



Design and construction of tailor made filtering equipment:

- Protfilt builds tailor made filtering equipment for fluids and gases based on world class patented technology.
- Depending on the requirements, we carry out full turn-key projects or work as part of your development team to build the exact equipment you need.

We have a solution to all of your filtering issues – call us today for a free quote:

- If you have any kind of filtering issue, just tell us what:
 - is your substance
 - particle size is allowed
 - throughput rate you need
- Leave the rest to us, we will:
 - do the engineering
 - take care of the procurement
 - build the solution
 - deliver a turn-key solution at your site

We guarantee low cost and high quality based on superior technology and proven track record:

- Fineness guarantee: We guarantee filtration fineness by the 1 micron level – if a larger particle gets through we compensate you
- Lifetime guarantee: We provide lifetime guarantee on key parts e.g. filter cartridge
- Low lifetime costs: Lifetime costs are very low due to technology and materials used:
 - Key parts are made of stainless steel, which makes replacement cycle extremely long
 - Filter surface is formulated in a way that allows full and automatic backwashing i.e. no need for dismantling for manual wash or frequent replacement
- Low investment cost: Initial CAPEX is low due to
 - CEE labor cost base
 - 100% own technology i.e. no expensive purchased parts
- Superior technology: Our technology has proven its superiority against competing solutions under demanding circumstances (water, oil, acids, alkali, gasses, etc.)
- Proven track record: We serve several industries from oil, gas, aluminum, rubber and other chemicals, through food, pharma and municipality water treatment, to mining.

Over 30 years of research and design experience

Proffilt - a registered trade mark – stands for PROTection of the environment and machines by FILTration.

The patent was registered in 1984, the company was founded in 1991, by Lajos Szabó PhD and Zsolt Szabó, father and son, both mechanical engineers.

Starting from a garage shop, today we work on 1872 m² building, containing our own workshop, warehouse, filtering laboratory, offices. The company gives work to 28 employees, in Budaörs, near Hungary's capital.



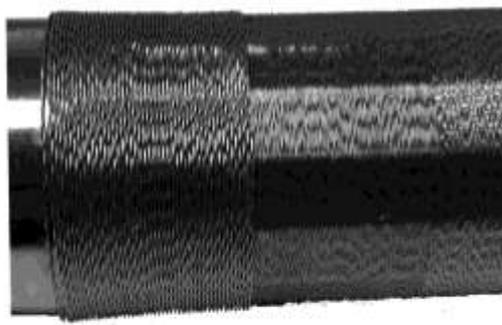
Show room and production area

Patented technology ensures top quality

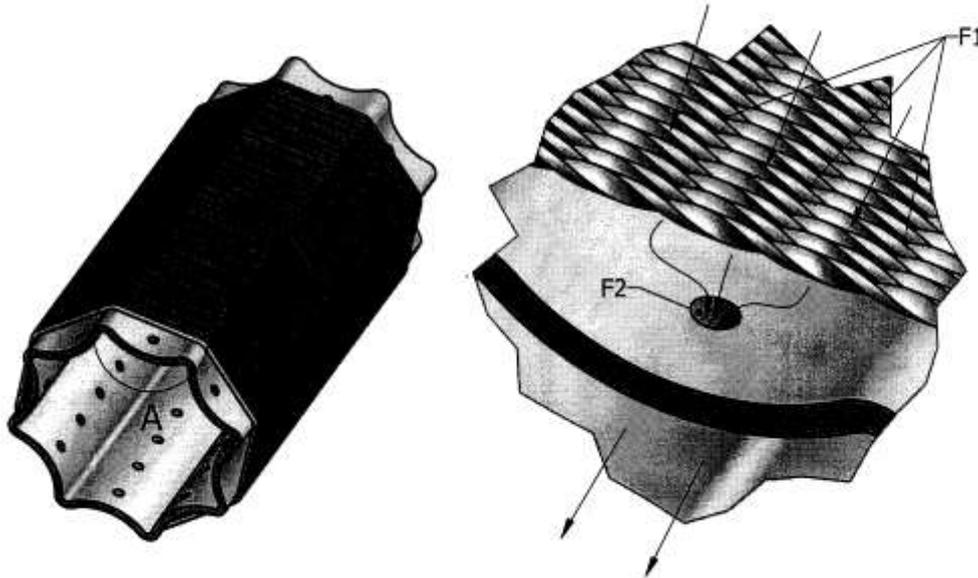
The patent is built on a self-developed technology where the filter surface is created from a specially prepared stainless steel wire. This wire is wound on a stainless steel perforated cylindrical carrier (deformed tube), which also has a specially designed shape for maximum stability. Filtering fineness can be adjusted with very high precision between 2 and 100 microns, based on client needs.

