

# ***Fish Processing***



[www.Aqua-Tech.eu](http://www.Aqua-Tech.eu)

# ***Fish Processing***

## **Overview**

Processing fish is a good way for fishfarmers and fishmongers to expand their product range while simultaneously increasing profits and enhancing their image. Fish processing can be divided into various stages or steps.

For stunning of smaller quantities, fish are often stunned with a short wooden stick by a sharp blow to the head behind the eyes. For larger fish, the gill arches or the main blood vessels are often severed afterward with a small, curved knife. Larger quantities of fish are usually stunned using electric stunning devices in plastic containers.

For gutting of smaller quantities, fish are typically gutted with a small, hook-shaped knife. An incision is made down the middle of the belly, from the vent to the head, and the entrails, sometimes including the gills, are removed. The kidneys are then scraped out with a teaspoon, and the fish are thoroughly washed. For larger quantities of fish, slaughtering devices or machines are often used, which suck-out the entrails, cut off the throat, and may clean the fish with a rotating brush and water rinse.

For scaling of smaller quantities, fish are usually descaled by a knife, held at an angle and scrapped against the scales, causing them to detach from the skin. For larger quantities of fish, scaling machines are typically used, which operate with a rotating, perforated drum or a rough base plate.

For filleting of smaller quantities, fish are fileted by a long, thin knife, which is drawn from the inside, directly above the spine behind the head, towards the tail fin, and then the sides are cut away from the head. For larger quantities of fish, filleting machines are usually used, which, in the case of deheaded fish, use rotating circular blades to cut the fillets from the carcass.

For deboning of smaller quantities, a knife is often used for deboning (scoring), cutting at small intervals (3-4 mm). Either the fish is scored from the skin side to the spine, or the fillets from the flesh side to the skin. For larger quantities of fillets, however, there are manual or electric Y-bone cutters, and I-bone pullers for removing the remaining bones.

For skinning of smaller quantities, fillets are skinned using a long, thin knife. The flesh is cut at the tail end down to the skin, and the knife is then drawn along the skin with a single cut. For larger quantities, however, automatic skinning machines are usually used.

We offer a complete product range of various fish processing equipment and machines, from low-cost manual devices such as stunning, scaling, and deboning devices, through semi-manual or semi-automatic slaughtering aids and skinning machines, to high-end automatic processing machines such as slaughtering, filleting, and skinning machines.

**Consulting:**

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# ***Fish Processing***

## **Overview**

Variants	Small Devices		Large Machines	
Process	Manually		Automatically	
Stunning				
Gutting				
Scaling				
Deboning				
Skinning				
Filleting				

**Made in the European Union!**

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# ***Fish Knives***

## **Selection**



Herring knife



Oyster knife



Tourning knife



Deboning knife



Chopping knife



Flatfish knife



Filleting knife



Fish knife



Japanese knife



Slaughter knife



Flowcut knife



Fish chopper



Eel knife



Universal knife



Mackerel knife



Colon knife



Skinning knife



Fillet knife



Trout knife



Stitching knife



Kitchen knife



Butcher knife



Carp knife



Salmon knife

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# Fish Knives

## Properties

Description	Blade length (mm)*													Notes			
	45	55	60	65	80	110	130	140	155	170	180	190	210	260	300	315	Blade
Herring gutter	X																Stiff blade
Eel knife		X															Bent blade
Tournier knife			X														Bent blade
Oyster knife				X													Robust blade
Mackerel knife					X												Stiff blade
Universal knife						X											Stiff blade
Deboning knife							X		X								Mean blade
Skinning knife							X		X		X						Bent blade
Fish knife							X		X		X		X				Stiff blade
Colon knife									X								Blunt tip
Japanese knife										X							Santoku blade
Slaughtering knife								X				X					Pointed blade
Stitching knife									X		X		X				Robust blade
Chopping knife											X						Deep blade
Fillet knife											X		X				Stiff blade
Filleting knife											X		X				Flexible blade
Trout knife											X		X				Flexible blade
Flatfish knife											X		X				Thin blade
Butcher knife											X		X	X		X	Stiff blade
Skin knife													X	X			Stiff blade
Cocking knife													X	X			Thick blade
Kitchen knife													X	X			Thin blade
Flowcut knife													X				Wavy blade
Carp knife														X			Wavy blade
Fish chopper															X		Wavy blade
Salmon knife																X	Flexible blade

\*Total length with handle: +100-140 mm. Material: Stainless steel (HRC 56-57) and Polypropylene (green).  
 Accessories: Sharpeners and Bags (for 3 knives with thin blades to 21 cm).  
 Freshwater knife-set = X; Saltwater knife-set = X.  
 Minimum order = 10 knives (can be different ones)!

