



SPECIFICATIONS

CONCRETE CDS^{MD}

SCOPE

These specifications apply to the performance, materials, and manufacture of models CDS-3 to CDS-12 of the continuous deflective hydrodynamic separator CDS supplied by Soleno.

TREATMENT UNIT REQUIREMENTS

The continuous deflective hydrodynamic separator CDS shall be supplied by Soleno Inc. and shall comply with these materials and performance specifications based on specified flow and storage capacity.

RAW MATERIALS

- **Structure :** the CDS structure shall be in precast concrete.
 - Precast concrete components, reinforcing steel and rubber gaskets shall meet the BNQ 2622-420 standard.
 - Concrete shall achieve a minimum 28-day compressive strength of 30 MPa (4000 lb/ft²).
 - Unless otherwise noted, the precast concrete sections shall be designed to withstand to CL-625, H-25 and HS-25 traffic loads.
 - Shipping of components shall not be initiated until a minimum compressive strength of 30 MPa (4000 lb/ft²) is attained or five (5) calendar days after fabrication.
 - A butyl gasket in accordance with BNQ 2622-420 must be installed for the sealing of horizontal joints between concrete sections.
- **Fiberglass treatment device :**
 - Fiberglass components shall be conformed to the ASTM D-4097.
 - They shall be sealed to the concrete wall using a polyurethane elastomeric sealant, Sikaflex 1a or equivalent, to seal any gap between it and the manhole wall.
- **Separation screen :**
 - Separation screen shall be manufactured of Type 316 and 316L stainless steel conforming to ASTM F 1267-01.
- **Hardware :**
 - Hardware shall be manufactured of Type 316 stainless steel conforming to ASTM A 320.

PERFORMANCE

- For roadway use, frames and covers shall be made of cast iron and adjustable, allowing transfer of loads to the surrounding soil.
- The CDS shall include a ____ mm (____ in) interior diameter structure.
- The CDS shall include a separate sediment storage sump to minimize the probability of fine particle re-suspension. In order to not restrict the owner's ability to maintain the CDS, the minimum dimension providing access from the ground surface to the sump chamber shall be 400 mm (16 in) in diameter. The sediment storage sump must have a minimum interior height of 610 mm (24 in) for CDS-3 to CDS-6 models and 914 mm (36 in) for CDS-7 to CDS-12 models.
- The CDS shall include a fiberglass structure (water inlet, central cylinder, oil deflector and weir) and a stainless-steel separation screen of ____ mm (____ in) diameter and of ____ mm (____ in) height. The CDS shall capture the oils, grease, waste and floating debris and ____ % of Total Suspended Solids (TSS) entering the chamber (annually).
- The CDS shall include at least; one (1) 750 mm (30 in) interior diameter access for CDS-3 to CSS-5 models or two (2) 600 mm (24 in) interior diameter access for CDS-6 to CDS-12 models, located on the upper part of the chamber, to provide safe access for routine inspection and maintenance.

FRAME AND COVERS

- Frames and covers shall be made from S series cast iron.
- Adjustable cast iron frames and covers are furnished in options.
- Cast iron frames and grates are furnished in options.

DIMENSIONS AND QUANTITIES

Dimensions and quantities shall comply with tender documents and drawings.

INSTALLATION

Installation shall be carried according to the installation requirements of the concrete manhole specified in standard BNQ 1809-300, and following Soleno's recommendations. Contact the Soleno representative in your region or visit our website at soleno.com for installation recommendations.