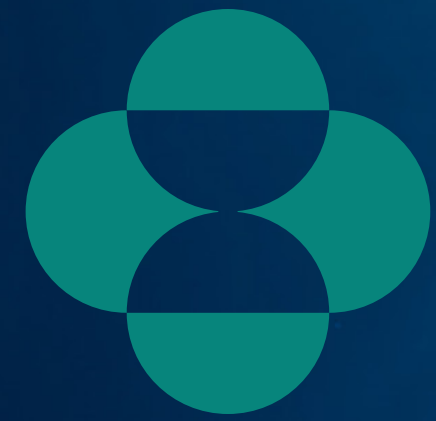


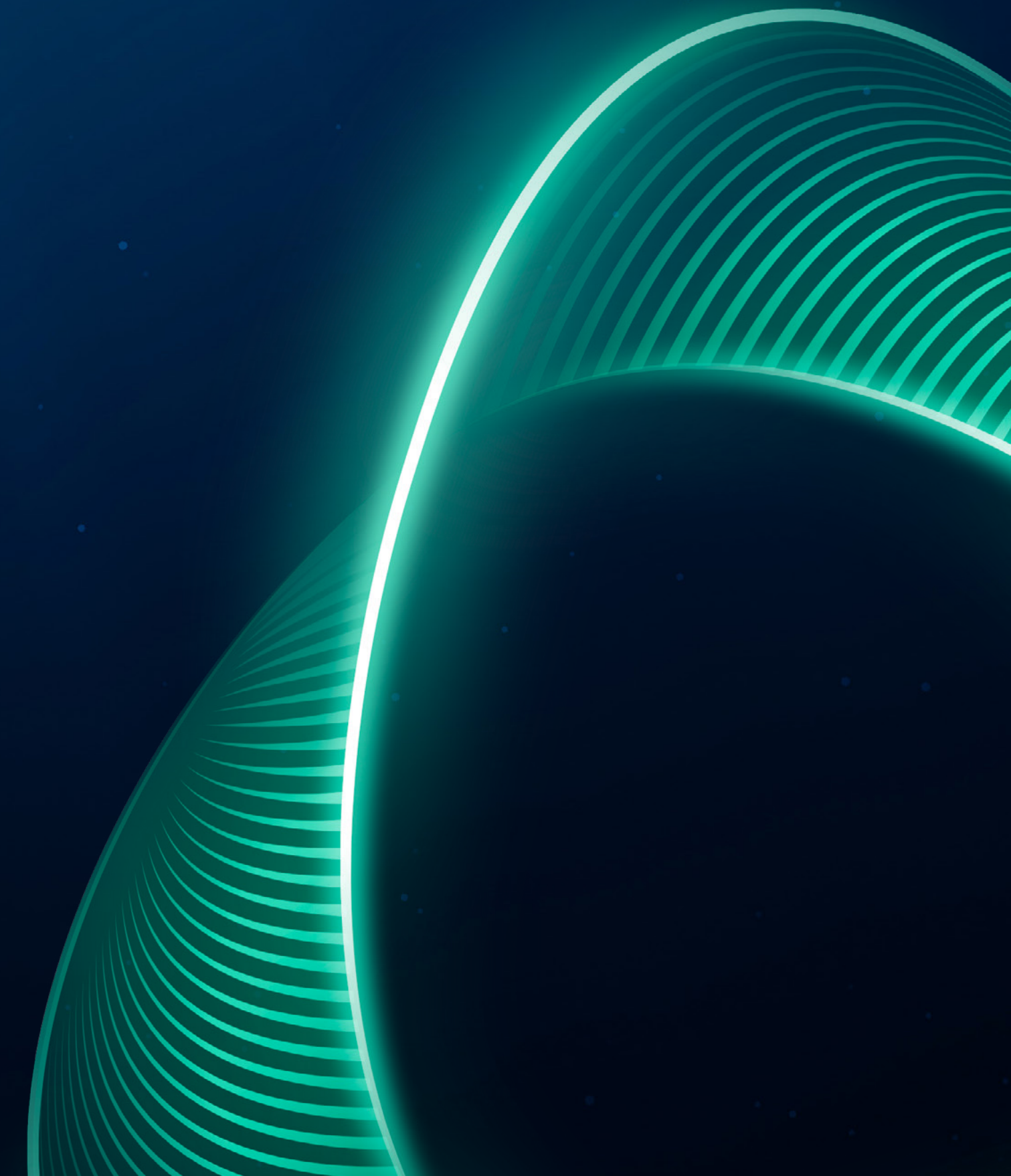


MSD

Animal Health

VAKI[®] SMARTFLOW

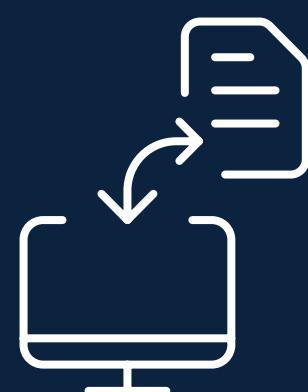
THE ULTIMATE FISH HANDLING SOLUTION





VAKI® SmartFlow is the ultimate fish handling solution built with farmers in mind and fish welfare at its core. Seamless integration of our Smart Pumps, Graders, and Counters gives you complete control by leveraging automation and your expertise to elevate production.

With **SmartFlow**, we provide a comprehensive, data-driven overview of your fish handling operation by enabling you to:



MONITOR FOR INSIGHTS

Collect key operating data from all Smart equipment.



OPTIMIZE WITH PRECISION

Utilize remote control and automation for effortless, real-time adjustments.

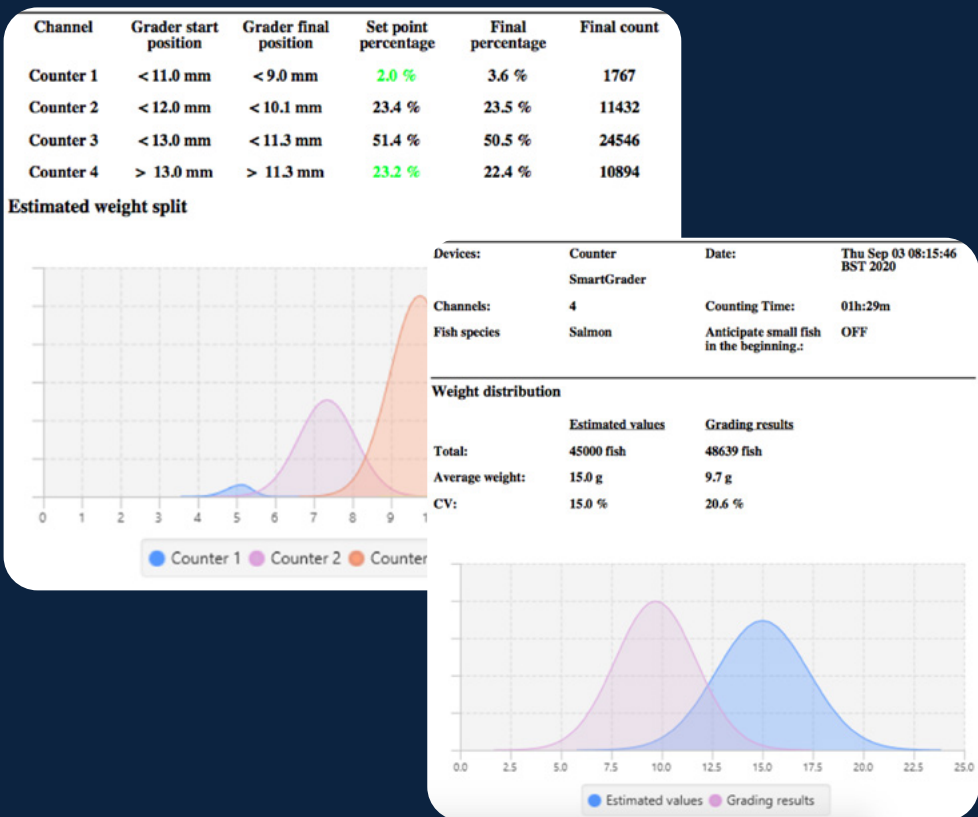


BENCHMARK FOR PERFORMANCE

Leverage automatic reporting of production efficiency and KPIs for sustainable performance and maximum returns.



SEAMLESSLY INTEGRATED SMART EQUIPMENT



SMART PUMP

The Smart Pump is controlled by the Smart Counter, which measures the speed of fish flow, to automatically regulate the pumping speed and prevent overload of the grader/counter. This automation ensures that the Smart Pump is always adjusted to meet the needs of operational output.

That means SmartFlow takes care of the pumping for you.*

SMART GRADER

The Smart Grader uses the feedback loop between itself and the Smart Counter to relieve you from having to monitor the grading process manually. Resulting in an optimal distribution between each grading category.

That means SmartFlow makes grading simple and easy.