## Options



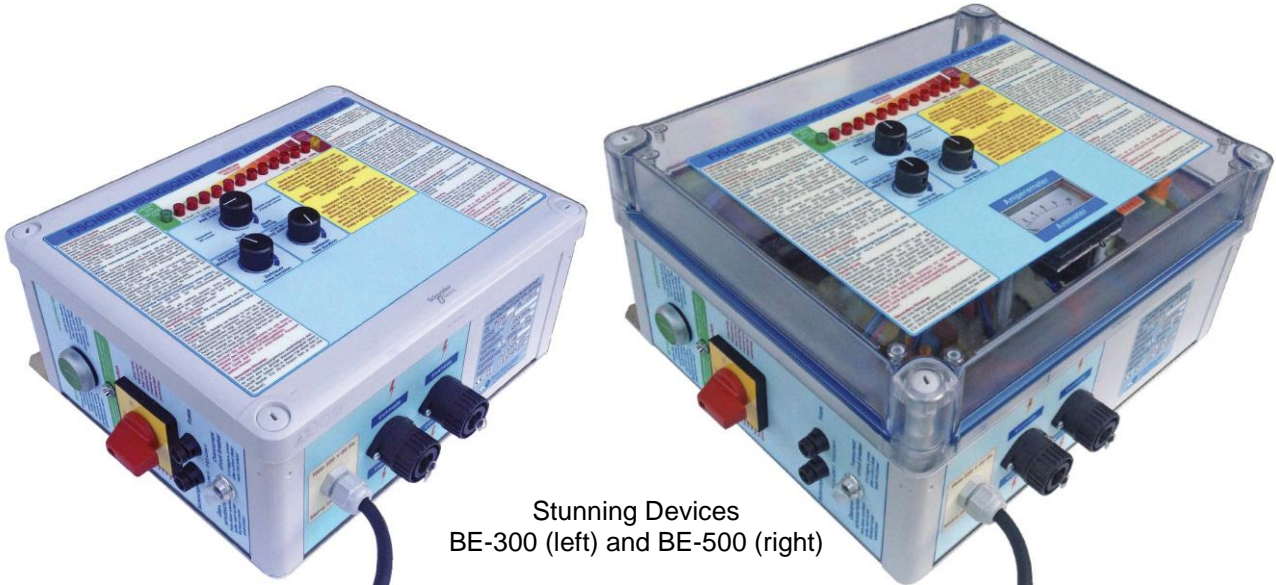
Other handle colours, on request.

# AquaTech

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, www.aqua-tech.eu

# ***Fish Stunners***

## **Selection**



Stunning Devices  
BE-300 (left) and BE-500 (right)



Stunning Container  
BH-100



Stunning Containers  
BH-300 (left) and BH-500 (right)

# ***AquaTech***

# Fish Stunners

## Properties

Description	Stunning Devices		
	BE-100	BE-300	BE-500
<b>Device type</b>			
Inlet voltage (V)	230	230	230
Outlet voltage (V)	42	0-160	0-160
Consumption max. (W)	100	600	1000
Outlet power max. (W)	50	200	500
Outlet current max. (A)	1	5	10
Ampere meter	no	no	yes
Regulation knobs	no	yes	yes
Security switch	no	yes	yes
Protection class	IP67	IP55	IP55
Transformer	external	internal	internal
Dimensions LxWxH (cm)	45x25x5	30x30x15	36x36x19
Weight approx. (kg)*	3	5	9
<b>Container type</b>	<b>BH-100</b>	<b>BH-300</b>	<b>BH-500</b>
Volume (l)	96	280	610
Dimensions LxWxH (cm)	67x40x45	100x64x65	120x100x80
Weight approx. (kg)	10	30	50
Container colour	white	grey	grey
Container lid	yes	yes	yes
Electrode plates	2	2	2
Connection cable (m)	2 x 5	2 x 6	2 x 7
Fish capacity max. (kg)	50	150	300
Options	Non	Non	Outlet valve

\*Weight incl. external or internal transformer. Technical changes reserved!



