

COMPANY PROFILE

With more than 7000 tons. per year, Guarniflon is one of the world's leading manufacturers of fluorobased machined and semifinished products. Guarniflon production is based on:

extruded and moulded tubes and rods, sheets, films, tapes and machined products in virgin and compounded PTFE and other fluorobased materials.

Established in 1982, today Guarniflon leads a group of 7 international companies. The present leadership was reached thanks to the quality management system which meets customer requirements.

Guarniflon today:

7000	Tons of fluoropolymer materials processed every year
600	People involved
3300	Regular Customers
73	Countries reached
7	Branche offices and companies

Main industrial application fields of Guarniflon products are chemical, petrochemical, valves, hydraulic and pneumatic, machine tools, electronics, electromechanical, automotive, pharmaceutical, medical, food, aerospace, etc.

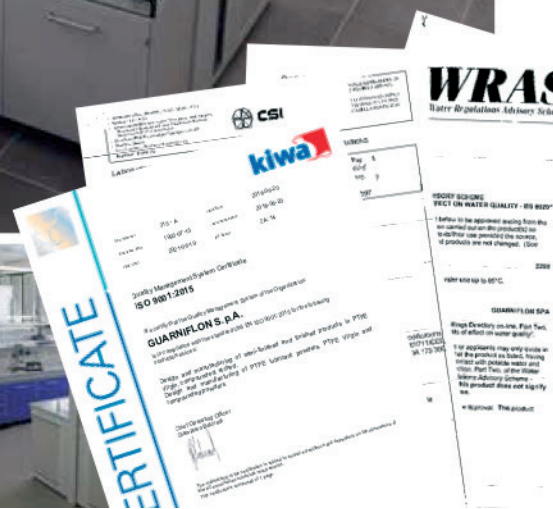
An international network with its Headquarters in Italy.

QUALITY MANAGEMENT - R&D TEAM

Since 1993, Guarniflon is working with a Quality Management System in accordance with UNI EN ISO 9001:2015

Thanks to a modern and qualified laboratory equipped with the most updated apparatus, special physical-chemical-electrical and mechanical testing and analysis are daily performed complying with international standards such as ASTM, DIN, BSI, ISO, etc.

The laboratory is run by a skilled and experienced team, able to test and make all quality controls in incoming, in process and ready-to-deliver materials and products, in order to grant Guarniflon customers the best quality and service.



GUARNIFLON GROUP



ADMINISTRATION
OFFICES



Maceplast
GmbH
Germany



Maceplast
UK Ltd.
UK



Maceplast
France S.A.
France



Maceplast
Romania S.A.
Romania



Maceplast
España S.L.
Spain



IPM
Industrial Plastics
and Machine Inc.
U.S.A.



Guarniflon India
PVT. LTD.
India



P.A.T.I. S.p.A.
TERMOPLASTIC FILMS
Italy



GHVI
SEALING PARTS
Italy



Guarniflon S.p.A.
Via T. Tasso, 12
24060 - Tagliuno di Castelli Calepio
Bergamo - Italy
Tel. +39.035.4494311
Fax +39.035.4494336
info@guarniflon.com
www.guarniflon.com

VENDITE ITALIA
vendite@guarniflon.com
Fax +39.035.4425191

INTERNATIONAL SALES
sales@guarniflon.com
Fax +39.035.4425238



UNI EN ISO 9001:2008



YOUR CHOICE FOR
FLUOROBASED PRODUCTS



VIRGIN AND FILLED PTFE

The **G Series** names a family of products based on polytetrafluoroethylene (PTFE), both virgin and filled with different reinforcing fillers.

The G Series range includes beside the virgin grade, a number of standard types filled with glass fibers, carbon, graphite, and bronze powders in different percentages and combinations. G Series products are available as basic shapes and finished parts, standard and special.

The base characteristics of virgin PTFE are the ones offering a unique combination of:

- low coefficient of friction (the lowest among all solid materials known)
- excellent chemical inertness
- extremely non-adhesive surface (practically no products could stick on it)
- wide temperature withstanding (from –200° C up to +260° C)
- excellent dielectric properties
- toughness and flexibility balance

HIGH PERFORMANCE PTFE BASED COMPOUNDS

The material of the **filled grades of G Series** range are among the best solutions today offered by the market to resolve tribological applications where the most critical operating conditions are present.

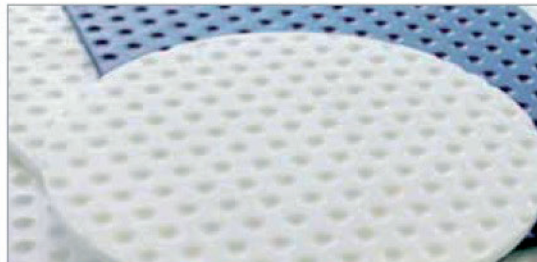
The capability of operating completely dry makes of filled grades of G Series the right answer for applications where to lubricate could be a tough problem (because of inaccessibility, extreme temperatures, chemical corrosion or risk of contaminating other products, such as food or drugs). The materials of the filled grades of G Series range offer the best combination of properties in terms of low coefficient of friction and high wear resistance in a wide variety of operating situations. For special application needs also special grades filled with alumina, calcium fluoride, PPS, PEEK and other fillers are available. Today Guarniflon has available more than 80 different compounds providing solutions to the most tribological applications.