SMART COUNTER

The Smart Counter measures both size and number of fish that pass through the Smart Grader in each grading category. The Smart Counter then measures the percent (%) distribution and fine tunes the Smart Grader as needed.

That means SmartFlow efficiently counts and measures with accuracy.

SMART REPORT

The Smart Report is automatically generated and contains detailed fish handling data and images of all scanned fish.

That means SmartFlow gives you a total overview of all moved and graded fish at any given time.



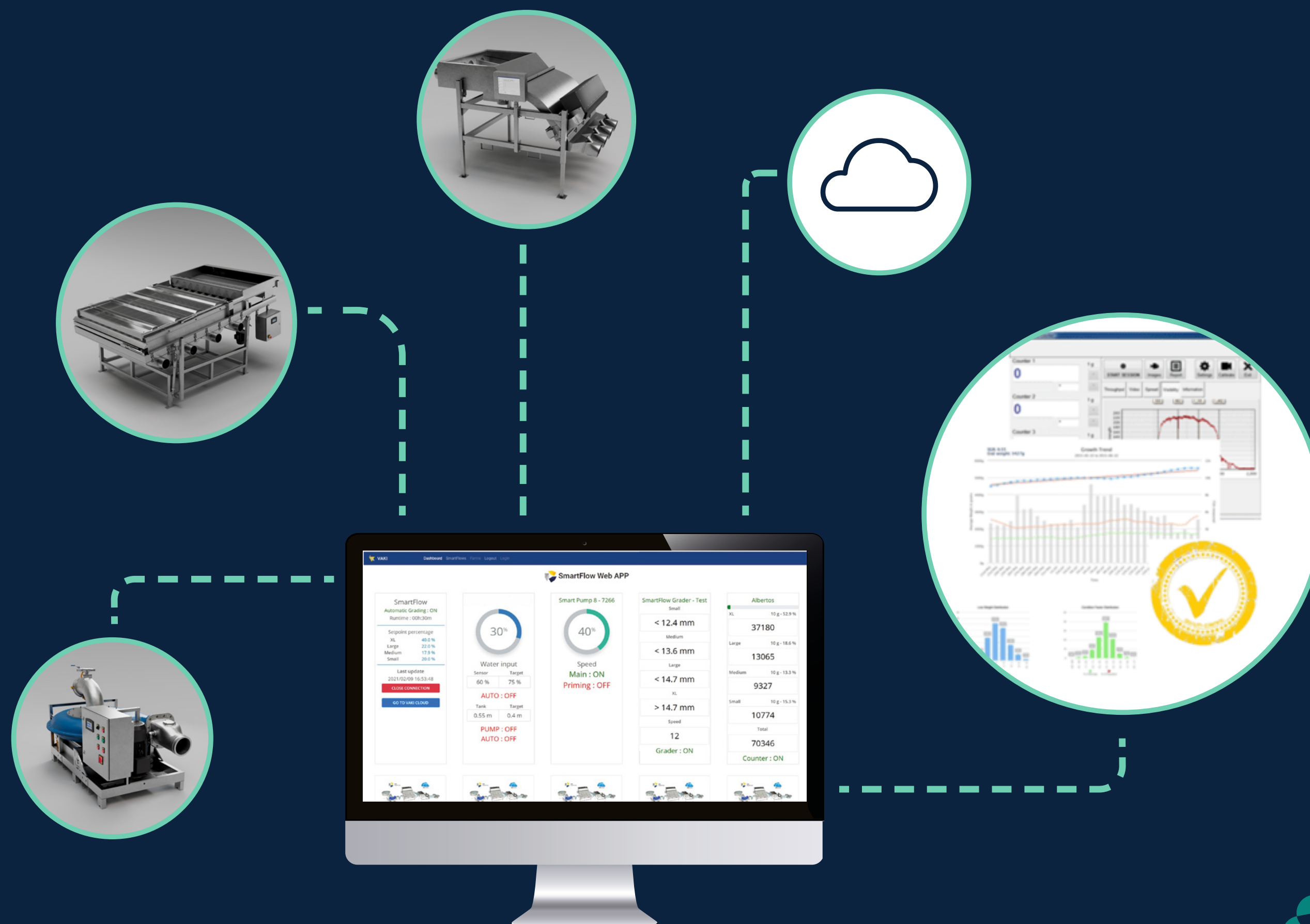
*Non-Smart Pumps may be used in the SmartFlow system, but pumping automation, remote-control and monitoring capabilities will be lost.

INSIGHTS AT YOUR FINGERTIPS



SmartFlow provides you with a comprehensive, data-driven overview of your fish handling operation. Enabling you to remotely monitor the performance of all connected Smart Equipment from any desktop, tablet, or smart phone.

Records and reports of all operational and performance data is stored in the **VAKI® Cloud** and made available to you for analysis, comparison and review at any time. SmartFlow also provides real-time monitoring with live access to key performance data such as pumping speeds, grading, and counting.

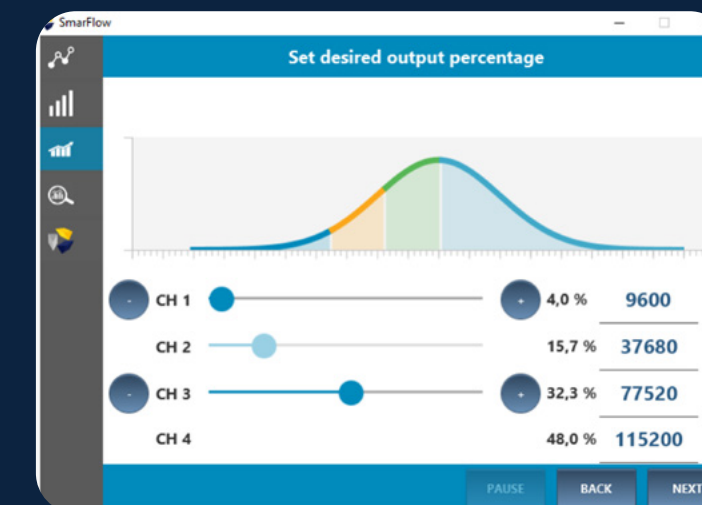
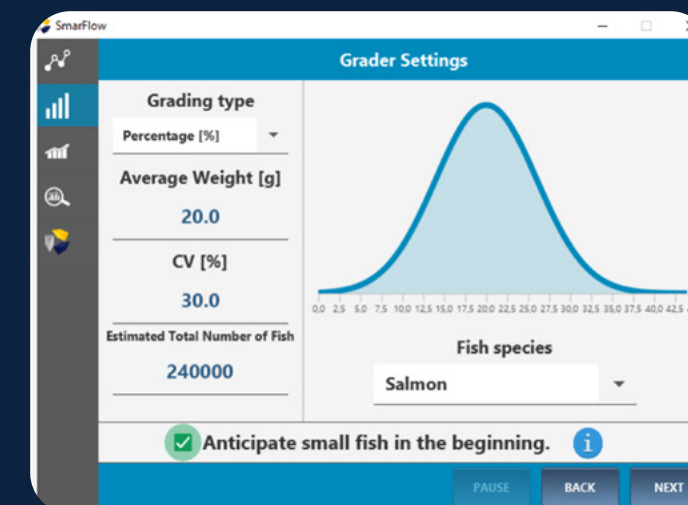


MAXIMUM CONTROL

AUTOMATION (FEEDBACK LOOP)

SmartFlow can be fully automated to significantly streamline the fish handling process for maximum efficiency and performance. Just set grading based on the percent (%) split and let SmartFlow do the rest.

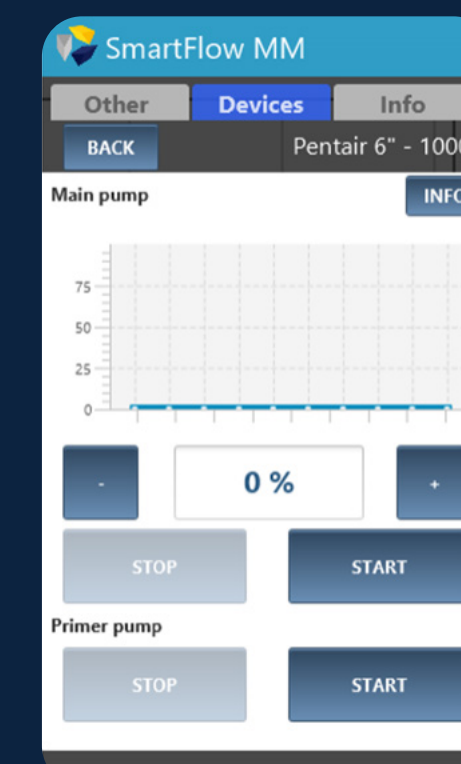
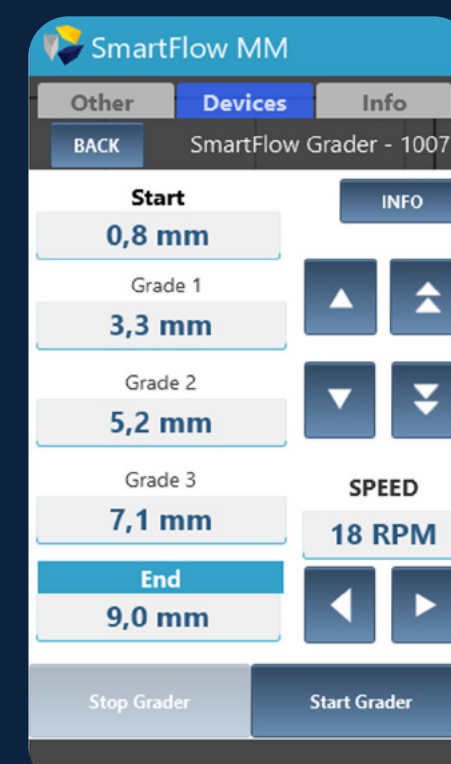
Constantly monitoring and fine-tuning in real-time.



