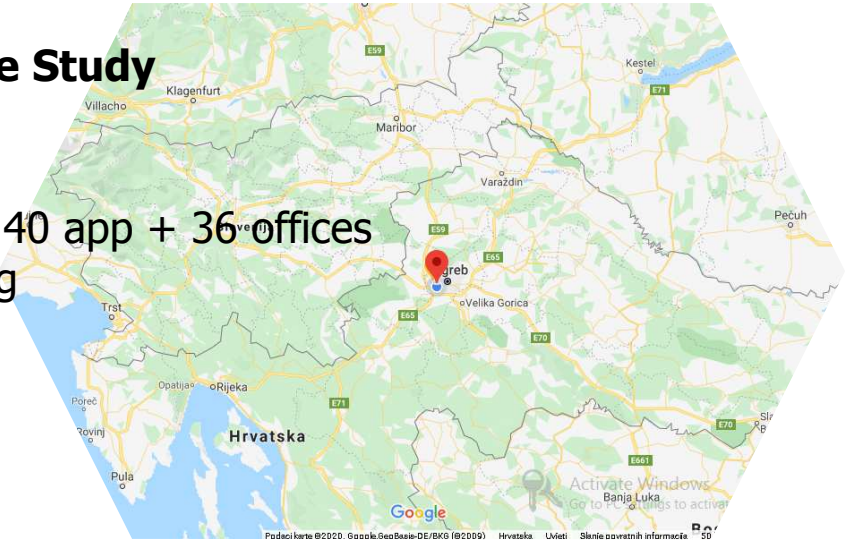




## Nobel Water Systems Case Study

Residential & Office Building, 40 app + 36 offices  
 In Zagreb, Croatia – Softening  
 Of the Sanitary Water



### Summary

Location	Zagreb, Croatia
Address	Radnička cesta
Time of Installation	August 2020
Key Products	Installed Mechanical filtration 2" and EcoWater Systems - 2" Simplex Softener - 566l Ion-Exchange Resin

### The facility



A business-residential building with 40 apartments and 36 offices, monthly water usage around 750m<sup>3</sup>. Heating delivered by Municipal Heating Plant with a heating station inside the building and heat exchangers in each flat for the purpose of sanitary water heating. Frequent failiures of the heat exchangers due to high water hardness – 20°dH. We treated the water mechanically and softening to the level of 3°dH. The economical result will be appart from avoiding frequent repairs and purchases of new heat exchangers, protection of all the water elements and discomforts from the scale and other similar issues inside the households. The paying off the System in a few years with working costs included.

### Sanitary water system

The table below sets forth the pre-treatment and water softener installed.

Municipal water come into the building system at 2" installation.

#### Process

Big particles are removed like rust and dust  
 The softening of both municipal from 20 to 3°dH

