

# Application brochure

Vacuum & overpressure systems for  
modern aquaculture logistics

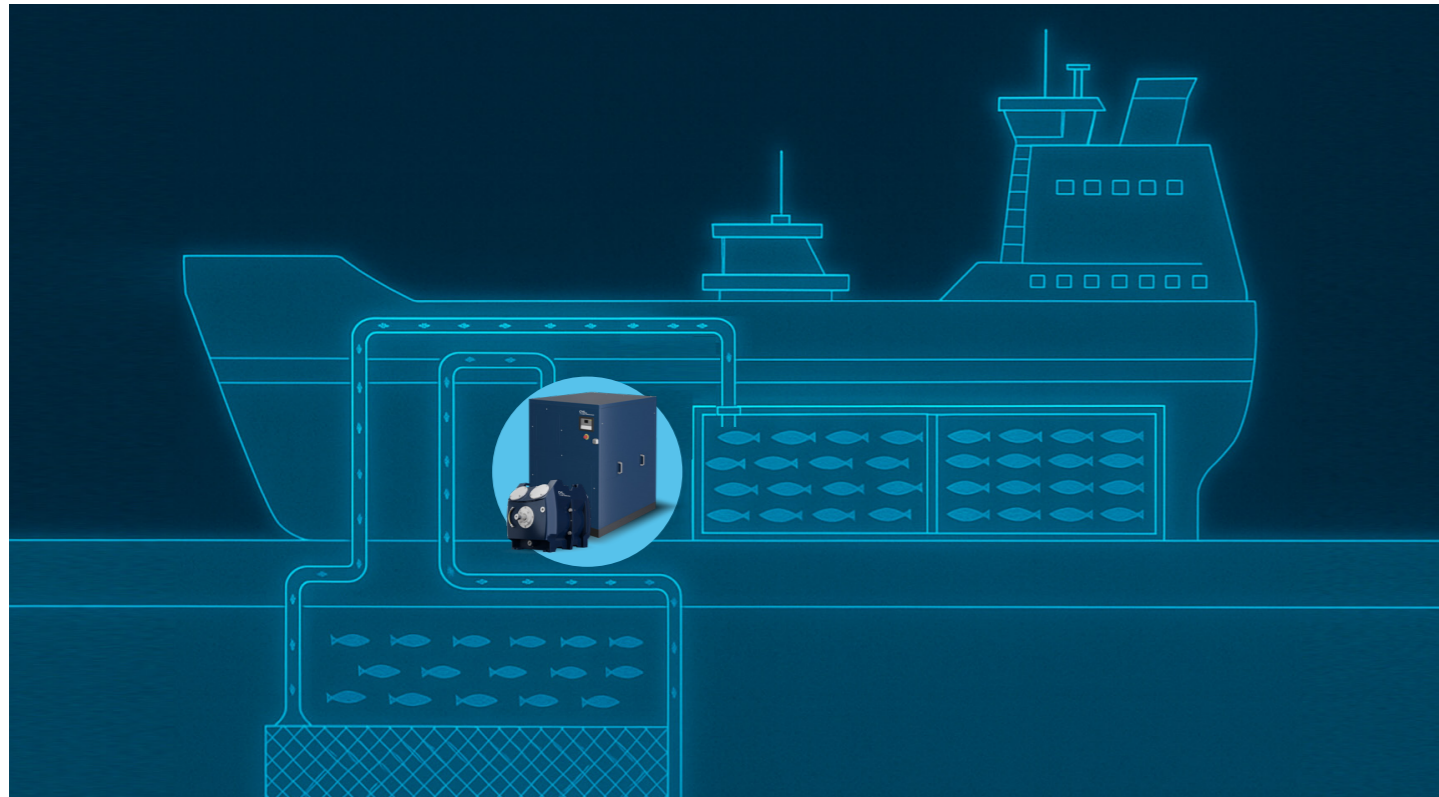


**Fish  
Handling**



# Reliable fish transport

From sea to shore



## Your challenge:

Fish handling is a critical step in aquaculture and seafood processing. Whether transferring live fish from offshore cages to wellboats or moving fish between tanks in land-based farms, it's essential to ensure stress-free, damage-free, and hygienic transport.