REMOTE CONTROL

SmartFlow gives you complete and effortless control of the entire fish handling system. Monitor progress in real-time, set automations, and make adjustments.

*All Smart Equipment can be manually operated with on device electric controls

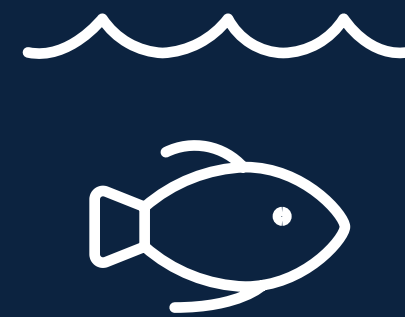


ELEVATE PERFORMANCE & ENHANCE PROFITABILITY



PRODUCTION

- Seamless Integration
- Robust Data & Insights
- Easy to Use
- Labor Efficient
- Maximum Control
- Maximize Capacity
- Improve Performance & Efficiency



FISH WELFARE

- Gentle & Safe
- Efficient Handling
- Less Stress



ECONOMICS

- Improve Performance & Profitability
- Improve Fish Quality
- Reduce Operational Costs
- Labor Savings



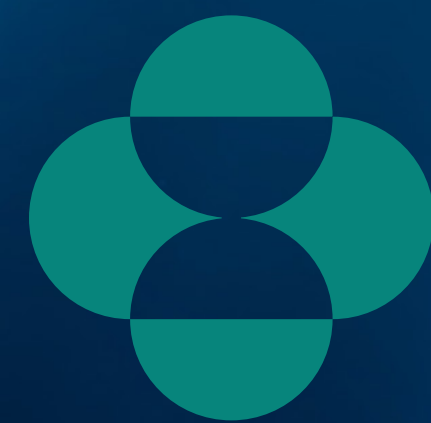
CONNECT WITH US

and learn how

SMARTFLOW

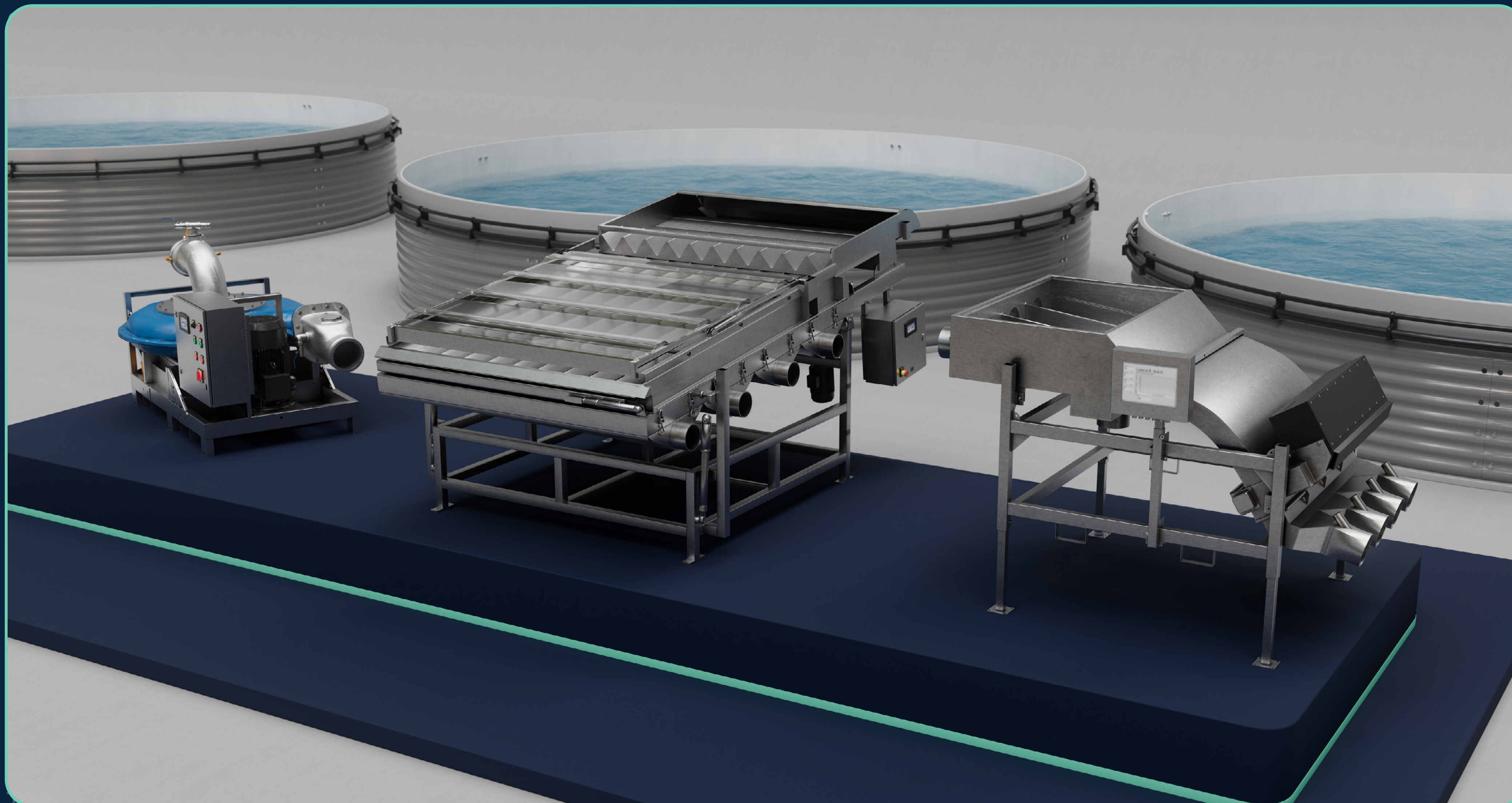
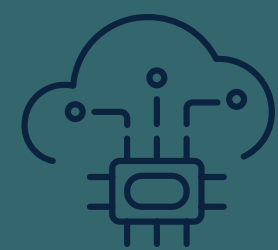
CAN ELEVATE **YOUR PRODUCTION**





MSD

Animal Health

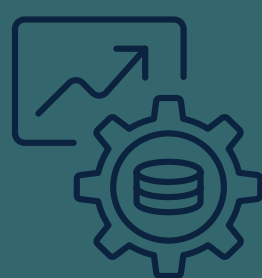
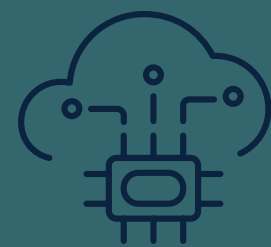


That means SmartFlow takes care of the pumping for you.*

Makes grading simple and easy.

Efficiently counts and measures with accuracy.

*Non-Smart Pumps may be used in the SmartFlow system, but pumping automation, remote-control and monitoring capabilities will be lost.



PUMP

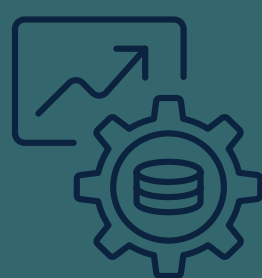
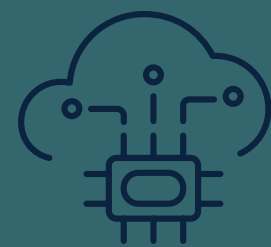
Lite pumps:

- High Capacity and efficient centrifugal pumps.
- Available in three sizes; 6", 8" & 10" and in 2 model types as a Lite Pump or Smart Pump.

