



PACKINGS & LOW EMISSION SOLUTIONS

ADVANCED PACKINGS

**For dynamic applications.
Designed for durability and operational reliability.**

When shafts rotate and media change, the right design is crucial.
We deliver reliable sealing for stuffing boxes, low-friction operation, and maximum service life.

**THE SMART
GASKETEERS**

IDT-GASKETS.COM



ENGINEERING & TESTING

VALVES & PACKINGS



VALVE TEST RIG

We use a TEMES valves test rig to test the tightness and functionality of shaft seals and housing gaskets in valves under realistic operating conditions. Focused on friction force during shaft movements and the sealing behavior of all sealing elements.

TESTING OPTIONS

- Classification of shut-off and control valves
- Leakage tests
- Friction tests

STANDARDS & GUIDELINES

DIN EN ISO 15848-1 & -2, VDI 2440, API 624, and individual tests

PACKING TEST MODULE

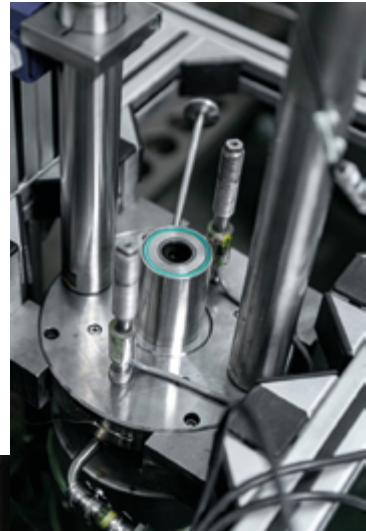
The TEMES packing module enables the targeted determination of deformation and sealing properties of gland packings—as a basis for selection, design, and product responsibility.

TESTING OPTIONS

- Determination of compression and deformation characteristics
- Determination of coefficients of friction

STANDARDS & GUIDELINES

DIN EN ISO 15848-1, VDI 2440, API 622, and individual tests



PTFE



1737 1738 2724 2724F 2725 2725F 2726 2729 2730 2719

PROPERTIES

Material	ePTFE	ePTFE	PTFE	PTFE	PTFE	PTFE	PTFE-graphite	ePTFE-graphite	PTFE	PTFE-graphite
Impregnation	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	no	PTFE	PTFE	PTFE
Lubricant [*silicone-free]	yes	no	no	no	yes*	yes*	1,4	yes	no	yes*
Density approx. [g/cm ³]	1,6	1,2	1,7	1,7	1,7	1,7	0,7	1,6	1,4	1,6
Deflection factor K	0,9		0,8	0,8	0,9	0,9		0,9		0,9

OPERATING RANGE

Min. temperature [°C]	-269	-269	-269	-269	-269	-269	-269	-269	-269	-269
Max. temperature [°C]	+260	+260	+260	+260	+260	+260	+260	+260	+260	+260
Steam [°C]										
pH	0-14	0-14	0-14	0-14	0-14	0-14	0-14	0-14	0-14	0-14
Pressure [p] / Sliding Velocity [Vg]										
Piston Centrifugal pump [bar/m/s]	25/20	25/15	25/2	25/2	10/10	10/10	40/10	25/25		25/25
Pump [bar/m/s]	100/2	25/2	500/2	500/2	150/2	150/2	500/3	250/2		250/2
Valve [bar/m/s]	100/2	100/	500/2	500/	100/2	100/	500/3	100/2	100/2	100/2

APPLICATIONS

Varnishes, paints [silicone-free]	x	x	•	•	•	•	•	x	•	•
Abrasive and sticky media	o	o	x	x	x	x	x	o	x	x
Water, service water, seawater	•	•	•	•	•	•	•	•	•	•
Hot water, boiler feed water	•	•	•	•	•	•	•	•	•	•
Vapors, acidic gases, nitrogen	•	•	•	•	•	•	•	•	•	•
Oxygen **	x	o	•	•	x	x	x	x	x	x
Mineral oils, animal fats	•	•	•	•	•	•	•	•	•	•
Heat transfer oils, synthetic oils	•	•	•	•	•	•	•	•	•	•
Akalien diluted, salt solutions	•	•	•	•	•	•	•	•	•	•
Akalien concentrated	•	•	•	•	•	•	•	o	•	o
Inorganic acids diluted, salt solutions	•	•	•	•	•	•	•	•	•	•
Concentrated inorganic acids	•	•	•	•	•	•	•	•	•	•
Solvent, other organic compounds	•	•	•	•	•	•	•	•	•	•

