





GECITECH specializes in the manufacture of flexible hoses and fittings for the food, chemical, pharmaceutical, biotechnology and cosmetic industries.

We have a full range of flexible silicone, rubber and thermoplastics hoses (PFA, PTFE, MFA, etc.) as well as stainless steel fittings. This range meets all our customers' needs.

All our products undergo many testing requirements and controls throughout the production cycle, meeting international standards such as FDA, USP, BfR, Atex, European Regulation 1935/2004, etc. Our company is also ISO 9001 certified since 2005.



GECITECH can meet any customer specification with our pioneering R&D department staffed with highly qualified technicians and engineers who design and improve co-engineering demands from customers.

This expertise enables the development of patented innovative products.

Our products are manufactured and assembled in our workshop by qualified and trained staff with the latest technologies.



Our production site in Mions with over 20000 m².



SILICONE

GSI[®] 75 NT and NTP



FIL, GAS, NPT, JIC, FLANGES, etc.).

NRS



SILICONE TUBES



Extruded silicone tube, platinum cured.

PRODUCT HIGHLIGHTS

60/70/80 shores Long manufacturing lengths and wide range of diameters. Autoclavable tube.



POLYSIL®

SILICONE / PFA





NRS

Smooth PTFE bore, stainless steel braid, textile reinforcements and stainless steel wiring HR* from ND 13 (0.51 inches). White silicone cover.

PRODUCT HIGHLIGHTS

- For the transfer of all food products, including oily and fatty products, liquid chemical products and gas (except
- melted down alkaline metal and fluorinated gas) and permanent steam.
 - Excellent thermal protection.

Phtalate

free

- Available from ND 6 to 25mm (0.25 to 1 inch).
- Working pressure from 40 to 120 bar (580 to 1740 PSI).
- Working temperature range from -50 to +230°C (-58 to +446°F).
- Standard manufacturing length 22m (72.2 feet).
- (Except ND 25mm (1") which is 5.75m (18.9 ft).
- No vacuum capability

Assembly options

The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

FDA

IISP

Class VI

Regulation

1935/2004



POLYTECH®

PFA / EPDM



POLYTECH® CP (Carbone Pharma)

PFA / EPDM

BfR

Regulation 1935/2004

BNIC



White PFA, ultra smooth and non-adherent, textile ply and galvanized steel wires embedded in the wall. Blue/black marbled finish and antistatic.

PRODUCT HIGHLIGHTS

- Robust hose for the transfer of food, pharmaceutical and chemical products
- using bipolar solvents in explosive areas.

USF

Class V

- Available from ND 13 to 100mm (0.51 to 4 inches).
- Working pressure 10 bar (145 PSI).

Assembly options

- Working temperature range from -30 to +130°C * (-22 to +266°F).
- Standard manufacturing length 20m (66 feet). Phtalate



Atex validated by INERIS in accordance with the certification N° 21795.2X/09 (Assembly by GECITECH).

The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

POLYTECH® CC (Carbone Chimie)







Black PFA smooth antistatic with textile ply and galvanized steel wires embedded in the wall. Blue/black marbled finish and antistatic.

PRODUCT HIGHLIGHTS

- Robust hose for the transfer of all products including the most aggressive fluids
- in explosive areas.
- Available from ND 13 to 100mm (0.51 to 4 inches). Working pressure 10 bar (145 PSI).
- Working temperature range from -30 to +130°C* (-22 to +266°F).
- Standard manufacturing length 20m (66 feet).







Atex validated by INERIS in accordance with the certification N° 21795.2X/09 (Assembly by GECITECH).

Assembly options The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

* For temperature requirements above 100°C (212°F), please contact us.



VIEWLINE®



Fluorinated thermoplastic, translucent to view the transfer product.

PRODUCT HIGHLIGHTS

Material shatter resistant, chemically inert to avoid contamination of the transferred product. Suitable for food, pharmaceutical, cosmetic and chemical applications. It is also tasteless and odorless. • Can be externally reinforced with a stainless steel safety guard according to the ratio pressure / temperature applications.

• Can be assembled in longer length for tank level applications.

USP

Class VI

FDA

Regulation 1935/2004

BfR

Phtalate

free

Phtalate

FDA

FDA

- Available from ND 25 to 100mm (1 to 4 inches).
- Working pressure from 4 to 8 bar (58 to 116 PSI).
- Working temperature range from -40 to +150°C (-40 to 302°F).
- Available in longer length for diameter 20x24 for level gauge (replacement



The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

Phtalate

SMOOTH PTFE BORE HOSE WITH STAINLESS STEEL BRAID

Assembly options

of the glass level gauge).



