

## Glass-lined Turbines from THALETEC

Classification of turbine properties ● low ● medium ● high

### Radial Flow Turbines

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



Power input ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

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

FBT (Flat-Blade-Turbine)



Power input ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

Processes: Homogenisation, Gases, Dispersion, Heat transfer

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



Power input ● to ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

Processes: Homogenisation, Gases, Dispersion, Heat transfer

RCleco (Retreat Curved Impeller eco)



Power input ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

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

### Radial/Axial Flow Turbines

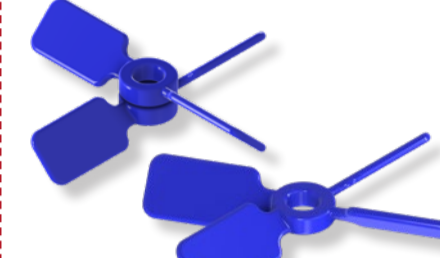
DCT (Diffusor-Concentrator-Turbine) K030  
DCX (Diffusor-Concentrator-X-shaped)



Power input ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

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 ● to ●

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

### Axial Flow Turbines

TAF (Turbo-Axial-Flow)  
TXF (Turbo X-shaped)



Power input ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

Processes: Homogenisation, Suspension, Crystallisation, Heat transfer

TAR (Turbo-Axial-Residual) K024



Power input ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

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

### Special Turbines

AMT (Abrasion Minimized Turbine) K055



Power input ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

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

ANC (Anchor)



Power input ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

Processes: High viscosity media, Heat transfer, Residual

SGT (Smith-Gassing-Turbine) K084



Power input ●  
Pumping power ●  
Shear stress ●  
Viscosity range ● to ●

Processes: Homogenisation, Dispersion, Gases, Heat transfer

PowerBaffle (K018)  
• Baffle  
• Temperature probe  
• Heat Exchanger

| Figure | Type           | $\eta$ [mPas] | H  | R  | S  | D  | G  | C  | H  | P | W  |
|--------|----------------|---------------|----|----|----|----|----|----|----|---|----|
|        | ANC            | > 10000       | 0  | 0  | -  | -  | -  | 0  | ++ | 0 | 0  |
|        | AMT            | < 10000       | ++ | +  | ++ | 0  | 0  | ++ | ++ | 0 | ++ |
|        | CXR            | < 10000       | ++ | ++ | ++ | +  | +  | 0  | ++ | 0 | +  |
|        | CXU            | < 10000       | ++ | 0  | +  | +  | +  | 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 | 0  |
|        | RCleco         | < 10000       | ++ | +  | +  | +  | 0  | +  | ++ | 0 | +  |
|        | SGT-6, SGT-8   | < 10000       | 0  | -  | -  | ++ | ++ | -  | +  | - | -  |
|        | TAF, TXF       | < 10000       | ++ | 0  | +  | 0  | 0  | ++ | +  | 0 | 0  |
|        | TAR            | < 10000       | ++ | ++ | ++ | 0  | 0  | ++ | +  | 0 | 0  |
|        | CAT, CFT       | > 10000       | +  | 0  | +  | 0  | +  | +  | +  | + | +  |