APPROVALS & TEST REPORTS

FDA FDA BAM/FDA

GRAPHITE & CARBON



PROPERTIES

	1376	1395	1372	1372P	1372K	1373	1380/90	1377	1375
Material	Graphitre foil, Inconel	Graphitre foil, Inconel	Graphitre foil	Graphitre foil	Graphite foil, Carbon	Graphitre foil, Inconel	Graphite foil, Compressed	Carbon	Carbon
Impregnation	PTFE			PTFE				Grafito	Grafito
Lubricant [*silicone-free]	no	no	no	yes	no	no	no	no	yes*
Density approx. [g/cm ³]	1,75	1,4	1,2	1,4	1,2	1,2	1,2-1,8	1,0	1,2
Deflection factor K	0,7	0,7	0,7	0,8	0,8	0,8	a petición	0,8	0,9

OPERATING RANGE

Min. temperature [°C]	-269	-269	-269	-269	-269	-269	-269	-269	-269
Max. temperature [°C]	+300	+550	+550	+260	+400	+550	+550	+550	+400
Steam [°C]		+600	+550		+550	+600	+600	+500	+500
pH	0-14	0-14	0-14	0-14	0-14	0-14	0-14	2-12	0-14
Pressure [p] / Sliding Velocity [Vg]									
Piston Centrifugal pump [bar/m/s]				60/50			20/25		
Pump [bar/m/s]					50/8				
Valve [bar/m/s]	450/2	500/2	300/2	150/2	350/2	400/2	300/2	150/2	100/2

APPLICATIONS

Varnishes, paints [silicone-free]	x	o	o	o	o	o	o	o	o
Abrasive and sticky media	o	x	x	x	x	x	x	x	x
Water, service water, seawater	▪	▪	▪	▪	▪	▪	▪	o	▪
Hot water, boiler feed water	▪	▪	▪	▪	▪	▪	▪	▪	o
Vapors, acidic gases, nitrogen	▪	▪	▪	▪	▪	▪	▪	o	▪
Oxygen **	o	x	x	x	x	x	▪	x	x
Mineral oils, animal fats	▪	▪	▪	▪	▪	▪	▪	▪	▪
Heat transfer oils, synthetic oils	▪	▪	▪	▪	▪	▪	▪	▪	▪
Akalien diluted. salt solutions	▪	▪	▪	▪	▪	▪	▪	o	o
Akalien concentrated	o	o	o	o	o	o	▪	x	x
Inorganic acids diluted, salt solutions	▪	▪	▪	▪	▪	▪	▪	o	o
Concentrated inorganic acids	o	o	o	o	o	o	o	x	x
Solvent, other organic compounds	▪	o	o	o	o	o	o	o	o

APPROVALS & TEST REPORTS

BAM/
DVGW/KTW

SPECIAL



PROPERTIES

	2224	2225	2226	2229	2722	2750	2750M	2755	2785	1783	1724/25
Material	PTFE-Aramid	PTFE-Aramid	PTFE-Aramid	PTFE-Aramid	Aramid	Aramid-staple-fiber	meta-Aramid	Ramie	Kynol	Polyacrylic	PTFE
Impregnation	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Lubricant [*silicone-free]	yes	yes	yes	yes	yes	yes*	yes*	yes*	yes*	yes*	no/yes*
Density approx. [g/cm ³]	1,6	1,5	1,5	1,6	1,4	1,1	1,35	1,4	1,4	1,5	1,7
Deflection factor K	0,9	0,9	0,9	0,9	0,9	0,9		0,9	0,9	0,9	

OPERATING RANGE

Temperatura mín. [°C]	-100	-100	-100	-100	-100	-100	-50	-50	-50	-50	-269
Max. temperature [°C]	+260	+260	+260	+260	+280	+250	+280	+140	+250	+140	+260
pH	1-13	1-13	1-13	1-13	1-13	1-13	1-13	5-14	1-14	1-13	0-14
Pressure [p] / Sliding Velocity [Vg]											
Piston Centrifugal pump [bar/m/s]		20/15		25/25	50/20	25/20	25/25	20/20	20/15	50/25	
Pump [bar/m/s]	500/2	200/5	500/3	100/5	100/1,5	100/2	50/2	100/2		50/2	
Valve [bar/m/s]	100/2	100/2	100/3	200/2		100/2	100/2	100/2		50/2	

