

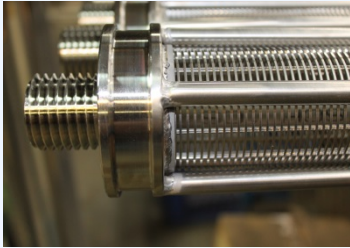
# UNISLOT N.V.

precision filter elements



- ▶ Precision filter tubes
- ▶ Conical filter tubes
- ▶ Flat grids
- ▶ Square filtration

## THE PRODUCT



Our filter tubes consist of longitudinal bars extending in the longitudinal direction around which a triangular profile wire is mechanically welded. In this way, gap openings are formed between the windings.

In this separation method, the filter element removes solids from the medium to be filtered. The smaller the gap openings, the smaller the filtered-out components.

High mechanical strength and durability, combined with the preservation of high-precision gap openings are the main assets of our products.



## APPLICATIONS

Unislot filter elements are often used in all kinds of filter systems, screening machines, curved screens, centrifuges, dredging and drainage systems.

Our filter systems are successfully used in the (petro)chemical, pharmaceutical and food industries, as well as in manure processing, beer and seawater filtration.



## SLOTTED SCREEN BASKETS and CYLINDERS

The successful separation of materials in different processes (mostly when separating solids from a liquid) is a problem of the highest priority in many industries. Our slotted screen baskets and cylinders offer a qualitative solution with very high accuracy. This provides an optimal separation result.

Separators and centrifuges are used in the following industries:

- ▶ Chemical industry
- ▶ Food industry
- ▶ Waste water management
- ▶ Mining industry
- ▶ Regenerative power generation (biogas)



Unislot slotted screen baskets are frequently used in the following plants:

- Conical and cylindrical screen baskets for centrifuges
- Cylindrical screen baskets for screw press separators

Slotted screen baskets / cylinders are available:

- with or without reinforcement
- as a single or composite unit
- in various sizes and designs
- in different types of inox
- with an axial or radial slot direction

Slotted screen baskets and cylinders, intended for separators and centrifuges, are fully customised by Unislot and produced according to the customer's specific wishes. This enables us to guarantee optimal placement and operation of our products.

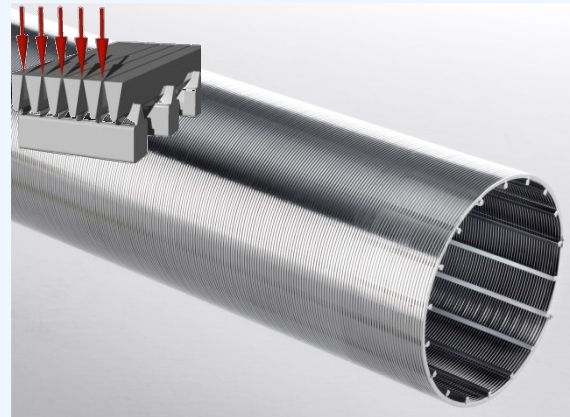


## Radial FOTI

### ***FOTI "From Outside To Inside"***

The triangular profile wire is welded with the wedge-shaped side on the inner longitudinal bars.

In this frequently used design, the outside filter surface (= inflow side) is smooth, which makes it easy to remove any accumulated impurities.

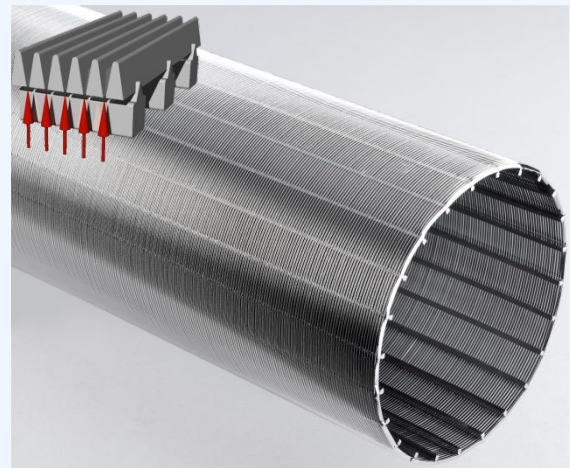


## Radial FITO

### ***FITO "From Inside To Outside"***

The triangular profile wire is welded with the flat side on the inner longitudinal bars. In this design, the inside filter surface (= inflow side) is smooth and is interrupted by the longitudinal bars.

Cleaning of this type of filter usually takes place by applying a backwash.



