



# DAF TECHNOLOGY FOR PAPER MILL APPLICATIONS

KWI Group is considered one of the pioneers of Dissolved Air Flotation (DAF) technology and is one of the oldest existing DAF unit manufacturers in the world.

Our DAF range includes **11 standard models**, as well as custom designs, to meet all customer requirements.

With nearly **70 years'** experience and the supply of **7000 DAF units** for **4700 references** globally, our Group is strategically qualified to serve process industries worldwide.



DAF is considered very efficient and is widely used in treating white water, TMP filtrates and wastewater for pulp and paper industry.

#### Main aim of KWI DAF units in paper mills:

For whitewater treatment, DAF can be used to separate solids/water and recover fibers and clean water which can be reused in the paper and pulping process.

In wastewater and filtration application, DAF can also remove suspended fillers, fiber and other sludge.

#### The Megacell® Horizontal or Vertical (MCH or MCV) are the best solutions.

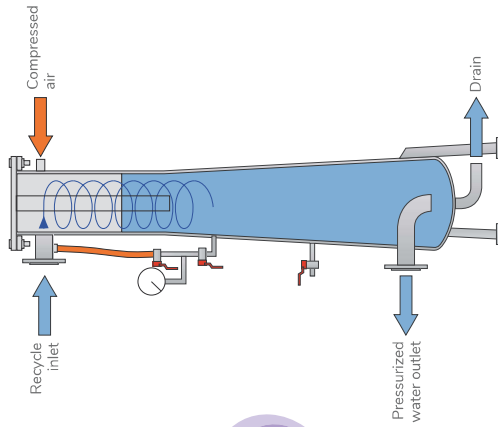
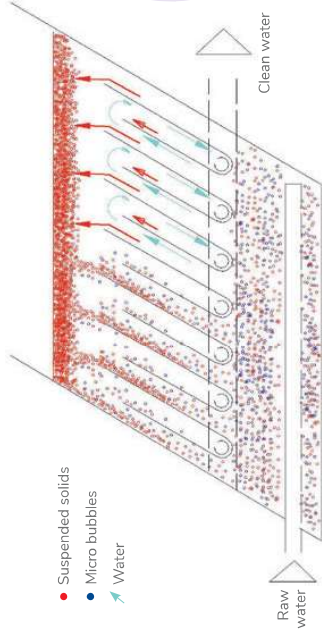
These innovative DAF units are a compact solution, robust and easy to operate. Even start-up and shut-down phases do not modify their performance.

#### KEY FEATURES AND BENEFITS

- High TSS removal efficiency: 96%~99%
- High hydraulic load: up to 80m<sup>3</sup>/(m<sup>2</sup>.h)
- High sludge load: up to 70 kg/(m<sup>2</sup>.h)
- Small footprint
- Less energy and chemical consumption
- High sludge concentration: up to 5% of solid content

## ■ Our patents: that's what makes the difference!

Patented "U" elements and Air Dissolving Reactor (ADR<sup>®</sup>)



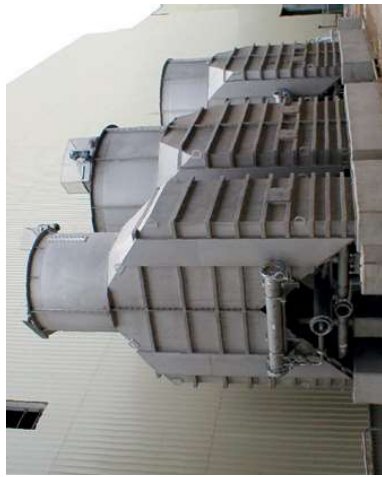
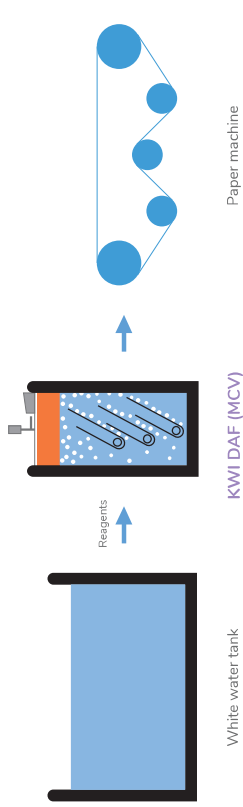
This innovative ADR<sup>®</sup> ensures floated sludge uniformity, a key factor in judging DAF performance.

## ■ Performance & Operating Parameters

Inlet TSS:	max. 5000 mg/l
TSS Removal efficiency:	>96%
Recirculation ratio:	20-40%
Air dissolving rate:	>80%
Construction material:	SS304L/SS316L

**WANT TO LEARN MORE?**  
Please contact  
our sales representatives!

## ■ Typical white water process treatment with Megacell<sup>®</sup> vertical (MCV)

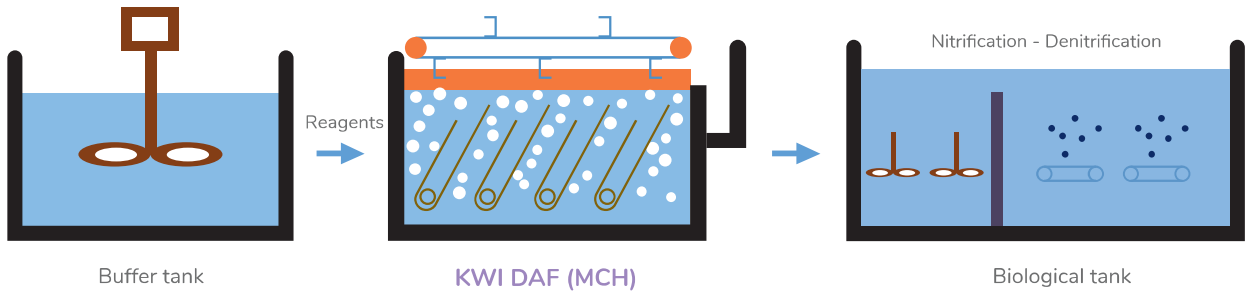


## ■ MCV range

TYPE	MAXIMUM INLET FLOW* (m <sup>3</sup> /hour)	POWER (kW)	TDIMENSIONS Ø or L x W x H (m)	OPERATING WEIGHT (tons)
MCV 8	100	0.55	2.2xNAX5.2	22
MCV 12	150	0.55	2.2xNAX6.2	27
MCV 20	250	0.55	2.2xNAX8.2	38
MCV 30	375	0.55	3.0xNAX9	65
MCV 20.2	250	0.55	2.2x2.3x5.3	25
MCV 30.2	375	0.55	2.2x2.3x6.8	35
MCV 40.4	500	0.55	4.3x4.3x5.3	80
MCV 60.4	750	0.55	4.3x4.3x7.6	110
MCV 80.4	1000	0.55	4.3x4.3x8.8	150
MCV 100.4	1250	0.55	4.3x4.3x6.6	200

\*The maximum flow includes recycle flow and depends on SS loading and on the application.

## ■ Typical paper mill waste water treatment process with Megacell® horizontal (MCH)



## ■ MCH range

TYPE	MAXIMUM INLET FLOW* (m <sup>3</sup> /hour)	POWER (kW)	DIMENSIONS LxWxH (m)	OPERATING WEIGHT (tons)
MCH 2	25	0.18	3.0x1.7x2.8	2.5
MCH 4	50	0.18	3.8x1.7x2.9	4.5
MCH 8	100	0.18	4.0x2.5x3.0	11.5
MCH 12	150	0.25	4.6x2.5x3.0	14.5
MCH 20	250	0.37	6.2x2.5x3.0	22
MCH 25	312	0.37	7.6x2.5x3.0	28
MCH 30	375	0.37	8.6x2.5x3.0	35
MCH 40	500	0.37	10.6x2.5x3.0	44
MCH 50	625	0.55	10.8x2.5x3.0	52
MCH 60 double	750	1.5+0.75	10.1x4.6x3.3	67
MCH 80 double	1000	1.5+0.75	12.1x4.6x3.8	116

\*The maximum flow includes recycle flow and depends on SS loading and on the application.

KWI specialists have vast expertise and experience ranging from engineering to building and commissioning, and from investment to operation.

**Let's work together to make your project a success!**



Member of the **SafBon** Group

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