NATIONAL LINE™

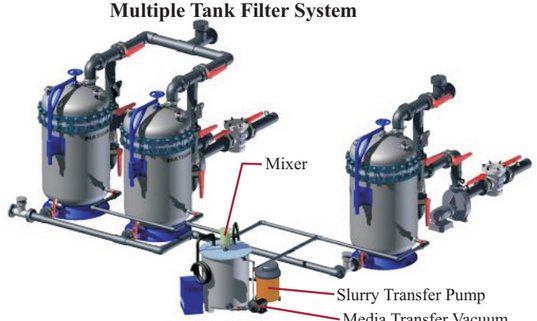
NATIONAL LINE™/ATLAS® BULK PRECOAT COMPONENTS

The National Line™/ ATLAS® Regenerative Media Bulk Precoat System can be used for single tank, multiple tank and/ or multiple system installations. The system comes complete with a bulk precoat mix tank, ¾ Hp mixer, slurry transfer pump and a dry media vacuum system.

National Line™/ ATLAS® Slurry Precoat Funnel Components

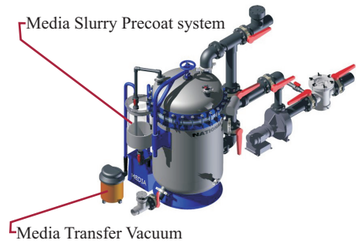
The National Line™/ ATLAS® Regenerative Media Slurry Precoat Funnel System is ideally suited for use in single tank installations. The system comes complete with a slurry precoat funnel and dry media vacuum system.

Multiple Tank Filter System



Bulk Mix Tank

Single Tank Filter



Slurry Precoat Funnel

The National Line™/ ATLAS® A-Series Regenerative Media Filter Systems are available from 30" (762 mm) through 96" (2,438 mm) tank diameters and 100 psi (690 kPa) operating pressures. This provides a wide range of filter bed surface areas ranging from 88 up to 1,360 ft² (8.18 to 126.35 m²), flow rates from 74 to 2,720 U.S. GPM (17.0 to 617.8 m³/ hr), in twenty four (24) different models.

NPC A SERIES SELECTION OPTIONS

Model #	Tank Diameter Inches (mm)	Nominal Effective Filter Area Ft² (m²)	Maximum Flow Rate Ft²/hr (m²/hr)	Influent/ Effluent Nominal Pipe Diameter inches (mm)	Backwash Nominal Pipe Diameter inches (mm)
NPC-030-0088	30 (762)	88 (8.18)	177 (40.0)	3 (80)	3 (80)
NPC-030-0097	30 (762)	97 (9.01)	194 (44.1)	3 (80)	3 (80)
NPC-034-0117	34 (864)	117 (10.87)	234 (53.2)	4 (100)	3 (80)
NPC-034-0129	34 (864)	129 (11.98)	257 (58.6)	4 (100)	3 (80)
NPC-042-0198	42 (1,067)	198 (18.39)	396 (90.0)	6 (150)	4 (100)
NPC-042-0218	42 (1,067)	218 (20.25)	436 (99.0)	6 (150)	4 (100)
NPC-048-0289	48 (1,219)	289 (26.85)	578 (131.3)	6 (150)	4 (100)
NPC-048-0318	48 (1,219)	318 (29.54)	636 (144.5)	6 (150)	4 (100)
NPC-054-0384	54 (1,372)	384 (35.67)	769 (174.4)	8 (200)	4 (100)
NPC-054-0423	54 (1,372)	423 (39.3)	846 (192.2)	8 (200)	6 (150)
NPC-060-0475	60 (1,524)	475 (44.13)	950 (215.8)	8 (200)	6 (150)
NPC-060-0523	60 (1,524)	523 (48.59)	1,046 (237.6)	8 (200)	6 (150)
NPC-066-0575	66 (1,676)	575 (53.42)	1,150 (261.2)	8 (200)	6 (150)
NPC-066-0633	66 (1,676)	633 (58.81)	1,266 (287.6)	8 (200)	6 (150)
NPC-072-0704	72 (1,829)	704 (65.4)	1,408 (319.8)	10 (250)	8 (200)
NPC-072-0775	72 (1,829)	775 (72.0)	1,550 (352.1)	10 (250)	8 (200)
NPC-078-0805	78 (1,981)	805 (74.76)	1,610 (365.6)	10 (250)	8 (200)
NPC-078-0885	78 (1,981)	885 (82.25)	1,770 (402.2)	10 (250)	8 (200)
NPC-084-0948	84 (2,134)	948 (88.07)	1,896 (430.7)	10 (250)	8 (200)
NPC-084-1043	84 (2,134)	1,043 (96.9)	2,086 (473.8)	10 (250)	8 (200)
NPC-090-1177	90 (2,286)	1,186 (100.06)	2,154 (489.3)	12 (300)	8 (200)
NPC-090-1086	90 (2,286)	1,077 (110.18)	2,372 (538.8)	12 (300)	8 (200)
NPC-096-1235	96 (2,438)	1,235 (114.74)	2,469 (561.1)	12 (300)	10 (250)
NPC-096-1360	96 (2,438)	1,360 (126.35)	2,720 (617.8)	12 (300)	8 (200)

