

SOFT MATERIALS GASKETS

SEALS FROM MICA / CERAMIC / BIOSOLUBLE REFRACTORY / GLASS FIBERS SPETOTERM® TUI

Service parameters

T (°C)	-10 ÷ +1300	700*
P _{max} (bar)	40	0.5*
Q _{max} (MPa)	120	1*

Widely used in:

power generation, refineries, heat genereation, steel works, glass production, pulp and paper, shipyards, chemical industry, gaskets used in nonpressurized air installations, coal dust system, exhaus installations, furnace and boiler chamber covers, burners, in all places where the temperature is high, but without pressure; used also to contain oxidizing media, such as nitric acid, sulphur trioxide etc. in pressure installations; gaskets have very good chemical and fire resistance.

Custom styles:

- TUI 50 packings with graphite or PTFE impregnation improving sealability
- insert as the centring ring
- metal insert from selected material, e.g. nickel alloys
- full face gaskets with bolt holes
- metal insert with elements facilitating assembly, such as locatina luas
- parts from TUI 820 as thermoisolating elements

General information

Ordering:

- for gaskets obeying EN 1514-1, DIN 2690, DIN 2691, DIN 2692, ISO 7483 please indicate the symbol, thickness, DN, PN, and for EN and ISO standards, the type (IBC, FF, TG or SR according to EN 1514-1), the standard number, e.g. SPETOTERM® TUI 831, 2 mm, DN 50 PN 40, IBC, EN 1514-1
- for gaskets obeying EN 12560-1, please indicate the symbol, thickness, DN, CLASS, the type, the standard number, e.g. SPETOTERM® TUI 831, 2 mm, DN 50 CLASS 150, IBC, EN 12560-1
- for gaskets obeying ASME B 16.21 please indicate the symbol, thickness, NPS, CLASS, the standard number, e.g. SPETOTERM® TUI 831, 2 mm, NPS 2" CLASS 150, ASME 16.21
- please provide the dimensions or a drawing of non-standard gaskets, or any special requirements, e.g. "for oxygen"

Availability:

Flat gaskets: TUI 70, TUI 70I, TUI 810

- EN 1514-1
- EN 12560-1
- ISO 7483
- TUI 50 packing: square cross section $8 \div 50 \text{mm}$

In case when the full data is not provided, standard gaskets will be produced:

- default standard: EN 1514-1 (DN and PN); EN 12560-1 (DN/NPS and CLASS)
- default normative dimension type IBC
- default thickness: 2 mm up to DN 400 (NPS 16")

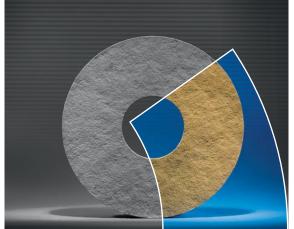
3 mm from DN 450 (NPS 18")