6" Lite Pump

Weight	190 kg
Dimensions (L x W x H)	1850 mm x 900 mm x 1200 mm
Capacity	See capacity chart based on operating speed
Fish size	0.2 - 400 g
Power consumption	8 kW
Voltage	380 - 420 V, 3P+N+E
Voltage options	230V 3P & 480 V 3P
SmartFlow compatible	NO
Remote control operated	NO
Inlet size	150 mm (6") (with option to reduce to 100 mm (4") or 50 mm (2"))
Outlet size	150 mm (6") (with option to reduce to 100 mm (4") or 50 mm (2"))
Main motor	4 kW
Primer motor	1.1 kW
Pump speed	200-670 rpm
Max. pump output	2400 lpm/635 gpm
Max. pump head (TDH)	9 m
Max. pump suction	3 m
Max. horizontal transfer	2.000 m





PUMP

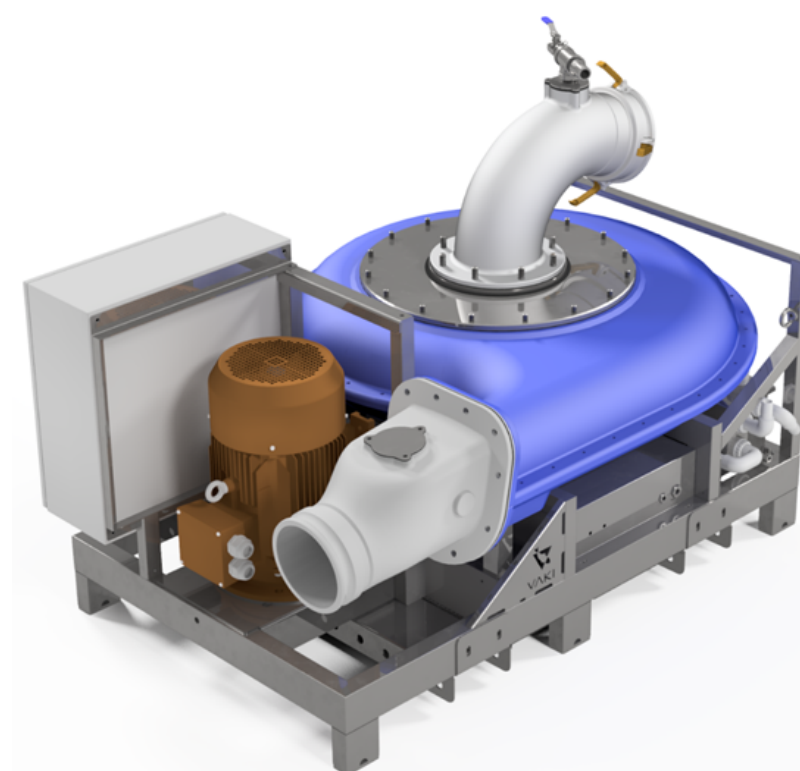


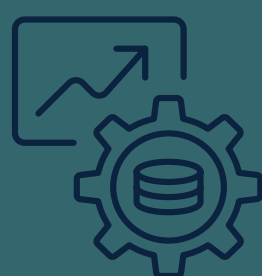
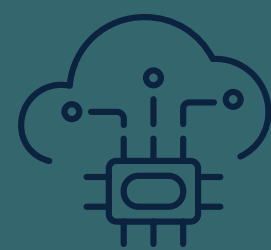
Lite pumps:

- High Capacity and efficient centrifugal pumps.
- Available in three sizes; 6", 8" & 10" and in 2 model types as a Lite Pump or Smart Pump.

8" Lite Pump

Weight	730 kg
Dimensions (L x W x H)	1800 mm x 1300 mm x 1300 mm
Capacity	See capacity chart based on operating speed
Fish size	0.2 - 1.200 g
Power consumption	22 kW
Voltage	380 - 420 V, 3P+N+E
Voltage options	480 V, 3P+N+E
SmartFlow compatible	NO
Remote control operated	NO
Inlet size	203 mm
Outlet size	203 mm
Main motor	15 kW
Primer motor	1.1 kW
Pump speed	200-500 rpm
Max. pump output	7500 lpm/1981 gpm
Max. pump head (TDH)	11 m
Max. pump suction	3 m
Max. horizontal transfer	2.000 m





PUMP

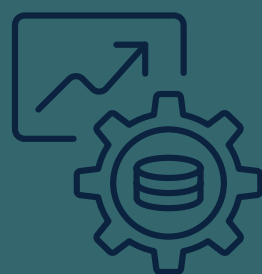
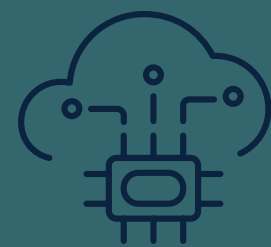
Smart pumps:

- High Capacity and efficient centrifugal pumps.
- Available in three sizes; 6", 8" & 10" and in 2 model types as a Lite Pump or Smart Pump.

6" Smart Pump

Weight	200 kg
Dimensions (L x W x H)	1850 mm x 900 mm x 1200 mm
Capacity	See capacity chart based on operating speed
Fish size	0,2 - 400 g
Power consumption	8 kW
Voltage	380 - 420 V, 3P+N+E
Voltage options	230V 3P & 480 V 3P
SmartFlow compatible	YES
Remote control operated	YES
Inlet size	150 mm (6") (with option to reduce to 100 mm (4") or 50 mm (2"))
Outlet size	150 mm (6") (with option to reduce to 100 mm (4") or 50 mm (2"))
Main motor	15 kW
Primer motor	1.1 kW
Pump speed	200-670 rpm
Max. pump output	2400 lpm/635 gpm
Max. pump head (TDH)	9 m
Max. pump suction	3 m
Max. horizontal transfer	2.000 m





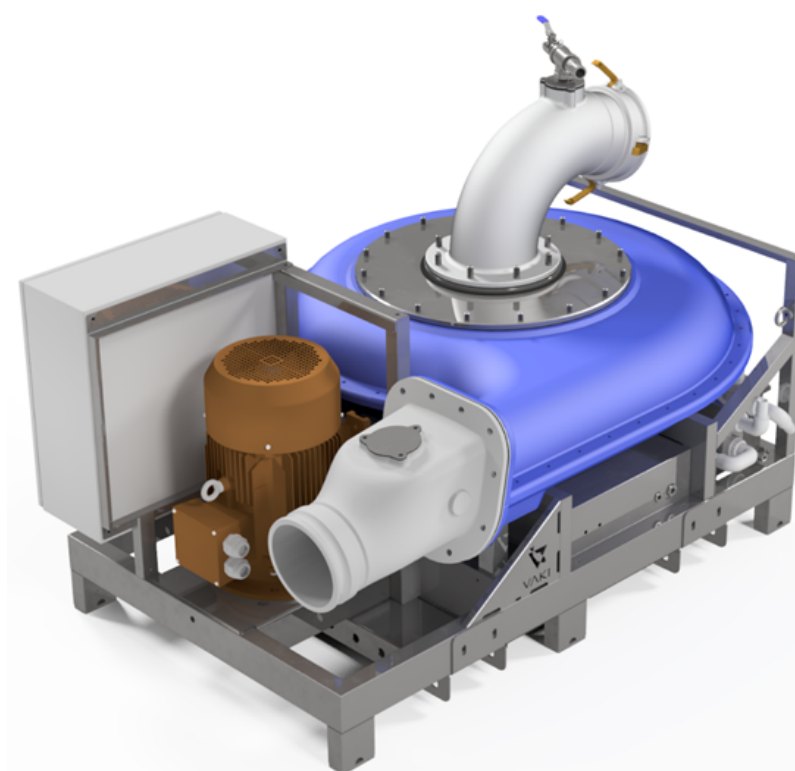
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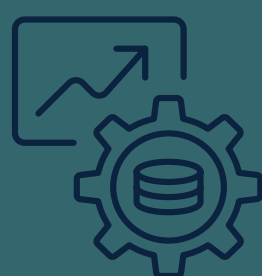
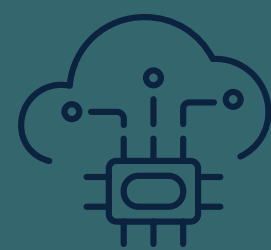
Smart pumps:

- High Capacity and efficient centrifugal pumps.
- Available in three sizes; 6", 8" & 10" and in 2 model types as a Lite Pump or Smart Pump.