Smooth PTFE bore hose. Outer surface reinforced by a stainless steel braid in 304L material.

PRODUCT HIGHLIGHTS

Ideal for the transfer of chemical products, steam even at high temperature and pressure. Non-stick quality which allows a good flow of the transferred liquid with minimum pressure loss.

- Available from ND 5 to 26mm (0.2 to 1 inch).
- Working pressure from 68 to 205 bar (986 to 2973 PSI).
- Working temperature range from -50 to +200°C (-58 to +392°F).
- No vacuum capability.

Assembly options

The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

PTFE CONVOLUTED HOSE WITH STAINLESS STEEL BRAID



NRS

PTFE convoluted hose. Outer surface reinforced by a stainless steel braid in 304L material.

PRODUCT HIGHLIGHTS

ldeal for the transfer of aggressive products in dynamic application.

- Available from ND 6 to 100mm (0.24 to 4 inches).
- Working pressure from 12 to 170 bar (174 to 2466 PSI).
- Working temperature range from -50 to +200°C (-58 to +392°F).
- For vacuum applications, contact us.

Assembly options

The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).



SMOOTH PTFE BORE HOSE WITH STAINLESS STEEL BRAID CARBON-LOADED



HERMOPLASTIC HOS Ш



Assembly options

Available from ND 6 to 26mm (0.24 to 1 inch).

Working pressure 350 bar (5076 PSI)

PRODUCT HIGHLIGHTS

chemical products.

PTFE hose with high robustness

for the transfer of all types of food or

Atex validated by INERIS in accordance with the certification n°87830-1/07 (Assembly by GECITECH). The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

Working temperature range from -60 to +200°C (-76 to +392°F).

Antistatic tube.

minimum pressure loss.

Good mechanical properties with

Phtalate

free

FDA



DEPOTAL[®]

EPDM



6

NRS

Reusable ferrules



MAXIFOOD® EPDM White EPDM with synthetic plies reinforcement, high tenacity. Outer surface grey smooth synthetic rubber. **PRODUCT HIGHLIGHTS** • Very robust hose without wire reinfor-cement. food products, except oily and fatty products Ideal for resisting ground abrasion. Can be used for metal detectors. Recommended for processing most Available from ND 25 to 76mm (1 to 3 inches). Working pressure 10 bar (145 PSI). Working temperature range from -35 to +100°C (-31 to +212°F). Standard manufacturing length 40m (131 feet). Phtalate FDA BfR For vacuum applications, contact us. free **Assembly options** The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). The hose can be also supplied with reusable fittings and ferrules for some diameters (contact us). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, NRS GAS, NPT, JIC, FLANGES, etc.). **VAPROCESS® EPDM** White EDPM with synthetic reinforcement plies. Outer surface micro perforated blue EPDM. **PRODUCT HIGHLIGHTS** • Very flexible hose without wire reinfor-cement. Ideal cleaning hose reel applications (except slaughterhouses). Recommended for processing most food products, except oily and fatty products. Caution: no continuous steam application. Available from ND 13 to 76mm (0.5 to 3 inches) Working pressure 7 bar at 170°C and 20 bar at 95°C (102 PSI at +338°F and 290 PSI at 203°F) Working temperature range from -40 to +170°C (-40 to 338°F). Standard length manufacturing 40m (131 feet). Phtalate No vacuum capability. FDA free **Assembly options** The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, MRS ISS, FIL, GAS, NPT, JIC, FLANGES, etc.). **VTA®** BUTYL White Butyl with steel reinforcement braid embedded in the wall. Outer surface micro perforated grey Butyl. **PRODUCT HIGHLIGHTS** food products in high pressure and non-Very flexible and robust hose improving permanent steam. operator safety. Long manufacturing lengths. A versatile hose compatible with most

Available from ND 13 to 38mm (0.5 to 1.5 inches).

Working pressure 8 bar at 170°C and 30 bar at 95°C (116 PSI at +338°F and 435 PSI at

- 203°F), depending on duration. Contact us for temperature requirements over 95°C (203°F). Working temperature range from -40 to +170°C (-40° to +338°F).
- Standard manufacturing length 60m (196.8 feet).

Phtalate FDA BfR free

Assembly options

NRS

The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).



POLYURETHANE REINFORCED GECIFLEX PU/AL/EX HOSE



100% translucent and antistatic polyurethane polyester with stainless steel wire without halogens or plasticizers.

