

Water preparation plant

Mosina, Poland

Poland's biggest and most advanced water treatment plant was opened in Mosina in 2015. It provides drinking water to 60 % of the residents of the Polish city of Poznań. The technology involves ozonation, a powder activated carbon installation and carbon filters together with the most advanced technologies of rinse water and sediment recycling.

Stainless steel is a common material for the preparation of drinking water; however, material selection is not trivial. In most parts of the installation, standard grades of the 304 and 316 types were identified as fully adequate whereas in specific areas, the highly alloyed grade 904L (EN 1.4539) was required. Pre-disinfection with chlorine dioxide can make such high-alloyed grades necessary.

The Mosina plant is an example of engineering for cost-effectiveness because each part of the installation was designed in the grade that was a technical and economic optimum for a given corrosive environment.



The range of alloys used goes from 304 (EN 1.4301) to 904L (EN 1.4539)



Details

Engineering and fabrication:	Invest-tech
Fabricator and supplier:	Invest-tech, Torun, Poland
Stainless steel grade:	304/304L (EN 1.4301/1.4307), 316/316L (EN 4404/1.4404), 904L (EN 1.4539)
Product type:	Flanges and tubes
Dimension:	Din 40 - Din 1200
Total quantity:	430 t