NOTE: National Line™/ ATLAS® Regenerative Media Filter Systems are certified by NSF International to ANSI / NSF Standard 50 for; both pool and spa applications, filtration rates of .85 to 2 U.S. GPM / ft² (2.08 to 4.89 m³/m²/hr), use with Diatomaceous Earth or Perlite media in fresh water/ salt-water applications and precoating of filter in either a closed loop or filter cycle. National Line™/ ATLAS® Regenerative Media Filter Systems are certified for backwash rates of .85 to 1.8 U.S. GPM / ft² (2.08 to 4.40 m³/m²/hr) or gravity draining. The backwash rate is not required to match the filter flow rate.

ENGINEERING NOTE: All National Line™/ ATLAS® Regenerative Media Filter Systems should be backwashed when 12 to 15 PSIG (83 to 103 kPa) differential is indicated on the influent and effluent pressure gauges.

NEMATO CORP.

1605 McEwen Dr., Whitby, Ont., Can. L1N 7L4 Tel: (800) 361-5025 or (905) 571-5305 Fax: (905) 571-3935 www.nemato.com mail@nemato.com

NATIONAL LINE™

National Line™/ ATLAS®

Automatic Regenerative Media A-Series Filter Systems

Features:

- Corrosion Resistant FRP Construction
- NSF Certified 100 PSIG Operating Pressure
- NSF Certified for Use w/Diatomaceous Earth or Perlite
- NSF Certified for Use in Fresh Water/Salt Water Applications
- NSF Certified for Precoating of Filter in Filter Cycle
- NSF Certified for Gravity Drain of Filter in Backwash Cycle
- Automatic Filter System Backwash Control
- Patented Filter System and Internal Component Design