8" Smart Pump

Weight	700 kg
Dimensions (L x W x H)	1800 mm x 1300 mm x 1300 mm
Capacity	See capacity chart based on operating speed
Fish size	0,2 - 1.200 g
Power consumption	22 kW
Voltage	380 - 420 V, 3P+N+E
Voltage options	480 V, 3P+N+E
SmartFlow compatible	YES
Remote control operated	YES
Inlet size	203 mm
Outlet size	203 mm
Main motor	15 kW
Primer motor	1.1 kW
Pump speed	200-500 rpm
Max. pump output	7500 lpm/1981 gpm
Max. pump head (TDH)	11 m
Max. pump suction	3 m
Max. horizontal transfer	2.000 m





PUMP

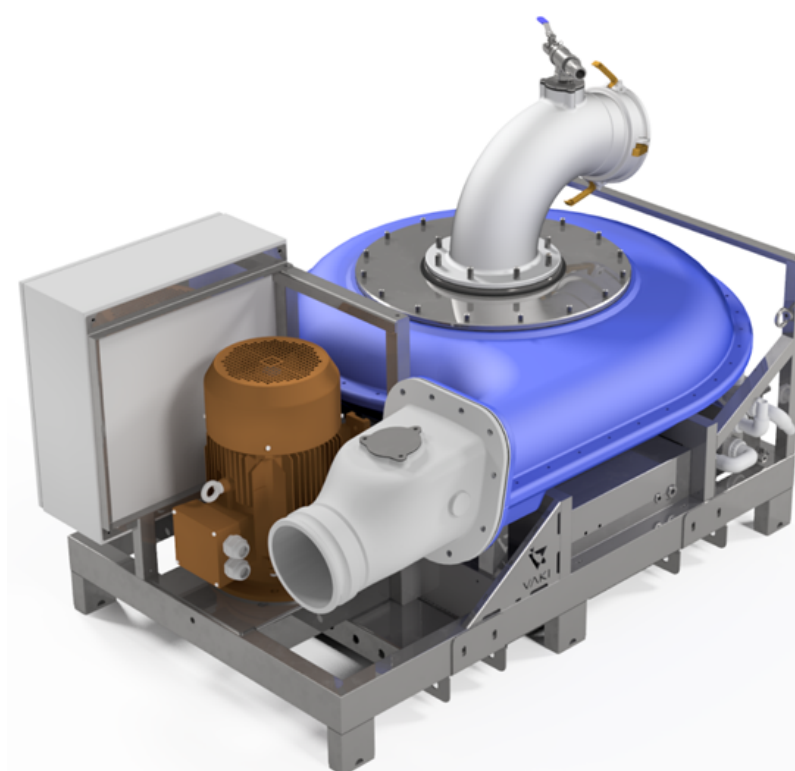


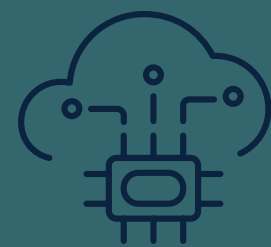
Smart pumps:

- High Capacity and efficient centrifugal pumps.
- Available in three sizes; 6", 8" & 10" and in 2 model types as a Lite Pump or Smart Pump.

10" Smart Pump

Weight	1000 kg
Dimensions (L x W x H)	2200 mm x 1650 mm x 1550 mm
Capacity	See capacity chart based on operating speed
Fish size	5 - 2.300 g
Power consumption	33 kW
Voltage	380 - 420 V, 3P+N+E
Voltage options	480 V, 50 - 60 Hz, 3P+N+E
SmartFlow compatible	YES
Remote control operated	YES
Inlet size	254 mm
Outlet size	254 mm
Main motor	22 kW
Primer motor	2,2 kW
Pump speed	200-350 rpm
Max. pump output	14.000 lpm/3.700 gpm (at 14 ft/3.4 m head)
Max. pump head (TDH)	12 m
Max. pump suction	3 m
Max. horizontal transfer	2.000 m





PUMP

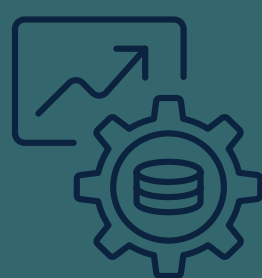
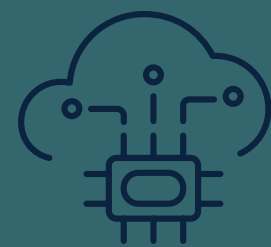
Smart Graders

Automatic size adjustment and accurate fish grading. VAKI Smart Graders are the next generation in technical innovation to improve the operational efficiency on-site.

5-Track Smart Grader

Weight	500 kg
Dimensions (L x W x H)	3000 mm x 1100 mm x 1400 mm
Capacity	Up to 7,500 kg/hr (salmon)
Fish size	5-500 g
Power consumption	0.55 kW
Voltage	230 V, 2P+E
Voltage options	110 V, 2P+E
SmartFlow compatible	YES
Inlet size	DN150 Camlock
Outlet size	OD=154 mm
Fish width	Up to 50 mm
Grader tilt	Manually operated
Roller diameter	60 mm
Number of grading tracks	5 grading tracks





PUMP

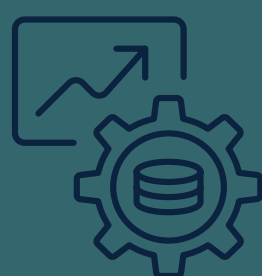
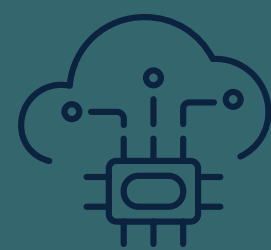
Smart Graders

Automatic size adjustment and accurate fish grading. VAKI Smart Graders are the next generation in technical innovation to improve the operational efficiency on-site.

10-Track Smart Grader

Weight	900 kg
Dimensions (L x W x H)	3250 mm x 2100 mm x 1600 mm
Capacity	Up to 15.000 kg/hr (salmon)
Fish size	5-500 g
Power consumption	1.1 kW
Voltage	230 V, 2P+E
Voltage options	230V, 3P +E
SmartFlow compatible	YES
Inlet size	DN200 Camlock
Outlet size	OD=154 mm
Fish width	Up to 50 mm
Grader tilt	Electronic
Roller diameter	60 mm
Number of grading tracks	10 grading tracks





PUMP

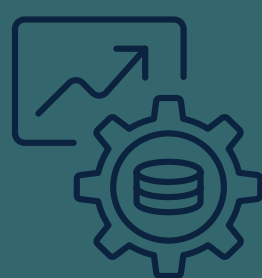
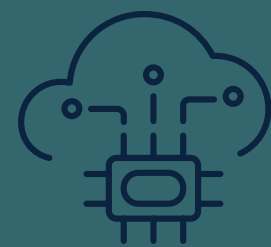
Smart Graders

Automatic size adjustment and accurate fish grading. VAKI Smart Graders are the next generation in technical innovation to improve the operational efficiency on-site.

7-Track Smart Grader

Weight	1500 kg
Dimensions (L x W x H)	5700 mm x 2150 mm x 2300 mm
Capacity	Up to 40.000 kg/hr (salmon)
Fish size	5-2000 g
Power consumption	1.1 kW
Voltage	230V, 2P+E
Voltage options	230V, 3P +E
SmartFlow compatible	YES
Inlet size	DN200 flange
Outlet size for grade 1	OD=200 mm
Outlet size for grades 2 and 3	DN250 flange
Fish width	Up to 70 mm
Grader tilt	Electronic
Roller diameter	75 mm
Number of grading tracks	7 grading tracks





PUMP



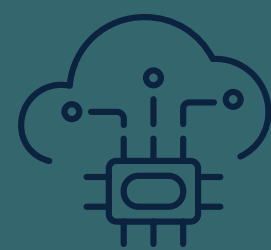
Channel Counters: SB-X000 Series

SB-X000 COUNTERS: The SB counter range is a modular and scalable solution, designed to handle counting of fish from 50 g to 2.5 kg on well boats and on production sites.

SB-1000

Weight	70 kg
Dimensions (L x W x H)	500 mm x 1250 mm x 500 mm
Capacity	See capacity chart based on fish size
Fish size	30 g-1.5 kg is the average size range (min individuals 10 g and max individuals 2.6 kg)
Power consumption	0.1 kW
Voltage	110-230 V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	1000 mm x 230 mm
Counting area height	230 mm
Counting width	1000 mm





PUMP



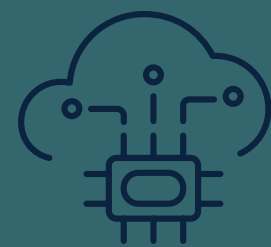
Channel Counters: SB-X000 Series

SB-X000 COUNTERS: The SB counter range is a modular and scalable solution, designed to handle counting of fish from 50 g to 2.5 kg on well boats and on production sites.

SB-2000

Weight	160 kg
Dimensions (L x W x H)	500 mm x 2400 mm x 500 mm
Capacity	See capacity chart based on fish size
Fish size	30 g-1.5 kg is the average size range (min individuals 10 g and max individuals 2.6 kg)
Power consumption	0.2 kW
Voltage	110-230 V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	2000 mm x 230 mm
Counting area height	230 mm
Counting width	2000 mm





PUMP



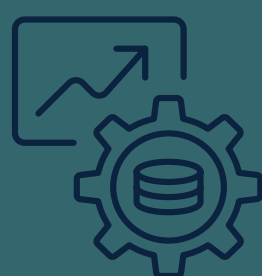
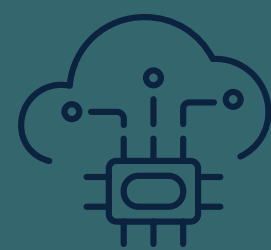
Channel Counters: SB-X000 Series

SB-X000 COUNTERS: The SB counter range is a modular and scalable solution, designed to handle counting of fish from 50 g to 2.5 kg on well boats and on production sites.

