

# Commercial Filters

MEETING HIGHEST DEMANDS

Custom-Built Service Available



# Innovative and Enterprising

Emaux is now a recognized global manufacturer that meets and surpasses the expectations of customers with best-in-class products and services. For over 40 years, we have been actively engaged in key water projects worldwide and worked closely with industrial consultants, developers, and engineers alike. The proven performance of our manufacturing solutions makes us the preferred partner for customers seeking a robust water solution to enrich their leisure living and professional experience.

## Large Production Centre

Headquartered in Hong Kong and Europe, Emaux owns an 100,000m<sup>2</sup> purpose-built production centre which locates in a

strategic area in Zhong Shan, China that enables us to serve the local and global markets with advanced products efficiently.

Our experienced R&D team proactively pursues breakthroughs in product innovation and OEM production leveraging know-how in mechanics, automatics, electronics, hydraulics, and plumbing.

The automated manufacturing process employs the most advanced technologies in mould making, plastic blow moulding, plastic injection, fibreglass production, electronic controls, and assembly. Flexible one-stop solutions are provided to meet every need for water treatment and water leisure.



Atlantis in China



Chimlong Ocean Kingdom in China



Gumbuya World in Australia

## Project References



Demonstration Site  
and Training Centre

## Huge Capacity Advance Technology



Equipped by advanced machinery



Pressure Testing



Bobbin winding

### We are your trustworthy water solution partner

With quality at the heart of everything we do, we promise not to compromise on quality and to ensure the optimal performance of our solutions in the most demanding environment. Our production facility is ISO9001:2015 certified, and the most stringent international standards have been met for individual products, including UL, ETL and CSA (Canada and the U.S), TUV-GS and RoHS (Europe), SAA and C-Tick (Australia and New Zealand), CCC (China), and SASO (Saudi Arabia). Rigorous quality control processes are also in place to deliver consistent quality.

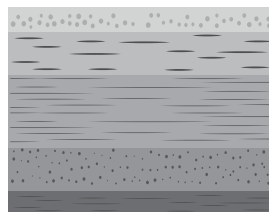
Because we regard quality as the life of enterprise, we have won long-term support and trust of our customers and business partners all over the world. We offer specialized products and custom-built services to :

- \* Swimming Pools, Commercial Spa
- \* Aquatic centres, Water parks,
- \* Aquaculture, Aquariums,
- \* Water Features and Large Water Treatment Systems.

# Glass Fiber Reinforced Polyester (GRP) Sand Filter

With the professional engineering experience and a large Glass Fiber Reinforced Polyester (GRP) production facility, Emaux is capable to design and manufacture a wide variety of commercial sand filters constructed by a multiple-layer moulded structural inner layer and a continues outer filament winding by computer controlled winding machines.

## Multi-layer construction (from inner to outer):



- ① ISO or VE gelcoat barrier, corrosion resistant
- ② Woven roving fibers with ISO polyester resin, water proofing
- ③ Woven roving with high content of fiberglass, structural strength
- ④ Continues outer filament winding with ISO resin, reinforced to withstand pressure
- ⑤ PU surface coating, UV resistant and dirt protection



Large Production Capacity



Reinforced Inner Tank



Computer Controlled Filament Winding

## Advantages:



Non-Corrosive



UV Resistance



Chemical Resistance



Nil Maintenance



Non-Electrical Conductive



Long Service Life



Low ratio of Thermal Expansion



Light and Easy Handling

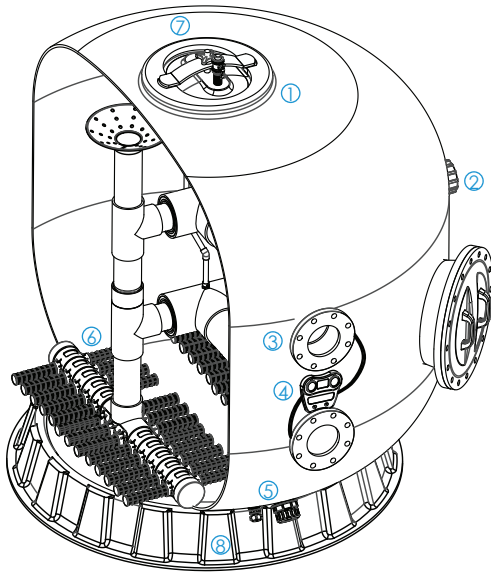
The filter tank is manufactured by long-lasting and non-corrosive fiberglass and resin, with bobbin wound automatic technology, UV resistance composites, allowing the filter to work and resist extreme weather conditions, with no corrosion and very long working life.