### ***WIRE VARIATIONS: UH® and UV® profile***

These triangular profile wires are specially designed to produce filter tubes with a very small gap opening between 50 - 15  $\mu$ .

With both the UH® and the UV® profile, we do not have any welding slag between the welded profiles because a welding cam is located below the profile. This enables us to deliver perfect quality to the customer even for filter tubes with very small gap openings.

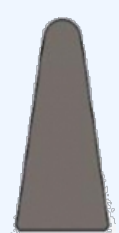
These profile wires are available in different widths (narrowest is 0,5 mm wide). The narrower the wire profile, the larger the open area.



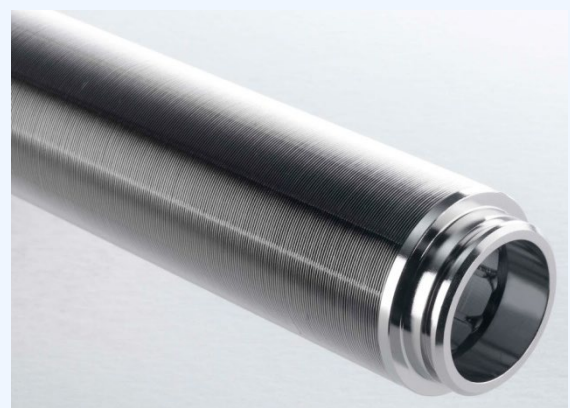
**UH® profile**



**UV® profile**



**US profile**



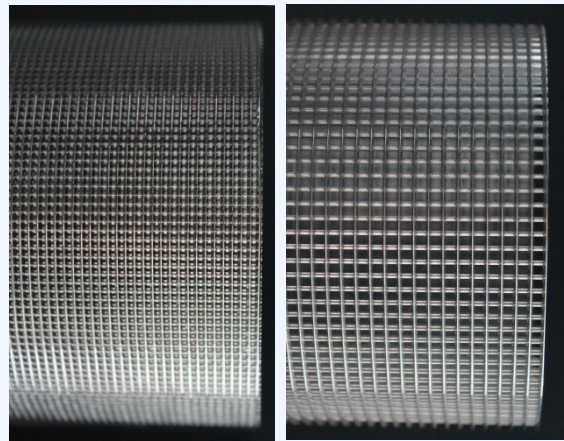
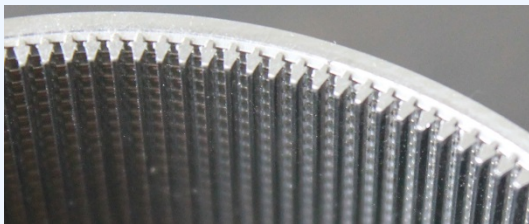
## Square filtration® FITO / FOTI

THE LATEST innovation in the filter industry. The term “square filtration” refers to the filter openings that are perfectly square on the inside and outside, both in the radial and axial directions.

Due to the special profile geometry (the UH® or UV® wire profile is used for these filter tubes) very small square openings up to 20 μ can be created.

With this patented design it is possible to filter from outside to inside as well as from inside to outside.

This type of filter tubes has the additional advantage that they can operate in high pressure systems without the use of reinforcements and/or support elements.



## Axial FITO

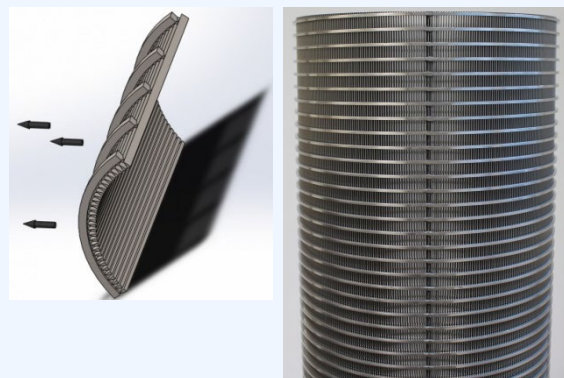
In the axial version, the gap forming wire profiles run parallel to the longitudinal cylinder axis.

The cross bars are wound over the profiles from outside and, like the radial versions, are machine welded to the profiles.

With this version, the filtering is done from the inside to the outside and thus the inner filter surface (= inflow side) is smooth.

Cylinders can be made either directly on our production machines or from a radial version which is then flattened, rolled and welded to the desired diameter.

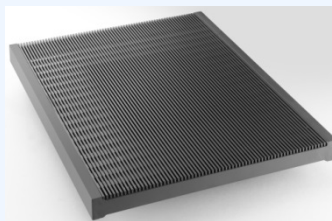
Cleaning of this type of filter is usually done with a scraper.