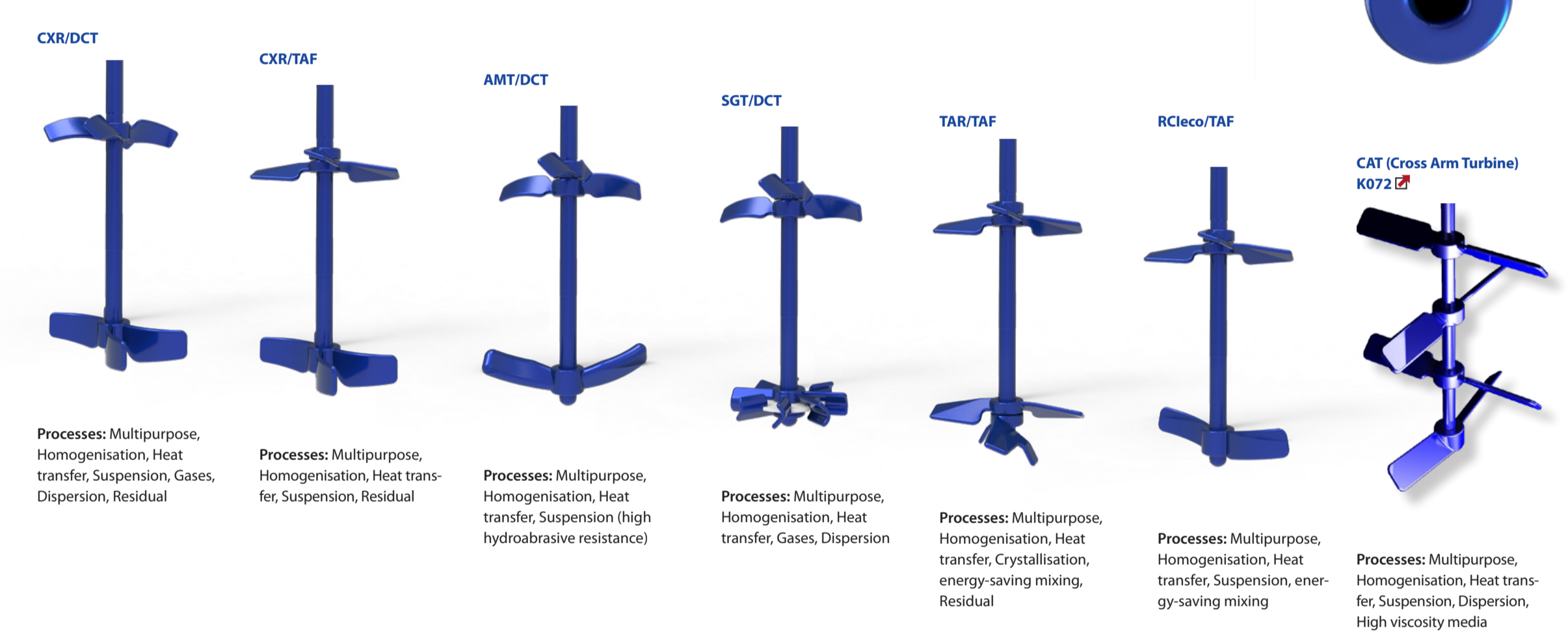
Legend: H: Homogenisation, R: Residual, S: Suspension, D: Dispersion (liquid/liquid), G: Dispersion (liquid/gaseous), C: Crystallisation, H: Heat Transfer, P: Polymerisation, W: wear processes

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



## Selection of multi-stage agitator systems



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

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

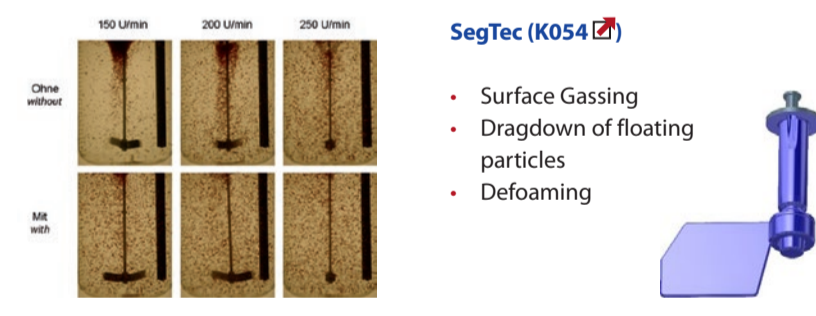
Processes: Multipurpose, Homogenisation, Heat transfer, Suspension (high hydroabrasive resistance)