## Standard Features:

- \* Available with laterals or nozzles plate system for air scouring capabilities
- \* Optional accessories includes sight glass, manhole, union drain, and air purge
- \* Dual/ triple manifold distribution increase the flow rate evenly



## Components :



- ① **Manhole** Lateral Manhole for easy access to internal system maintenance and service
- ② **Sight Glass** Allow great observation on media status and backwash effect
- ③ **Flange** Heavy duty FRP flange connection in either ANSI or DIN standard
- ④ **Manometer** High quality pressure gauge to monitor the pressure inside the filter tank
- ⑤ **Union Drain** A quick discharge point of water and filter media
- ⑥ **Lateral System** Constructed by ABS+PP material with rigid structure and 0.4mm slit
- ⑦ **Air Vent Valve** Automatic release of air bubbles in the filtration system
- ⑧ **Base** Flat base increase the stability

\* Stainless Steel parts are made of AISI 316 S.S. Plastic parts are in PVC and ABS

\* Gasket or O'ring sealants are in EPDM or VITON material for Ozone resistance

## Customized maximum size and performance:



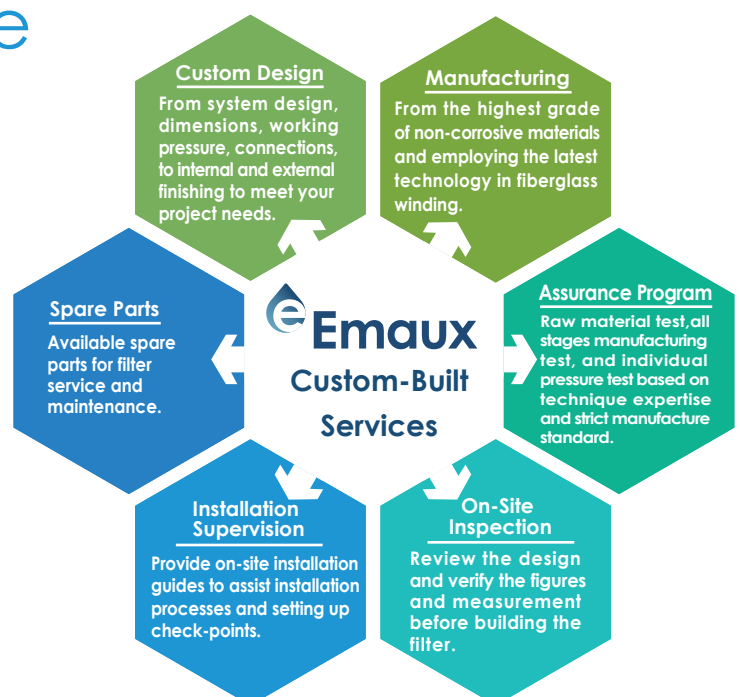
## Custom-Built Service

### Fit all projects' needs!

Emaux offers a fully customized service from system design, dimensions, working pressure, connections, to internal and external finishing to meet your project needs.

The products are designed and manufactured in accordance with the latest international industry standards such as BS EN-13121, European Directive of Pressure Vessels 97/23/EC; and used a quality assurance program that starts with confirmation and testing of raw materials right through all stages of the manufacture and testing.

Each Sand Filter is individually pressure tested and comes with its own factory test certificate, quality assurance record and serial number.





## Standard Model:



NL, E, K Series .....page 6 - 8



H Series .....page 9-12



Large Size Horizontal Sand Filter .....page 13-14



# Commercial Filter NL SERIES E SERIES K SERIES



Filtration System

laterals / nozzles

Design Filtration Velocity

$50\text{m}^3/\text{h}/\text{m}^2$

Max Operating Pressure

36psi(2.5bar)

58psi(4.0bar)

Max Temperature

43°C (109°F)

Suggested Size of Media

0.5-0.8mm

1-2mm

## Excellent Performance with Deep Sand Bed!

### Application Suggestions:

- \* Competition Swimming Pool
- \* Aquatic Park and Aquarium
- \* Commercial Spa, Fountain
- \* Water Treatment Plant

### Product Features:

- \* Multi-construction layers: non-corrosive and chemical protective
- \* UV resistance, suitable for operation underprolong sunlight
- \* High filtration standard with depth sand bed
- \* Bobbin wound fiberglass reinforcement with polyester resin
- \* Available with laterals or nozzles plate system for air scouring capabilities
- \* Optional accessories includes sight glass, manhole, union drain, and air purge.



