The new generation of sealing materials
Biaxially expanded PTFE:

KIRCHDORF (Austria). The renowned Austrian company TEADIT has lately been the focus of attention due to new developments in the field of expanded PTFE materials for the fluid sealing industry. The internationally successful manufacturer of PTFE gasket materials has – by means of a special thermo-mechanical stretching process – succeeded in manufacturing biaxially (multidirectionally) expanded PTFE also in form of a tape. This new and revolutionary gasket material has almost equal tensile strength in both longitudinal and cross direction, exceptional dimensional stability and a very high level of creep resistance and stress retention. Due to its excellent malleability it compensates for irregular and damaged sealing faces. The outstanding technical data and gasket parameters of this material make it ideal for the most demanding of applications throughout industry.

As a first step, Teadit has developed biaxially expanded PTFE sheets (TEADIT 24 SH) in thicknesses from 0.5 mm to 6.0 mm. This was followed by the development of the same kind of material in tape-form (TEADIT 25 BI), as described above. Gasket tapes made of multidirectionally expanded PTFE are ideally suited for applications with limited bolt force, stress sensitive and/or fragile flanges made of glass, ceramics, plastics, etc., thermal cycling, high bolt loads, etc.

All biaxially expanded PTFE products made by Teadit meet the rules of the Food and Drug Administration FDA 21 CFR 177.1550 Perfluorcarbon regulations.

The newly developed TEADIT 25 BI is already being successfully used in some of the biggest chemical plants in Germany. These companies appreciate the exceptional properties of this new gasket material, for example its ability to compensate for out-of-parallel and damaged flange faces, dimensional stability - making it also suitable for narrow sealing areas - its amazing versatility, excellent stress retention, chemical resistance, etc. TEADIT 25 BI is being successfully used with enamelled flanges and containers, large flanges with high bolt loads, heat exchanges, suction filters and many more. The wide spectrum of advantages of biaxially expanded PTFE products manufactured by TEADIT includes simple and quick installation, unequalled versatility, endless shelf life, excellent chemical and thermal resistance, etc., ensuring tight and long-lasting seals in demanding applications.