

# The economical fish pass HYDROCONNECT FISH ASCENT SCREW

Injury-free fish pass for fish and microorganisms in flowing water

www.hydroconnect.at

## The economical alternative

In contrast to conventional "fish ladders" or fish passes, the Hydroconnect fish ascent screw is considerably more environmentally friendly, spacesaving and economical.

## Animal & environmentally friendly

- Creation of fish passage from downstream water to the upstream water
- 100% freedom from injury for fish and all water life (macrozoobenthos compatible)\*
- Space-saving and resource-saving system (also for narrow gorges)
- Patented luring and guiding current (only manufacturer!) That is the only way to ensure the fish enter and hence the function.

## **Economical construction**

- NO water loss Savings of the official fish ladder compensation water
- Simple, robust construction
- Fast, cost-effective installation
- Patented roller bearing makes greater heads possible as well

## Can be used universally

- Low maintenance
- Suitable for fluctuating water levels
- No debris jamming possible
- Low maintenance after flooding

Details & product data can be found at www.hydroconnect.at

\* Extensive studies and information on the fish through passage and freedom from injury can be found on our website at www.hydroconnect.at



#### Compensation water protection

- Steel protection for regulating the amount of compensation water
- Compensation of headwater level fluctuations
- Seasonally dependent compensation water quantities Fish descent possible
- For bigger locations, the water can be used as a guiding current
- The compensation water protection is controlled by level sensors and water quantity specifications

Generator works

Axial self-aligning roller bearing

Variable rotation speeds can be used through the implemented frequency

Geared motor

converter technology.

Brake

### Fish discharge chute

 chute to transport the individually ascended fish into the calm headwater

minimum slope







#### Steel construction

- welded steel construction
- screw blades welded seamless
- high stability
- long service life gap-free

#### Substructure

Possible as a concrete structure or steel frame

#### Fish ladder and attraction current (patented double screw)

- The fish transport is based on Archimedes' principle: Fish are raised effortlessly upstream in the standing water of the screw chamber.
- special shape of the screw blades to create an optimised guiding current
- bottom connection for weak swimming fish such as the bullhead, for example



#### Cover or housing

Can be realised as a rainproof construction including design variations (wood, glass, stone, concrete, etc.)

Bearing The radial forces are absorbed by rollers.

3d model: www.pund

Economical, universal, eco-friendly

## The fish pass in action

As you can see in our references, we would also be happy to provide you with all types of screws or the necessary hydraulic steelwork according to DIN 19704.





#### Power Plant Schütt, Carinthia

KELAG-Kärntner Elektrizitäts-Aktiengesellschaft Gail 6,5 m danube salmon (100 cm) 16,2 m 8 t



### Power Plant Berndorf, Styria

l	Operator:	Norske Skog GmbH
l	Waters:	Mürz
ł	Drop height:	6,6 m
l	Pilot fish:	danube salmon (100 cm)
l	Overall length:	16 m
	Weight:	8t

Zusätzlich wird der Einstiegsbereich der Fischaufstiegsschnecke im Unterwasser mit bis zu 300l/s als Lockströmung dotiert.





### Power Plant Annahütte SAH2, Germany

	Operator:	Stahlwerk Annahütte Max Aicher GmbH & Co. K	
	Waters:	Hammerauer Mühlbach	
1	Drop height:	7,17 m	
THE NEW YORK	Pilot fish:	danube salmon (100 cm)	
	Overall length:	17,5 m	
	Weight:	8t	
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#### Power Plant Brandstatt, Lower Austria

Planned for 11/2021

Operator:	EVN n Erzeug
Vaters:	Erlauf
Drop height:	5,60 m

VN naturkraft rzeugungsgesellschaft m.b.H. rlauf

Drop height: Pilot fish:

danube salmon (80 cm)

3d model



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Partner





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