#### Product

2" sed. filters 80mic  
 2" Simplex softener 566l

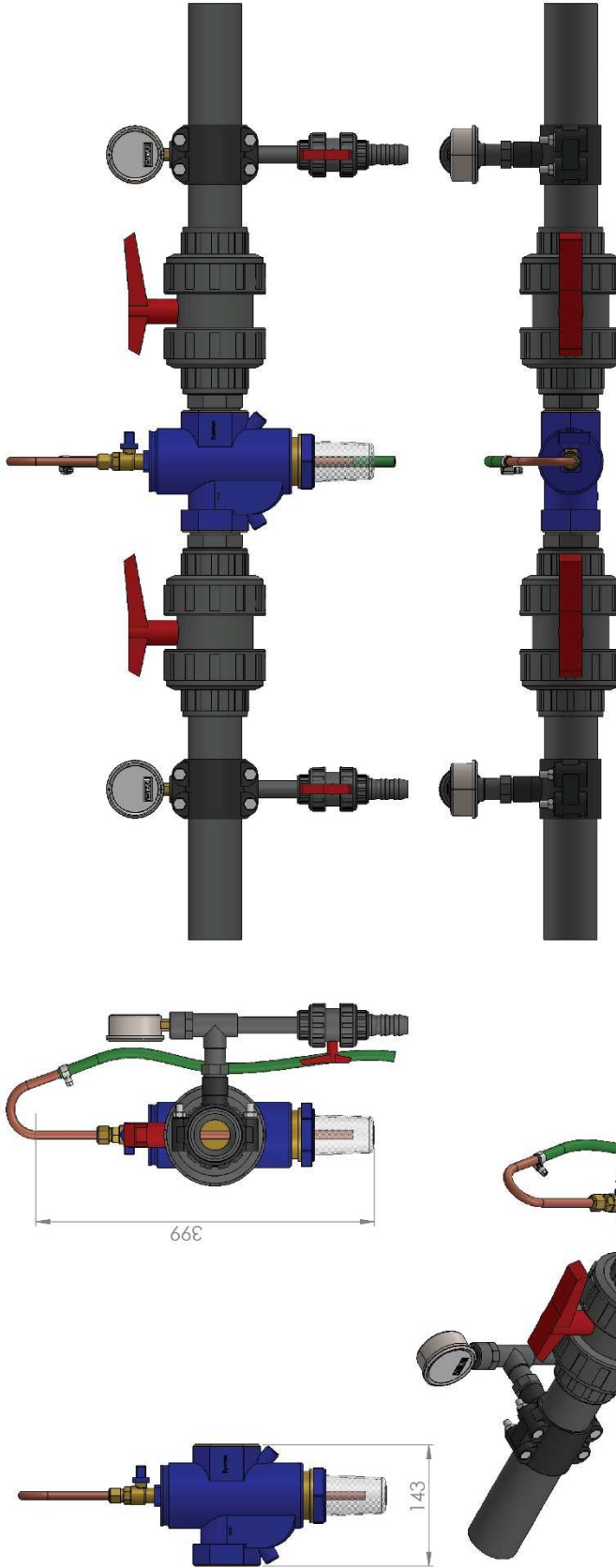
#### Brand

Nobel  
 EcoWater



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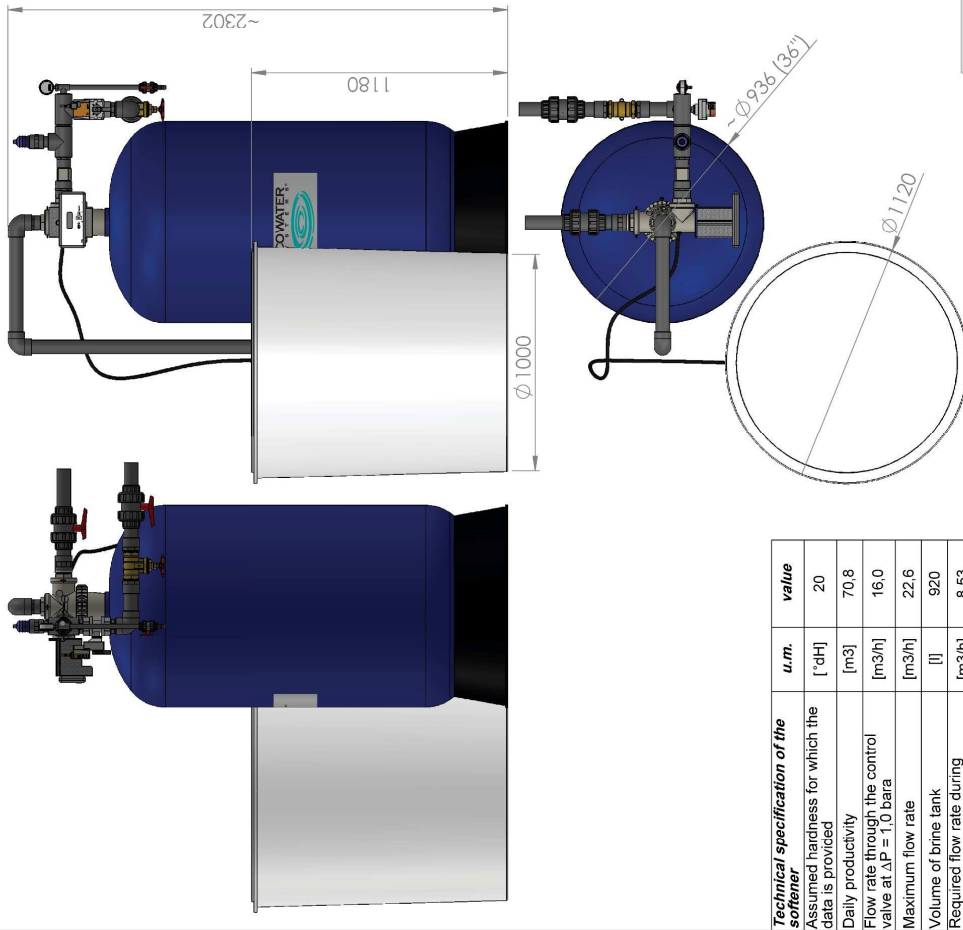
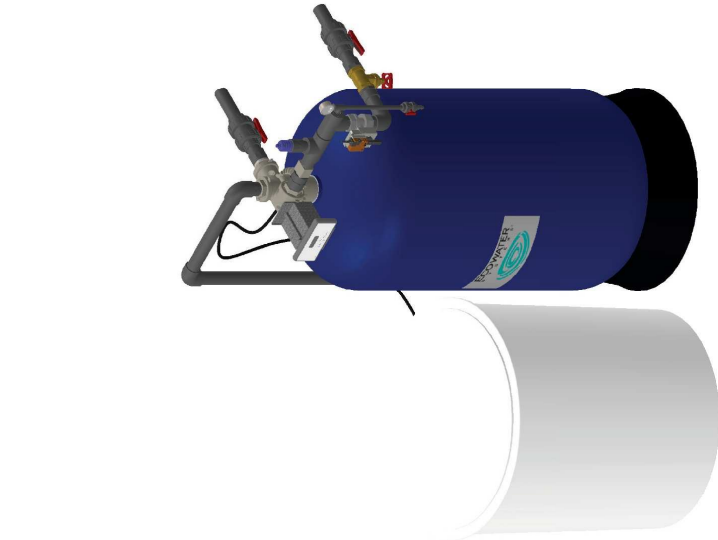
Technical specification of the filter		u.m.	value
Connection diameter		[inch]	2
Flow rate at $\Delta P = 0,2$ bar		[m <sup>3</sup> /h]	12,0
Maximum pressure		[bar]	16
Maximum temperature		[°C]	40
Weight		[kg]	3,5