## Optional Accessories:

Sightglass: 114mm

Code: E012072



Air purge: 20mm

Code: E012054



Manhole: Dia.400mm

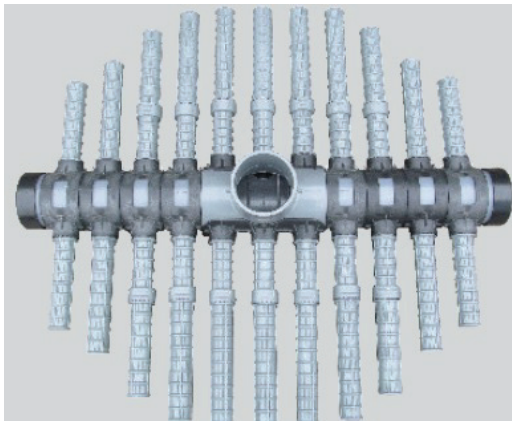
Code: 4105064354

Manhole: Dia.500mm

Code: 4105067252



## Laterals System:

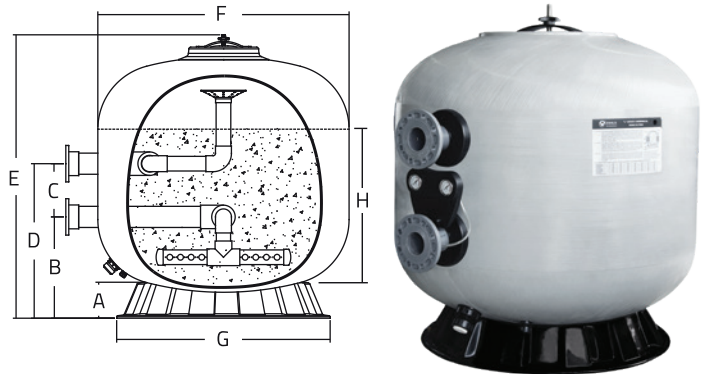


## Nozzle System:



Flange connection standard optional:  
GB(HG20592 PN1.0MPa) or ANSI( ANSI B16.5(1988) Class150)

## NL SERIES



### Product Dimensions:

| Model  | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm |
|--------|------|------|------|------|------|------|------|------|
| NL1200 | 170  | 565  | 350  | 915  | 1410 | 1200 | 1000 | 720  |
| NL1400 | 190  | 565  | 350  | 915  | 1570 | 1400 | 1220 | 760  |
| NL1600 | 200  | 650  | 350  | 1000 | 1740 | 1620 | 1365 | 820  |
| NL1800 | 220  | 690  | 415  | 1105 | 2040 | 1790 | 1630 | 950  |
| NL2000 | 220  | 770  | 415  | 1185 | 2210 | 1945 | 1630 | 1020 |
| NL2300 | 230  | 950  | 550  | 1500 | 2510 | 2375 | 1800 | 1200 |
| NL2500 | 230  | 1050 | 550  | 1600 | 2670 | 2495 | 1800 | 1290 |

### With Laterals System:

| Code 2.5bar | Code 4bar | Model  | Vol. (m³) | Filter Area (m²) | Flange Connections |      | Max Flow Rate |       | Sand Weight (kg) |       |
|-------------|-----------|--------|-----------|------------------|--------------------|------|---------------|-------|------------------|-------|
|             |           |        |           |                  | GB(mm)             | ANSI | lpm           | m³/h  | 0.5-0.8mm        | 1-2mm |
| 88012813    | 88013213  | NL1200 | 1.17      | 1.13             | 80                 | 3"   | 942           | 56.5  | 681              | 359   |
| 88012814    | 88013214  | NL1400 | 1.64      | 1.54             | 100                | 4"   | 1283          | 77    | 941              | 460   |
| 88012815    | 88013215  | NL1600 | 2.48      | 2.01             | 100                | 4"   | 1675          | 100.5 | 1412             | 771   |
| 88012816    | 88013216  | NL1800 | 4.02      | 2.54             | 150                | 6"   | 2100          | 126   | 2366             | 1343  |
| 88012817    | 88013217  | NL2000 | 4.61      | 2.97             | 150                | 6"   | 2475          | 148.5 | 2781             | 1375  |
| 88012818    | 88013218  | NL2300 | 8.09      | 4.34             | 200                | 8"   | 3617          | 217   | 5539             | 1682  |
| 88012819    | 88013219  | NL2500 | 10.00     | 4.89             | 200                | 8"   | 4075          | 244.5 | 6366             | 1972  |

### With Nozzle System:

| Code 2.5bar | Code 4bar | Model  | Vol. (m³) | Filter Area (m²) | Flange Connections |      | Max Flow Rate |       | Sand Weight (kg) |       |
|-------------|-----------|--------|-----------|------------------|--------------------|------|---------------|-------|------------------|-------|
|             |           |        |           |                  | GB(mm)             | ANSI | lpm           | m³/h  | 0.5-0.8mm        | 1-2mm |
| 88013313    | 88013413  | NL1200 | 1.17      | 1.13             | 80                 | 3"   | 942           | 56.5  | 575              | 274   |
| 88013314    | 88013414  | NL1400 | 1.64      | 1.54             | 100                | 4"   | 1283          | 77    | 778              | 382   |
| 88013315    | 88013415  | NL1600 | 2.48      | 2.01             | 100                | 4"   | 1675          | 100.5 | 1208             | 496   |
| 88013316    | 88013416  | NL1800 | 4.02      | 2.52             | 150                | 6"   | 2100          | 126   | 2167             | 609   |
| 88013317    | 88013417  | NL2000 | 4.61      | 2.97             | 150                | 6"   | 2475          | 148.5 | 2550             | 715   |
| 88013318    | 88013418  | NL2300 | 8.09      | 4.34             | 200                | 8"   | 3617          | 217   | 5075             | 972   |
| 88013319    | 88013419  | NL2500 | 10.00     | 4.89             | 200                | 8"   | 4075          | 244.5 | 5815             | 1117  |



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