



# membrane systems

aquasource® nomad is a mobile ultrafiltration water production unit built-in to a container.

It can produce up to 3,400 m³/day from surface, ground, or network water supplies. aquasource® nomad solutions provide access to water quickly and efficiently.

# applications

- drinking water production
  - seasonal needs
  - · emergency uses
  - · remote locations
- process water production
  - accidental pollution
  - · maintenance works
  - increased production
- reverse osmosis

& demineralization pretreatment



# membrane technology: aquasource nomad



**aquasource**® **nomad** is delivered ready to connect (electrically and hydraulically) and is easy to operate (automatic, steering by touchscreen, remote control...)

**aquasource**® **nomad** solutions have been designed to be installed and operated quickly and efficiently. **aquasource**® nomad systems have a flexible layout which can fit into a variety of processes.

Ultrafiltration is a physical treatment process which clarifies and disinfects water in a single procedure, while maintaining the water mineral balance. Our technology guarantees consistent water quality regardless of variations in the influent water quality.

# how it works

The aquasource nomad is a compact, stand-alone low pressure membrane filtration system. The raw water is first prefiltered (130  $\mu m$ ). It is then dispatched with low pressure (< 0.3 bar) in ultrafiltration modules. The membrane acts as a filter for impurities larger than 0.02  $\mu m$ .

The system alternates automatically, depending on the raw water quality, whilst the filtration and backwashing sequences deliver a constant quality of water. The sequence of backwashing for each module or group of modules is carried out with ultrafiltrated water produced by other modules.

This mode of operation renders a backwash tank and associated equipment unnecessary. It limits investment costs (civil engineering & equipment) and operating costs (reduced consumption of water and energy).

The processes developed by SUEZ are based on mechanical washings, without the use of chemical products during the production phase. Depending on client requirements and raw water quality, additional cleaning products can be added (acid, base or chlorine).

# product highlights

# quick installation

- ▶ installation and commissioning < 48h
- direct connection to the network
- no civil engineering

# health and safety

- constant water quality, despite meteorological events or accidental pollutions
- physical barrier against micro-organisms & particles
- zero risk of disinfection by-product formation : THM, bromates...

# user-friendly

- automatic adaptation from process to resource
- intuitive and customizable setup
- control & communication performed remotely

# sale or lease

# performances

- ▶ flow rate:
  - from 80 to 170 m³/hour/system
- ultrafiltered water turbidity0.1 NFU (guaranteed 100%)
- 6 log removal of bacteria and cysts
- ▶ 4 log elimination of viruses
- ▶ SDI:
  - < 3 (guaranteed 100%)



aquasource®
nomad is
an autonomous
plug & play
system,
providing access
to water quickly
and efficiently

multibore® membrane, PolyEtherSulfone -Inside/Out, is ultraresistant and insensitive to bacterial attacks. The fibres are bundled in groups of 7, which renders the membrane more mechanically resistant than individual fibres.

range	average production*	max flow rate*	piping	installed power	dimensions L x l x h	flooded weight	empty weight	max number of
	m³/day	m³/hour	mm	kW	m	kg	kg	modules
aquasource® nomad 20'	1,600	80	DN 100	15	6.06 x 2.44 x 2.59	8,500	7,100	14
aquasource® nomad 40'	3,400	170	DN 150	21	12.2 x 2.44 x 2.59	17,500	14,200	32

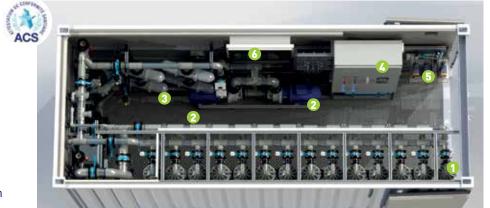
<sup>\*</sup> depending on raw water quality

# technical data

- ▶ inlet maximum turbidity: up to 100 NFU
- maximum operating pressure: 3 bar < 20°C
- ▶ outlet maximum pressure: 1 bar
- > systems components: ACS (French Ministry of Health)
- ▶ certification: CE (European Community)
- ultrafiltration module: polyethersulfone IN/OUT - 0.02 μm
  - Alteon™-l-XL60 (ACS)
  - dizzer® XL 0.9 MB 60 W (NSF)

# options

- ▶ integrated raw water tank
- ▶ integrated treated water buffer tank
- raw water turbidimeter
- treated water turbidimeter
- ▶ made to measure according to required standards (pump, prefiltration, control/drive...)



- ultrafiltration module
- raw water feed pump
- prefiltration (130µm)
- drive/control: automatic device with its man/machine dialogue interface
- chlorine injection station
- air conditioning

- quick and easy integration
- ▶ installation < 48h
- ▶ thermal and phonic insulation
- security equipment (fire extinguisher...)

- automatic operation
- adapts automatically to production flow rates and to resource quality
- start & stop
- automatic integrity testing

# easy drive eco wash savings

reduced consumption and improved performance thanks to various mechanical washing cycles without any use of chemical reagents

# aqua link peace of mind

- communication with all peripheral equipment
- diagnosis and program updates performed remotely
- services: training, maintenance...
- ▶ hotline

A pioneer in ultrafiltration, SUEZ and its product line **aquasource**° actively participates world-wide in the sector's technological advance, by focussing on industrial and environmental issues.

Since its creation in 1984, the innovative, effective and ecological processes developed through laboratory research provide one-of-a-kind solutions for the treatment of drinking water, industrial water and water recycling.

Treatment plants using **aquasource**° processes and systems have been installed in more than 25 countries, on over 300 sites.

1st
ultrafiltration
plant
in the world

30 years of experience 300 plants in operation



# europe

#### france

tel: +33 5 61 36 30 36

#### switzerland

tel: +41 44 801 8511

#### russia

tel: +7 831 434 1628

# asia

## china (shanghai)

tel: +86 21 5331 1333

#### china (tianjin)

tel : +86 4008 906 005

# south korea

tel: +82 31 701 9036

#### singapore

tel: +65 66 61 0432

### americas

#### brazil

tel: +55 11 2166 3604

#### usa

tel: +1 201 676 2525

contact.aquasource@aquasource.fr

www.aquasource.fr • www.suez.com