



**CARVER PUMP™**

Built for purpose



**850**

Horizontal Filtrate Pump



## 850

Specifically designed for filtration systems and abrasive fluid processes.

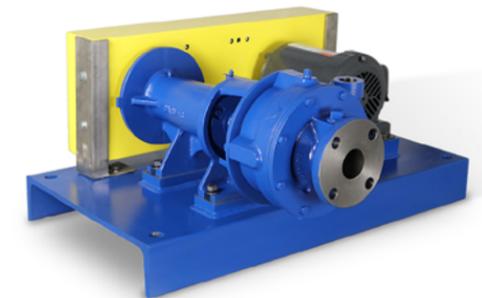
Rugged in design and dependable in nature, the 850 is a proven performer in some of the earth's toughest environments. Capable of operating in vacuum conditions up to 26" Hg, the 850 is well suited for vacuum filtration and dewatering systems with difficult suction conditions. A vent port allows pumping to resume even after short periods of interrupted flow, assuring continuous pumping, from a trickle to full capacity.

With a semi-open impeller and a variety of material choices ranging from duplex stainless steel to rubber lined, the 850 is ideal for abrasives and light slurry duty in the mining, power generation, and pulp and paper industries.

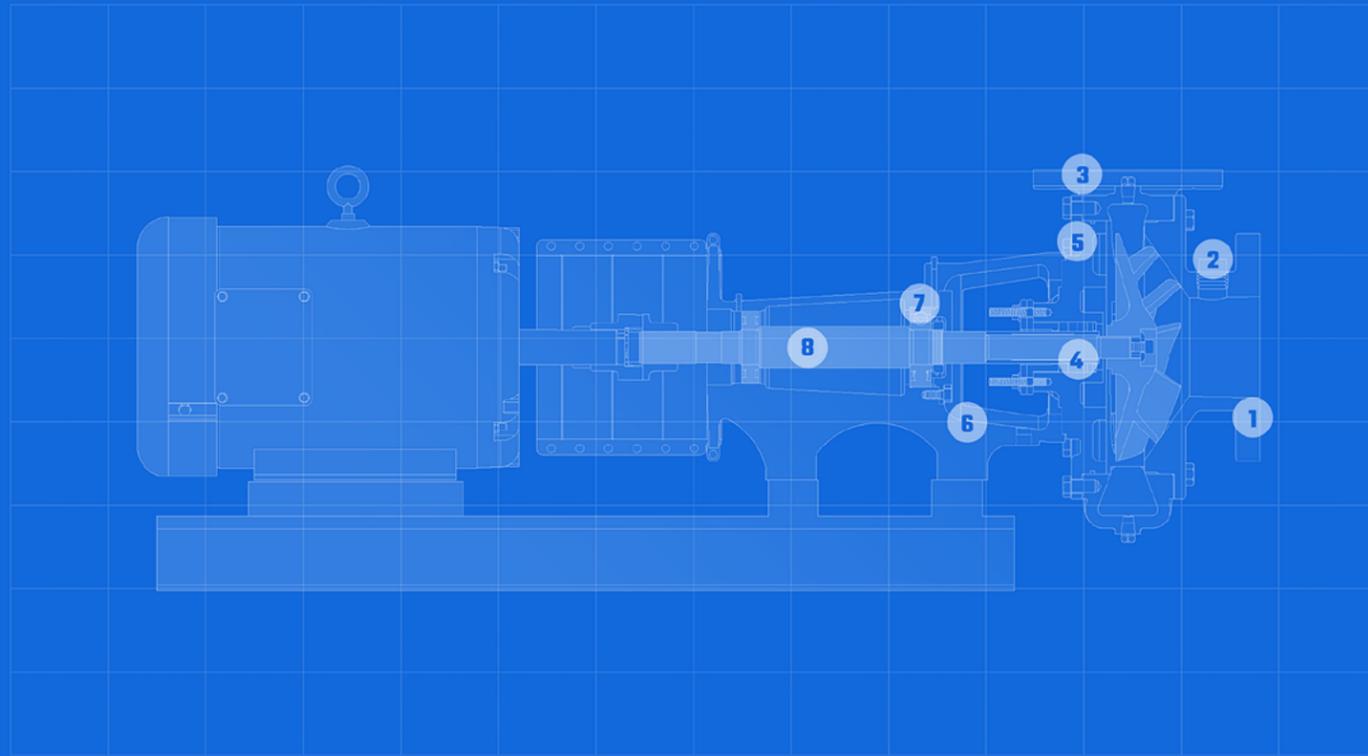
The 850 is available as either a close-coupled or frame-mounted unit with an option for a side-mounted motor with belt drive. By using either a belt drive or a variable frequency drive (VFD), performance can be fine-tuned to match most system requirements. The front and back pull-out design allows for easy maintenance. The pump comes standard with a packed stuffing box and flush water connections to ensure lubrication and eliminate vacuum or air leakage. A variety of shaft sealing options is available to meet the requirements of specific applications.



