

Arvo-Tec Feeding Technology



See also our website: www.arvotec.fi

Arvo-Tec

Professional Feeding Control System

Suitable from start feeding to on growing



Arvo-Tec control unit with example attachments

The Arvo-Tec control unit WOLF is a fully integrated feeding, measurement and alarm system

The control unit is utilized in Robot feeding, Centralized feeding and Single feeder systems

The system uses environmental parameters like water temperature and oxygen content to automatically control the feeding process according to adjustable energy demand model

The system estimates fish growth based on the feed conversion factor and calculates the biomass daily

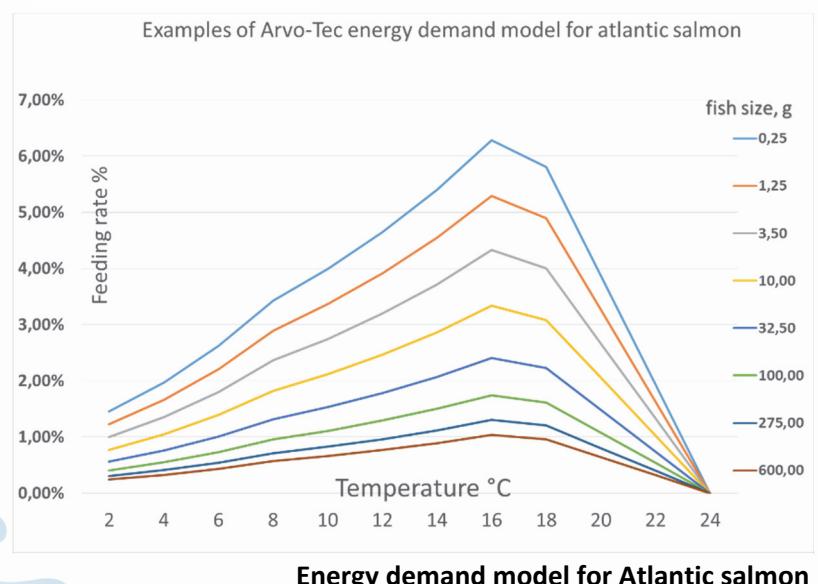
9 inbuilt feeding formulas for different species with customization options and quick manual adjustments

Control the day/night cycle of through photo period control.

Menu driven display in control unit

Optionally use MS Windows based PC-connection with web-based software

Arvo-Tec controller is cased in stainless steel cabinet for extreme conditions.



Robot Feeding System

Feed large number of tanks with one unit



Arvo-Tec feeding robot improves feeding efficiency and saves labour time by feeding a large number of tanks with a single robot thus eliminating the need for a feeder at each tank

Arvo-Tec BASE unit controls up to 3 robots with a combined total of 240 tanks

Standard versions for 2-4 feed and 50l hoppers.
Custom sizes and configurations are available on request

Options for full Arvo-Tec control system with PC connection or standalone robot

Flexible programming - handle multiple feeding frequencies at once for different fish type and size from fingerling to broodstock.

Technical specifications

- Travel speed 6min/100m
- Max. Daily dose >2000kg
- Battery powered 24 vdc – recharges at home base/charging station
- Optical sensor for collision avoidance
- Standard options for 2-4 feeds
- Max rail length 450 m / robot,
- Max 240 tanks /robot
- Automatic refilling system optional
- Compatible with electrical disc spreaders
- Flexible rail configurations and feeding behaviour options
- Inp 80 din 1025 rail



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T-Drum 2000 Feeder

Accuracy, Reliability, Versatility



The Arvo-Tec T drum 2000 feeder has high accuracy whilst remaining at a competitive price

TD 2000 is multifunctional making it suitable for start feeding hatcheries as well as on-growing units

Easy modification through a wide range of accessories

Technical specifications

- 1, 6 or 10 litre transparent hopper
- 50, 150 or 600l white PE hopper
- Standard motor 24 VAC 11,3w 2 rpm
- Granule / pellet size 0,1-12mm
- Minimum dose of 0,1, 0,3, 1,5, 20, 45 or 100g
- Accuracy >98% in typical conditions