APPLICATIONS

Varnishes, paints [silicone-free]	x	x	x	x	x	▪	▪	o	▪	o	▪
Abrasive and sticky media	▪	▪	▪	▪	▪	▪	▪	o	o	x	o
Water, service water, seawater	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪
Hot water, boiler feed water	▪	o	▪	▪	▪	▪	▪	x	▪	o	▪
Vapors, acidic gases, nitrogen	o	o	▪	▪	o	x	x	x	▪	o	▪
Oxygen **	x	x	x	x	x	x	x	x	x	x	x
Mineral oils, animal fats	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪
Heat transfer oils, synthetic oils	o	o	o	o	o	o	o	▪	▪	o	▪
Akalien diluted, salt solutions	▪	▪	▪	▪	▪	▪	▪	▪	▪	o	▪
Akalien concentrated	x	x	x	x	x	x	x	x	▪	x	▪
Inorganic acids diluted, salt solutions	▪	▪	▪	▪	▪	▪	▪	x	▪	o	▪
Concentrated inorganic acids	x	x	o	o	x	x	x	x	o	x	▪
Solvent, other organic compounds	o	o	o	o	o	o	o	o	▪	o	▪

APPROVALS & TEST REPORTS

FDA

LOW EMISSION



1376



1374



1339



2724F



2724FS

PROPERTIES

	1376	1374	1339	2724F	2724FS
Material	Graphite foil, Inconel	Graphite, PTFE	Graphite foil	PTFE	PTFE
Impregnation	PTFE			PTFE	PTFE
Lubricant [*silicone-free]	no	no	no	no	no
Density approx. [g/cm ³]	1,75	1,65	1,6	1,7	1,7
Deflection factor K					

OPERATING RANGE

Temperatura mín. [°C]	-269	-269	-269	-269	-269
Max. temperature [°C]	+300	+300	+550	+260	+260
pH	0-14	0-14	0-14	0-14	0-14
Pressure [p] / Sliding Velocity [Vg]					
Piston Centrifugal pump [bar/m/s]					
Pump [bar/m/s]					
Valve [bar/m/s]	350/2	300/2	300/2	250/2	250/2

APPLICATIONS

Varnishes, paints [silicone-free]	o	o	o	▪	▪
Abrasive and sticky media	x	x	x	x	x
Water, service water, seawater	▪	▪	▪	▪	▪
Hot water, boiler feed water	▪	▪	▪	▪	▪
Vapors, acidic gases, nitrogen	▪	▪	▪	▪	▪
Oxygen **	x	x	x	▪	▪
Mineral oils, animal fats	▪	▪	▪	▪	▪
Heat transfer oils, synthetic oils	▪	▪	▪	▪	▪
Akalien diluted, salt solutions	▪	▪	▪	▪	▪
Akalien concentrated	o	o	o	▪	▪
Inorganic acids diluted, salt solutions	▪	▪	▪	▪	▪
Concentrated inorganic acids	o	o	o	▪	▪
Solvent, other organic compounds	o	o	o	▪	▪

APPROVALS & TEST REPORTS

TA Luft [40 bar]/API 622/ASTM F2168/ Shell Spec MESC SPE 85-203, DIN EN ISO 15848**	TA Luft/40bar, DIN EN ISO 15848**	TA Luft/25bar, DIN EN ISO 15848**	TA Luft/40bar, DIN EN ISO 15848**	TA Luft/40bar, DIN EN ISO 15848**
---	--------------------------------------	--------------------------------------	--------------------------------------	--------------------------------------

** Please consult the manufacturer.

▪ = suitable o = conditionally suitable x = not suitable

Annaberg-Buchholz

+49 [0]3733 505-0
annaberg@idt-dichtungen.de

Essen

+49 [0]201 85511-0
essen@idt-dichtungen.de

Munich

+49 [0]89 991883-0
muenchen@idt-dichtungen.de

Tarragona

+34 977475653
tarragona@idt-juntas.com

Shanghai

+86 1381 7077710
shanghai@idt-gaskets.com

ANNABERG-BUCHHOLZ

+49 [0]3733 505-0
annaberg@idt-dichtungen.de

TARRAGONA

+34 977475653
tarragona@idt-juntas.com

ESSEN

+49 [0]201 85511-0
essen@idt-dichtungen.de

SHANGHAI

+86 1381 7077710
shanghai@idt-gaskets.com

MUNICH

+49 [0]89 991883-0
muenchen@idt-dichtungen.de