

Innovative Mixing Technology
for glass-lined reactors



Glass-lined Turbines from THALETEC

Classification of turbine properties low medium high

Radial Flow Turbines

CXU (Curved X-shaped Universal)
CXR (Curved X-shaped Residual) K024

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Gases, Suspension, Dispersion, Multipurpose, Heat transfer, Residual (CXR)

FBT (Flat-Blade-Turbine)

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Gases, Dispersion, Heat transfer

RCI (Retreat Curved Impeller)
One-piece impeller or splitted Impeller

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Gases, Dispersion, Heat transfer

RCleco (Retreat Curved Impeller eco)

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Suspension, Dispersion, Gases, Residual, Heat transfer

Radial/Axial Flow Turbines

DCT (Diffusor-Concentrator-Turbine) K030
DCX (Diffusor-Concentrator-X-shaped)

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Gases, Suspension, Dispersion, Multipurpose, Heat transfer

PBT (Pitched-Blade-Turbine)
PBX (Pitched-Blade-X-shaped)

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Suspension, Crystallisation, Dispersion, Heat transfer

Axial Flow Turbines

UFT (UltraFlow Turbine)
UFX (UltraFlow X-förmig) K173

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Suspension, Crystallisation, Heat transfer

TAR (Turbo-Axial-Residual) K024

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Suspension, Crystallisation, Heat transfer, Residual

Special Turbines

SoliSus (Solid Suspension) K189

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Suspension, Crystallisation, Hydroabrasion, Heat transfer

ANC (Anchor)

Power input
Pumping power
Shear stress
Viscosity range

Processes: High viscosity media, Heat transfer, Residual

SGT (Smith-Gassing-Turbine) K084

Power input
Pumping power
Shear stress
Viscosity range

Processes: Homogenisation, Dispersion, Gases, Heat transfer

PowerBaffle (K018)

- Baffle
- Temperature probe
- Heat Exchanger

Figure	Type	η [mPas]	H	R	S	D	G	C	H	P	W
	ANK	> 10000	0	0	-	-	-	0	++	0	0
	SoliSus	< 10000	++	++	++	0	0	++	++	+	++
	CXR	< 10000	++	++	++	+	+	0	++	0	+
	DCT, DCX	< 10000	++	0	++	+	+	+	+	++	+
	FBT	< 10000	+	0	0	++	+	0	++	0	0
	PBT, PBX	< 10000	++	0	+	+	+	+	+	0	0
	RCI (Impeller)	< 10000	+	0	0	+	+	+	+	++	0
	RCleco	< 10000	++	+	+	+	0	+	++	0	+
	SGT-6	< 10000	0	-	-	++	++	-	+	-	-
	SGT-8	< 10000	++	0	++	0	0	++	++	0	0
	UFT, UFX	< 10000	++	++	++	0	0	++	+	0	0
	TAR	< 10000	++	++	++	0	0	++	+	0	0
	CAT, CFT	< 10000 > 10000	+	0	+	0	+	+	+	+	+

Legend: H: Homogenisation, R: Residual, S: Suspension, D: Dispersion (liquid/liquid), G: Dispersion (liquid/gaseous), C: Crystallisation, H: Heat Transfer, P: Polymerisation, W: wear processes

Glass-lined Baffles from THALETEC

Standard Baffles (K020, S013)

- Bevertail
- Optional with Temperature probe

QuickTip (K061)
Fast Temperature probe

Premium Baffle (K020, S013)

- Bevertail
- Inlet nozzle
- Optional with Temperature probe

TS Temperature sensor

DeltaBaffle (K057, S013)

- Delta-Baffle (up to + 15 % power input)
- Inlet nozzle
- Optional with Temperature probe

QuickTip Tandem or Triple (K114)
Fast Temperature probe

MultiTube (K021, S013)

- Bevertail
- Dip pipe
- Optional with Temperature probe

PremiumTube (K021, S013)

- Bevertail
- Dip pipe
- Inlet nozzle
- Optional with Temperature probe

Selection of multi-stage agitator systems

CXR/DCT

Processes: Multipurpose, Homogenisation, Heat transfer, Suspension, Gases, Dispersion, Residual

CXR/UFT

Processes: Multipurpose, Homogenisation, Heat transfer, Suspension, Residual

AMT/DCT

Processes: Multipurpose, Homogenisation, Heat transfer, Suspension (high hydroabrasive resistance)

SGT/DCT

Processes: Multipurpose, Homogenisation, Heat transfer, Gases, Dispersion

TAR/UFT

Processes: Multipurpose, Homogenisation, Heat transfer, Crystallisation, energy-saving mixing, Residual

RCleco/UFT

Processes: Multipurpose, Homogenisation, Heat transfer, Suspension, energy-saving mixing