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

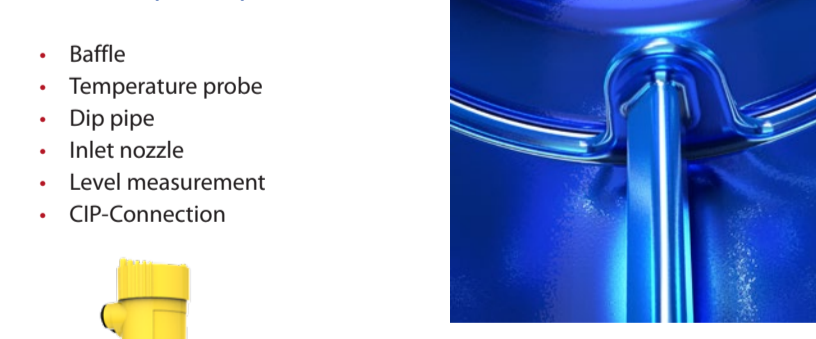
Processes: Multipurpose, Homogenisation, Heat transfer, Crystallisation, energy-saving mixing, Residual

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

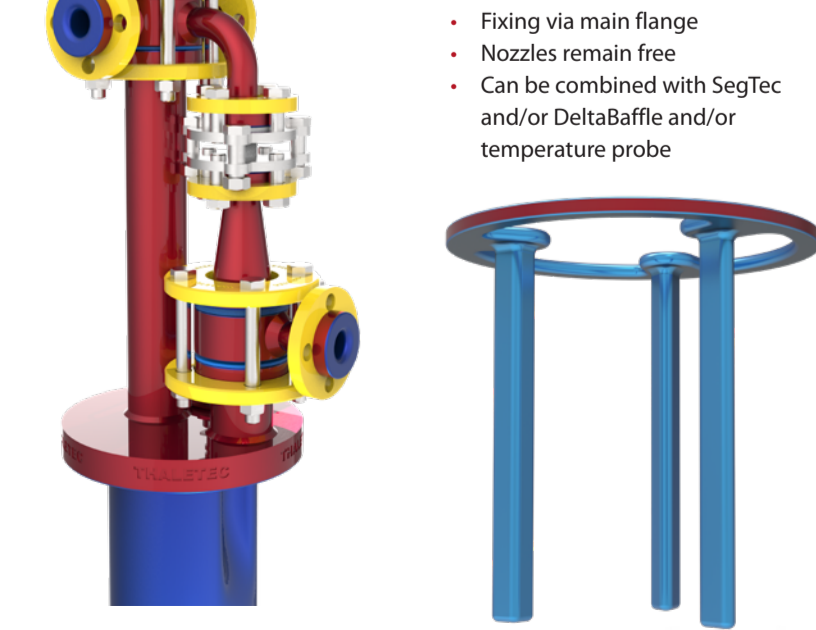
Processes: Multipurpose, Homogenisation, Heat transfer, Suspension, Dispersion, High viscosity media