## FLAT GRIDS

Depending on the desired dimensions, flat grids can be produced either directly on a machine (flat welding) or from an ordinary filter tube (radial FOTI). The ordinary filter tube is ground open and then flattened on our roller benches.

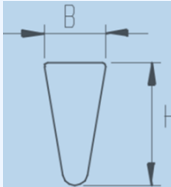
The finish can be fully customised, according to the customer's wishes, in Unislot's in-house production.

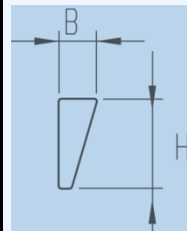


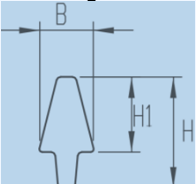
Flat grids are used in:

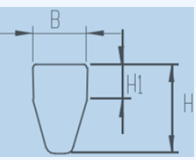
- ▶ Screening machines
- ▶ Refineries and breweries
- ▶ Extractors, ion exchangers, ...
- ▶ Drainage systems
- ▶ Façade cladding and architecture

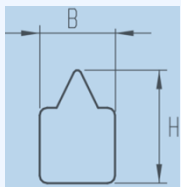
## WIRE PROFILES and SUPPORT BARS

<b>US</b> 	Type	B (mm)	H (mm)
	4 US	0,495	1,25
	10 US	0,75	1,4
	11 US	0,75	1,8
	12 US	1,0	2,0
	15 US	1,19	2,24
	18 US	1,5	2,5
	22 US	1,8	3,7
	28 US	2,2	4,5
	34 US	2,8	5,5
42 US	3,4	6,8	

<b>US</b> 	Type	B (mm)	H (mm)
	111 US®	0,75	1,8

<b>UH/UV</b> 	Type	B (mm)	H (mm)	H1 (mm)
	105 UH®	0,5	1,4	0,9
	11 UH®	0,75	1,8	1,3
	12 UH®	1,0	2,0	1,35
12 UV®	1,0	2,0	1,35	

<b>USC</b> 	Type	B (mm)	H (mm)	H1 (mm)
	18 USC	1,5	2,5	1,0

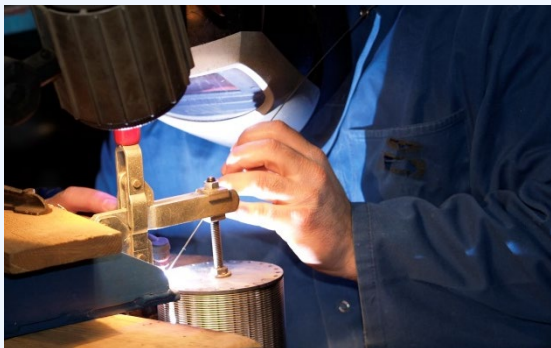
<b>Q</b> 	Type	B (mm)	H (mm)
	Q 20	2,0	2,2
Q 25	2,0	3,0	
Q 35	3,0	5,0	
Q 50	3,0	6,5	

## MACHINERY

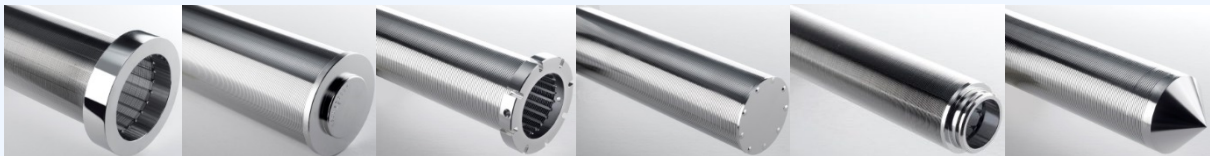
All filter elements are made on our specifically designed production machines.

For both custom and series production, we can rely on our many years of experience and know-how in order to obtain the most practical and economical solution in consultation with the customer.

The fulfilment of our customers' individual wishes, combined with quality, is of paramount importance to us.



Our internally trained production staff, welders, turners and metal workers, who keep abreast of the latest technical possibilities thanks to continuous further training, form the supportive basis of our finished products. In addition, Unislot trains all workers itself, so that they are familiarised with our specific requirements from day one.



We have a wide variety of machines that are constantly kept up to date.

With our experience and extensive knowledge, we can guarantee a fast, qualitative, reliable and repeatable high-accuracy solution for turning and milling, drilling, cutting, welding and general metal work.



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