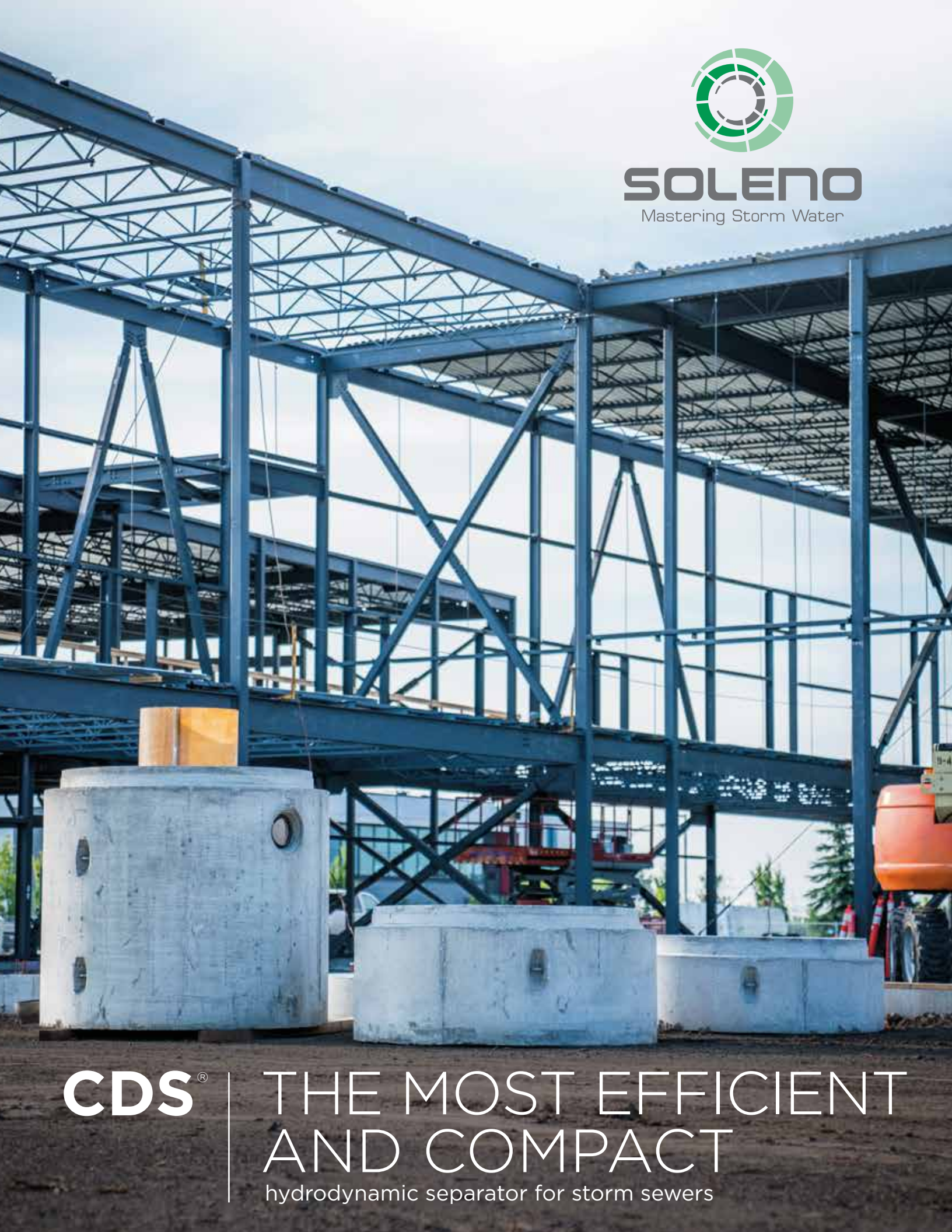




**SOLENO**

Mastering Storm Water



**CDS**<sup>®</sup>

THE MOST EFFICIENT  
AND COMPACT

hydrodynamic separator for storm sewers



# A HIGH-PERFORMANCE PRODUCT

that exceeds environmental requirements

The evolution and implementation of a stricter regulatory framework is gradually transforming traditional practices towards integrated storm water management. Owners and municipal network managers must now use new treatment solutions while ensuring the sustainability of infrastructure, in accordance with new environmental requirements.

