

# FIVE THINGS YOU DIDN'T KNOW ABOUT ROTARY POSITIVE DISPLACEMENT PUMPS

## THE CHALLENGES YOU FACE EVERYDAY

You measure success by inventory turnover. Unloading and loading of product and petroleum tankers, rail cars and tanker trucks must be performed as quickly as possible. Wasted time is lost revenue. The fluid handling equipment at these facilities must not only be reliable, but efficient as well, delivering the flow needed to move fluids into, around and out of the terminal.

## ROTARY PD PUMPS - VOLUMETRIC MACHINES

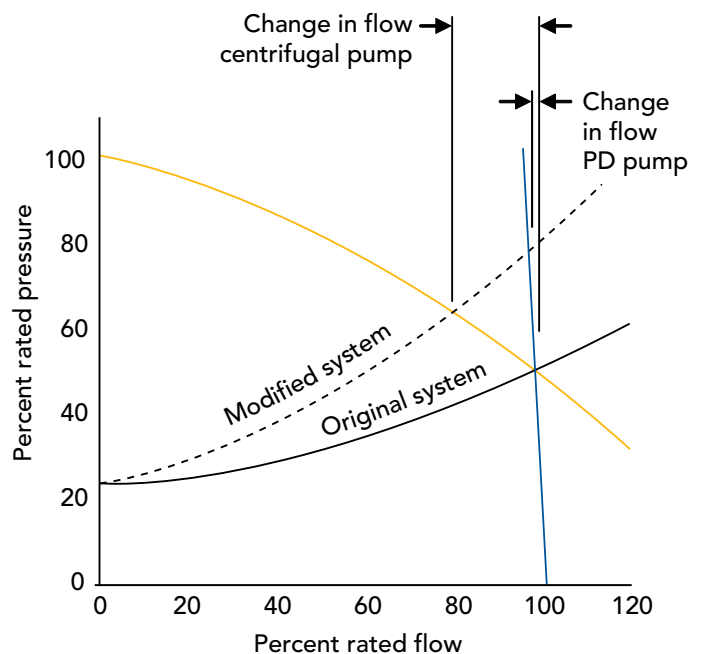
1. Positive displacement (PD) pumps don't develop head like centrifugal pumps: they move flow.
2. The flow rate of a PD pump, unlike a centrifugal pump, increases as the fluid viscosity increases.
3. PD pump performance is not dependent on specific gravity, unlike centrifugal pumps.
4. Rotary PD pump performance is not governed by the Best Efficiency Point (BEP) like centrifugal pumps.
5. Unlike centrifugals, most PD pumps are self-priming and some can pull almost a pure vacuum.

## ROTARY PD PRODUCT BRANDS

ALLWEILER® HOUTTUIN™ IMO® WARREN®

## AVOIDING LOST CAPACITY IS VITAL TO TERMINAL PERFORMANCE

In terminals, the process requirements will vary significantly throughout the day. Additional flow requirements, or the need to transfer more viscous fluids, will modify the behavior of your processes (see the adjacent graph). In the case of centrifugal pumps, the change in flow can be quite dramatic, whereas the rotary PD pump's performance is often only marginally affected.



**COLFAX FLUID HANDLING'S ROTARY PD PUMPS HELP YOU COMPLETE FLUID TRANSFER OPERATIONS SAFELY AND ON TIME, SO THAT YOU CAN MOVE ONTO YOUR NEXT TASK.**

**COLFAX**®  
Fluid Handling

# VOLUMETRIC FLUID HANDLING TECHNOLOGIES GIVE YOU THE PERFORMANCE CONTROL THAT YOU NEED TO RUN A WORLD-CLASS FACILITY.

## ENSURING EFFICIENCY FLOWS DOWNSTREAM

For offloading and management within the facility:

	Flow rates up to:	Pressures up to:
Vessel unloading	5000 m <sup>3</sup> /h (8800 usgpm)	16 bar (230 psi)
Circulation and blending	300 m <sup>3</sup> /h (1325 usgpm)	10 bar (145 psi)
Tank-to-tank blending	1000 m <sup>3</sup> /h (4400 usgpm)	10 bar (145 psi)

For exporting from the facility:

	Flow rates up to:	Pressures up to:
Vessel loading	5000 m <sup>3</sup> /h (13250 usgpm)	16 bar (230 psi)
Truck loading	100 m <sup>3</sup> /h (440 usgpm)	10 bar (145 psi)
Injection and pipeline transfer	750 m <sup>3</sup> /h (3300 usgpm)	100 bar (1450 psi)
Pipeline stripping	500 m <sup>3</sup> /h (2202 usgpm)	10 bar (145 psi)

## REDEFINING WHAT'S POSSIBLE

In your world, getting things done requires having the right resources in place – people you can count on, products you need and service when you need it. That's why we're building our business around the same things that drive yours.

At Colfax Fluid Handling, you get more than just another product off the shelf. You get 150 years of application experience, technology that's relied on to move more than 4.5 million barrels of oil every day worldwide and a team of product and service specialists tasked with maximizing the uptime and efficiency of your operation – from upstream process to downstream refining.

### Colfax Fluid Handling

1710 Airport road  
 Monroe, NC 28110-5020  
 USA

Tel: 704.289.6511

Tol: 877.853.7867

[www.colfaxcorp.com/oil-gas](http://www.colfaxcorp.com/oil-gas)

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