The technology's advantages are:

- continuous (no fixed increments) adjustability of filtering fineness
- one layer formulation allowing for perfect and fully automatic backwashing
- stainless steel construction guaranteeing long lifetime
- cartridge and surface material and construction allow for working under high pressure and corrosive substances



$$\Sigma F1 \leq F2$$



The principle of the brevet with drawing and photo.

Tailored design and manufacturing

Our staff has more than 30 years experience in the filtration industry, hence we can offer a solutions to any kind of filtering process, e.g.:

- Physical separation systems up to many thousands m³/hour liquid or gas
- Chemical, chemo-physical treatment (activated carbon, ion exchange resin, reverse osmosis, centrifugal technology, etc.)
- fully automated PLC controlled filter systems
- filter surf

Our filters are individually designed to meet the requirements of the client. Any kind of special requests are accommodated in a short period of time.

Other important advantages:

- very high filtration fineness 2,3,4...microns in a 1 layer system
- perfect cleanability
- high operating pressure and temperature
- amazing lifetime economics throughout the long operation time supported by easily replaceable filter layer (without changing the carrier)
- fully flexible sizing in terms of filter surfaces (tens of square meters)

We have numerous references in almost every field of the heavy and light industry such as oil industry, energy industry, food industry, mining, pharmaceutical industry, breweries, wineries, construction industry, car industry, etc.



NaOH filtering unit in the mining industry



Completely automatic filtering unit for hot plastic



Oil filtering unit



Thermal water filtering unit



Complete water preparation system for pharmaceutical purposes



Complete filtering system with gravel bed and reverse osmosis in the tire industry



Reverse osmosis system in the car industry

Case studies on recent projects



Name: Methane gas filter for the power sector
Flow rate: 150 m³/h
Junction diameter: 100 mm
Filtering fineness: 20 micron
Filter surface: 1 m²

Description: Normal steel housing with polypropylene nonwoven textile filter media

Price for filter: USD 2 750



Name: Thermal water filtering system (95°C warm water) for district heating
Flow rate: 150 m³/h
Junction diameter: 150 mm
Filtering fineness: pre-filter 80 micron, main filter 25 micron
Filter surface: 3.3 m²

Description:

- Full stainless steel construction.
- Parallel filtering solution: one unit is in operation while the other is being cleaned by a reverse water flow, ensuring continuous operation
- Dirt is removed via a valve on the bottom of the filter housings

Price for complete unit: USD 40 000



Name: Wine filter unit with glass filter housing for wineries
Flowrate: 10 m³/hour
Junction diameter: 80 mm
Filtering fineness: 25 micron
Filter surface: 0.6 m²

Description: Completely made from stainless steel and borosilicate glass in order to see the filtering process

Price: USD 4 000



Name:	Condensed water filtering unit for power plants
Flow rate:	200 m ³ /hour
Maximum pressure:	16bar
Maximum temperature:	130°C
Maximum pressure drop on filter surface:	1.6 bar
Size of filter housing:	diameter: 0.6 meter; height: 2.7 meter
Junction diameter:	200 mm
Filtering fineness:	5 micron
Filter surface:	2.75 m ²

Price: USD 25 000



Name:	Hydrochlorid acid gas filter unit for the chemical industry
Flow rate:	4 000 m ³ /hour
Juction diameter:	500 mm
Filtering fineness:	15 micron
Filtering surface:	10.5 m ²

Description: Full stainless steel to withstand acidic substance

Price: USD 15 000