PRODUCT HIGHLIGHTS Suction and powder discharge hose for food, pharmaceutical and cosmetic industries requiring a food contact certification If or explosive areas. High resistance to UV and ozone. Available from ND 38 to 100mm (1.5 to 4 inches). Working temperature range from -40 to +90°C (-40 to 194°F). Standard manufacturing length 10m (32.8 feet). Matate FDA (Explored to the set of the set of



with the certification n°24576/12 (Assembly by GECITECH).

Assembly options The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

POLYURETHANE REINFORCED GECIFLEX PU/AL HOSE





100% translucent polyurethane polyester with stainless steel wire without halogens or plasticizers.

PRODUCT HIGHLIGHTS

Extraction and transfer of powder, dust.

• High resistance to UV and ozone with a bend radius and great flexibility.

- Available from ND 32 to 200mm (1.3 to 8 inches).
- Working temperature range from -40 to +90°C (-40 to 194°F).
- Standard manufacturing length 10m (32.8 feet).

Assembly options

The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

DEPOTAL ANNELE®

EPDM

Regulation 1935/2004

BfR

Phtalate

free

FDA



White EDPM with synthetic reinforcement ply and steel wire. Outer surface corrugated blue EPDM rubber.

PRODUCT HIGHLIGHTS

- High flexibility for flow control panel, etc.
 Robust hose recommended for all types of food products except oily and fatty products.
 Ideal for resisting ground abrasion.
 Good vacuum capability.
- Available from ND 25 to 102mm (1 to 4 inches).
- Working pressure 10 bar (145 PSI).
- Working temperature range from -30 to +120°C (-22 to +248°F).
- Standard manufacturing length 40m (131 feet).

Assembly options

The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

Phtalate

free

FDA



WINERY



NRS

White elastomer with nylon wire or galvanized steel wire and textile plies. Outer surface red elastomer.

PRODUCT HIGHLIGHTS



Special for wineries applications.

Available from ND 25 to 70mm

Working pressure 10 bar (145 PSI).

Standard manufacturing length 40m

Working temperature range from -30

Phtalate

free

FDA

Nylon wire

(131 feet).

(1 to 2.7 inches).

to +70°C (-22 to +158°F).

Galvanized steel wire

- Available from ND 25 to 102mm
- (1 to 4 inches).
- Working pressure 10 bar (145 PSI). Working temperature range from -30 to
- +120°C (-22 to +248°F).
- Standard manufacturing length 40m (131 feet)

Assembly options

braid.

The 316L stainless steel swaged fittings are monoblocs (no welds) in accordance with the NRS® design (Non Retention System). The hose can be also supplied with fittings and reusable ferrules. Many types of fittings are also available upon request (SMS, DIN, CLAMP, RJT, ISS, FIL, GAS, NPT, JIC, FLANGES, etc.).

OUTER PROTECTION BY SILICONE SLEEVE

Reusable ferrules



Extruded silicone sleeve translucent or white.

PRODUCT HIGHLIGHTS

 Facilitates the outer surface cleaning of the hose
 Allows the visualization of possible leak.

Protects against dirt in the metal

 Finishing with stainless over-rings at both ends.

Surface thermal protection.



INSULATING HOSE



Insulating hose extruded elastomer foam.

PRODUCT HIGHLIGHTS

- Hose thermal protection, limits thermal shocks between inside and outside.
- Limits the temperature loss of the conveyed product.

Working temperature range from -50 to +150°C (-58 to +302°F).



FIBREGLASS SLEEVE COATED WITH SILICONE



PRODUCT HIGHLIGHTS

Operator protection against the hose temperature.
 Hose protection from ambient temperature.

Finishing with stainless over-rings at <u>both ends.</u>

Complies with SAE AS1072 standard.

DOUBLE JACKET HOSE



Double jacket hose with water or air circulation. For inner product circulation and outer connection for the circulation of heating or cooling media.

PRODUCT HIGHLIGHTS

Ideal to maintain temperature of the transferred liquid thanks to hot water, cold water or air circulation system. System used with all types of hoses.

Option:

Double jacket hose with inside elastomer and outside stainless steel corrugated.

Double jacket hose with inside/outside elastomer.

HEATED HOSE WITH ELECTRICAL WIRE



Flexible hose inside with heating electrical wire outside.

PRODUCT HIGHLIGHTS

- Maintains a consistent temperature thanks to the electrical flexible wire. Heated hose self-regulated with sensor PT100 or heated hose with external controller (contact us).
- Insulating foam.
 With outside silicone sleeve for easy closeling.

cleaning.
 Finishing with stainless over-rings at both ends.