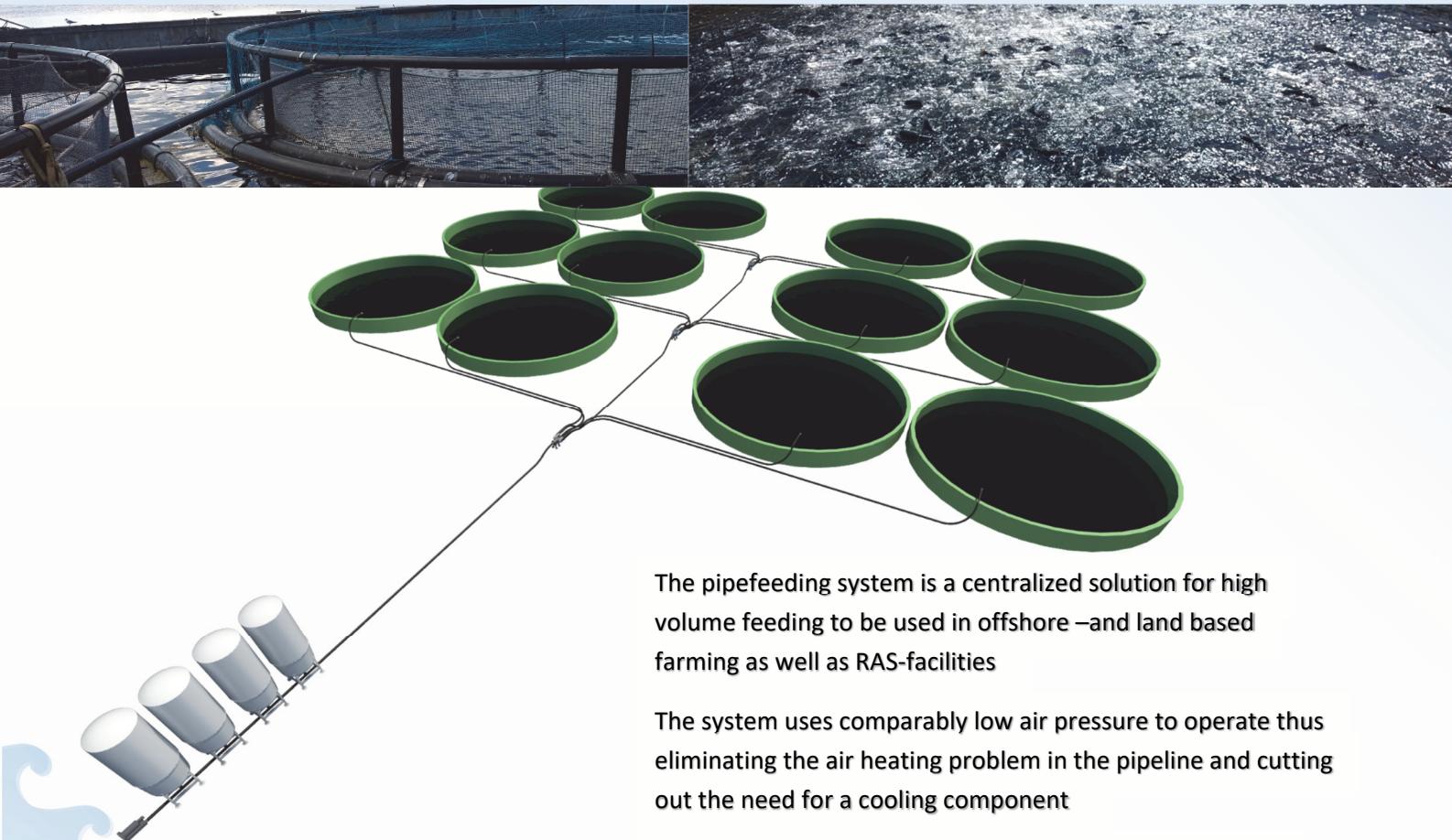
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Centralized Feeding System

