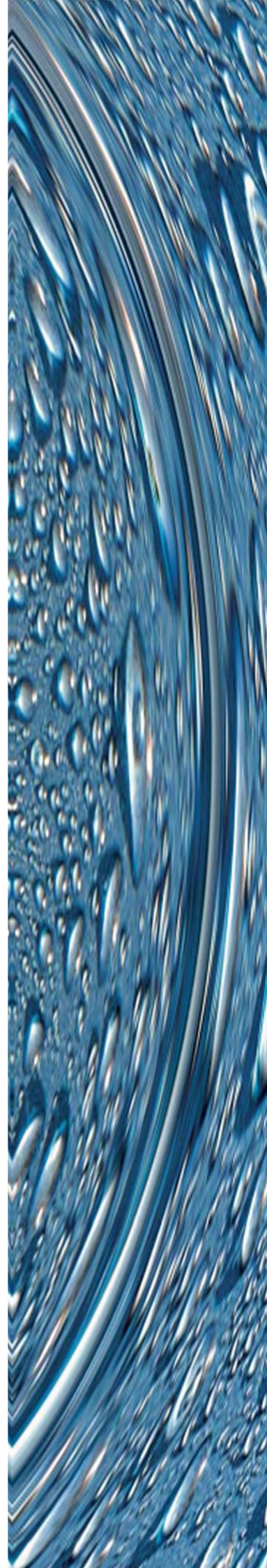


MN Grit & Sand Separators

-  *Pre-treatment of Domestic & Municipal Waste Waters*
-  *Recovery & Solids Processing from Industrial Discharges*



Cost-effective
Grit Sand and Sediment Removal



M.A.IND

With over 4,000 installations around the world, M.A.IND has developed a good reputation with a philosophy of offering high quality at low cost. This has served to provide equipment to smaller industries or applications where previously it was considered unviable and offers a lower purchasing cost for larger applications.

MN Grit & Sand Separators

MN Grit and Sand Separators offer a simple, cost-effective solution to removing grit and sand from process flows or waste water discharges. It can be applied to, industrial processing, paper mills, abattoirs, food processing, refineries, etc, for either recovery or removal purposes, or to waste flows for providing protection to downstream mechanical equipment in addition to improving the performance and reliability of drainage systems.

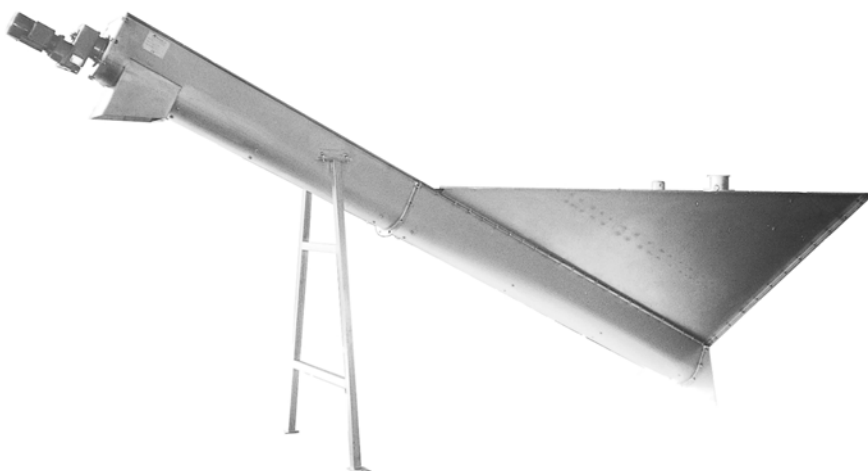
MN Grit and Sand Separators consist of a shaft-less spiral screw conveyor and hopper. Effluent flows into the hopper where the grit and sand settles out. Settled minerals and silt are then conveyed and dewatered prior to being disposed into a container. The screw conveyor can include mineral washing to remove organic matter.

Operation

Process liquors or waste effluent discharges into the top of the hopper. Settlement of grit and sand contained in the flow then takes place with sufficient retention for variations of particle settling velocities to attain > 80 % removal of 0.20 mm (200 μ m) size mineral particles*. Floatable solids including suspended organic matter will be drawn with the waste water and eventually discharge to the outlet whilst accumulated grit, sand and sediments will be conveyed by the spiral screw conveyor above the water level and then dewatered prior to disposal.

FILWASH may be fitted to the screw conveyor to wash organic matter from the mineral surface prior to dewatering and discharging into a container. Removal of organic matter > 50 % is attainable*.

The option of continuous bagging systems are available to receive the mineral and can be sealed without any personal contact. Where odours are an issue, continuous bagging systems can be used to abate odour nuisance.



