

# 2H SK SEDIMENTATION TANK

Efficient sedimentation in compact units



The SK tank series offers a range of compact, ready-to-connect units for separating solids from liquids. The sedimentation process in these units is based on the proven counter-flow principle. They are available in different sizes with settling areas of 2 – 72 m<sup>2</sup> and flow rates of 2 – 70 m<sup>3</sup>/h for usual sedimentation tasks.

SK tanks can be installed easily and quickly. The innovative circular design (SKR) does not only save costs but also calms the influent stream, achieves a uniform flow distribution in the lamellas and facilitates the sludge concentration in the hopper.

## Features of our 2H SK series

- Low-cost, round design with circular frame support
- Optimized flow dynamics
- Large, efficient sedimentation area by the 2H TUBEdek® units
- Very good sludge thickening in 60° conical hopper
- Rapid, easy installation
- Easily relocated to a new site

## Round, cost-saving, with favourable flow dynamics

SKR tank units add the advantages of lamella clarifiers to those of round settling tanks. This efficient design is achieved with 2H TUBEdek® lamella separators, which can be cut to the round shape of the tank.

# EXTERIOR: ROBUST TANKS – ROUND OR SQUARE

The sedimentation tank units come in 13 different standard types and are adaptable to specific project requirements. Tank size, projected sedimentation area, the appropriate 2H TUBEdek® type and the flange size of inlet, outlet and sludge drain connections can all be selected accordingly.

## The SKR is divided into four areas

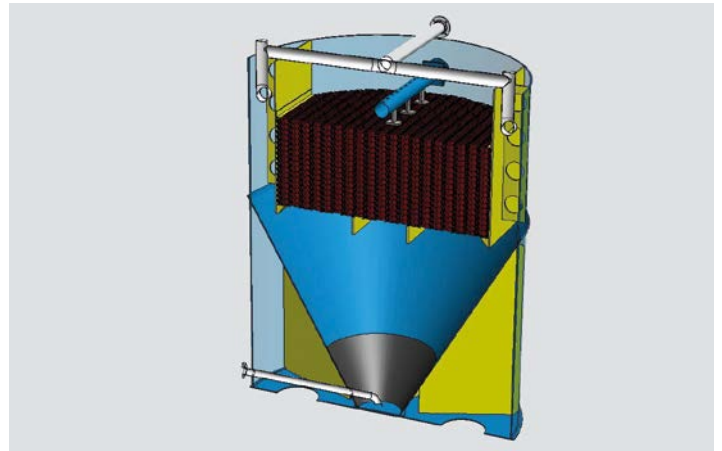
- Inlet area
- Thickening and sludge accumulation zone
- Separation zone with 2H TUBEdek® lamellas
- Clear water zone with launders

The influent enters the SKR from two opposite sides. In the influent sections the incoming flow is slowed down, descends and then rises up through the 2H TUBEdek® lamellas. The solids settle on the lamella planes before sliding down to the hopper. In the thickening and accumulation zone, settled solids thicken further. The clear phase rises and is collected in the launders.

Separated sludge has to be extracted from the thickening zone's sump in regular intervals.

## Rectangular SK-tank unit

In addition to our standardised SKR design, we also supply special solutions consisting of square-design tank units. Special transport requirements (e.g. in containers) or space requirements at the installation site can be met by this design. This tank type, too, achieves an optimal water distribution by carefully chosen design details.



Sketch of SKR tank unit



Rectangular SK-tank unit

# INTERIOR: 2H TUBEdek® LAMELLA CLARIFIERS FOR EFFICIENT SEDIMENTATION

The key component is found inside the tank: 2H TUBEdek® lamellas. Numerous, equidistant sedimentation planes of the lamella clarifier ensure a reliable separation process, with a high hydraulic capacity.

Additionally V-shaped channels support the sludge discharge. 2H TUBEdek® lamella clarifiers have proven themselves repeatedly in the field, regardless whether utilised as tank components or in large-scale systems.



2H TUBEdek® FS41.50

2H SKR sedimentation tank unit	
Round tank with circular frame support	
Material	PP or PE
Diameter	up to 3.4 m
2H TUBEdek®	FS41.50 / FS42.62 / FS41.84
Lamella height	800 – 1000 mm
Sedimentation surface	15 – 72 m <sup>2</sup>
Flow rate	2 – 70 m <sup>3</sup> /h (guideline for typical applications)

Standard range 2H SKR sedimentation tank unit							Lamella package H = 1 m		
Type	Inner diameter D	Width W	Total height H	Net weight with 2H TUBEdek®	Total weight (when filled)	Water volume	Projected sedimentation surface P		
	m	m	m	approx. kg	approx. kg	m <sup>3</sup>	FS41.50 m <sup>2</sup>	FS41.62 m <sup>2</sup>	FS41.84 m <sup>2</sup>
SKR10-17	1.85	1.45	2.70	250	5050	4.80	20.40	16.20	11.10
SKR10-26	2.20	1.70	3.00	590	7590	7.00	31.00	24.00	16.90
SKR10-30	2.28	1.80	3.20	630	8020	7.60	35.20	25.60	19.20
SKR10-35	2.50	1.96	3.30	810	10410	9.60	41.60	32.00	22.70
SKR10-46	2.80	2.21	3.50	900	13400	12.50	46.00	35.40	25.10
SKR10-58	3.10	2.47	3.80	1350	17350	16.00	58.30	45.00	31.80
SKR10-72	3.40	2.72	4.00	1760	21760	20.00	72.40	55.10	39.50

Standard range 2H SKR sedimentation tank unit							Lamella package H = 0.8 m		
Type	Inner diameter D	Width W	Total height H	Net weight with 2H TUBEdek®	Total weight (when filled)	Water volume	Projected sedimentation surface P		
	m	m	m	approx. kg	approx. kg	m <sup>3</sup>	FS41.50 m <sup>2</sup>	FS41.62 m <sup>2</sup>	FS41.84 m <sup>2</sup>
SKR08-15	1.85	1.45	2.70	220	4420	4.20	17.80	13.80	9.70
SKR08-22	2.20	1.70	2.80	550	6850	6.30	26.50	20.50	14.50
SKR08-30	2.50	1.96	3.10	740	9440	8.70	35.20	27.20	19.20
SKR08-39	2.80	2.21	3.30	830	11930	11.20	39.00	30.00	21.30
SKR08-49	3.10	2.47	3.60	1250	15690	14.50	49.20	38.50	26.80
SKR08-60	3.40	2.72	3.80	1650	19650	18.00	60.70	46.50	33.10

Standard range 2H SKR sedimentation tank unit							Lamella package H = 0.75 m		
Type	Inner diameter D	Width W	Total height H	Net weight with 2H TUBEdek®	Total weight (when filled)	Water volume	Projected sedimentation surface P		
	m	m	m	approx. kg	approx. kg	m <sup>3</sup>	FS41.50 m <sup>2</sup>	FS41.62 m <sup>2</sup>	FS41.84 m <sup>2</sup>
SKR07-10	1.45	1.17	2.00	160	2660	2.50	10.00	8.10	6.30

This information has been put together with greatest care. However, any performance data given in this leaflet is subject to compliance with certain surrounding conditions and hence may vary from case to case. Further, we reserve the right to make changes at any time without notice. We strongly recommend (i) reconfirmation with us whether this information is still fully valid, before using it for final designs and (ii) to verify performance data taking into account the actual surrounding conditions. We do not take any responsibility for any consequences due to non-compliance with these recommendations.

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