SB-3000

Weight	240 kg
Dimensions (L x W x H)	500 mm x 3350 mm x 500 mm
Capacity	See capacity chart based on fish size
Fish size	30 g-1.5 kg is the average size range (min individuals 10 g and max individuals 2.6 kg)
Power consumption	0.3 kW
Voltage	110-230 V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	3000 mm x 230 mm
Counting area height	230 mm
Counting width	3000 mm





PUMP

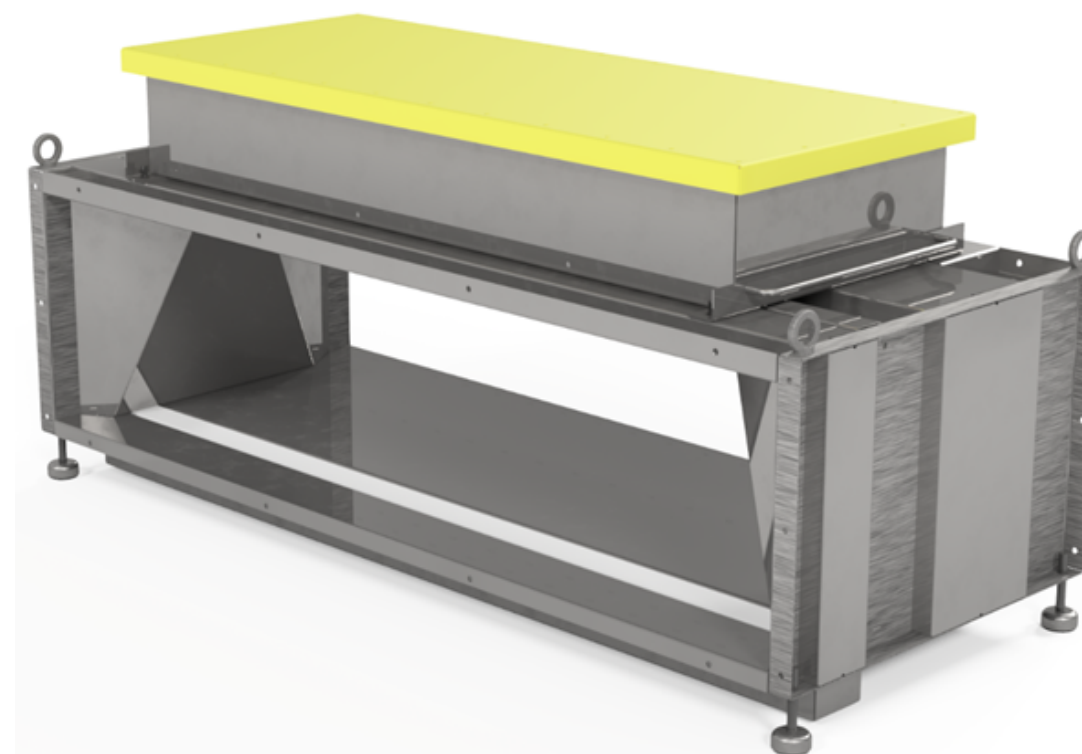


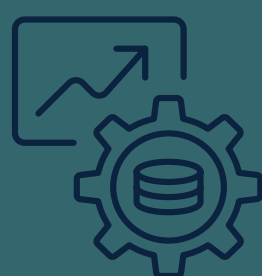
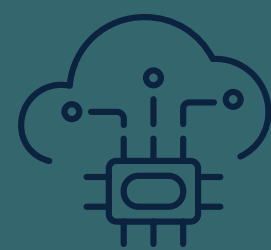
Channel Counters: B-Series

B-COUNTERS: The B counters are particularly useful during delivery, grading, and lice treatments, providing critical data on the number of counted fish, both in well boats and on production sites.

B-1400

Weight	150 kg
Dimensions (L x W x H)	600 mm x 1500 mm x 700 mm
Capacity	See capacity chart based on fish size
Fish size	50g up to 10Kg+
Power consumption	0.15 kW
Voltage	110-230V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	1400 mm x 350 mm
Counting area height	350 mm
Counting width	1000 mm
Size estimation	YES
AP/Remote monitor	YES





PUMP



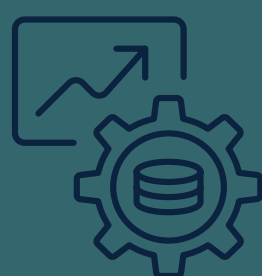
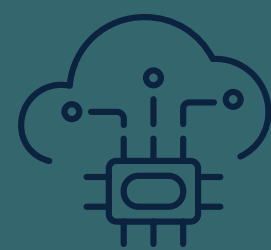
Channel Counters: B-Series

B-COUNTERS: The B counters are particularly useful during delivery, grading, and lice treatments, providing critical data on the number of counted fish, both in well boats and on production sites.

B-2000

Weight	200 kg
Dimensions (L x W x H)	600 mm x 2150 mm x 700 mm
Capacity	See capacity chart based on fish size
Fish size	50g up to 10Kg+
Power consumption	0.2 kW
Voltage	110-230V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	200 mm x 350 mm
Counting area height	350 mm
Counting width	2000 mm
Size estimation	YES
AP/Remote monitor	YES





PUMP



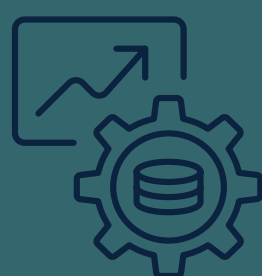
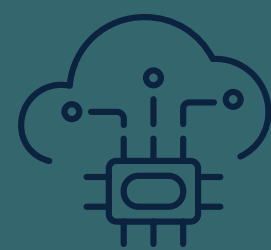
Channel Counters: B-Series

B-COUNTERS: The B counters are particularly useful during delivery, grading, and lice treatments, providing critical data on the number of counted fish, both in well boats and on production sites.

B-3000

Weight	560 kg
Dimensions (L x W x H)	950 mm x 3350 mm x 750 mm
Capacity	See capacity chart based on fish size for SB-3000
Fish size	50g up to 10Kg+
Power consumption	0.3 kW
Voltage	110-230V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	3000 mm x 350 mm
Counting area height	350 mm
Counting width	3000 mm
Size estimation	YES
AP/Remote monitor	YES
Vacuum	0,7 bar





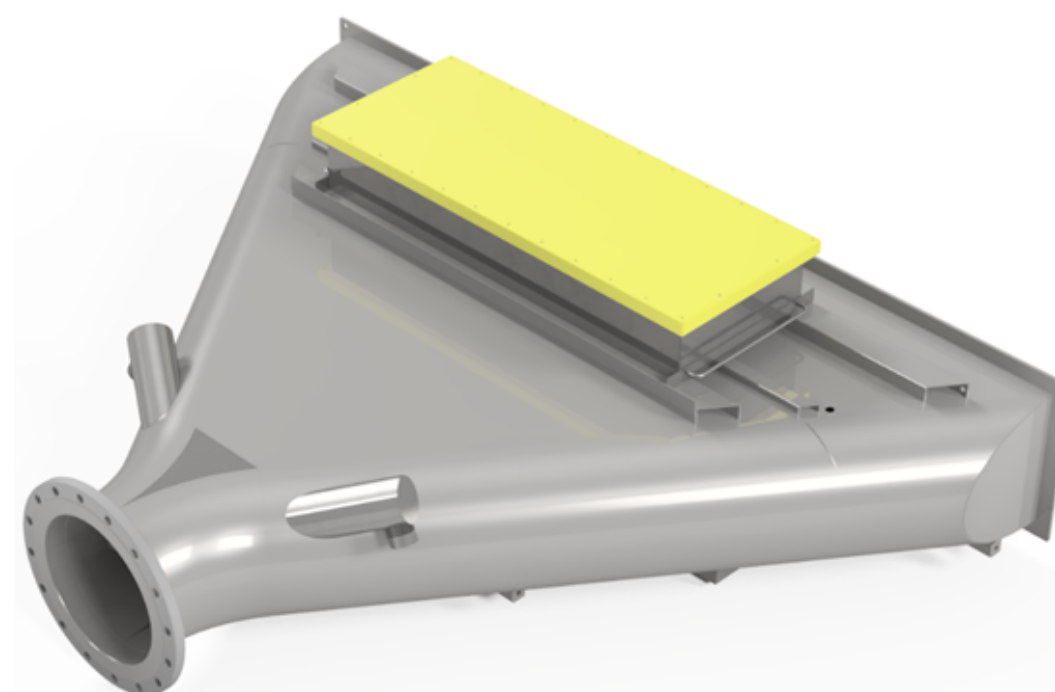
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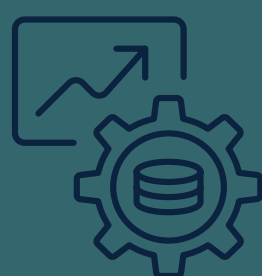
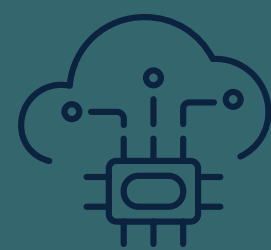
Channel Counters: Y-Counters

Y-COUNTERS: The Y counters are particularly useful during delivery, grading, and lice treatments, providing critical data on the number of counted fish, both in well boats and on production sites, where a reduction to a single outlet is needed.

