PRINCIPLE OF OPERATION
The mini-CDB sludge collectors treat the entire return flow from the loop. They act in 3 complementary and consecutive ways that are essential to obtain a good result:
- Decanting induced by a considerable reduction in the fluid velocity, due to the large diameter of the collector case.
- Magnetic collecting of metal oxide particles in the low velocity zone, by an ALNICO 600 magnetic bar.
- 300 µm filtering on a vertical stainless mesh, for self-cleaning.

The continuously clear water thus:
- ensures proper operation of the regulation systems (valve mechanisms, thermostat-controlled valves, temperature sensors, etc.),
- prevents obstruction of the small section exchangers,
- reduces frequent corrosion phenomena of the “sub-deposit” type, due to the differential oxygenation of the pipe system zones.

ADVANTAGES of the sludge collector
The sludge collector is the solution to the following problems:
- reduced circulation flow,
- sludge deposit on circulation valve seat (magnetic phenomenon),
- obstruction of controller Tees and column base valves.
- obstruction of distribution collectors,
- obstruction of low points (radiators, under-floor heating, etc.),
- damage to circulators,
- clogging of boilers and exchangers (sludge precipitation with scaling).

Clearing sludge from systems enables the system to operate properly, reduces energy consumption and reduces the maintenance required.

System without pump causes no noise pollution.

FIELDS OF APPLICATION
The mini-CDB sludge collectors effectively trap particles in suspension carried in closed hot or cold water systems, and particularly in household central heating systems (radiators or under-floor heating).
SLUDGE COLLECTORS

TECHNICAL CHARACTERISTICS
Treats the entire loop return flow, for faster sludge collection.
- Supplied complete, ready to install.
- Max. service pressure = 5 bars (at 60°C).
- Magnetic collection by ALNICO 600 magnetic bar mounted vertically on easily removable support.
- 300 µm filtering on stainless mesh (vertical filter causing sludge to fall).
- Velocity reduced to < 0.1 m/s in mini-CDB sludge collector case.

SIZING THE COLLECTOR
CWTI specialists size your system to ensure safe, efficient and reliable operation.
The following information is required to size your sludge collector:
- characteristics of your system,
- service pressure,
- circulation flow in m³/hour,
- nature of fluid in your system.

STANDARD INSTALLATION
- Installed on loop return, upstream of boiler.
- Installation with bypass is recommended, in order to allow servicing work without shutting down the system.
- Installed on the floor, a minimum clearance of 300 to 400 mm must be allowed above the system, to enable the filter mesh to be cleaned.

UTILISATION
The sludge collector can be incorporated when the system is installed. It collects the particles carried within the system.
It can also be installed in an existing system, to descale and remove sludge from systems that are very obstructed by scaling or by the results of corrosion.

GUARANTEE
1 year parts and labour – excluding consumable items and transport.

MAINTENANCE
- Drain the bottom of the sludge trap.
- Clean the magnetic bars.
- Clean the 300 µm filter.
→ The frequency of these operations depends on the initial condition of the system, and decreases considerably following the installation of a sludge collector. These operations can also be managed through a conventional maintenance contract.

<table>
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<th>Material</th>
<th>Operating temperature</th>
<th>Ø Inlet/Outlet</th>
<th>Reference</th>
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* Dimensions in mm.