

FOR GRANULAR MEDIAL FILTRATE COLLECTION AND BACKWASH DISTRIBUTION

Suitable for heavy industrial waste applications and potable water treatment applications

For use in any type of pressure or gravity filter

Can be used with sand, anthracite and granular activated carbon media



**Durable and
multifunctional
design is effective
and long-lasting
when used with
any pressure or
filtration media**

EWT™ FLEXKLEEN® NOZZELS

The EWT™ FlexKleen® nozzles incorporate hydraulic characteristics and structural features developed from Ovivo's experience of designing and manufacturing filter underdrain nozzles.

FlexKleen nozzles are suitable for both heavy industrial waste applications and potable water treatment. FlexKleen nozzles can be used in any type of pressure or gravity filter, including those with steel or concrete filter floors.

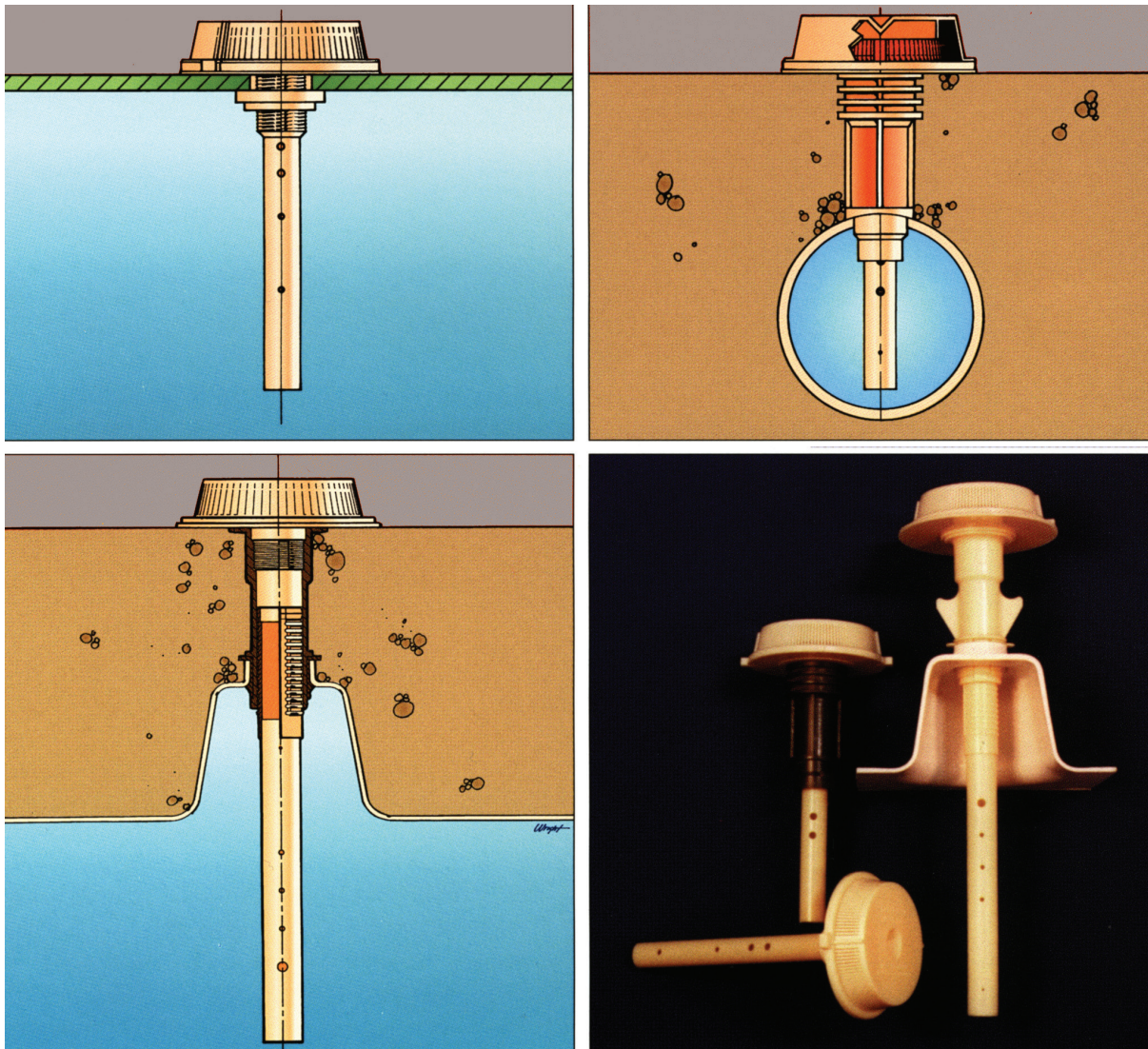
Current FlexKleen nozzles are designed to easily replace older models. Nozzles can be used with sand, anthracite and

granular activated carbon media. They are usually located on 8-inch centers, but have successfully replaced our competitor's brands on 6-inch and other spacing.



HOW WE CREATE VALUE

- Nozzles designed to give the correct headloss
- Easily replaces previous Nozzle models
- Durable materials and design



EWI™ FLEKKLEEN® NOZZLES

HOW IT WORKS

Our underdrain nozzles are designed to carry out four basic functions:

ELIMINATION OF INTERNAL PRESSURE BALANCED FEED DISTRIBUTORS

The pressure drop created by the nozzles balances the collection of filtrate during the filtration cycle, eliminating the need for a header and lateral type filter inlet distributor.

ELIMINATION OF GRAVEL LAYERS

Vertical ribs in the nozzle head prevent filter media from passing into the plenum chamber. Slots widen towards the inside, presenting a sharp outer edge to the media. This allows the placement of sand directly onto the nozzles, eliminating gravel layers and their associated problems.

UNIFORM DISTRIBUTION OF AIR SCOUR

Backwash air is metered evenly into all nozzle heads through air tubes. Multiple orifice sizes and elevations are optimized for low, medium or high-rate air scour requirements. A baffle ring extending down from inside the top of the nozzle directs the scouring force of the air in a radial pattern from each nozzle.

UNIFORM BACKWASH WATER DISTRIBUTION

The pressure drop created in the nozzles ensure water backwashing is evenly distributed through the filter media. Water is discharged radially at a 15° angle above the filter floor. An internal cone directs and stabilizes flow inside the nozzle head.

FEATURES

The improved FlexKleen nozzle heads are injection molded from strong, chemical resistant acrylonitrile-butadiene-styrene (ABS) plastic. Other plastics are available for special applications.

Most granular media filters are designed to end the filtration cycle at differential pressures of 2 to 10 psi maximum across the media. However, chance malfunctions or operator errors have the potential to allow differential pressures to approach the structural ratings of the filter tank. FlexKleen nozzles are rated for 20 psi pressure drops. Laboratory tests simulating a twenty-year period of two cycles per day indicated that the nozzles will survive repeated abuse at multiples of rated pressure, ensuring a long product life.