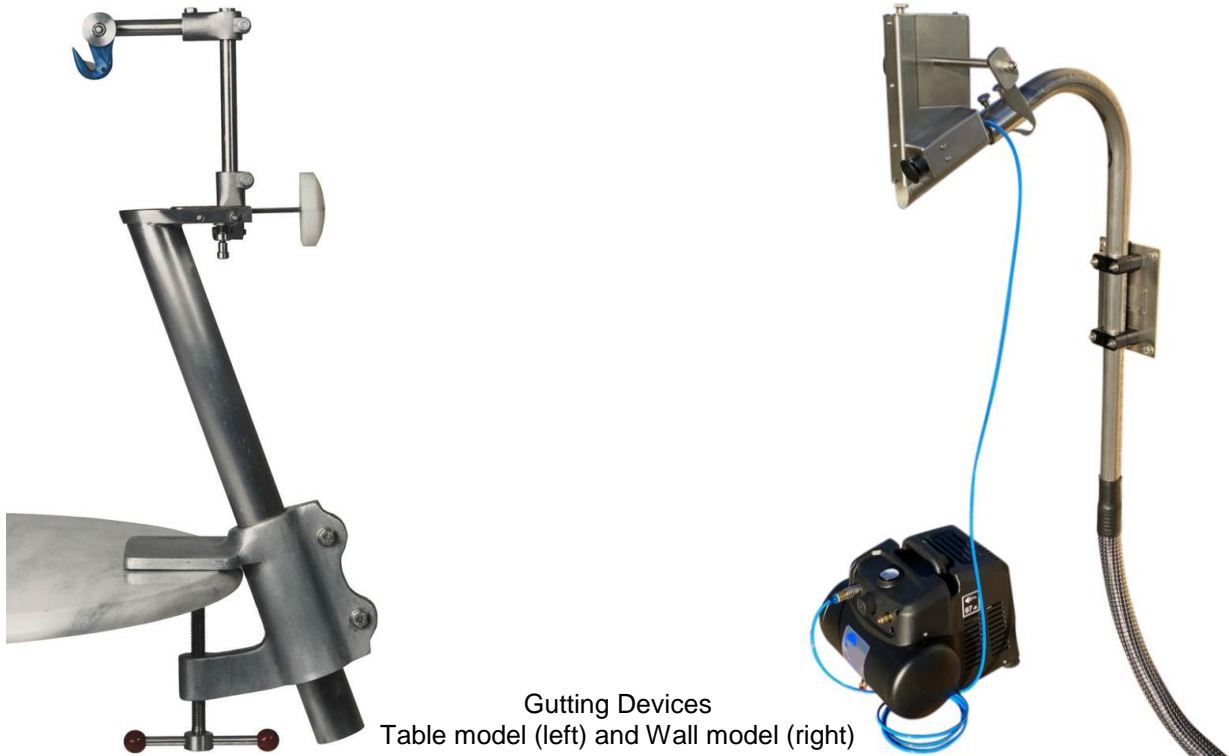
Stunning Device BE-100 (with transformer)

# AquaTech

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# ***Fish Gutters***

## **Selection**



Gutting Devices  
Table model (left) and Wall model (right)



Gutting Device  
Stand model with cleaning brush (left)

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# ***Fish Gutters***

## **Properties**

<b>Description</b>	<b>Gutting Devices</b>		
	<b>Table model</b>	<b>Wall model</b>	<b>Stand model</b>
<b>Model type</b>			
Operation mode	manually	half-manually	half-automatically
Air-compressor (230 V)	no	yes	yes
Wet-cleaner (230 V)	optionally	yes	yes
Wash-table 120x60x85 cm	no	no	yes
Cleaning brush (380 V)	no	Accessory	Accessory
Options	no	Suction head	Suction head

Technical changes reserved!