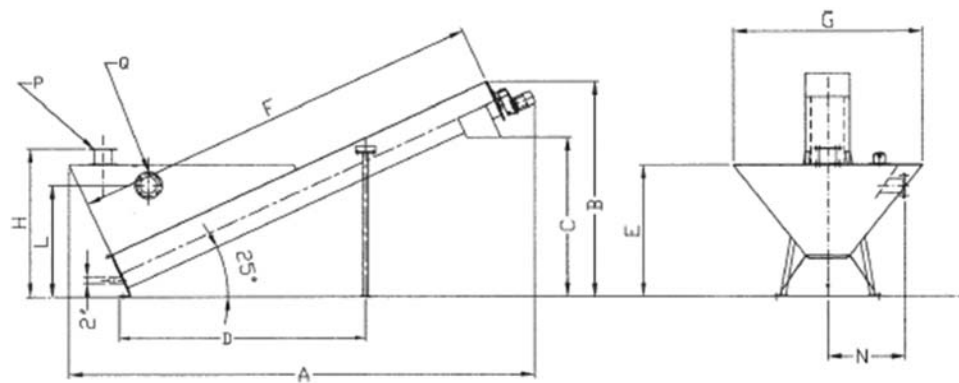
* Enhanced performance efficiencies to > 95 % removal of 0.20 – 0.25 mm (200 μ m – 250 μ m) size grit particles and organic matter removal of > 97 % can be achieved with M.A.IND MN-FW Grit Classifiers or TOP Combined Systems. Separate literature is available for these products.

Availability

MN Grit & Sand Separators are available in four models.

Type	Inlet Flow (l/s)	Inlet Flow (m ³ /h)
MN 30	8	30
MN 80	22	80
MN 100	28	100
MN 130	36	130

MN Grit & Sand Separator Dimensions



Model	A	B	C	D	E	F	G	H	L	N	P	Q
MN 30	4500	2100	1550	2380	1300	4000	1835	1500	1100	750	100 DN	150 DN
MN 80	5660	2540	2000	3235	1650	5000	2400	1800	1400	980	125 DN	200 DN
MN 100	6100	2740	2220	3235	2020	5500	2400	2200	1820	1100	175 DN	250 DN
MN 130	6277	3160	2631	3905	2120	6500	2396	2260	1870	1100	200 DN	300 DN

To suit other requirements, the M.A.IND range also includes alternative processes for grit or sand separation including:

TOP Combined Systems
(Screening, Grit & FOG Removal)



Grit removal efficiency
≥ 95% grain size 0.2 – 0.25 mm

M/2 Compact Combined Systems
(Screening & Grit Removal)



Grit removal efficiency
≥ 80% grain size 0.2 mm

MN-FW Grit Classifiers
(Grit Separation)



Grit removal efficiency
≥ 95% grain size 0.2 – 0.25 mm

MN Grit & Sand Separators – a simple, cost-effective solution for removing grit, sand and sediment ...

MN Grit & Sand Separators can be applied to waste flows, industrial processing, abattoirs and food processing, paper mills, refineries, etc, for either mineral recovery or removal purposes.

Specifications

Flow Capacities

Up to 36 l/s (130 m³/h)

Fabrication

Stainless steel: 304 (BS EN 10088 1.4301)

Stainless steel: 316 (BS EN 10088 1.4401)

Grit removal efficiency

≥ 80% grain size ≥ 200 µm (0.2 mm)

Volatile organic reduction

≥ 50%

Dewatering efficiency

90% dry residue

The Benefits

- high quality and reliability at low costs
- simple and robust
- quick and easy installation
- retrofit capability
- stainless steel fabrication
- reliable and automatic self cleaning operation
- protection of downstream plant and drains

Typical Applications

- Small sewage treatment works
- Municipal waste water treatment works
- Industrial effluent discharges
- Paper mills, abattoirs, food processing
- Chemical industry, refineries
- Receiving grit from drains or gullies
- Mineral recovery from processing plant

Other products from M.A.IND include:

- ⇒ Screw Compactors
- ⇒ Screw Conveyors, Horizontal, Inclined or Vertical
- ⇒ SLUDGLESS Sludge Thickening & Dewatering

Contact M.A.IND for further information regarding other products or screen variants

We reserve the right to amend any detail without notice. Please ensure you have the latest information.
Issue Grit Sand Separator MN 0408 (en)

M.A.IND Screening Systems



M Range Screens; available for channel mount or supplied in stainless steel tank, ≤ 300 l/s



MID/V Vertical screens for pump station etc, ≤ 300 l/s



SP Range Screens for high solids content



M Range Tanker reception screens with Bauer connection



GSR Range Sludge reception Rapid tanker emptying



MINYSCREEN probably the smallest low cost screw screen available on today's market

Head Office:
M.A.IND srl
Via Calcinaro, 2131
47023 Cesena (FC)
Tel: +39 0547 385043
Fax: ++39 0547 638182

Factory:
M.A.IND srl
Via Pitagora 30
41010 Limidi di Soliera (Mo)
Tel: +39 059 525720
Fax: ++39 059 525443

Email: maind@maindsrl.it
Web: www.maindsrl.it



UNI EN ISO 9001:2000
Quality Certification
No: 50 100 7256