COIL



• Example of a PFA pneumatic coil used in pharmaceutical production room.

Products and materials on request.

CLEANING



Stainless steel hose reel used for cleaning operations in food industries.

PRODUCT HIGHLIGHTS

• Stainless steel hose reel with automatic spring return (Additional models available upon request). Ideal for washing facilities. Wall mounting.

The reel can be assembled with:

- Vaprocess[®] hose or blue PVC.
- Water guns: red, white, blue or stainless steel.
- Swivel connector and accessories.





SWAGED FITTING NRS[®] (Non retention System)





The fittings are manufactured to avoid diameter differences between the nipple and pipe in order to ensure a continuous flow of the transfer product. The swaged assembly brings a better non-retention safety by avoiding bacteria entrapment areas.

PRODUCT HIGHLIGHTS

Bend connections 90° or 45°, as well as the special assemblies are manufactured with orbital type welding. All the straight connections are one part, without welding. The concept of assembly can be cleaned in place (CIP) without disassembling.

• The inside surface quality of the connections is smooth (roughness $<0,8\mu$) Grinding or electro polishing is also available upon request. After swaging, the outside of the ferrule is polished.

• Each flexible hose is tagged with a manufacturing code to allow the traceability and the follow-up quality of the flexible. In order to identify the transfer product, a colour identification can be added outside of the hose.

The NRS® range can be assembled with all kinds of fittings (SMS, CLAMP, DIN, RJT, ISS, GAS, etc.).

VNRS® REUSABLE FITTING

3

Gecitech



VNRS® reusable fitting in stainless steel 316L can be assembled on all our silicone Tressil® hoses.

PRODUCT HIGHLIGHTS

This screw-on fitting allows assembly and disassembley without special tools and without galling (non-galling rings*). Can be cleaned with normal CIP procedure (Gecitech patented system).

The connection hose/fitting is specially manufactured to avoid differences in diameter and to

ensure a continuous flow of the transfer product.

The VNRS® system avoids bacteriological gaps

The VNRS® range can be assembled with all kinds of fittings (SMS, CLAMP, DIN, RJT, ISS, GAS, etc.).

ASSEMBLY ON SITE FITTING MSP®



The assembly on site fitting MSP[®] is in stainless steel 316L and can be assembled on GSI[®] 75 NT and 75 NTP hoses range as well as Polysil[®] (on request).

PRODUCT HIGHLIGHTS

*standard ring or autoclavable ring.

• The screw-on fitting allows a perfect compression and holding of the hose extremity, in addition to the locking of the ferrule into the fitting groove making it monobloc like a swaged system.

To assure the best assembly, we propose an

appropriate wrench.

The MSP® range can be assembled with all kinds of fittings (SMS, CLAMP, DIN, RJT, ISS, GAS, etc.).

REUSABLE FERRULES



The reusable ferrules can be assembled on Depotal®and Nitrifood® hoses range.

PRODUCT HIGHLIGHTS

• The assembly is easy and fast, made with two half stainless steel or aluminium ferrules with screws and nuts.

 Perfect for maintenance service, these reusable ferrules avoid production down-time with quick repair. The reusable ferrules range can be assembled with all kinds of fittings (SMS, CLAMP, DIN, RJT, ISS, GAS, etc.).



LASER MARKING





Example of customer marking

GECITECH has a high performance laser marking equipment which offers many identification possibilities.

COLOUR TRACKING



Colour identification by extruded silicone sleeve or shrinkable sleeve. This system allows the hose identification by area of use or by products being transferred.

HOSES CLEANING



GECITECH uses a cleaning station using softened hot water, rinsing with reverse osmosis water, and drying by filtered hot air circulation. This cleaning possibility is optional on request.

QUALITY SERVICES

GECITECH offers material certification type 2.0 and 3.1.

GECITECH offers three levels of traceability procedures: standard, high and ultra-high depending on customers' needs.

- Electro polishing.
- Roughness: 0.8 µ standard and up to 0.1 µ on request.
- Welds made by our operators are validated NF EN 287-1.
- Bench pressure test report.
- Hoses endoscopy video.



316L stainless steel fittings (Other materials on request)







All parts of our production are unitary tagged with the production batch number.





AMACO















Our cleanroom: 700m ² in a controlled atmosphere area for the silicone hoses production



Stainless steel fittings production





Assembly room equipped with the latest technologies





Cleaning station using reverse osmosis water



www.gecitech.com



Christian Berner Oy • p.09 2766 830 • infofi@christianberner.com • www.christianberner.fi