850



850 OPTIONAL SIDE-BY-SIDE



**1 SUCTION FLANGE**  
ANSI flat-face cast iron or stainless steel flanges for all sizes

**2 SUCTION VENT PORT**  
Allows pumping to resume even after short periods of interrupted flow

**3 DISCHARGE**  
Depending on size, the pumps come with NPT or Class 150 ANSI flanged discharge connections. All rubber-lined pumps have flanged discharge

**4 STUFFING BOX**  
Packed stuffing box as standard, mechanical seals are available as an option

**5 FRONT AND BACK PULL-OUT DESIGN**  
Allows removal of rotating elements and replacement of the shaft, impeller, or mechanical seal without disturbing system piping

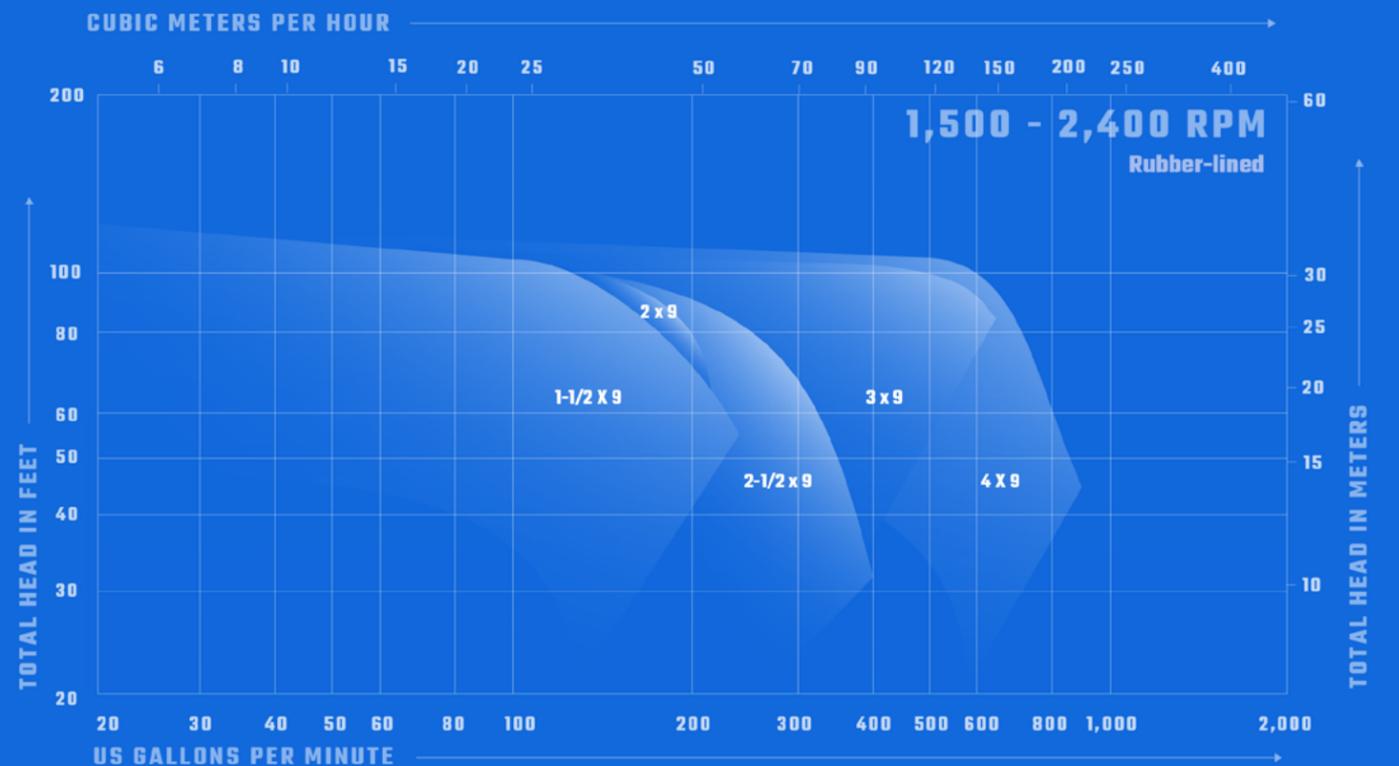
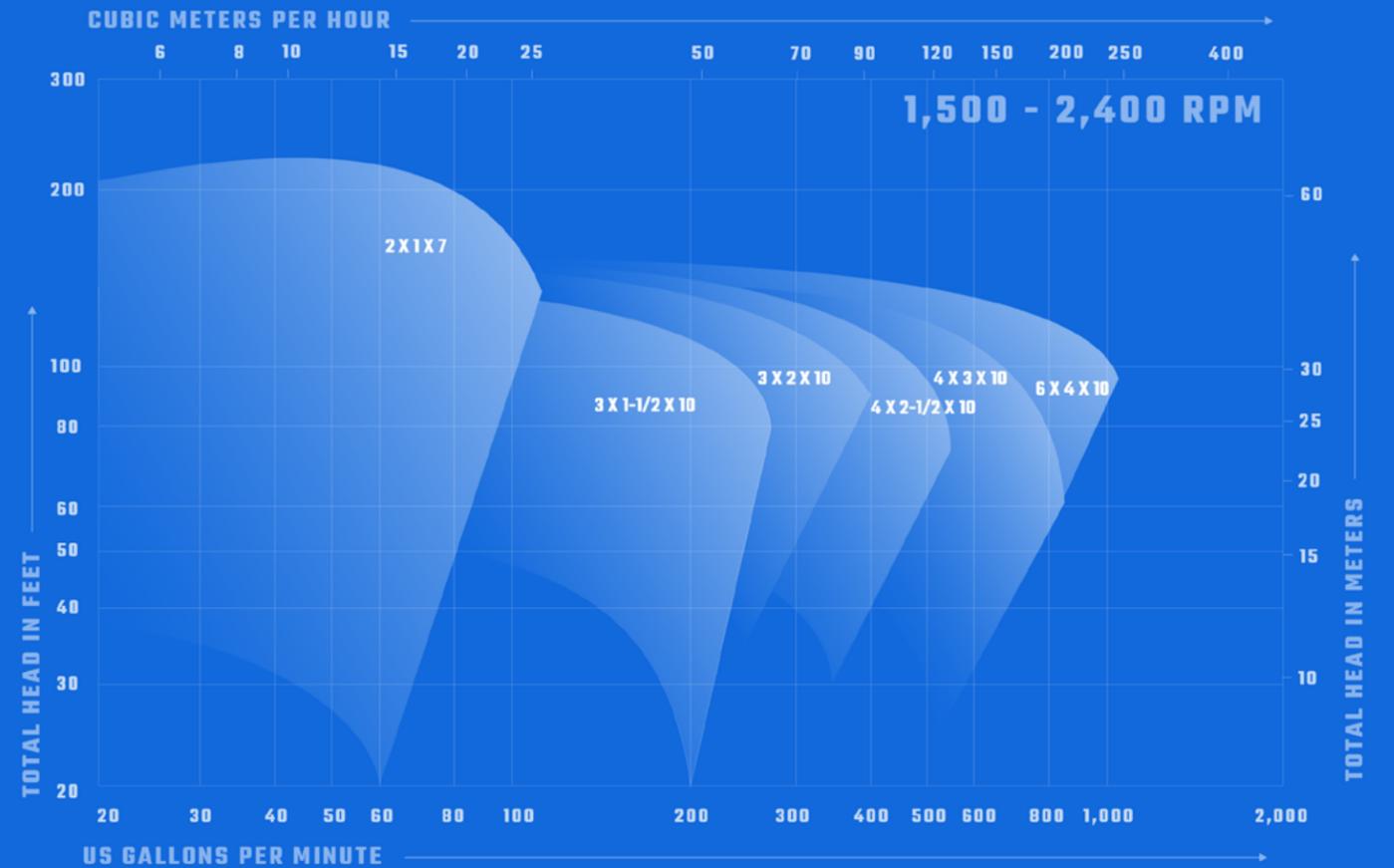
**6 BEARING FRAME**  
Heavy-duty, thick-walled frame supports the rotor, assuring less vibration, better alignment and longer life

