

Technologie Kring Paper & Board Industry
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Application examples of a novel filter with reduced energy consumption, free of service and maintenance as filter for ultra filtrate, police filter for spray bars and fibre recovery.

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Vorstellung KLASS FILTER



1976

Foundation of the company by Georg Klass senior

The founding idea was to produce filters for water recovery in sewer flushing trucks.

1996

Entry of Georg Klass junior

Development of the Jet Wing Liquidfilter

2010

Product idea Spiral filter

2020

Production of Plug & Play systems for the industry

2021

Winning the German Sustainability Award

2026

50 th anniversary

Areas of application



SHIPPING
SCHIFFFAHRT



**WASTEWATER
TREATMENT PLANTS**
KLÄRANLAGEN



PAPER INDUSTRY
PAPIERINDUSTRIE



PET RECYCLING
PET-RECYCLING



LAUNDRIES
WÄSCHEREIEN



FOOD INDUSTRY
LEBENSMITTEL-
INDUSTRIE



SEWER CLEANING VEHICLE
KANALSPÜLWÄGEN



**CONTAINER
TREATMENT PLANTS**
CONTAINER-
KLÄRANLAGEN



CHEMICAL INDUSTRY
CHEMIEINDUSTRIE



METAL INDUSTRY
METALLINDUSTRIE



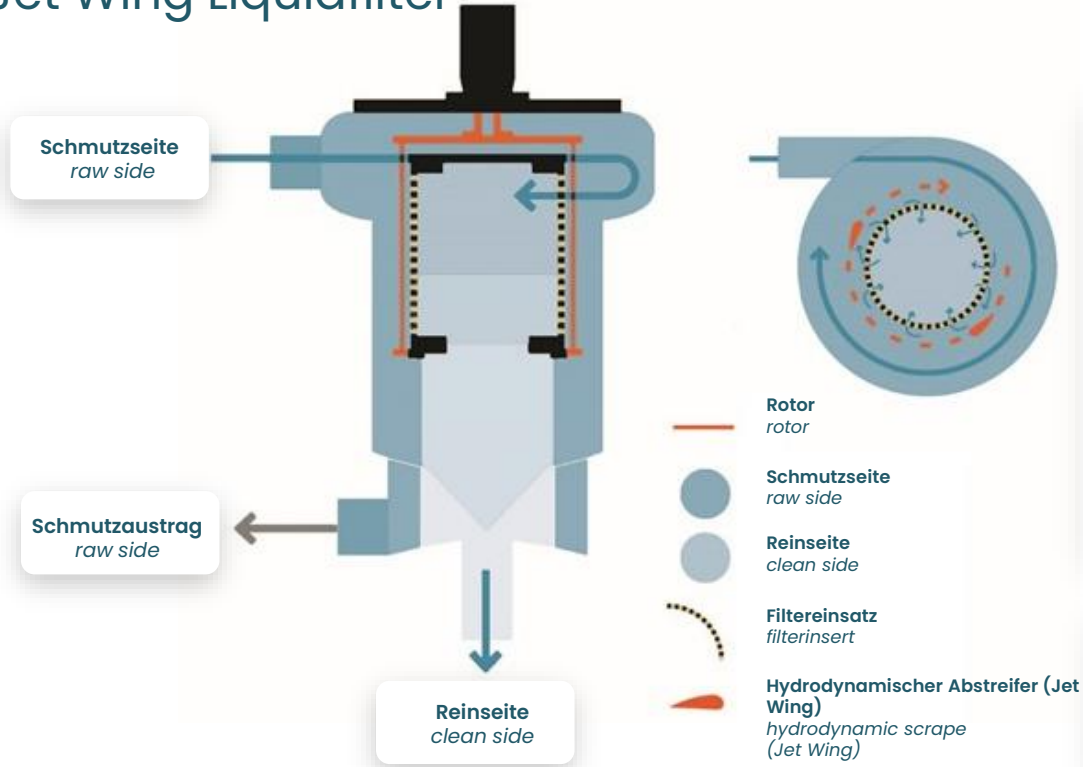
**DRY FERMENTATION
PLANTS**
TROCKENFERMENTATIONS-
ANLAGEN



**WASHING PLANTS FOR
IBC CONTAINERS**
WASCHANLAGEN FÜR
IBC CONTAINER

Jet Wing Liquidfilter

Jet Wing Liquidfilter



Input	Output
< 5 % TS	< 100 µm < 60 µm < 25 µm

Jet Wing Liquidfilter

Jet Wing Liquidfilter



Typ type Jet Wing Liquidfilter	Gewicht weight [kg]	Bauraum Installation volume (HxLxB) [mm]	Nenn-Volumenstrom * nominal volume * [m³/h]			Leistungsaufnahme electrical power [kW]
			Größe diameter			
			Spalt gap 25 µm	Loch hole 60 µm	Loch hole 100 µm	
Z 5-0	470	2700 x 2210 x 1500	9	20	30	4
Z 6-0	505	2700 x 2210 x 1500	12	28	40	5,5

* In Abhängigkeit vom Eingangs TS / depending of the input TS

Polizeifilter für sauberes Klarfiltrat

Police filter for clean clear filtrate



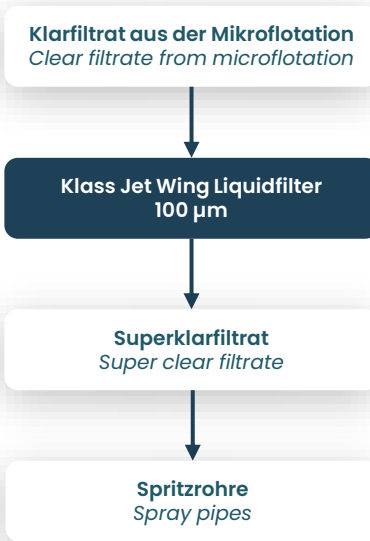
Polzeifilter für sauberes Klarfiltrat

Police filter for clean clear filtrate



Prozessdiagramm

Process diagram



Laborauswertung

Laboratory Evaluation



raw side

100 µm



raw side
side

clean
side



Ergebnis

- **Sauberes Klarfiltrat für die Düsen**
- **Wartungsfreier Betrieb**
- **Wertvolles Stadtwasser einsparen**
- **Durchsatz 30 m³/h**

Result

- *Clean clear filtrate for the nozzles*
- *Maintenance-free operation*
- *Saving valuable city water*
- *Durchsatz 30 m³/h*

Wassereinsparung durch die Verwendung von kleineren Düsen



Water savings through the use of smaller nozzles

Bohrungsdurchmesser Bore diameter	Druck pressure	Wassermenge Amount of water
2 mm	150 bar	24,95 l/min
1,5 mm	150 bar	14,03 l/min
1,0 mm	150 bar	6,24 l/min
0,8 mm	150 bar	3,99 l/min
0,6 mm	150 bar	2,25 l/min
0,4 mm	150 bar	0,99 l/min
0,2 mm	150 bar	0,25 l/min

Faserrückgewinnung

Fiber recovery



Faserrückgewinnung

Fiber recovery



Prozessdiagramm

Process diagram



Laborauswertung

Laboratory Evaluation



raw side

60 µm



raw side
side

clean
side



Ergebnis

- 95% Faserrückgewinnung
- Erhöhung Stoffdichte
- Wasserrückgewinnung

Result

- 95% Fiber recovery
- Increase stock consistency
- Water recovery



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Thank you
for your attention.

