

Neva-Clog®

Structure

Neva-Clog® consists of two sheets of light gauge metal in which circular perforations are made in a predetermined hole diameter and spacing. The sheets are joined by spotwelding in a specific pattern, dependent on the medium's application. This welding pattern, besides assuring uniform joining of the sheets, also controls the functional characteristics of the medium.

Neva-Clog®, produced in its largest quantity in stainless steel, can be produced in any commercially available sheet metal possessing the proper perforation and welding characteristics.

Neva-Clog® in Filter Leaves

Although originally developed as an underdrain material, Neva-Clog® has found wide use as the filter media on pressure and vacuum filter leaves. Neva-Clog® provides fast precoating, easy cake release and easy leaf cleaning due to its smooth surface. Neva-Clog® is RUGGED and thus resists abrasion and abuse during cleaning or acid washing.

In combination with Wedge-Flow® or Por-O-Septa® as the chamber material, Neva-Clog® becomes a general purpose filter leaf for many applications.

Operating Principle

Fluids pass through the holes of the top sheet, turn at right angles to pass through the controlled spacing between the sheets, then turn again at right angles to pass through the holes in the bottom sheet. Solids too large to pass through are retained on the surface. Finer particles are retained by the formulation of a filter bed or cake. Neva-Clog® operates best with free draining solids or as a supporting medium for precoat material.

Grades

There are three grades of standard and three grades of "back-to-back" Neva-Clog®. Grade I is used for coarse retention, Grade II is used for finer retention and Grade III is used where a flatter surface is desired, such as on filter leaves. The "back-to-back" is used where more restricted and more equally distributed flow is desired.

Neva-Clog® in Underdrains

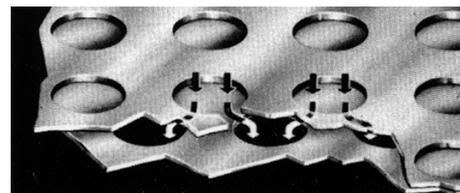
Neva-Clog® is used as a support for granular activated carbon in processing columns for removal of colors, odors, and tastes. Neva-Clog's® strength and performance characteristics have resulted in its installation in sugar, chemical, petrochemical and food refining plants. Because of its rigidity, compared with woven media, it requires minimum undersupport and no protective top screen. Neva-Clog's® particle retentivity, in the range of 100 mesh, enables it to handle all corresponding granula carbon and bone char.

Neva-Clog's® strength and freedom from internal plugging insure long service life, making it especially valuable for towers in inaccessible locations or in hazardous service.

Neva-Clog® is also used for underdrains in catalyst towers, resin towers and ion exchange units.

Industries Served

Sugar
Wine
Beer
High Fructose
Soda Ash
Water Treatment
Wastewater Treatment
Oil Additives
Chemical
Petrochemical



Magnification of Neva-Clog®, showing path of flow through two offset, perforated sheets.