## **Options**



Suction head  
Ø 32 or 40 or 50 mm

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# ***Fish Scalers***

## **Selection**



Scaling Devices (manually)  
SX-1 (left) and KT-2 (right)



Scaling Machines (automatically)  
20-K (left) and A-20 (right)

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# Fish Scalers

## Properties

Description	Scaling Devices		Scaling Machines			
	SX-1	KT-2	18-K	20-K	25-K	A-20
Type	manually	manually	automatically	automatically	automatically	automatically
Operation mode	manually	manually	automatically	automatically	automatically	automatically
Electric connection (V)	230	230	380	380	380	380
Nominal power (W)	130	180	370	550	1500	370
Load capacity (kg)	-	-	10	15	30	20
Capacity approx. (kg/h)	variable	variable	200	300	600	400
Moving part	Head	Shaft	Bottom	Bottom	Bottom	Drum
Drum position	non	non	vertical	vertical	vertical	horizontal
Drum Ø (cm)	-	-	41	46	58	50
Water connection (DN)	-	-	15	20	25	10
Dimensions LxWxH (cm)	20x10x5	23x19x24	56x53x93	65x60x95	75x74x120	130x100x170
Weight approx. (kg)*	4	9	60	77	133	80
Options	Round brush	Scaling head	Outlet valve, Roller frame			Larger
Accessory	Suction head	Scaling cover	Washing drum, Collecting box			Nothing

\*Weight incl. switchbox/transformer. Technical changes reserved!



Scaling Device SX-1 (with transformer and optional suction head and washing brush)

# AquaTech

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# ***Fillet Deboners***

## **Selection**



Y-bone Cutters  
manually (left) and automatically (right)



I-bone Pullers  
manually (left) and automatically (right)

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# Fillet Deboners

## Properties

Description	Y-bone Cutters (fork-boners)					
Type	K-1	K-2	K-3	K-4	A-11	A-12
Operation mode	manually	manually	manually	electrically	automatically	automatically
Electric connection (V)	-	-	-	24	380	380
Nominal power (W)	-	-	-	100	370+100	370+100
Cutting wide (cm)	9	15	30	30	30	40
Capacity approx. (kg/h)	20	30	60	100	200	300
Forwarding belt	no	no	no	no	yes	yes
Dimensions LxWxH (cm)					60x55x27	60x80x37
Weight approx. (kg)	5	10	15	26	46	66
Accessory	Stripe cutting adapter		Fillet pushing plate		Table frame	

Technical changes reserved!



K-1

K-2

K-3

Description	I-bone Pullers (pin-boners)	
Type	EM-10	EM-54
Operation mode	manually	automatically
Electric connection (V)	230	230
Nominal power (A)	0,8	2,0
Water consumption (l/h)	360-480	360-480
Water pressure (bar)	2-3	2-3
Capacity approx. (pc/h)	120-240	350-700
Forwarding belt	no	yes
Dimensions LxWxH (cm)	23x6x9	150x43x175
Weight approx. (kg)	1	50
Options	Non	Twin-system
Accessory	Nothing	Vacuum-system

Technical changes reserved!