CAT (Cross Arm Turbine) K072

Processes: Multipurpose, Homogenisation, Heat transfer, Suspension, Dispersion, High viscosity media

SegTec (K054)

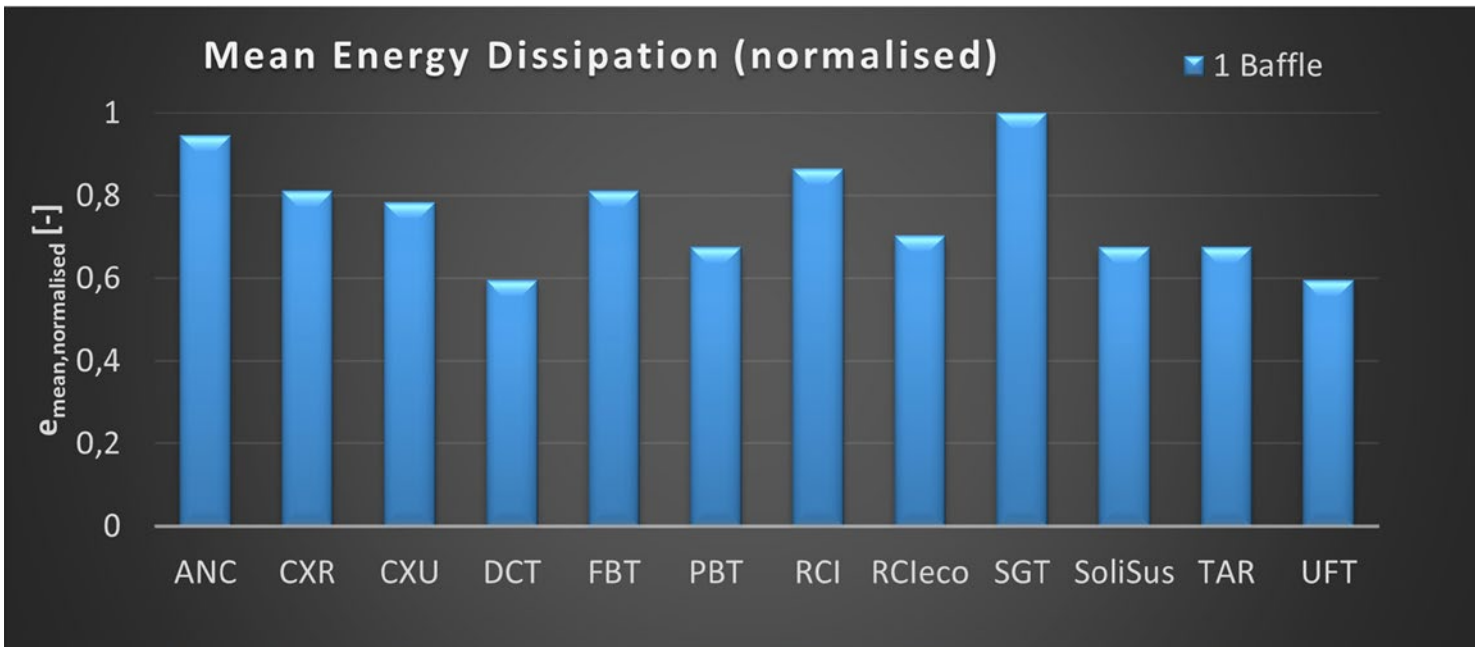
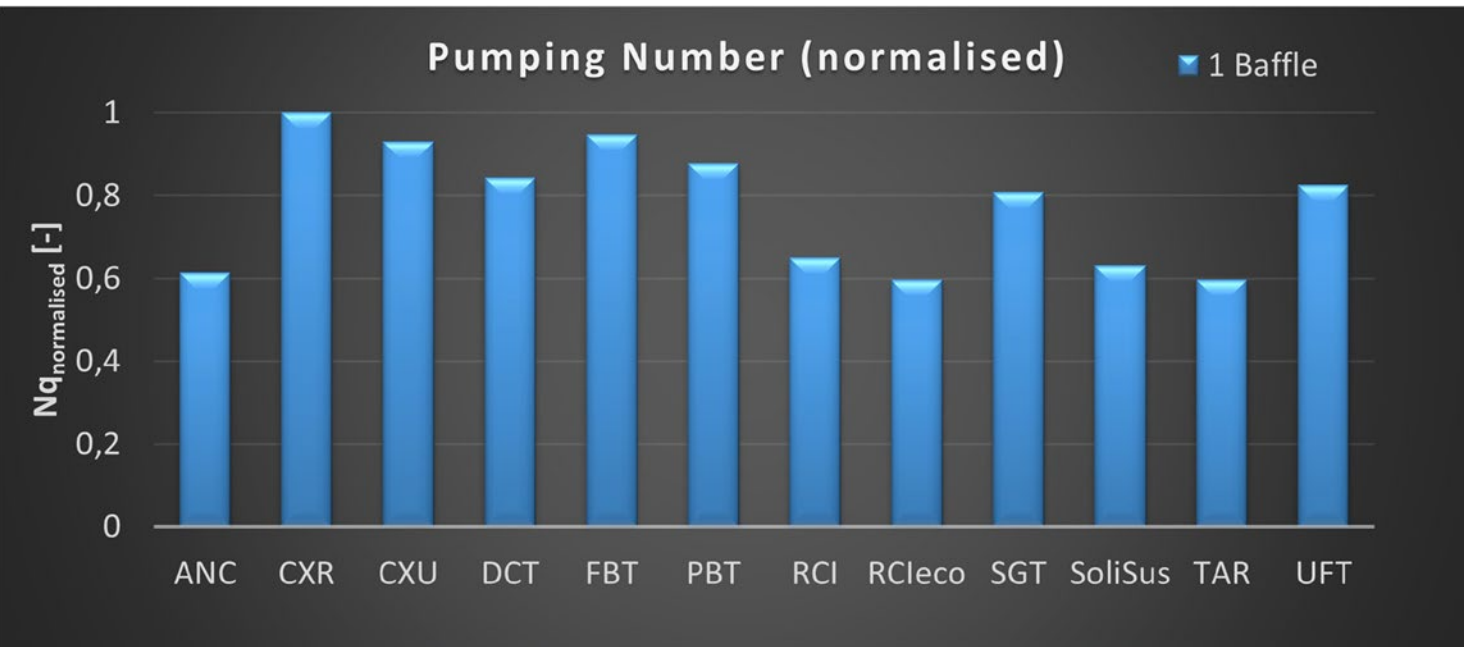
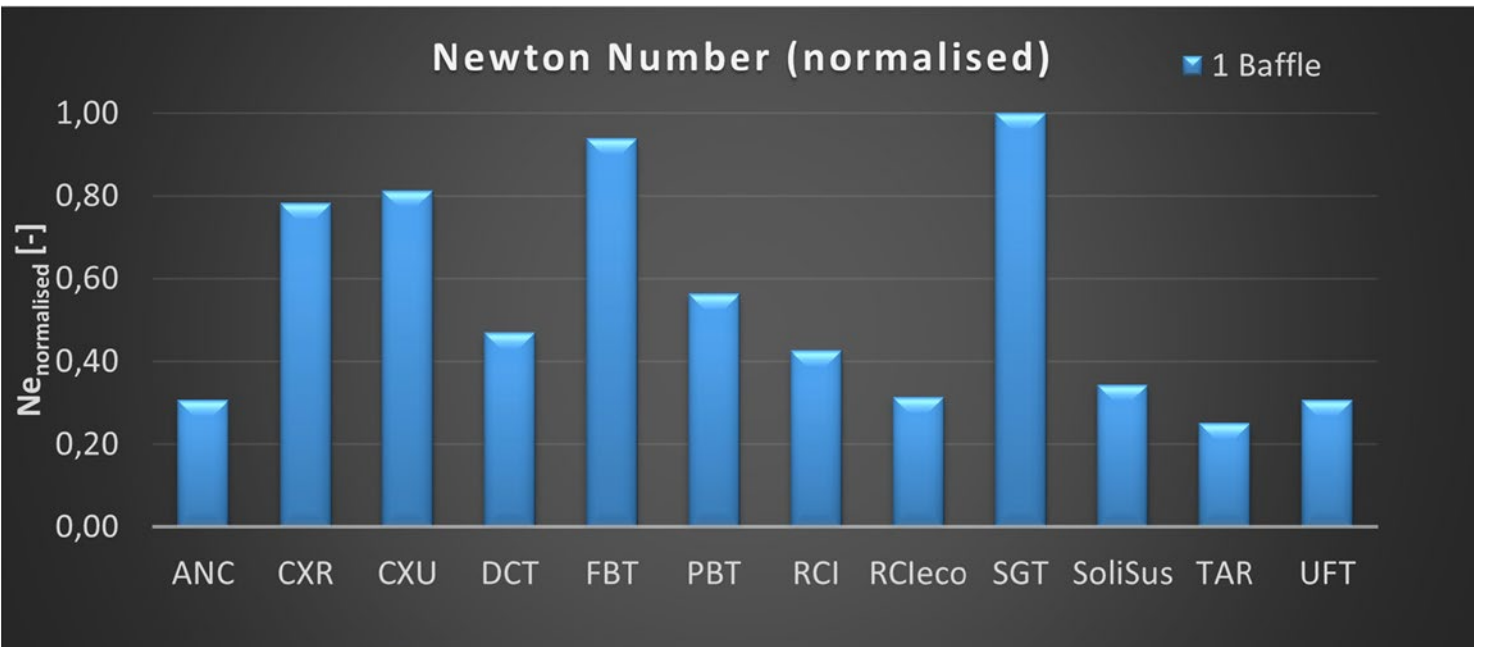
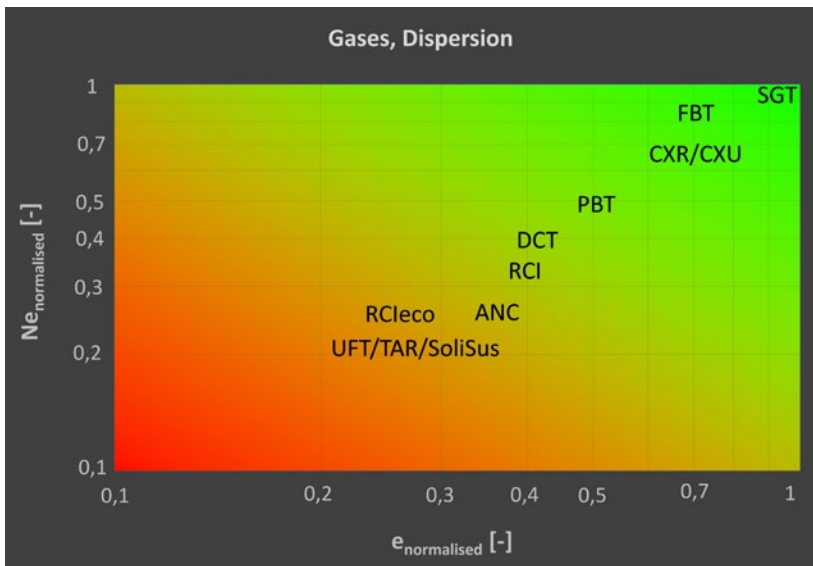
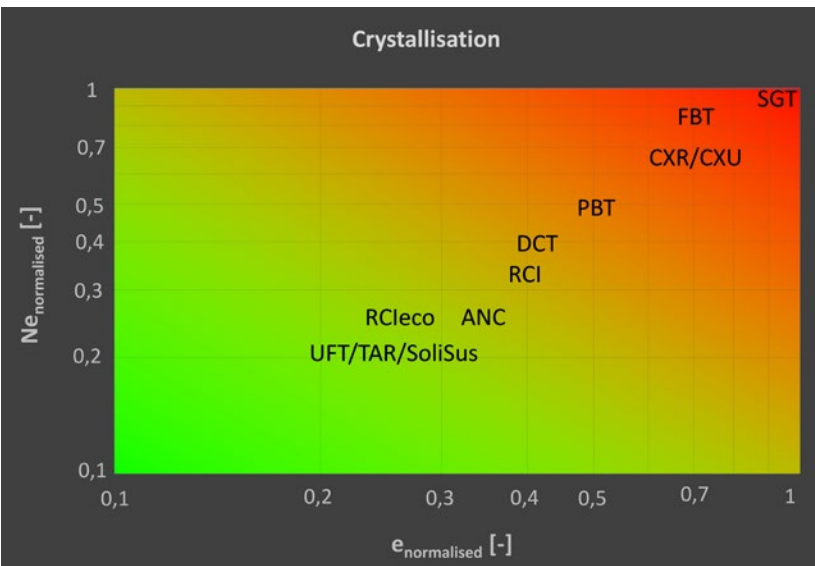
- Surface Gassing
- Dragdown of f particles
- Defoaming

HexaTube (K154)

- Baffle
- Temperature probe
- Dip pipe
- Inlet nozzle
- Level measurement
- CIP-Connection

RingBaffle (K167)

- AE-Reactors
- Fixing via main flange
- Nozzles remain free
- Can be combined with SegTec and/or DeltaBaffle and/or temperature probe



We protect your glass-lined reactor – the right technical glass-lining

- Chemical resistance Isocorrosion curves (K003, K001)
- Select the appropriate glass-lining with EmSelect (K139)
- VC-Email (Visual Control) enables visual control of the glass-lining top coat

Types of glass-linings

- RAS GLASS blue K001 (Standard glass-lining!)
- RAS GLASS white K001
- CONDUSIST K098 (Electrically conductive enamel over the entire layer thickness, glass-lining for pharmaceuticals)
- ABRISIST K028 (Higher hydroabrasive resistance)
- ALKASIST K129 (Extended resistance in alkaline range)

Engineering Support K164

- calculation of the thermal engineering of glass-lined reactors and heat exchangers
- Analytical and numerical (CFD) design of mixing technology
- Experimental investigations of mixing technology

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