**7 POSITIVELY LOCKED BEARINGS**  
Grease-lubricated ball bearings secured by locknuts eliminate axial movement at the impeller-to-casing clearances

**8 SHAFTS**  
Large diameter shafts with replaceable 316 SS shaft sleeves



Intertek



## WHY AN 850?

- Rotational speed can be adjusted with a VFD or by proper sizing of the belt drive system, to fine tune performance to match most system requirements.
- Semi-open impeller designed for filtrate and light slurry duty.
- Variety of mounting options reduces installation footprint.
- Rubber-lined option enhances abrasives handling.

### HYDRAULICS

- Flows to 700 US GPM (159 m<sup>3</sup>/hr)
- Heads to 120 feet (36 m)
- Power to 50 HP (37 KW)
- Temperatures to 250° F (121° C)
- Speeds to 2,450 RPM

### APPLICATIONS

- Minerals & Mining
- Power Generation
- Pulp & Paper
- Light Abrasives
- Condensate Systems

### STANDARD MATERIALS

Casing	Cast Iron, CD4MCuN or Rubber-Lined
Impeller	Cast Iron, CD4MCuN or Rubber-Lined
Shaft	Carbon Steel
Bearing Frame	Cast Iron

Other Materials Available Upon Request

### MECHANICAL DATA

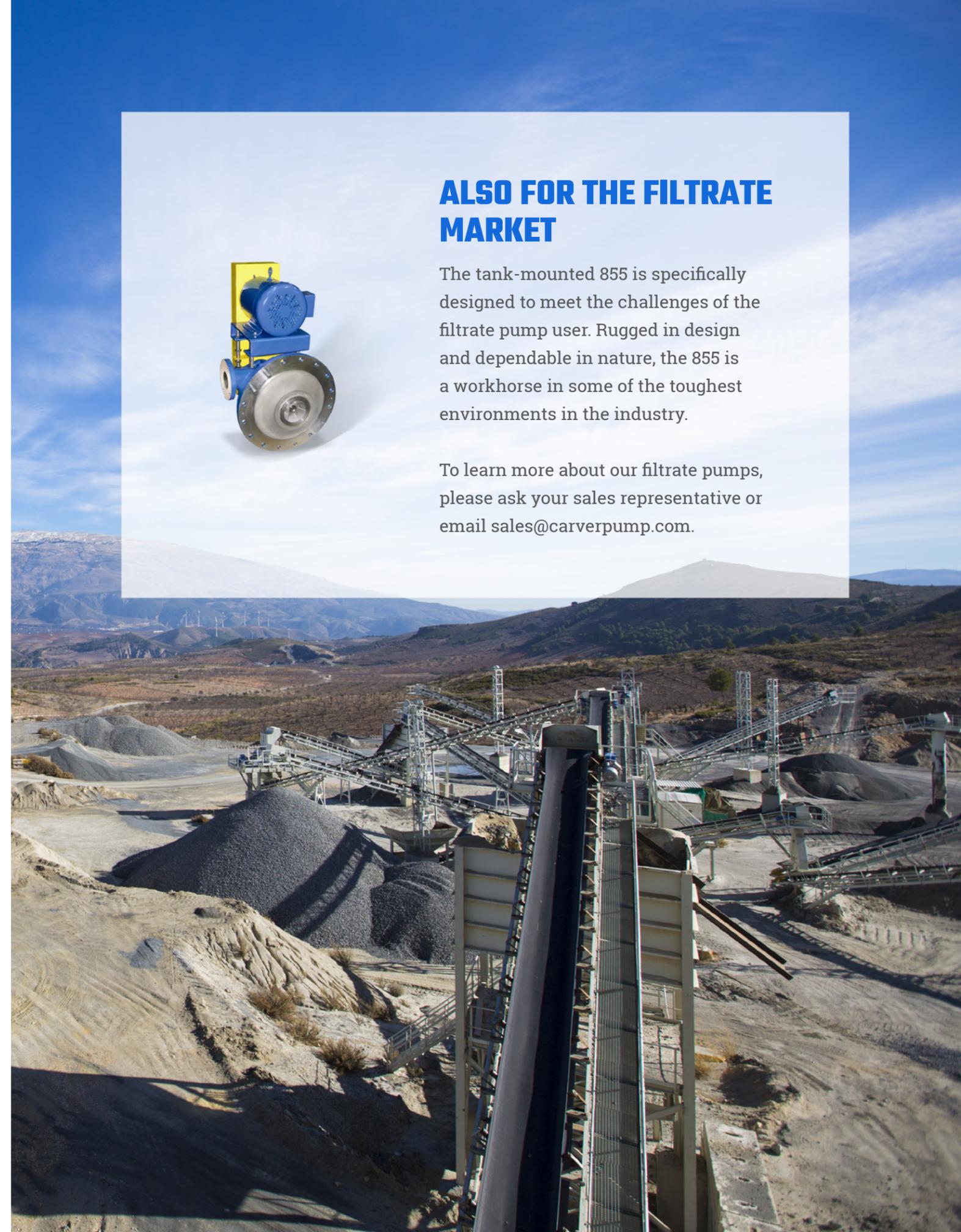
Rotation	Clockwise from Coupling
Input Power	Up to 50 HP
Discharge Connection	Determined by Size
Bearings	Greased

## ALSO FOR THE FILTRATE MARKET



The tank-mounted 855 is specifically designed to meet the challenges of the filtrate pump user. Rugged in design and dependable in nature, the 855 is a workhorse in some of the toughest environments in the industry.

To learn more about our filtrate pumps, please ask your sales representative or email [sales@carverpump.com](mailto:sales@carverpump.com).





## 80 years of experience

Since we built our first pumps in 1938, Carver Pump has become recognized as one of the leading centrifugal pump companies, building pumps to the most demanding engineering specifications and military standards in the world.

We were one of the first American pump companies to attain ISO 9001 certification – the most recognized standard for quality in the world. This certification is your assurance that our commitment

to quality includes not only our hardware, but also superior customer service, leading-edge R&D, and continuous improvement in everything we do.

So whether the job is refueling fighter jets on the deck of an aircraft carrier, supplying paint to an auto assembly line, or bringing water to the fountain in a city park, we put our reputation on the line everyday with every pump we build.

## Contact us

2415 Park Avenue  
Muscatine, Iowa 52761-5691  
USA

(563) 263-3410  
[sales@carverpump.com](mailto:sales@carverpump.com)  
[www.carverpump.com](http://www.carverpump.com)