# AquaTech

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# ***Fillet Skinners***

## **Selection**



Fork-roll Table model



Fork-roll Stand model



Transport-roll Band model



Freeze-drum Band model

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

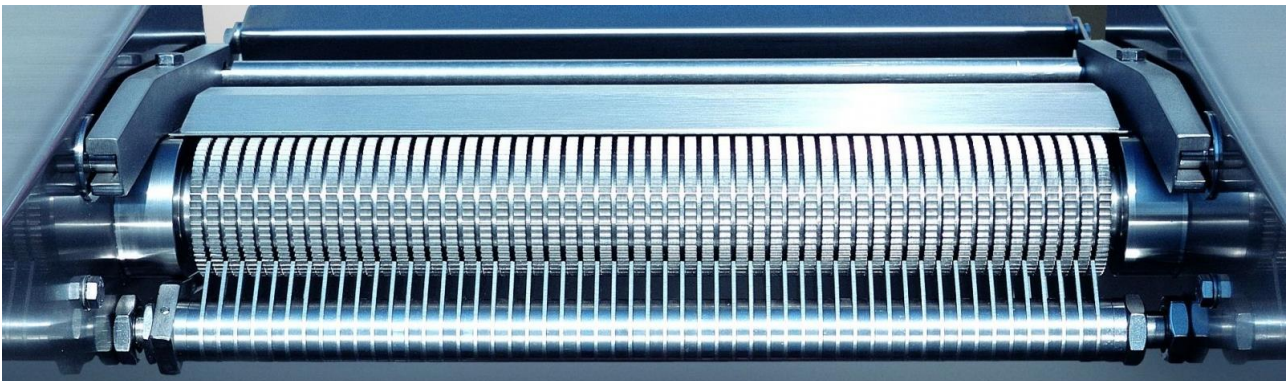
# ***Fillet Skinners***

## **Properties**

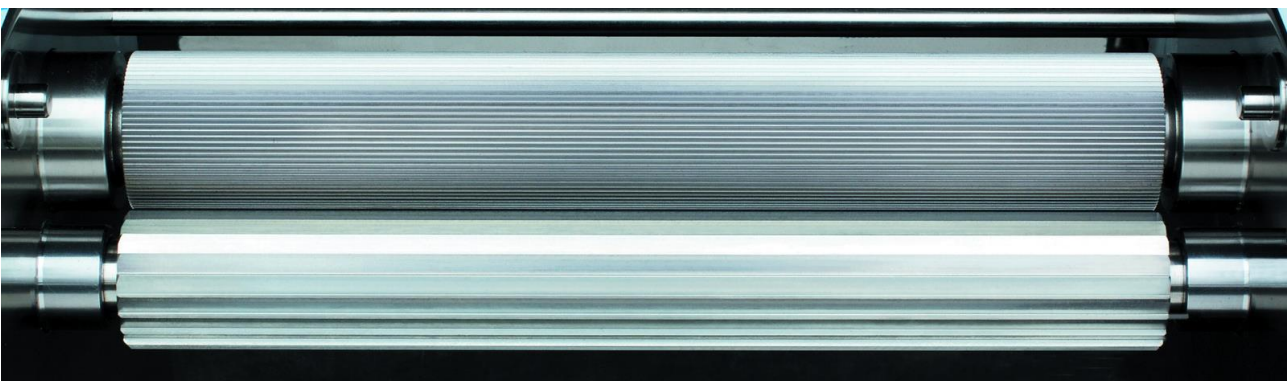
Description	Table models		Stand models	Band models	
Type	CF-300	CF-420	CF-460	CF-496	FE-350
Electric connection (V)	400	400	400	400	400
Nominal power (W)	250	750	750	750	5500
Cutting wide (cm)	28	43	43	43	35
Cutting depth (mm)	0-5	0-5	0-5	0-5	0-10
Capacity (m/min.)	19	19	24	29	10-20
Forwarding belts	no	no	no	yes	yes
Water connection (inch)	1/4	1/4	1/4	1/4	3/4
Water consumption (l/h)	50	80	100	200	750
Dimensions LxWxH (cm)	56x40x32	70x50x42	74x63x96	80x186x119	155x260x150
Weight approx. (kg)	50	80	150	250	680
Options	Non	Cleaning roll			Water chiller
Accessory	Roller frame		Nothing	Skin belt	Nothing

Technical changes reserved!

## **Options**



Fork roll (CF)



Cleaning roll (CS)

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# ***Fish Filleters***

## **Selection**



Filleting Machine  
for fishes below approx. 1 kg



Filleting Machine  
for fishes above approx. 1 kg

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)

# ***Fish Filleters***

## **Properties**

Description	Filleting Machines	
	A-60	A-70
Type	A-60	A-70
Electric connection (V)	380	380
Nominal power (kW)	0,55	1,50
Round blades Ø (mm)	200	400
Deheading blade	included	optional
Water connection	yes	yes
Capacity approx. (pc/h)	1800	1200
Fish size approx. (kg)	0,1-1,0	1,0-5,0
Dimensions LxWxH (cm)	70x60x120	210x99x115
Weight approx. (kg)	87	330

Technical changes reserved!

## **Details**



Consulting:

# ***AquaTech***

A-6370 Kitzbühel/Austria, Unterbrunnweg 3, Tel: +43/664-1048297, [www.aqua-tech.eu](http://www.aqua-tech.eu)