Customer:		Investment:	
Technology:			
<p><b>ECOWATER SYSTEMS</b> NOBEL WATER SYSTEMS d.o.o. Medačka 18 10000 Zagreb, Hrvatska tel.: + 385 1 7778662 e-mail: nobel@nobelcorporation.com</p>			
Your Water. Perfected.		Title:	
draw	NAME	DATE	Offer No
checked	SIGNATURE		
approved			
			Drawing No:
			A3

Indicated dimensions might be slightly different in reality.  
A schematic diagram of connecting of the device.  
The unit is supplied without:

- Piping (PVC glued)
- Manual shut-off valves,
- Manual control valves,
- Valves for sampling,
- Clamp saddles,
- Manometres



Technical specification of the softener	u.m.	value
Assumed hardness for which the data is provided	[°dH]	20
Daily productivity	[m <sup>3</sup> ]	70.8
Flow rate through the control valve at ΔP = 1.0 bara	[m <sup>3</sup> /h]	16.0
Maximum flow rate	[m <sup>3</sup> /h]	22.6
Volume of brine tank	[l]	920
Required flow rate during regeneration	[m <sup>3</sup> /h]	8.53
Average use of water for regeneration	[m <sup>3</sup> ]	2.83
Average use of salt for regeneration	[kg]	84.9
Power supply	[V]	230
Electric power	[W]	50
Feed water temperature	[°C]	4 - 30
Feed water connection	[inch]	2
Soft water connection	[inch]	2
Drain line connection	[inch]	2

Indicated dimensions might be slightly different in reality.  
 A schematic diagram of connecting of the device.  
 The unit is supplied without:  
 - Piping (PVC glued)  
 - Manual shut-off valves,  
 - Manual control valves,  
 - Valves for sampling,  
 - Clamp saddles,  
 - Manometres

		Customer: NOBEL WATER SYSTEMS d.o.o. Medačka 18 10000 Zagreb, Hrvatska tel.: + 385 1 7778662 e-mail: nobel@nobelcorporation.com		Investment:	
Your Water. Perfected.		Technology:		Title:	
NAME	SIGNATURE	DATE	EPUROTECH 52/566 SE		
draw			Drawing No:		
checked			A3		
approved			Offer No:		



## Nobel Water Systems – EcoWater Systems exclusive distributor for SE Europe

REGULATION VALVES EPUROMIX DN32-3,5 AND DN50-8.



- Precise regulation valves - threaded
- Three-functional: cutting, regulation, measurement
- With setting blockade
- Precise regulation of installation with the use of an electronic measure COMAP (reference 2760)
- Threaded body from bronze
- Knob with numerical scale, 40 regulation positions, every 1/10 twist
- R = Kv reduced
- Dole setting protection: blocking of setting and sealing the regulation knob
- Possibility of reading positions from top to bottom of valve

### *Block diagram of the system*

The EPUROMIX DN 32 set consists of 1 valve COMAP DN 32 and the EPUROMIX DN 50 set consists of 1 valve COMAP DN 50.

The above scheme shows an example of placing the EPUROMIX in the EPUROTECH softener system. Valve should be assembled on the hydraulic by-pass pipeline and its objective is to choke the flow rate of the hard water to the value making possible achieving (after mixing with soft water) result water with the requested hardness.