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NATIONAL LINE™

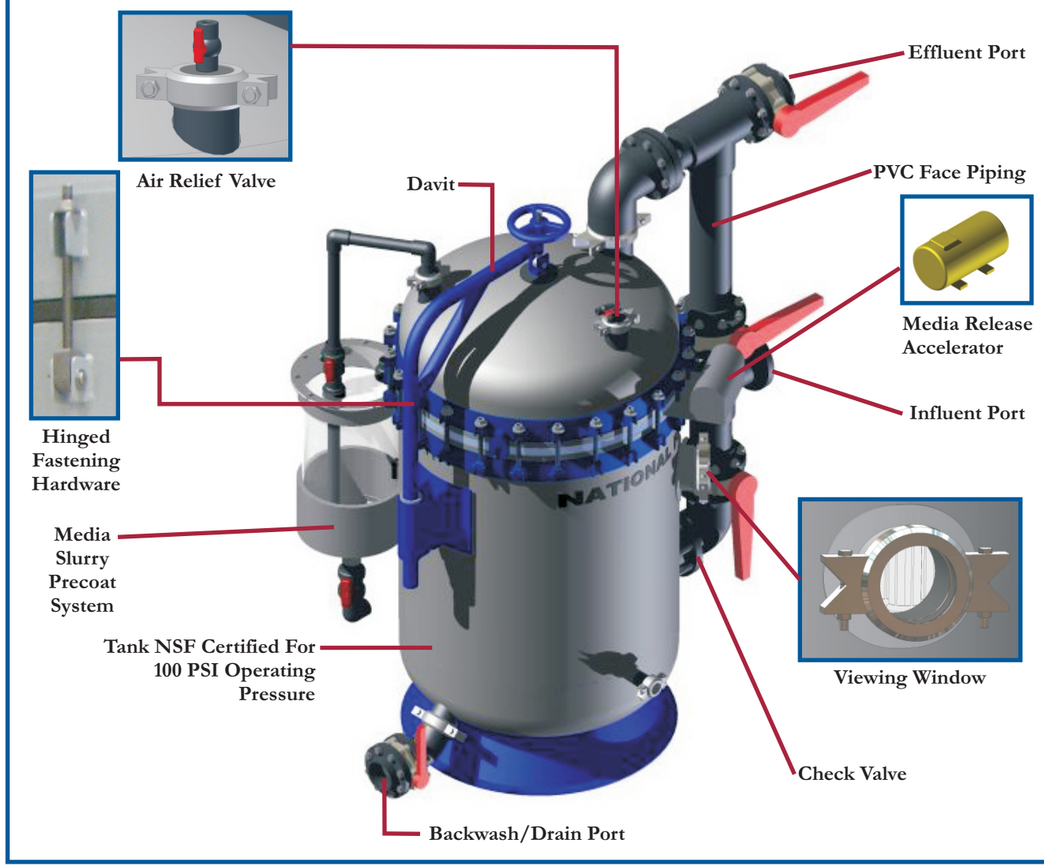
NATIONAL LINE™/ATLAS® AUTOMATIC REGENERATIVE MEDIA FILTER SYSTEMS

National Line™/ ATLAS® Automatic Regenerative Media Filter Systems
Patent No. US 5,441,633; US 6,401,938 B1; US 6,537,449 B2; Can. 1,296,262

National Line™/ ATLAS® filter tanks are constructed of Fiberglass Reinforced Isophthalic or Vinylester Resin (F.R.P.) and manufactured to ASTM and ASME tank standards using **molded surfaces for** all **critical dimensions.** The **tanks are** totally **non-corrosive** and **have** a high gloss **gel-coat finish with UV protection**. The **filter systems** are **designed for** working pressures of **100 PSIG with a minimum 4 to 1 safety factor.**

The filter systems are shipped with all internal components in a **fully assembled** state. **All National Line™/ ATLAS® filter designs come with** uniquely placed **integrally molded influent, effluent and drain connections, integrally molded clear acrylic viewing windows,** integrally molded **F.R.P. saddle support, PVC face piping, davit** (up to 54" diameter) and molded pressure gauge panel with two (2) **panel mount gauges.**

NATIONAL LINE™/ATLAS® PIPED FILTER SYSTEMS



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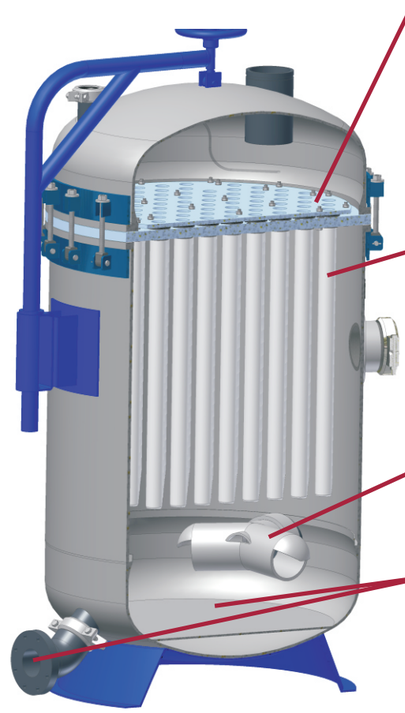
NATIONAL LINE™

NATIONAL LINE™/ATLAS® INTERNAL COMPONENTS



Pressure & Tube Plates
- o Patented Closed Cavity Manufacturing Process (CCBM)
  - Manufactured of Vinylester Resin (F.R.P.)
  - Improved Mechanical Properties Over Traditional F.R.P. or Plastics
  - Superior Corrosion Resistance
- o Reliable "O"-Ring Compression Seal of Filter Tube Effluent Port
  - Prevents Media Escaping From Tank
- o Controlled Filter Tube Spacing Eliminates Bridging During Filter Cycle

Patented Filter Tubes
- o Polyester Cloth Septum
  - Heat Set Weave Highly Resistant to Movement
  - Double Layer of Septum Cloth in High Stress Areas
- o ABS Plastic Septum Support
  - Elongated Body w/ 6 Longitudinal Ribs Extending Radially from Hub
  - Edges of Core Rounded to Reduce Wear on Cloth Septum

Patented Influent Manifold
- o Divergent Outlet Ports w/ Cowls
  - Provides Precise Directional Flow Control
  - Assures Uniform Flow Pattern
- o Reliable Dispersion of Filter Media During Precoat Cycle
- o Dramatically Reduces Wear of Filter Tubes