Canada's Environmental Technology Verification (ETV) program provides independent assessment of new technologies by providing assurance to sewer system owners and managers that environmental performance claims are valid, credible and supported by test data. This program provides a clear assessment of the environmental potential and value of the submitted technology.

The performance of the CDS hydrodynamic separator has been verified by the ETV Canada program and approved by Quebec's **MDDELCC**.

## Proven and approved treatment system



The best performing hydrodynamic storm water treatment system, based on **MDDELCC** evaluation criteria.



CDS is also approved by the Washington State Department of Ecology (**GULD\*** certification level) and the New Jersey Department of Environmental Protection (**NJDEP**).



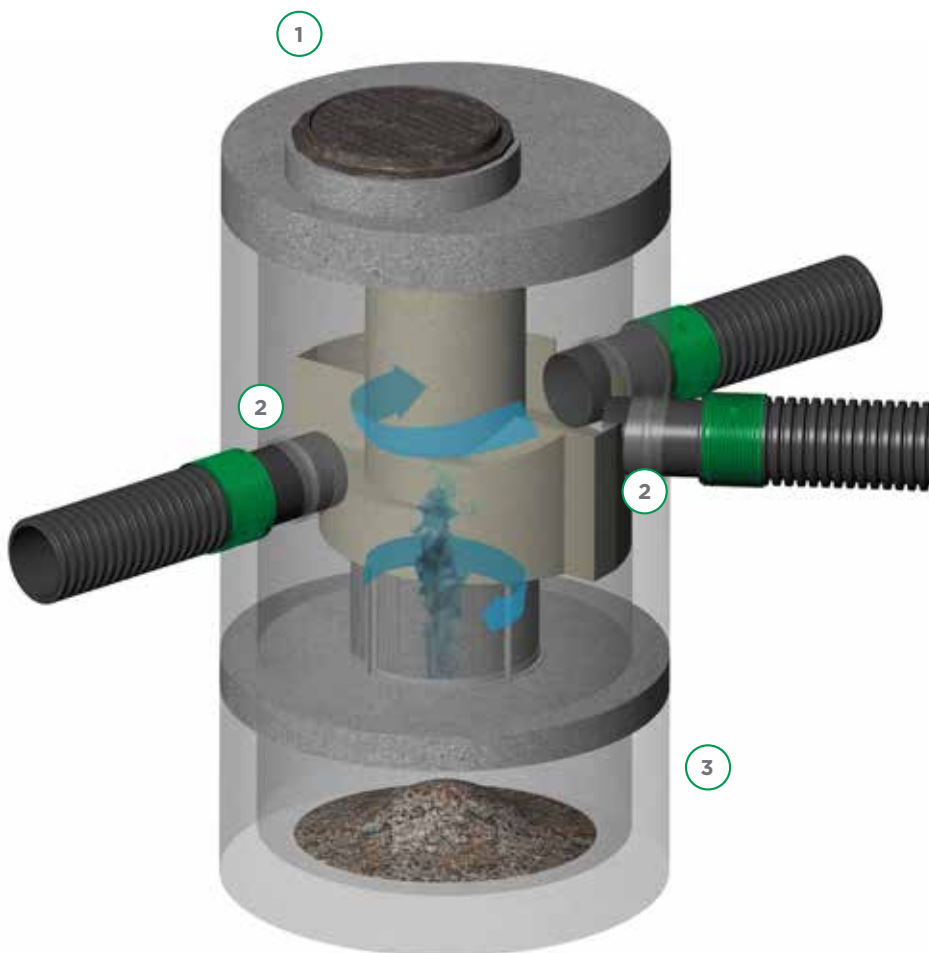
Tested in various environments; in the laboratory and at different sites, this system has proven itself for over 20 years.

\* General Use level Designation

# CDS<sup>®</sup>

## The most efficient and compact hydrodynamic separator for storm sewers

The **CDS continuous deflection hydrodynamic separator** is exceptionally efficient. It effectively controls and treats over 60%\* of suspended solids, oils and floating debris from runoff water before discharge to an outlet.