THE MAIN ADVANTAGES OFFERED BY THE FILLED GRADES OF G SERIES MATERIALS ARE:

- dry running capability/self-lubricant properties
- low coefficient of friction
- high wear resistance
- load carrying capabilities
- low relative abrasiveness
- operating temperature from –200°C up to +260°C
- thermal dissipation and antistatic properties
- chemical inertness and atoxicity
- dimensional stability
- flexibility and fatigue stress resistance
- vibrations dampening/low noise running
- low dirtying characteristics
- food contact compatibility
- dielectric properties

G SERIES BASIC SHAPES INCLUDE:

- extruded rods from 3 mm. up to 140 mm.
- moulded rods from 30 mm. up to 700 mm.
- extruded tubes from OD 10 mm. x ID 4 mm. up to OD 165 mm. x ID 150 mm.
- moulded tubes from OD 40 mm. x ID 15 mm. up to OD 1815 mm. x ID 1640 mm.
- moulded sheets 600x600 - 1000x1000 - 1500x1500 - 1000x2000 from 3,0 mm. up to 100 mm. thickness
- skived sheets and tapes from thickness 0,025 mm. up to 5 mm. width up to 1.500 mm.



HPF - HIGH PERFORMANCE FILMS

High Performance Films and Tapes from Guarniflon are skived, melt/blow, extruded fluoropolymer and polyolefin technical films and tapes engineered by Guarniflon R&D Department to allow the customers to select the right film for their application requirements.

A wide range of grades including PTFE, FEP, PFA, MFA, ETFE, PVDF, THV, HDPE, PP to match the right combination of physical and chemical performances in a variety of key market segments including composite molding for the automotive and aerospace industries, chemical processing, electrical/electronics, renewable energies, recreational and marine. HPF from Guarniflon are classified under 3 main product families:



PTFE skived tapes and films that can be offered also calendered or ultra flat. Tapes and films can be chemically etched. Thermoprocessables fluoropolymers skived tapes and films in FEP - PFA - MFA. Extruded films made by FEP - ETFE - THV - PVDF - PFA.



Premium Quality Pressure Sensitive Adhesive Tapes, offered with or without release liners in Fluorosilicone, Polyethylene, PVC, Paper.

Two different adhesive systems: Acrylic and Silicone.



Special products developed as release films for composite industry applications.

Perforation capability available.



AEROSPACE



ELECTRONICS



SOLAR ENERGY



MOBILITY



AUTOMOTIVE



MARINE



SC SERIES

THE SOLUTIONS TO PROBLEMS OF SEALING

Developed by Guarniflon R&D team, SC series is a superior and unique material for gasket (flat sealing) applications.

The overall benefits of Guarniflon SC series over that of both conventional PTFE and competitive PTFE/filler blends are found in the areas of environmental improvement (they are asbestos free) and overall cost saving.

Main applications in the chemical, petrochemical, pharmaceutical, food, paper industries.

SC1100	SC1200	SC1400	SC1600
<ul style="list-style-type: none">• Superior chemical resistance• Excellent resistance to deformation - No ageing• Good compressibility• High sealability• No water absorption• Non-flammable• Easy maintenance (assembling / disassembling)	<ul style="list-style-type: none">• Superior chemical resistance• Excellent resistance to deformation No ageing• High compressibility• High sealability• No water absorption• Non-flammable• Easy maintenance (assembling / disassembling)	<ul style="list-style-type: none">• Superior chemical resistance• Strong acid, solvents, hydrocarbons, chlorine• Water and steam• Excellent resistance to deformation• No ageing• High compressibility• Superior sealability for a wide range of pressure and temperature - No water absorption• Non-flammable• Easy maintenance (assembling / disassembling)	<ul style="list-style-type: none">• Superior chemical resistance• Acids, solvents, hydrocarbons, refrigerant, water• Low bolt load• No ageing• Excellent compressibility - Superior sealability• No water absorption• Non-flammable• Easy maintenance (assembling / disassembling)
	<ul style="list-style-type: none">• APPROVALS Complies with FDA protocols 21 CFR 177.1550 21 CFR 175.300 Complies with REG. EU 10/2011 Complies with TA-Luft VDI 2440	<ul style="list-style-type: none">• APPROVALS Complies with FDA protocol Certified by BAM (Gaseous Oxygen, 200°C, 25 bar) In compliance with TA-Luft VDI 2440	<ul style="list-style-type: none">• APPROVALS Complies with FDA 21 CFR 177.1550 Complies with TA-Luft VDI 2440

GCS SERIES - AIR & GAS COMPRESSORS MATERIALS

Among the 250 different PTFE compounded grades available at Guarniflon, 8 of them have been developed for compressor applications, based on PTFE materials. The compounded grades are processed at Guarniflon HQ's in Italy thanks to a unique integrated supply chain: the process is made possible thanks to Guarniflon compounding department capable of preparing the specific powders required for the intended use.

From the time the raw materials enter the company to the production of semifinished products, the process is monitored to meet the required quality standards.

Guarniflon internal management system ensures the traceability of orders for qualified products for compressors applications, starting from the raw material compounding, to the production of semi-finished products and finally to the machining of pieces and their final control.



FOOD AND BEVERAGE MATERIALS

Modern production processes in critical industrial sectors such as chemistry, pharmaceuticals and the food sector require materials that guarantee PURITY AND STABILITY, without which the risks of alterations of the products subject to the production processes would be too high.

This is a theme that is becoming increasingly topical even for the production capacities reached by modern plants, where an alteration or contamination that occurs during a single process would expand on an industrial scale with damages and repercussions of the same size.

SOME OF GUARNIFLON APPROVED GRADES

TEKCLEAN

Antibacterial and antimicrobial fluoropolymer

D-TEKBLUE

Revolutionary x-ray and metal detectable ptfe

PTFE G673

Toughness and elasticity in the same ptfe compound

