15.0	RTRI2034ID14.0
ISO 1127	10	25.0	34.0	14.0	21.0	RTRI2534ID14.0
ISO 1127	15	8.0	34.0	18.1	5.5	RTRI0834ID18.1
ISO 1127	15	10.0	34.0	18.1	7.0	RTRI1034ID18.1
ISO 1127	15	12.0	34.0	18.1	9.0	RTRI1234ID18.1
ISO 1127	15	20.0	34.0	18.1	15.0	RTRI2034ID18.1
ISO 1127	15	25.0	34.0	18.1	21.0	RTRI2534ID18.1
ISO 1127	20	12.0	50.5	23.7	9.0	RTRI1250ID23.7
ISO 1127	20	20.0	50.5	23.7	15.0	RTRI2050ID23.7
ISO 1127	20	25.0	50.5	23.7	21.0	RTRI2550ID23.7
ISO 1127	20	32.0	50.5	23.7	28.0	RTRI3250ID23.7
ISO 1127	20	38.0	50.5	23.7	33.5	RTRI3850ID23.7
ISO 1127	25	12.0	50.5	29.7	9.0	RTRI1250ID29.7
ISO 1127	25	20.0	50.5	29.7	15.0	RTRI2050ID29.7
ISO 1127	25	25.0	50.5	29.7	21.0	RTRI2550ID29.7
ISO 1127	25	32.0	50.5	29.7	28.0	RTRI3250ID29.7
ISO 1127	25	38.0	50.5	29.7	33.5	RTRI3850ID29.7
ISO 1127	32	12.0	50.5	38.4	9.0	RTRI1250ID38.4
ISO 1127	32	20.0	50.5	38.4	15.0	RTRI2050ID38.4
ISO 1127	32	25.0	50.5	38.4	21.0	RTRI2550ID38.4
ISO 1127	32	32.0	50.5	38.4	28.0	RTRI3250ID38.4
ISO 1127	32	38.0	50.5	38.4	33.5	RTRI3850ID38.4
ISO 1127	40	38.0	64.0	44.3	33.5	RTRI3864ID44.3
ISO 1127	40	50.0	64.0	44.3	43.5	RTRI5064ID44.3
ISO 1127	50	50.0	77.5	56.3	43.5	RTRI5077ID56.3
ISO 1127	50	63.0	77.5	56.3	58.5	RTRI6377ID56.3
ISO 1127	65	63.0	91.0	72.1	58.5	RTRI6391ID72.1
ISO 1127	65	75.0	91.0	72.1	70.5	RTRI7591ID72.1
ISO 1127	80	75.0	106.0	84.3	70.5	RTRI75106ID84.3
ISO 1127	80	100.0	106.0	84.3	94.0	RTRI100106ID84.3
ISO 1127	100	100.0	130.0	109.7	94.0	RTRI100130ID109.7



TRICLAMP COUPLINGS

DIN / INCH / ISO / IMPERIAL

Assembly: RK safety clamps in stainless steel

HRRK swage ferrules

HRP swage ferrules

Material: stainless steel AISI 316Ti / 1.4571

Corresponding pipe system DIN 11866 series B

Other dimensions on request available