Model shown: CDS-5 with two inlets

- ① Easy access for maintenance, no work in confined space.
- ② O-ring gasket into the walls of the system make it easy to connect all types of pipes: HDPE, PVC and concrete.
- ③ A **separate sump** for sediment retention prevents the resuspension of sediments during peak flow events.

\* See current local regulations.

## Advantages and benefits

- + Designed for specific treatment rates, CDS provides customized solutions for each project.
- + For the same flow rate, CDS is **the most compact option on the market**, in diameter and height.
- + It saves money by reducing the footprint, unit size and excavation requirements.
- + It effectively removes 100% of floating and neutrally buoyant debris over 2.4 mm in diameter and recovers oil.
- + It provides a large storage capacity for oil, debris and sediment, reducing the frequency of maintenance.

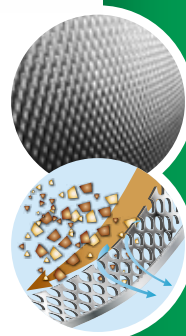
## Special features

- ✓ Complete range of diameters from 900 mm to 3600 mm (3 ft to 12 ft).
- ✓ Simple installation, similar to a traditional concrete manhole.
- ✓ Designed to resist CL-625, H-25 and HS-25 loads.
- ✓ Offered exclusively by Soleno in Quebec and the Atlantic Provinces.

## Easy maintenance due to a unique screen design

Thanks to its unique profile, the **continuous deflection separation screen**, made of stainless steel, prevents any risk of clogging and facilitates maintenance.

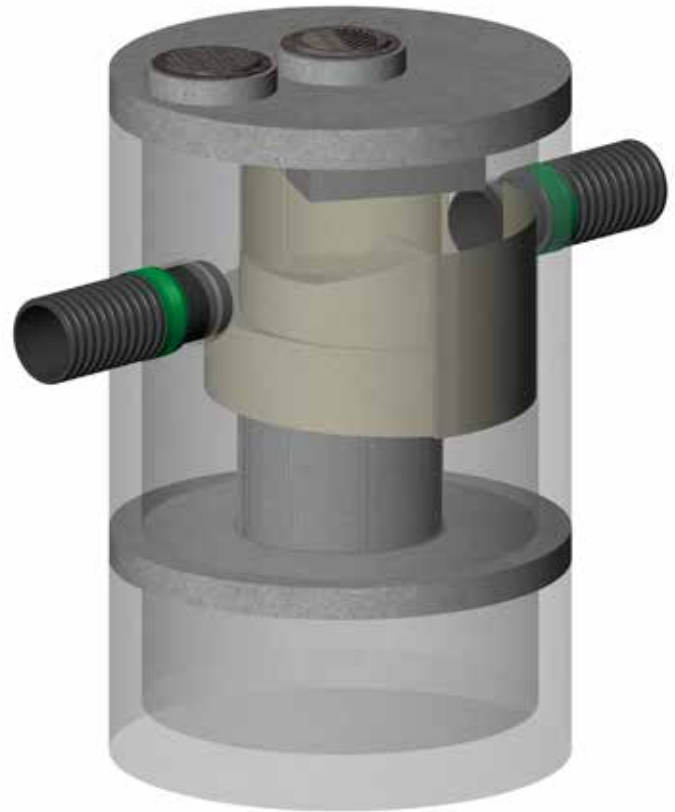
Because of its configuration, the **separation screen** modifies the path of debris by redirecting it into the vortex, in the centre of the system.



