



# X-Series

## Dust Collector System

For mobile drilling equipment



Newly developed dust collector system improves productivity, improves economy and improves the working conditions in the rock drilling industry.



# X-Series Dust Collector System

The X-Series represent a quantum leap with regards to design of dust collector systems for mobile rock drilling applications. The system offers the following main benefits:

## Efficiency.

- The new suction fan design, impeller and housing, limits the maximum power requirement to correspond to the need in each application.
- The use of a diffuser, *z*-diff, on the air intake tube contributes to improved efficiency.
- The cyclone shaped filter house contributes to a better performance with regards to dust separation
- The new filter cleansing function, *z*-clean, ensures high suction efficiency, even under severe drilling conditions.



## Economy

- Improved overall efficiency reduces energy consumption.
- Fewer filters reduces the service need and reduces downtime during filter service
- All components are of high quality ensuring long life

## Design

- The new compact design of the dust collector with low height and round sections makes it easy to integrate in a modern rock drilling rig or on any other rock drilling application.
- Air valves are integrated inside the dust collector.

## Serviceability

- Easy access of filters and air valves by opening the top, the "clean side", of the dust collector.
- The new filter design allows the use of fewer filters than normally used.
- The possibility to service the filters from the "clean" side is an improvement from most existing designs.
- The cyclone part of the dust collector is covered by polymer wear material easy to change from the "clean side"

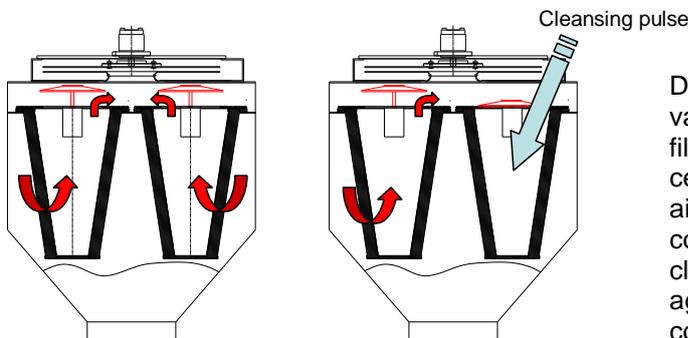
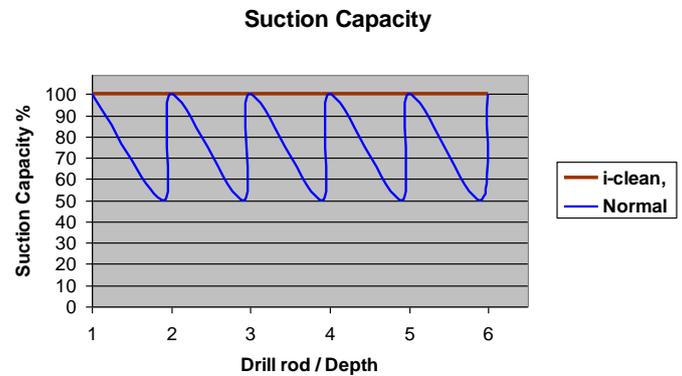




## New features on the ILMEG X-series Dust collectors:

**i-clean** a quantum leap when it comes to suction capacity in drilling applications.

The new filter cleansing function, *i-clean*, ensures high suction efficiency, even under severe drilling conditions. The system cleans each filter independently and continuously during the drilling sequence. The suction capacity remains regardless of drill rod length and rock conditions. The need for a pre-skimmer is reduced.

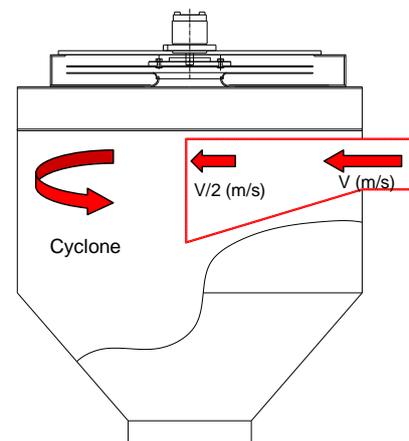


During the drilling sequence the closing valves are open, thus letting air through the filters creating the required suction. With certain intervals one valve closes and a short air pulse is introduced in the closed filter compartment to clean the filter. After the cleansing sequence both valves are open again until the next cleansing sequence comes in action on the next filter.

**i-diff** a quantum leap when it comes to suction capacity in drilling applications.

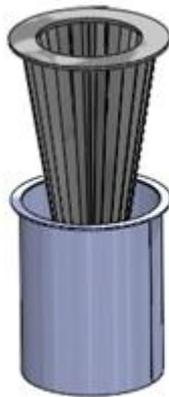
The new diffuser shaped design of the air intake to the dust collector, *i-diff*, converts the high transportation air velocity " $v$ " into useful static pressure, thereby improving the overall efficiency of the system.

The lower velocity of the dust stream at the diffuser outlet also reduces wear and noise.



## New materials and designs in the ILMEG X-series dust collectors:

In order to improve the wear resistance in combination with lower weight of the system, the bottom section of the new X-Series is made of highly wear resistant and strong polymer.



The X-Series filters are conical, specially designed for tough rock drilling applications. The conical shape supports the cleaning function in an excellent way. The filter material is made from water resistant material for long life.

## The ILMEG X-series Dust Collectors are available in the following sizes:

### Specification:

Model	Hole dimension Max (mm)	Hose dimension (mm)	Hyd. flow req. l/min	Hyd. pressure req. Bar	Number of filters
X-100	100	100	22	200	2
X-125	127	125	22	200	2
X-150	165	150	44	200	4
X-200	203	200	76	200	6

Model	Weight (Kg)	Main Dimensions W x L x H (mm)
X-100	160	740 x 957 x 1062
X-125	160	740 x 957 x 1062
X-150	220	1078 x 897 x 1133
X-200	280	1395 x 888 x 1098