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Intro/.

We are designers and manufacturers specialized for over 30 years in the filtration and separation of the cooling and process waters. Our units deal with all capacities and all working pressures. We design fully automated, static equipments, without any moving parts, reliable, economic in use and with a low consumption of wash water.

We supply custom-made equipments, fit for the specific task and operating under conditions specified by the client.

Our mission :

To create loyal customers by providing creative and suitable solutions for their needs.

Since 1970, we have achieved over 1500 installations throughout the world.

Current Clients/.

Our references

ABB
ALSTOM
ARCELOR
ARKEMA
BSN
BASF
BP
CASCADES
CEGELEC
CERN
COCKERILL
DANONE
DUFERCO
EDF
ENDEL SUEZ
ENDESA
ENEL
ESCHER-WYSS
FIAT
FORD
HEATHROW AIRPORT
HEINEKEN
HYUNDAI HEAVY IND.
IBM
ICI
IMPSA
ITALSIDER
KLOECKNER WERKE
LURGI
MARCONI DEFENCE SYSTEM
MICHELIN
MITTAL
NESTLE
NEYRPIC
PECHINEY
PEUGEOT
PFIZER
PIRELLI
PETROFAC
PONT-A-MOUSSON
POSCO
RENAULT
RHODIA
RIVA
SIDEM

Current Clients/.

Our references

SHELL

S.I. GENEVE

SNPE

SOLLAC

AMEC SPIE

SULZER

SUMITOMO

TAUERNKRAFTWERKE

TECHNIP

THYSSEN

TOFTE

TOTAL

TRACTEBEL

UGINE

VA INDUSTRIE

VA TECH

VERBUNDPLAN

VEOLIA



The DOUCET JET FILTER, designed for open or closed circuits is a static self-cleaning filter, the elements of which ensure a non-stop filtration. This filter operates in 100 to 1000 micron-range.

The "micromatic" elements have several openings on the same element, the regulation on one of them is automatic according to the quality of the water.

The JET FILTER has the following characteristics :

:: MINIMUM SPACE REQUIREMENTS

This light filtering tube requires little space since it fits directly on a horizontal or vertical pipe of the same nominal diameter.

:: AUTOMATIC OPERATION

Internal surface of the laminar filter elements are "Jet cleaned" in accordance with a pre-established cycle remote-controlled by a timer.

For safety reasons, in case of excessive load of impurities, the cleaning cycle is activated by the differential pressure switch when the latter detects an abnormal differential pressure between inlet and outlet.

:: NEGLIGIBLE LOSS OF PRESSURE

The hydraulic design of this filter ensures normal filtration practically without pressure loss (1-2 m WG). The differential pressure switch is released at 5 m WG.



:: MINIMAL LOSS OF RAW FLUSHING WATER

The JET FILTER is cleaned with raw water, whereas other automatic filters use filtered water. Under normal working conditions, losses are inferior to 1 % of the nominal capacity.

:: VIRTUALLY NO MAINTENANCE

This self-cleaning filter has no moving parts, suffers no abrasion and they requires no greasing, no adjustment, no tightening of packing box and there is no leakage, it does not corrode. The only moving parts are on the automatic flush valves.

:: CONSTRUCTION

In standard construction, carbon steel or stainless steel 304 L or 316 L, composites.

The filter elements are in stainless steel 316 L.



This strainer is placed in running water (velocity superior to 0.5 m/sec.) and is automatically cleaned by the velocity of the current.

It filters over a laminar flow area of from 1 to 6 mm and its nominal fineness of filtration is 3 mm.

The Hydromat is constructed from stainless steel AISI 304 L or 316 L. Its nominal diameter ranges from 50 to 500 mm (Flange according to DIN PN 16) and the flow rates range from 25 to 1 500 m³/h. (For flow-rates lower than 25 m³/h or higher than 1 500 m³/h, please contact us.)