# A VERSATILE DEVICE

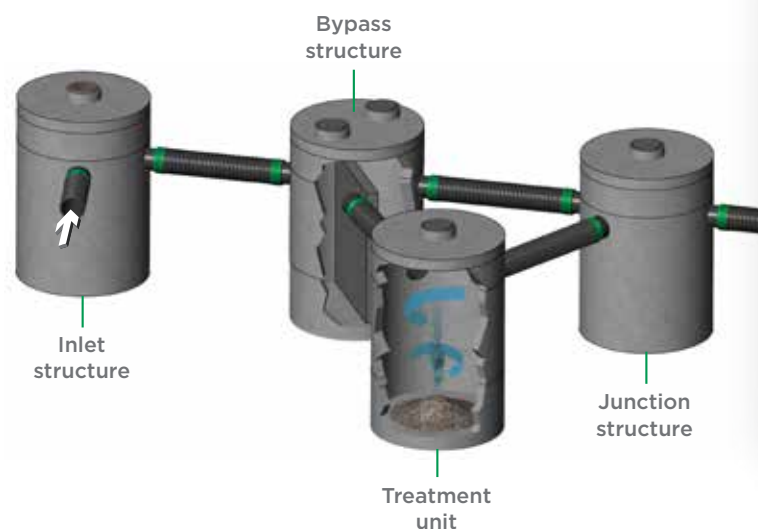
## All-in-one configuration

- The CDS treatment system combines all the structures required in a traditional treatment system, by combining the functions of an inlet, a bypass structure and a junction unit into a **single structure**.
- The CDS system is equipped with an **internal bypass weir** to control peak flows; its treatment capacity is maintained during high-intensity events.
- Grated-inlet option for runoff capture.
- Includes surface access and standard cast iron frame and cover (adjustable type optional).
- **Flexible design** allows multiple inlets and outlets at different angles.
- Inline and offline configurations available.



Model shown: CDS-8  
with a grate and a deflector pan

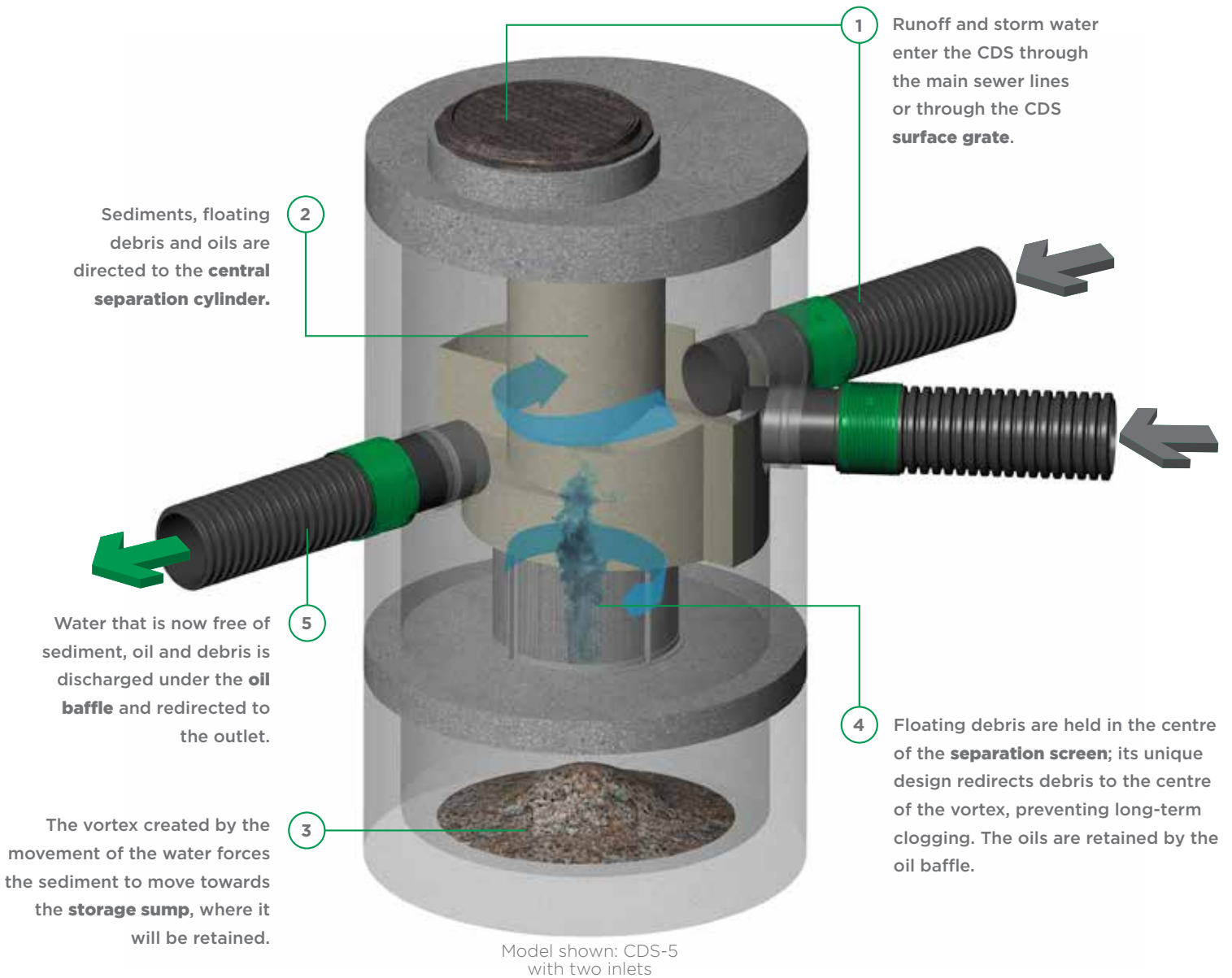
## Traditional treatment system configuration