Y-1300

Weight	250 kg
Dimensions (L x W x H)	1800 mm 2350 mm x 700 mm
Capacity	See capacity chart based on fish size
Fish size	50 g up to 10Kg+
Power consumption	0.15 kW
Voltage	110-230V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	2250 mm x 350 mm
Counting area height	350 mm
Outlet size	DN350 flange
Counting width	1300 mm
Size estimation	YES
AP/Remote monitor	YES





PUMP

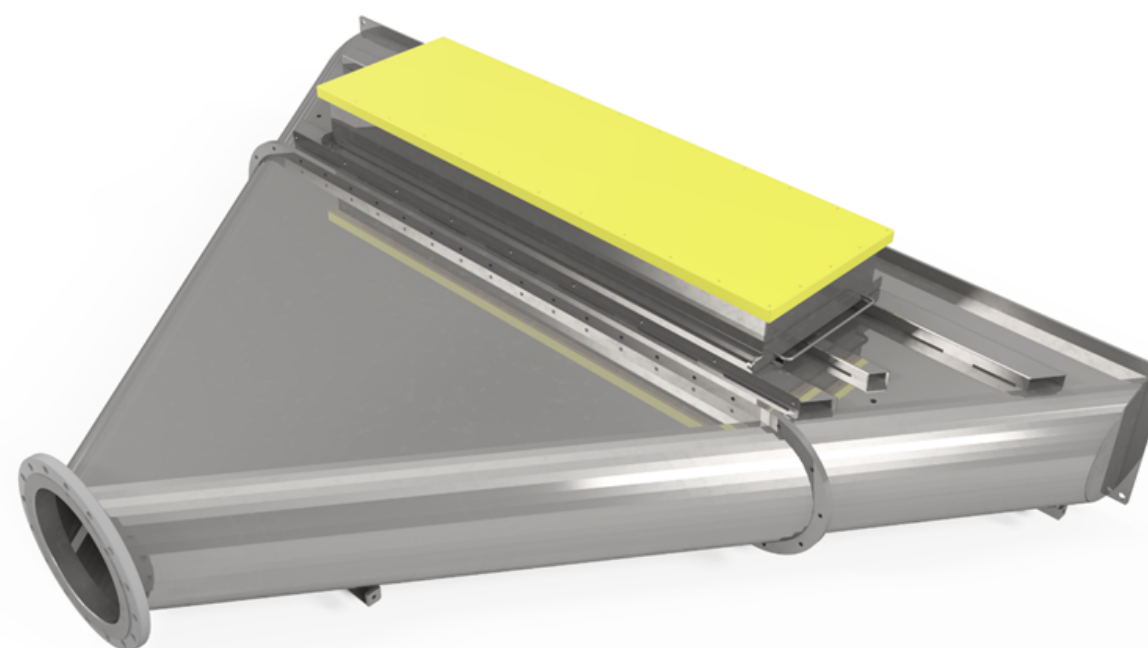


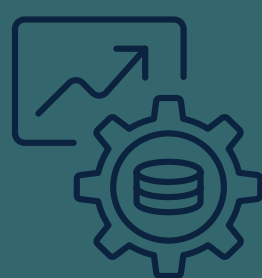
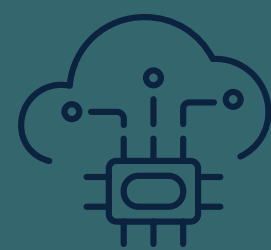
Channel Counters: Y-Counters

Y-COUNTERS: The Y counters are particularly useful during delivery, grading, and lice treatments, providing critical data on the number of counted fish, both in well boats and on production sites, where a reduction to a single outlet is needed.

Y-1900

Weight	450 kg
Dimensions (L x W x H)	2150 mm x 3100 mm x 700 mm
Capacity	See capacity chart based on fish size
Fish size	50g up to 10Kg+
Power consumption	0.2 kW
Voltage	110-230 V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	3000 mm x 350 mm
Counting area height	350 mm
Outlet size	DN350
Counting width	1900 mm
Size estimation	YES
AP/Remote monitor	YES





PUMP



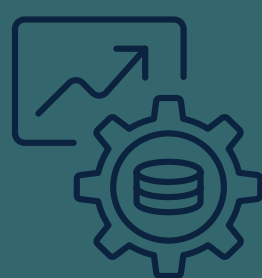
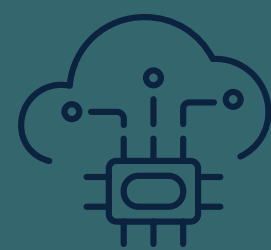
Smolt Counters: S-Counters

The Smolt counters are specially designed for integration within the high-capacity fish transport systems used on well boats and smolt production sites.

S-1400

Weight	500 kg
Dimensions (L x W x H)	2500 mm x 1700 mm x 1300 mm
Capacity	200.000-300.000 fish/hr. See capacity chart based on fish size.
Fish size	30g Up to 900 g
Power consumption	0.15 kW
Voltage	110-230 V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	1400 x 180
Counting area height	180 mm
Outlet size	DN250
Counting width	1400 mm
Size estimation	YES
AP/Remote monitor	YES
Ordered with	Dewater unit





PUMP

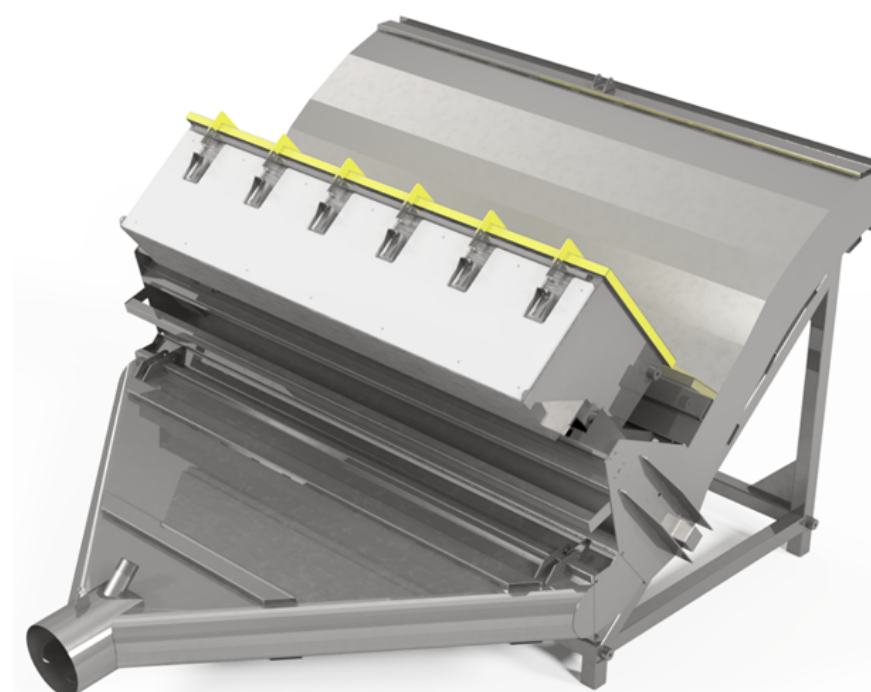


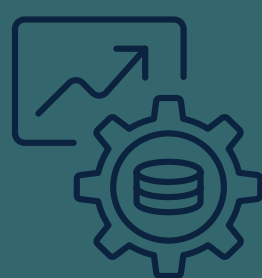
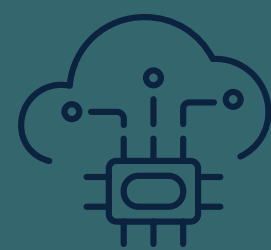
Smolt Counters: S-Counters

The Smolt counters are specially designed for integration within the high-capacity fish transport systems used on well boats and smolt production sites.

S-2100

Weight	550 kg
Dimensions (L x W x H)	2600 mm x 2300 mm x 1500 mm
Capacity	200.000-300.000 fish/hr. See capacity chart based on fish size.
Fish size	30g Up to 1,1 Kg
Power consumption	0.2 kW
Voltage	110-230V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet inner frame (W x H)	2100 mm x 180 mm
Counting area height	180 mm
Outlet size	DN250
Counting width	2100 mm
Size estimation	YES
AP/Remote monitor	YES
Ordered with	Dewater unit





PUMP



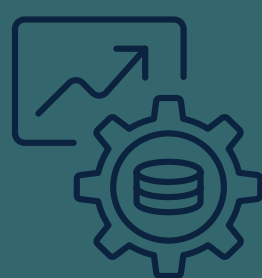
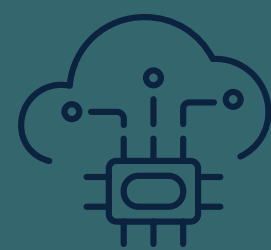
Smolt Counters: Macro Exel Counter

The Macro Exel counter is the largest fish counter in the Macro range with 20% higher capacity than the standard Macro.