The Hydromat is used in the following cases :

- Intake in running river water.
- Intake in way gates of hydro-electric power stations (Turbine) in order to divert the water to be filtered for cooling purposes.
- Intake in way gates and feeders of hydro-electric power stations working in double flow (Pump-Turbine).
- Intake in main conduits of circulating raw water if a filtered partial diversion of the flow is desired.

At present the DOUCET HYDROMAT FILTER represents the best millimetric filtering method for running water ; it is a static, extremely resistant device of simple construction ; it has neither moving parts no remotecontrols and requires no maintenance.

In general, the Hydromat protects the pump inlet and the water is subsequently filtered by a DOUCET Combined Unit which supplies water at



a filtration equivalent of 50 microns or into a DOUCET Jet Filter, with a filtration level ranging from 100 to 800 microns.

Hydromats are "clean" filters, i.e. there are no impurities to be discharged or processed.



High efficiency DOUCET HYDROCYCLONE UNITS (H - HD - 05 LS) with automatic or manual drains require little energy (Pressure drop from 2 to 7 m W.C. or 3 to 10 PSI) and have a nominal separation capability in the range of 10 to 80 microns, depending on the model selected. Our most efficient modules separate particles with a settling rate of 4 inches in less than 3 minutes.

DOUCET HYDROCYCLONES prevent sand from a water well or resins from a ion exchanger from being carried away.

They permit the recovery, concentration and even the transport of settling and valuable products such as microsand, coal, ore, crystals, chemical precipitates, ...

DOUCET HYDROCYCLONES never clog under normal working conditions when maximum dimensions of incoming impurities are respected, i.e., from 3 to 10 mm depending on the type of module selected. In the case of treatment of surface water containing coarse or floating impurities, a DOUCET JET FILTER must be added or COMBI-UNIT assuring filtration and separation.

DOUCET units are ideally suited for :

-The protection of both industrial (DOUCET H - HD, MICROSEPARATORS and STANDARD UNITS) and domestic installations (DOUCET PROTECTION UNITS). They eliminate settling impurities such as sludge, sand, lime, rust and scale.



- The protection of open or recycled hot-water and cooling circuits and spraying nozzles.
- The protection of pumps and turbines : stuffing boxes, labyrinth packing, flat seals and other types of hydraulic seals.
- The protection of control units, measuring instruments and water treatment equipment.



Products/. Combined protection unit

The Combined DOUCET Protection Unit includes a DOUCET laminar filter media with slots varying from 100 to 800 microns made of 2 mm thick stainless steel sheet. There are no moving parts. Subsequently, the water flows through a series of DOUCET high efficiency centrifugal separator modules.

The untreated water enters the laminar filter then passes through the filtration media which retains all suspended particles and impurities larger than the slot opening. It then passes through the DOUCET separators where sand, silt and mud settling by centrifugal action are removed in the filtration range of 30 to 50 microns.

The filtered water is of better quality than the effluent of a 50 microns micro-strainer ; it no longer contains any abrasive or clogging particles which are dangerous when present in industrial water for cooling systems, particularly tubular and multicellular exchangers, spray systems, hydraulic joints and automated water circuits.

Since there are no moving parts in the filter and since two complementary, very simple and sturdy techniques are used, our Combined DOUCET Protection Unit (fully automatic) does not require any special maintenance.

Of course, we supply each of the two components separately, i.e. the DOUCET Jet-Filter, or the Standard DOUCET Unit which contains only the high efficiency centrifugal separators.

Applications/.

::Power plants :

Water intake in penstocks

Cooling of equipments such as alternators, transformers

Protection of pumps and turbines seals

::Chemical, petrochemical industry :

Cooling of cracking installations

Treatment of reinjection water

::Steel mills :

Cooling of blast furnaces

Spraying of continuous castings,

Cooling of rolling mills

::Various other industries :

Paper industry, Engineering companies, Air conditioning, Desalination,
Reinjection

13./ DOUCET FILTERS®

Notes/.



Contact/.

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