## Applications

- ✓ New treatment installation
- ✓ Redesign or modernization of an existing structure into a treatment structure
- ✓ Replacement of traditional treatment system
- ✓ Pre-treatment for infiltration and bioretention
- ✓ Retention of sediment and debris upstream of watercourses
- ✓ Pump protection

# OPERATION



## CDS models and capacities<sup>1</sup>

MODEL	NOMINAL DIAMETER	HEAVIEST COMPONENT MIN. WEIGHT <sup>2</sup>	MAXIMUM TREATMENT FLOW (AS PER MDDELCC)	SEDIMENT STORAGE CAPACITY	OILS AND FLOATING DEBRIS STORAGE CAPACITY
	mm	kg	l/s	m <sup>3</sup>	liters
CDS-3	900	839	5.1	0.4	232
CDS-4	1 200	1315	9.2	0.7	313
CDS-5	1 500	2041	14.3	1.0	376
CDS-6	1 800	2722	20.6	1.6	439
CDS-7	2 100	5126	28.1	2.2	696
CDS-8	2 400	5080	36.6	4.3	795
CDS-10	3 000	8854	57.3	6.7	895
CDS-12	3 600	7530	82.4	12.8	994

<sup>1</sup> See current local regulations. <sup>2</sup> The weight represents the heaviest concrete section's weight.



# THE EASIEST

to maintain

The CDS system captures sediment, oil and floating debris. Inspection and maintenance are facilitated by the surface access, and require no work in confined spaces. The performance of the unit is not altered by the amount of accumulated sediment, provided that the maximum storage capacity limit is not reached. In all cases, Soleno recommends that the system be maintained periodically to ensure its performance.

Soleno Service is specialized in inspection and maintenance of treatment units. We offer the inspection, maintenance and certification of storm water treatment units in accordance with the requirements of local authorities.

Contact Soleno Service for more information on the services we provide at [solenoservice.com](http://solenoservice.com) or see our maintenance guide at: [soleno.com/en/produits/cds/](http://soleno.com/en/produits/cds/)

# OUR EXPERTISE

is always available

At Soleno, our solutions excellence is based on our technical support and expertise developed over the years with designers, water system managers and contractors responsible for the installation and maintenance of civil infrastructure.

Our engineers are available to help you identify and implement the best management practices to protect water resources that might be impacted by water runoff in urban or rural areas.



**SOLENO OBTAINED** its **ECORESPONSIBLE** Certification - level **2. Performance** in sustainable development from the Council for sustainable industries (CSI) **ECORESPONSIBLE** Program.

(Soleno plant located at 1160, route 133, Saint-Jean-sur-Richelieu only)



**SOLENO IS ISO 9001 CERTIFIED**  
(Saint-Jean-sur-Richelieu plant only)

**OUR PRODUCTS AND SOLUTIONS ARE DESIGNED AND MANUFACTURED ACCORDING TO THE MOST RIGOROUS STANDARDS.**

**SOLENO IS A MEMBER OF THESE AGENCIES:**



**SOLENO.COM**