Sample of Neva-Clog®, Grade III

**See Reverse Side
For More Details**

U.S. Patent Nos. 3,052,360 and 4,234,430



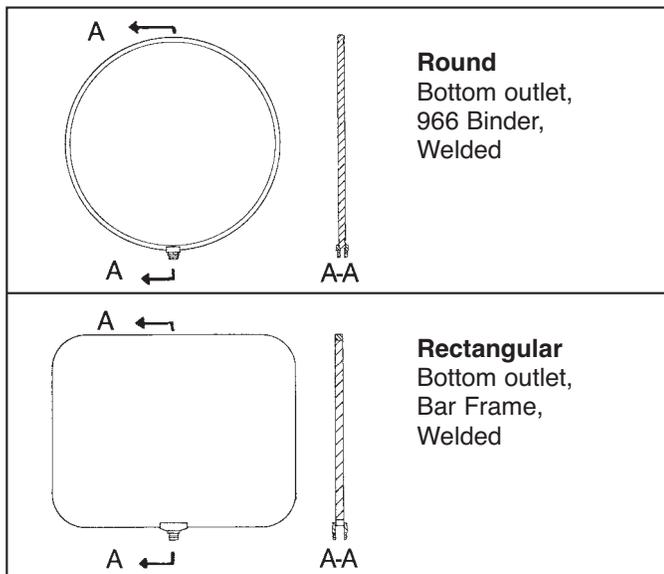
LEEM / LSS Filtration

25 Arrow Road • Ramsey, NJ 07446
Tel: (201) 236-4833 • Fax: (201) 236-2004
Email: info@leemlssfiltration.com

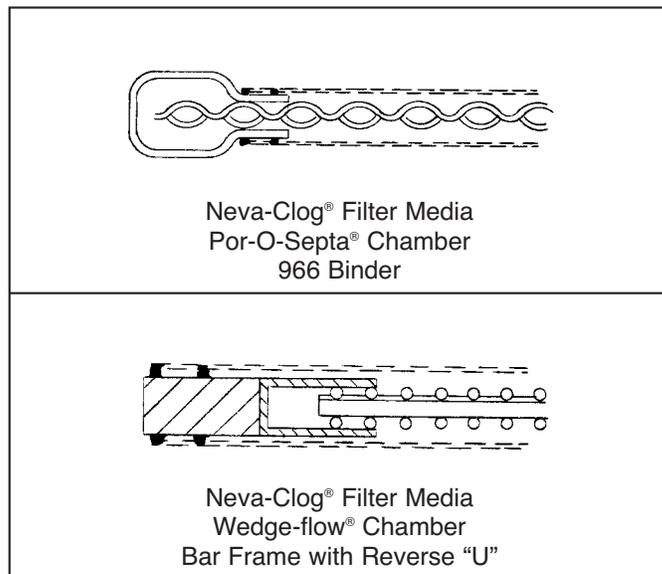
Neva-Clog®



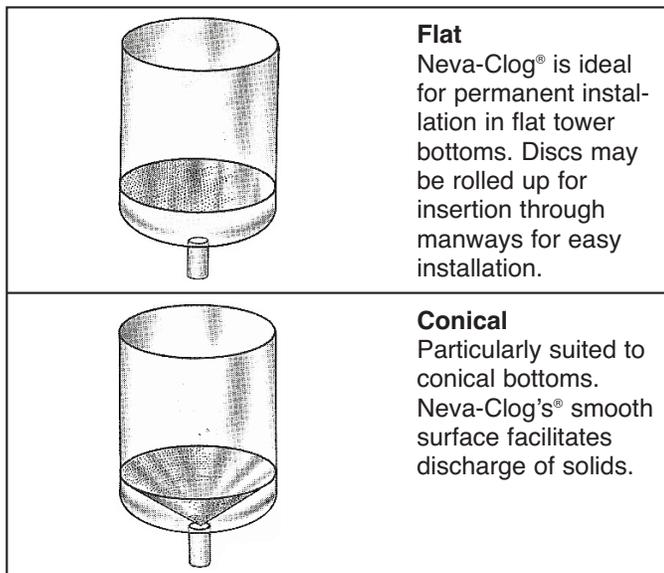
Filter Leaf Designs



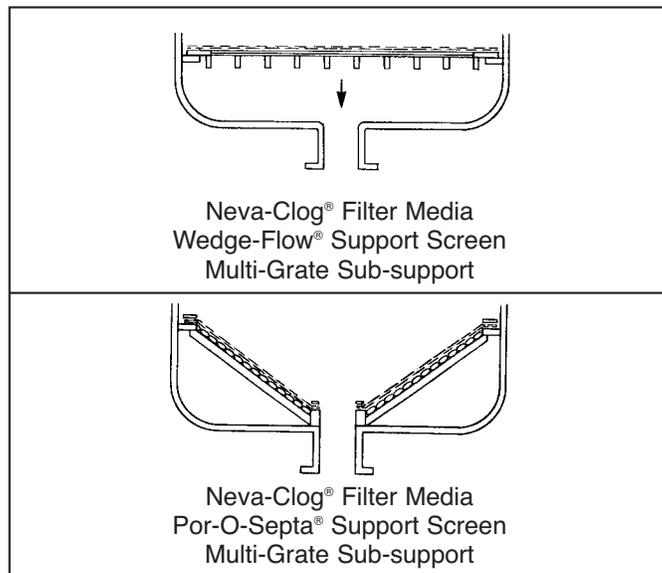
Filter Leaf Constructions



Underdrain Designs



Underdrain Constructions



Retention and Flow Data — Various Materials

	Neva-Clog®			24 x 110	AU Multibraid	12 x 64	20 x 250	100 x 100
	Grade I	Grade II	Grade III					
Nom. Micron Ret.	140	130	120	245	250	400	100	140
G.P.M./in ² , ΔP 5 psi	3.5	3.0	2.5	16.2	4.1	22.8	6.4	34.8
Weave	—	—	—	PL Dutch	Braided	PL Dutch	TW Dutch	PL