Backwash Drain
- o Provides Complete Purging of Spent Filter Media
  - Sloped Self-Draining Bottom Plate
- o Sloped 45º Grooved Pipe Connection
  - Prevents Build-Up and Solidification of Filter Media

NPC A SERIES SPECIFICATIONS

Model #	DE Precoat Wt lbs. (kg)	Perlite Precoat Wt. lbs. (kg)	Shipping Weight lbs. (kg)	Total Filter Operating Weight lbs. (kg)	Filter Tank Volume USG (M^3)	Backwash Volume USG (M^3)
NPC-030-0088	13 (6.0)	10 (4.4)	602 (273.9)	2,172 (987.3)	188 (0.71)	376 (1.42)
NPC-030-0097	15 (6.6)	11 (4.9)	631(286.6)	2,345 (1,066)	206 (0.78)	411 (1.56)
NPC-034-0117	19 (7.9)	14 (5.9)	703 (319.5)	2,720 (1,236.4)	242 (0.92)	484 (1.83)
NPC-034-0129	21 (8.7)	15 (6.5)	729 (331.3)	2,932 (1,332.8)	264 (1.0)	528 (2.0)
NPC-042-0198	30 (13.5)	22 (10.0)	1096 (498.1)	3,767 (1,712.4)	320 (1.21)	641 (2.43)
NPC-042-0218	33 (14.8)	24 (11.0)	1140 (518.1)	3,990 (1,813.6)	342 (1.29)	684 (2.59)
NPC-048-0289	43 (19.6)	32 (14.5)	1407 (639.7)	4,107 (1,866.8)	324 (1.23)	647 (2.45)
NPC-048-0318	48 (21.6)	35 (16.0)	1466 (666.3)	4,531 (2,059.7)	368 (1.39)	735 (2.78)
NPC-054-0384	58 (26.1)	42 (19.3)	1801 (818.5)	5,606 (2,548.1)	456 (1.73)	913 (3.45)
NPC-054-0423	64 (28.7)	47 (21.2)	1879 (854.2)	6,145 (2,793.3)	512 (1.94)	1,023 (3.87)
NPC-060-0475	71 (32.3)	52 (23.9)	2,338 (1062.7)	8,323 (3,783.0)	718 (2.72)	1,572 (5.43)
NPC-060-0523	79 (35.5)	58 (26.3)	2,432 (1105.4)	8,986 (4,084.5)	786 (2.98)	1,435 (5.95)
NPC-066-0575	86 (39.1)	63 (28.9)	3,146 (1429.9)	13,150 (5,977.3)	1,200 (4.54)	2,399 (9.08)
NPC-066-0633	95 (43.0)	70 (31.8)	3,260 (1481.9)	13,953 (6,342.4)	1,282 (4.85)	2,565 (9.71)
NPC-072-0704	106 (47.8)	78 (35.4)	3,900 (1772.9)	15,852 (7,205.4)	1,433 (5.43)	2,866 (10.85)
NPC-072-0775	116 (52.6)	85 (38.9)	4,039 (1835.8)	16,808 (7,640.1)	1,531 (5.8)	3,063 (11.59)
NPC-078-0805	121 (54.6)	89 (40.4)	4,538 (2062.8)	19,841 (9,018.7)	1,835 (6.95)	3,670 (13.89)
NPC-078-0885	133 (60.1)	97 (44.5)	4,696 (2134.6)	20,961 (9,527.8)	1,950 (7.38)	3,901 (14.77)
NPC-084-0948	142 (64.3)	104 (47.6)	5,481 (2491.4)	23,764 (10,574.6)	2,132 (8.07)	4,265 (16.14)
NPC-084-1043	157 (70.8)	115 (47.6)	5,664 (2574.7)	24,562 (11,164.4)	2,266 (8.58)	4,532 (17.16)
NPC-090-1077	162 (73.1)	119 (54.1)	6,821 (3100.6)	27,959 (12,708.7)	2,535 (9.6)	5,070 (19.19)
NPC-090-1186	178 (80.4)	130 (59.5)	7,028 (3194.7)	29,447 (13,384.8)	2,688 (10.18)	5,377 (20.35)
NPC-096-1235	185 (83.8)	136 (62.0)	8,119 (3690.6)	32,258 (14,662.9)	2,895 (10.96)	5,789 (21.92)
NPC-096-1360	204 (92.2)	150 (68.2)	8,360 (3800)	33,955 (15,433.9)	3,069 (11.62)	6,138 (23.24)

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