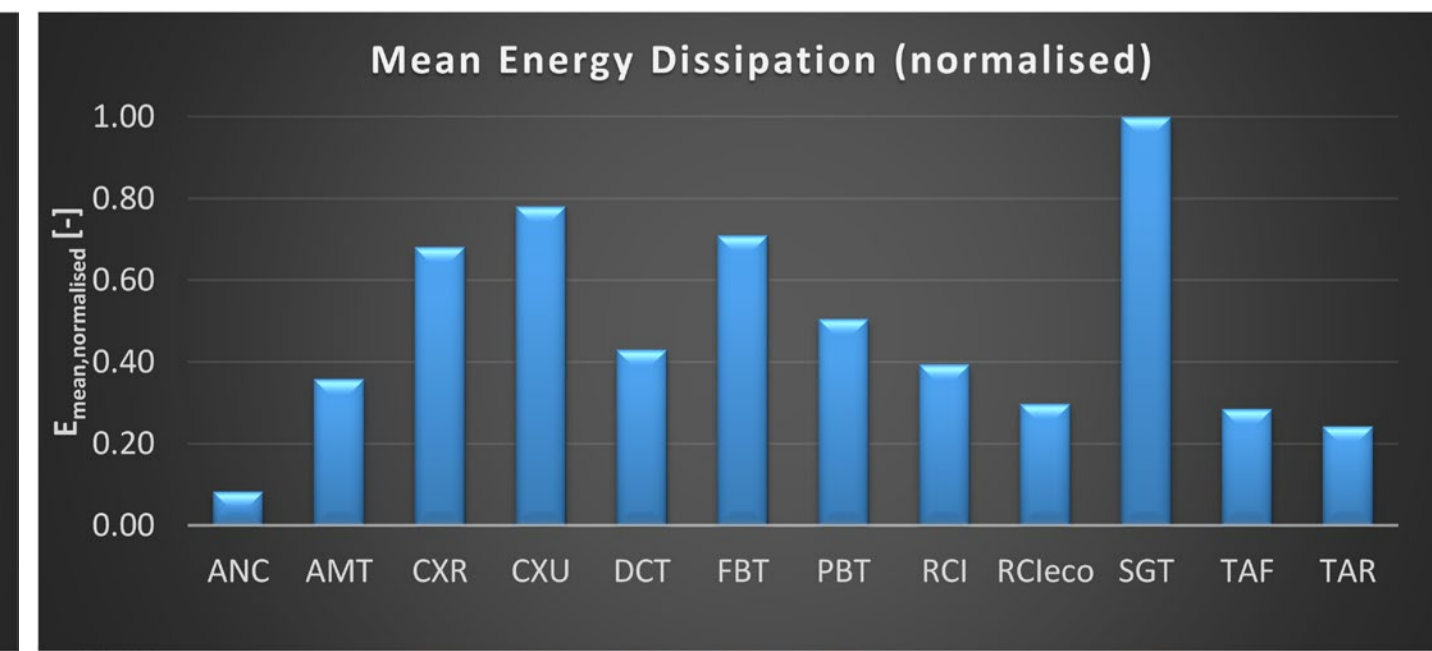
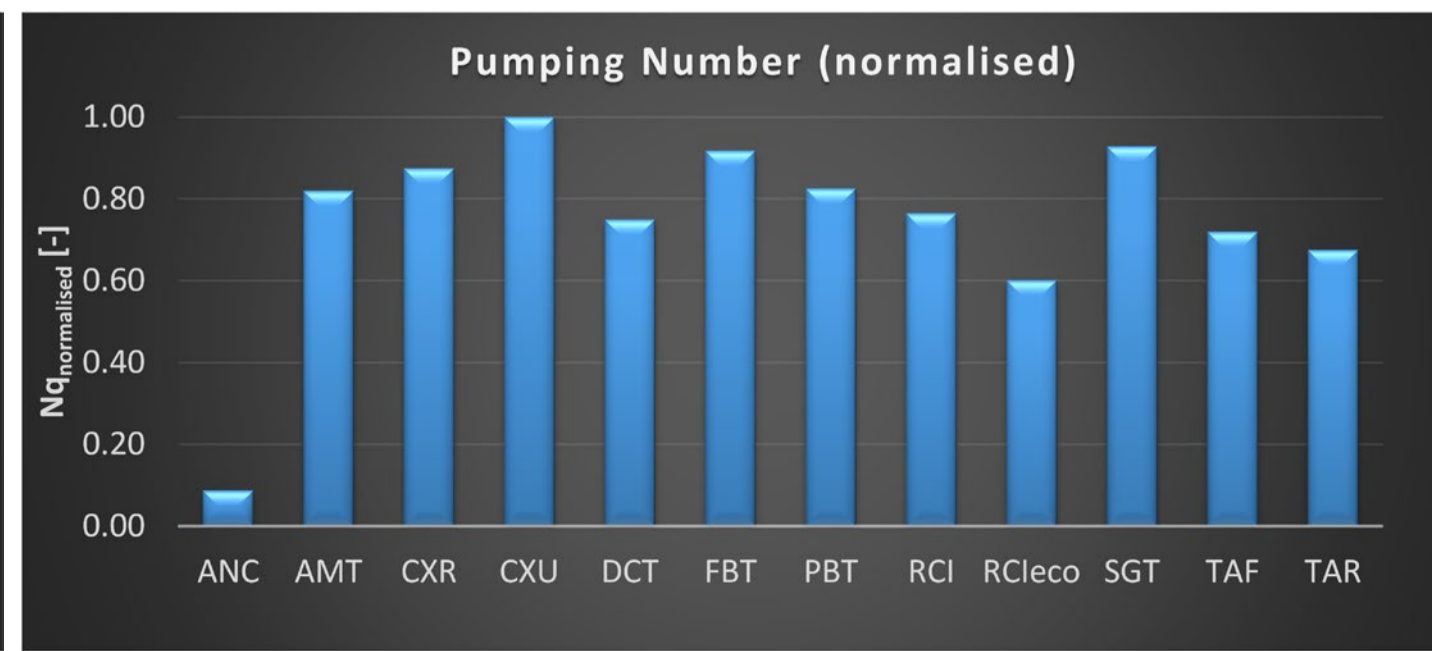
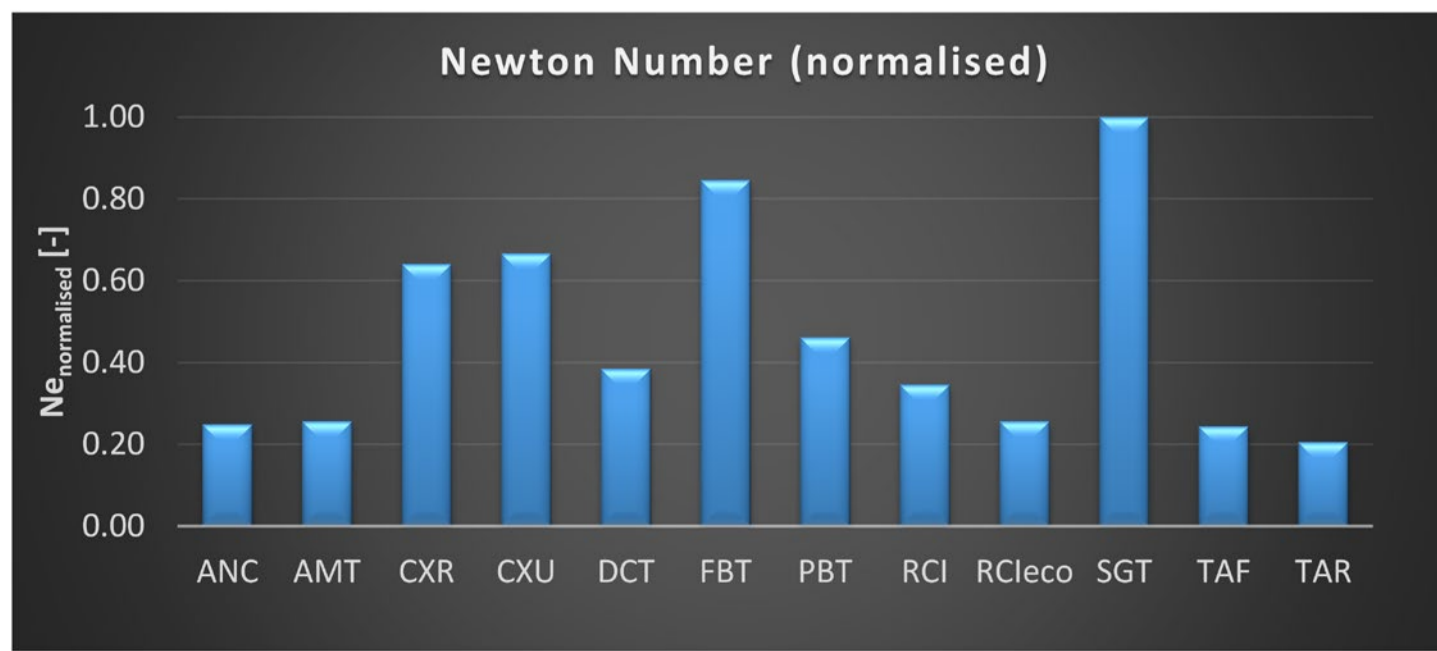
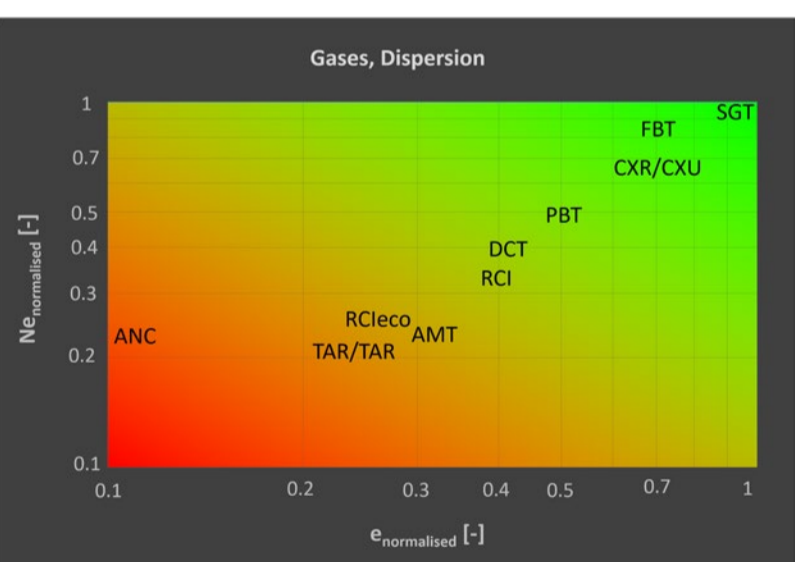
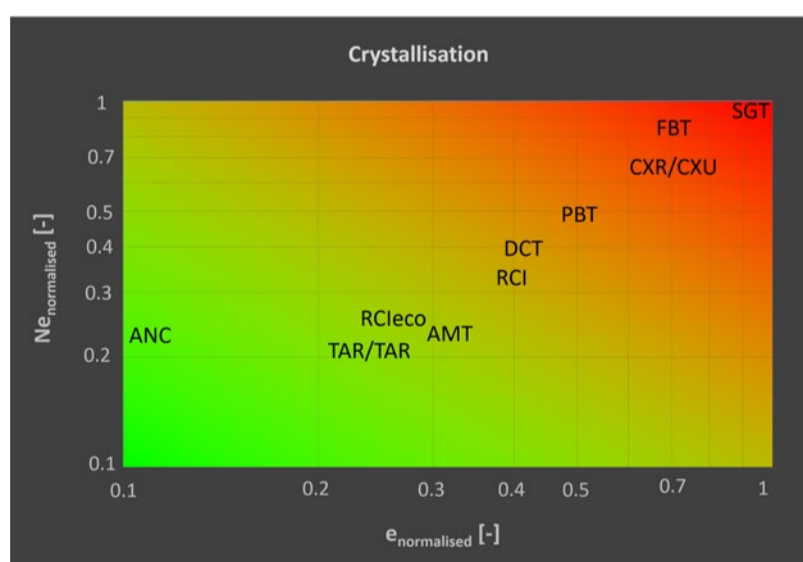
SegTec (K054)  
• Surface Gassing  
• Dragdown of floating particles  
• Defoaming



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 pharma industry)
- ABRISIST K028 (Higher hydroabrasive resistance)
- ALKASIST K129 (Extended resistance in alkaline range)

THALETEC GmbH  
Steinbachstraße 3  
D – 06502 Thale Germany  
☎ + 49 (0) 3947 778-0  
✉ + 49 (0) 3947 778-110  
Hotline:  
☎ + 49 (0) 3947 778-111  
@ service@thaletec.com  
www.thaletec.com

K172 01E  
© 2022 THALETEC GmbH  
Alle Rechte vorbehalten. All rights reserved.  
Produkte sind teilweise marken-, patent- oder gebrauchsmusterrechtlich geschützt.  
Some products are brand- or patent protected.  
● ● ● Made In Germany