• default PN/CLASS: PN 10-40 up to DN 80

N 16 from DN 100 CLASS 150 for all the NPS



 $^{^{*}}$ – please contact SPETECH if the specified values are higher



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Designation Sketch **Description** SPETOTERM® TUI 50 is the square braided packing, used to seal the **SPETOTERM®** furnace doors, installations containing melted metals in steel works, fire-**TUI 50S** safe zones in the pipelines, thermal dilatations, ship hauls; the packing may be also impregnated with graphite or PTFE; depending on material **SPETOTERM®** used the following styles can be distinguished: TUI 50 S glass fibre up to **TUI 50S75** 450°C; TUI 50 S75 high temperature glass fibre up to 750, TUI 50 C ceramic fibre up to 1000°C (1200°C), TUI 50 CR – ceramic fibre with wire **SPETOTERM®** reinforcement up to 1000°C (1200°C); due to ecological consideration, **TUI 50C** the sealing is manufactured from special glass fibre S75. **SPETOTERM®** TUI 50CR Types TUI 50C BIO and TUI 50CR BIO are produced from yarn of high quality biosoluble refractory fibres. Different from ceramic fibres, this material is not subject to any hygienic restrictions in the EU Member States **SPETOTERM®** TUI 50C BIO in accordance with the Q note of Directive 97/69 EC. The biosoluble fibres used for production of TUI 50C and 50CR BIO have perfect thermal stability and keep original material structure even in maximum **SPETOTERM®** temperature allowed. Products of BIO type do not contain refractory **TUI 50CR BIO** ceramic fibres (RCF) and asbestos. SPETOTERM® TUI 70 is a ceramic fiber based, high temperature resistant **SPETOTERM® x x x x x x** static gasket. SPETOTERM® TUI 701 gasket family is manufactured from TUI 70N 85 the same materials as for TUI 70 series, but have the steel core; such gasket has better mechanical stability in service, and importantly during assembly; **SPETOTERM® x x x x x x** steel core allows for the production of the gaskets with dimensions exceeding TUI 701 N110 **** those of sheet, depending on the material used the following styles are available: TUI 701 N85 (up to 850°C), TUI 701 N110 (up to 1100°C), **SPETOTERM® x x x x x** TUI 701 B120, TUI 701 G120 (up to 1200°C) the difference between TUI 70J 120 TUI 701 B120 and TUI 701 G120 lies in conformability of the layers; in **** the latter case, layers are much harder which results in thicker gasket after **SPETOTERM®** assembly, typically, metal core is manufactured from carbon steel. **TUI 70N 85 BIO** Types TUI 70 BIO sheets are produced from yarn of high quality biosoluble SPETOTERM® TUI refractory fibres. Different from ceramic fibres, this material is not subject 701 N110 BIO to any hygienic restrictions in the EU Member States in accordance with the Q note of Directive 97/69 EC. The biosoluble fibres used have perfect SPETOTERM® TUI thermal stability and keep original material structure even in maximum 70J 120 BIO temperature allowed. Products of **BIO** type do not contain refractory ceramic fibres (RCF) and asbestos.

GASKETS

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Designation	Sketch	Description
SPETOTERM® TUI 810 SPETOTERM® TUI 810 J SPETOTERM® TUI 811 I		SPETOTERM® TUI 810 is a soft, easily formed material, manufactured from flogop plates bonded with special silicone filler, firbre-free material, main applications: exhaust systems, sealing of heat furnaces, for strongly oxidising fluid media and heat shields; material can be punched, cut with knife or special cutters; often delivered as full face gasket, standard thickness 1mm, also available in thicknesses 2.0, 3.0 mm; standard sizes of the sheet 1000x1000mm; for dimensions above 1000mm recommended form of delivery is the gasket on the steel core TUI 810 I , soft elements of the gaskets may then be made from segments, recommended service temperature up to 750°C.
SPETOTERM® TUI 810 I SPETOTERM® TUI 811 J		SPETOTERM® TUI 810 J gasket is manufactured in the similar way to TUI 810 I, but corrugated ring is used as the metal core, which improves recovery, ensures better forming when the flanges are misaligned or uneven, corrugated ring also creates beneficial effect of higher loads in the areas of the corrugation peaks, which improves sealability, thickness of corrugated insert 1.5mm, also in this case, metal ring facilitates manufacture of segment gasket of dimensions over 1000mm.
SPETOTERM® TUI 830	· · · · · · · · · · · · · · · · · · ·	SPETOTERM® TUI 830 is the standard material used in manufacture of gaskets with perforated stainless steel core; mica flakes bonded with special binding agent show almost absolute inertness in contact with strongly oxidising media such as HNO ₃ lub H ₂ SO ₄ even at elevated temperatures; stainless steel reinforcement improves mechanical strength of the material, however, its application is limited to approximately 650°C, in order to achieve better sealability inner steel or silver eyelet is recommended (TUI 831).
SPETOTERM® TUI 910 SPETOTERM® TUI 910 J SPETOTERM® TUI 911 I		SPETOTERM® TUI 910 is the upgraded sealing material recommended for applications reaching 1000°C. This special structure phlogophit mica material may be used in most difficult working conditions combining high temperature, high pressure and strong oxidation environment. SPETOTERM TUI 910 thanks to excellent performance in heavy duty application — is widely used as filler for spiral wounds and layers for kammprofiles.