Macro Exel Counter

Weight	550 kg
Dimensions (L x W x H)	2400 mm x 1600 mm x 1400 mm
Capacity	1.200.000 fish (1 g)/hour - 240.000 fish (50 g)/hour
Fish size	Up to 800 g
Power consumption	0.2 kW
Voltage	110-230 V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet size	ID = 154 mm
Counting area height	100 mm
Outlet size	OD = 154 mm
Counting width	1200 mm
Size estimation	YES
AP/Remote monitor	YES
Channel options	1, 3 and 4 channel





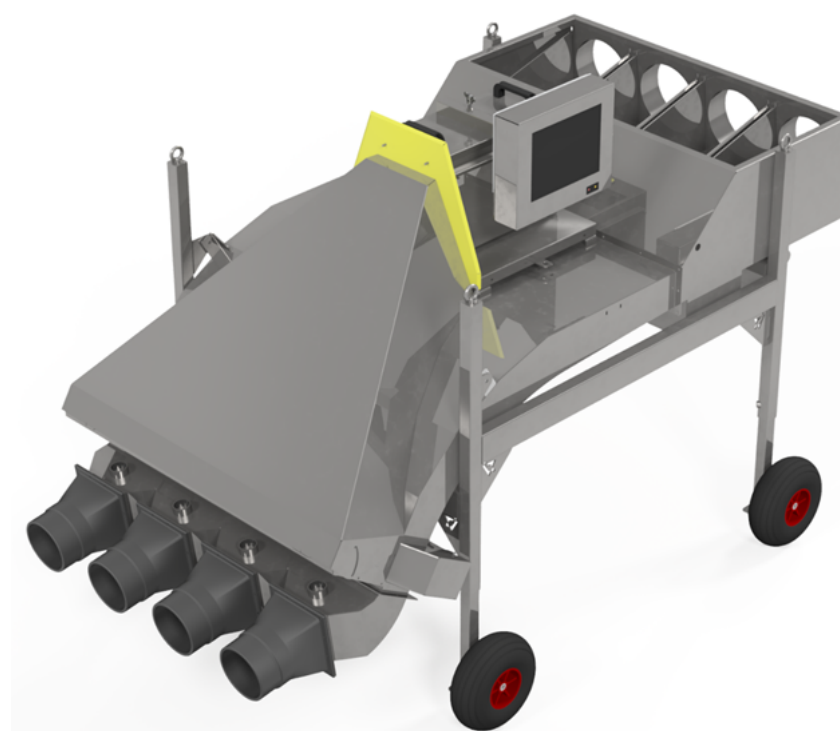
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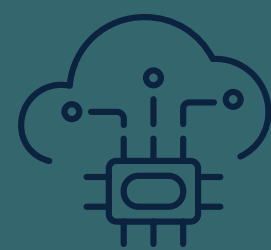
Smolt Counters: Macro Counter

The Macro counter is utilized when fish are delivered from hatcheries and for precise stock control when splitting, moving, or grading.

Macro Counter

Weight	210 kg
Dimensions (L x W x H)	2200 mm x 1200 mm x 1200-1800 mm
Capacity	1.000.000 fish (1 g)/hour – 200.000 fish (50 g)/hour
Fish size	0.1-400 g
Power consumption	0.2 kW
Voltage	110-230V, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet size	ID = 154 mm
Counting area height	100 mm
Outlet size	OD = 154 mm
Counting width	1000 mm
Size estimation	YES
AP/Remote monitor	YES
Channel options	1, 3 and 4 channel





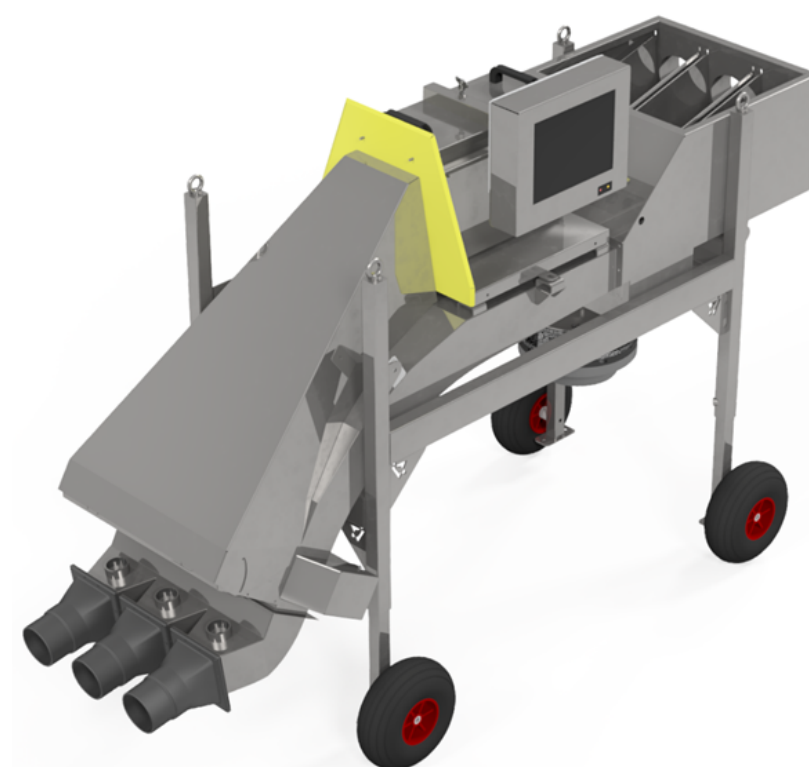
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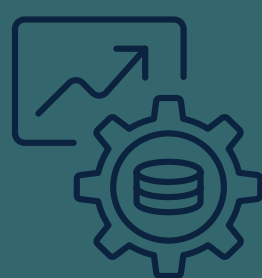
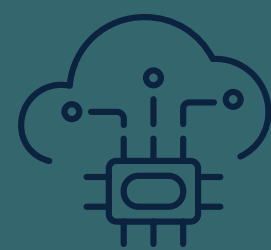
Smolt Counters: Micro Counter

The Micro counter is utilized when fish are delivered from hatcheries and for precise stock control when splitting, moving, or grading.

Micro Counter

Weight	150 kg
Dimensions (L x W x H)	1500 mm x 700 mm x 1500 mm
Capacity	500.000 fish (1 g)/hr
Fish size	0.1-200 g
Power consumption	0.2 kW
Voltage	110-230, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet size	ID = 100 mm
Counting area height	100 mm
Outlet size	OD = 100 mm
Counting width	500 mm
Size estimation	YES
AP/Remote monitor	YES





PUMP



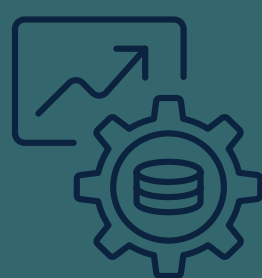
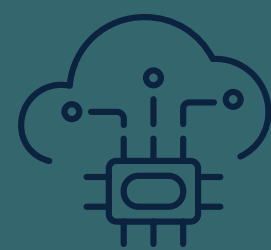
Smolt Counters: Nano Counter

The NANO counter is designed for counting small batches and smaller fish. The NANO is not commonly used with a fish pump but when hand netting or bucketing fish into the counter. The NANO can count fish down to 0.05g.

Nano Counter

Weight	90 kg
Dimensions (L x W x H)	1200 mm x 800 mm x 900 mm
Capacity	200.000 fish (1 g)/hr
Fish size	0.05-30 g
Power consumption	0.2 kW
Voltage	110-230, 2P+E
SmartFlow compatible	YES
Accuracy	Over 98%
Inlet size	OD = 73 mm (2,875 inch)
Counting area height	60 mm
Outlet size	OD = 111 mm (4,25 inch)
Counting width	400 mm
Size estimation	YES
AP/Remote monitor	YES





PUMP

Full Water Counters: Pipeline Counter

The Pipeline counter is installed in a pipeline counting fish 10g-10kg from a grader or at the end of a pipe.

Pipeline Counter (PLC)

Weight	6 kg (scanner frame)
Dimensions (L x W x H)	450 mm x 450 mm x 350 mm (scanner frame)
Capacity	45,000 fish (50 g)/hr
Fish size	10 g - 10 kg
Power supply	110-220 V AC
Power options	110-230 V AC, 2P+E
SmartFlow compatible	NO
Accuracy	Over 98%
Inlet size	OD = 200 mm
Counting area height	260 mm
Outlet size	OD = 200 mm
Counting width	260 mm
Size estimation	YES
AP/Remote monitor	NO