## Our solution:

CVS engineering provides advanced vacuum and overpressure systems designed for efficient and gentle fish handling – all engineered and manufactured in Germany.

### Our technology enables a two-phase fish handling process:

- **Vacuum loading:** Live fish and water are carefully drawn into a stainless-steel buffer tank using our reliable water ring vacuum pumps – ensuring minimal stress and fast loading.
- **Gentle transport:** The entire process is optimized to avoid mechanical contact with the fish, supporting healthy and humane logistics.
- **Efficient unloading:** Once the buffer tank is full, the system switches to overpressure mode, gently transferring fish into the main holding tanks.
- **System integration:** Available with our compact and efficient SKL-E Pack screw compressor unit for seamless performance.

# SKL-E Pack | VacuStar WR 1600

Two technologies – one optimized system

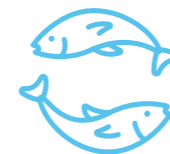
Traditionally, liquid ring vacuum pumps have handled both vacuum and overpressure. While effective, this setup can be energy-intensive and less efficient.

## CVS now offers a split system approach for better performance:

- **Liquid ring vacuum pump**
  - Constant suction
  - Gentle fish handling
  - Marine-grade design
  - Reliable under continuous load
- **SKL-E Pack screw compressor**
  - Separate unit for overpressure
  - Tailored compressed air supply
  - Energy-efficient and low-maintenance
  - Fully modular design



## Key benefits for aquaculture & fish logistics:



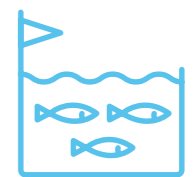
### Preserve fish quality

Gentle handling reduces stress and injury. Ideal for live fish transport and quality-sensitive operations.



### Seawater-resistant

Corrosion-resistant materials and components ensure reliable long-term operation in demanding marine environments.



### Modular and compact

Designed for tight spaces on vessels or farms. Easy to integrate and expand.



### Full system control

Automated switching from vacuum to pressure mode, with customizable parameters and smart process logic.



### Optimized operating costs

Separate systems allow each unit to run in its most efficient range. Result: lower energy consumption and longer service life.



### 100% Made in Germany

Designed, engineered, and built in-house at CVS Rheinfelden – with full quality assurance and expert support.

## Technical data:

VacuStar	Unit	WR 800	WR 1600
Max. suction volume flow	m <sup>3</sup> /h (cfm)	800 (470)	1.600 (940)
Max. operating pressure	bar g (psig)	2 (30)	
Max. operating vacuum with cell aeration	mbar (HG")	130 (26)	
Nominal speed	1/min (rpm)	800 – 1.800	
Power requirement at 0.5 bar g / 7.25 psig	kW (hp)	~27.5 (37.4)	~52.0 (70.7)
Sound pressure level in 7 m distance, at 0.5 bar g / 7.25 psig	dB(A)	~70	
Weight incl. changeover four-way valve	kg (lb)	~75 (165)	~110 (240)

SKL-E	Unit	610/1,5/30	430/2,5/30	800/1,5/37	860/1,5/45	980/2,0/55
Max. operating pressure	bar (g)	1,5	2,5	1,5	1,5	2,0
Speed	U/min	2400 – 3600	2400 – 2800	2000 – 3000	2000 – 3200	2000 – 3600
Suction volume flow	m <sup>3</sup> /h	395 – 610	375 – 430	500 – 800	500 – 860	490 – 980
Compressor		SKL 700	SKL 700	SKL 1100	SKL 1100	SKL 1100
E-Motor	kW	30	30	37	45	55

For information on additional pump configurations tailored to your application, please contact us directly.

## Dimensions:

