

KSE KleenScreen Effluent Range

Self-Cleaning Intake Screens for filtration of particles likely to cause system blockages in modern, sprinkler based effluent application systems.

As dairy effluent systems develop to better utilise nutrients and reduce environmental impact they are tending to be designed to apply much smaller amounts at greatly reduced application rates. A consequence of this is the use of relatively small nozzles to apply the effluent. These nozzles have a tendency to block when they are supplied direct from a dirty source such as an effluent pond, causing poor system performance and frustration for the user.

The KSE Range has been developed to greatly reduce this problem and decrease system maintenance. It effectively stops potentially troublesome particles from entering the effluent system.

The KSE Range use a pair of internal backwashing jets that rotate to continuously blast the screen and nearby area to break up or wash particles off and away from the screen.

In comparison to a KSE self-cleaning intake screen, standard irrigation filtration systems are either high-maintenance, due to the dirty situation, or very expensive to install.



Benefits

ENERGY SAVING

Although some of the pumped fluid is directed back to the backwashing system, the small screen hole size allows the use of conventional closed impeller pumps. This allows smaller motors to be used and higher heads to be pumped than standard open impeller and trash pumps, thereby reducing power consumption.

REPAIRS AND MAINTENANCE

The small screen holes filter water entering system. This can significantly reduce the wear on the pump and other system components, while also dramatically reducing the incidence of nozzle blockages.

LABOUR SAVING

By reducing one of the major causes of sprinkler based effluent system problems, i.e. blockage, the labour required to maintain the system is significantly reduced.

DURABLE

Stainless steel and thermoplastic components ensure rugged construction and long operational life.



KS5-E

Features

NO ELECTROLYSIS

Materials are mainly stainless steel or plastic, which prevents a corrosive situation with dissimilar metals.

DURABLE AND RELATIVELY LIGHT

The stainless steel construction provides a strong and durable screen, with a relatively light weight.

FILTERING OPTIONS

The KleenScreen Effluent range is produced using a Wedgewire cage which is suited to the typically fibrous effluent environment. The KS5-E is available with a 0.5mm or 1.0mm gap between the wires. The KSES is available with 1.5mm or 2.0mm between the wires, whereas the KSE is available with the full range of slot widths between 1.0mm and 3.0mm.

STANDARD CONNECTION

The KS5-E can have either a 2" or 3" BSP male connection where the KSES can have a 2½" BSP female connection or the slotted 80-100NB flange. The KSE - either the slotted 80-100NB flange or a 150NB AS2129 Table D flange. Backwash connections are standard BSP male connections.

INSTALLATION NOTES

The KSE Range of screens is best suited to being installed in a second oxidation pond, or at a minimum on the side opposite the pond inlet in a first pond. This range of screens is not recommended for sumps with relatively small volumes or situations that have large amounts of fibrous material. The recommended pressure range for backwashing is 25-60m (40-90 psi).



KSES



KSE



Flow | Pressure | Connections

Base Model	Maximum Flow (Wedge-wire with 0.5mm wire spacing)				Backwash Connection	Outlet Connection	Required Pressure for Backwash.	Backwash Flow at Required Pressure.
	L/S	M ³ /Hour	IGPM		International (USA)	International (USA)	Meters (USA)	L/S (USA)
KS5-E	8	29	106	128	1/2" BSP male (1/2" NPT)	2" (50mm)	30 (45)	0.7 (11)
KSES	12	43	158	192	3/4" BSP male (3/4" NPT)	4" (100mm)	30 (45)	1.3 (21)
KSE	25	90	330	400	1" BSP male (1" NPT)	4" 6" (100mm 150mm)	30 (45)	2.6 (41)

Dimensions

Base Model	Screen Length MM (inches)	Screen Diameter MM (inches)	Overall Length MM (inches)	Net Weight KG (pounds)
KS5-E	200 (7.9)	250 (9.8)	250 (9.8)	5 (11)
KSES	120 (4.7)	470 (18.5)	240 (9.4)	13 (29)
KSE	245 (9.6)	470 (18.5)	365 (14.4)	17 (47)