Fully scalable pipefeeding - optimized for freshwater sites

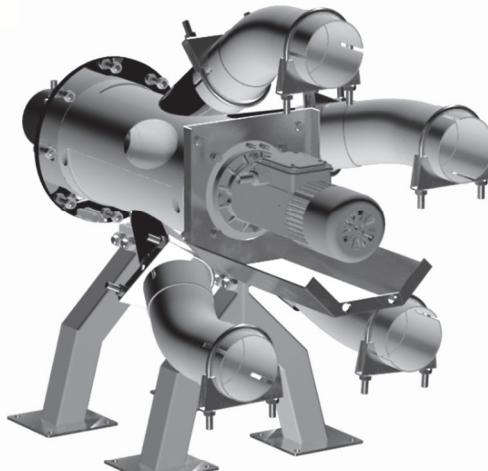


The pipefeeding system is a centralized solution for high volume feeding to be used in offshore –and land based farming as well as RAS-facilities

The system uses comparably low air pressure to operate thus eliminating the air heating problem in the pipeline and cutting out the need for a cooling component

The feed silos will ideally be placed in a feed storage area where they can be refilled easily

From there the system uses a powerful blower to propel the feed down a single 75 mm HDPE pipe to revolvers and onwards up to 300 metres away. This single pipe principle reduces the required pipe amount minimizing possible pipe related problems



5 – Way revolver unit cross-section



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Complete Feeding Network

Combine all systems – access remotely

Remote & Roaming users

- Connect to your farms online using VPN tunnel
- Online water quality & feeding monitoring



Head Office / Plant

- Server PC – All information in one database
- Primary user interface
- Manage all connected control units



Control units

- Cable, radio or LAN communication
- Up to 30 control units together
- Local control interface



Field equipment

- All connected feeders & robots
- Sensors, probes, light controls and other devices



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Web Based User Interface

Easy to use graphic interface on your browser

Measurements monitoring view



Adding a PC connection with web based software to Arvo-Tec feeding system gives access to clear, easy to use graphic interface with optimized functions for managing your farm with ease

Quick overview of your measurements, alarms and detailed tank status

Create day reports, feed reports and store all that data in one database

Export data to be used by 3rd party software

PC connection enables on-line support from Arvo-Tec service team should the need arise

Tank:	3	Tank name:	5-3	Updated:	23.09.16 10:09:53	
Group:	1	Fish name:	Fish3		<input type="button" value="←"/>	
Control Unit:	5					
FEEDING						
Feeding formula:	Trout					
Feeding change:	0.15					
Feeding rate:	0.231 %					
Daily dose:	4.998 kg					
One dose:	315.36 g					
Feeding frequency:	16					
Fed total:	1,579.45 kg	<input type="button" value="Reset"/>				
Fed today:	2.208 kg	<input type="button" value="Reset"/>				
Fed yesterday:	5.046 kg					
FISH						
Fish amount:	25,478					
Average weight:	84.97 g					
Biomass:	2,164.91 kg					
Mortality:	322	<input type="button" value="Reset"/>				
DOSING UNITS						
Name:	Dosing unit1	Oxygen in outlet:	12.538 mg/l			
Speed:	1.752 g/s	Water flow in:	999 l/s			
WATER						
Metabolised energy:	20 MJ/kg	Water flow need:	9.213 l/s			
FEED						
Feed Name:	Feed1					
Feed consumption:	3,213.79 kg					
FCR:	0.8					
INTERRUPTION						
Timed:	00:00:00	In use:	Off			
MEASUREMENTS						
Temperature:	9.679 °C					
Oxygen:	12.617 mg/l					
DOSING:						
Dosing time:	180 s					
Amount of Doses:	1					
Pause time:	01:14:49.00					
Minimum pause:	1 s					
Test:	0 s					
ALARMS						
No Time To Feed:						
Too Small Dose:						
Low Oxygen:						
Oxygen Alarm:						
Group Interrupt:						

Detailed tank parameters

Technical specifications

- Web based – access through browser
- Access system worldwide on laptop / mobile device



Data-logging view



Feeding period adjustments



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Professional Feeding Solutions



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