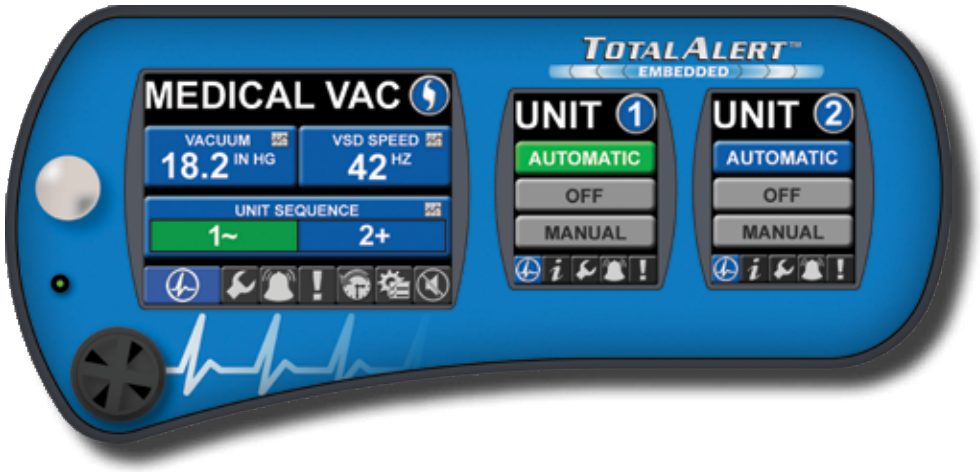
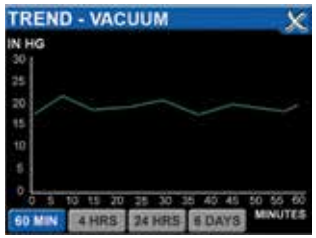
Claw Medical Vacuum

BeaconMedæs®



TotalAlert Embedded Touchscreen Controls: Detail View



Trend screens for historical analysis of problems or potential problems

Service screens with countdown timers and alerts for upcoming maintenance items

Download event logs for alarm and service history

Touchscreen Functionality

The Claw LifeLine Medical Vacuum systems feature high-detail touchscreen controls. All systems incorporate a large "system" screen with additional "unit" screens for each pump/motor combination. Easy-to-read color graphics and icons make navigation simple and display the system's vital information.

- *Motion sensor activates touchscreens, preserving the screen life*
- *Self-diagnostic alerts to inform you of potential system problems before becoming alarm/shutdown conditions*
- *Maintenance alerts to keep your vacuum system services on schedule*

TotalAlert Embedded

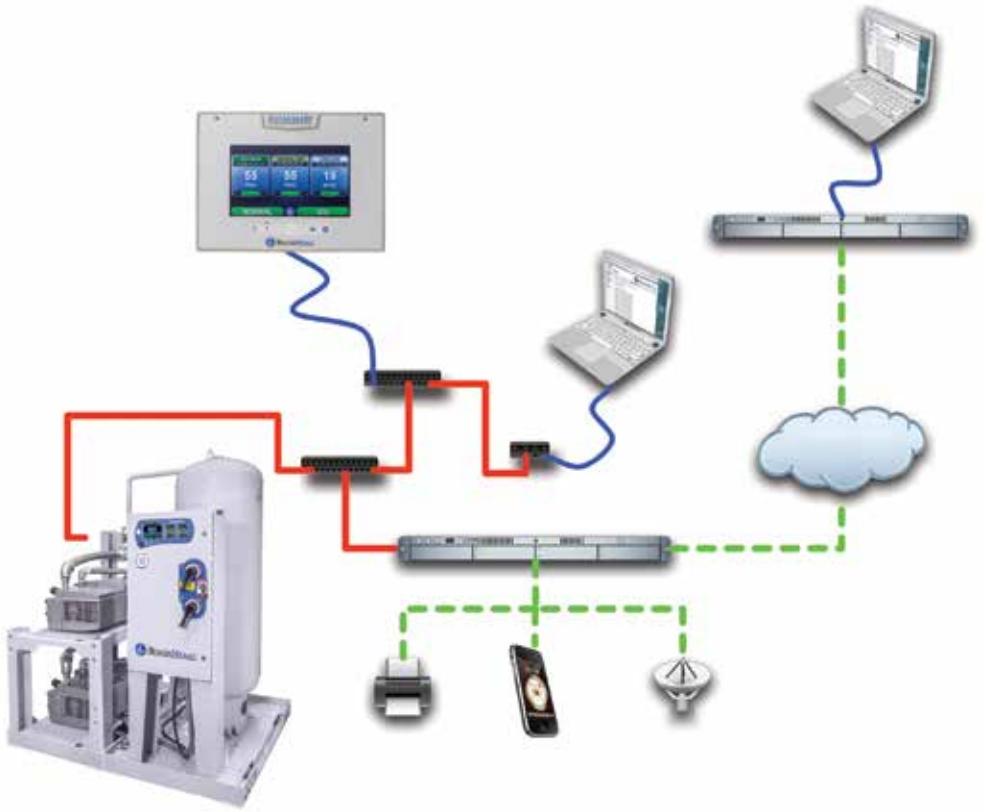
The TotalAlert Embedded controls enable you to network your Claw system with your TotalAlert alarm panels through your facility's Ethernet. By simply connecting the control panel to an Ethernet hub, you can monitor the system remotely from any computer on the facility's network. No additional wiring, no additional software - all inclusive out of the gate.

- *Text/e-mail alerts and alarms notify the right people immediately*
- *Ethernet communication compatible with TotalAlert alarm systems*

TotalAlert Embedded Network

The TotalAlert Embedded network puts all of the information from your source equipment and alarms at your fingertips. Each unit comes fully equipped with an embedded web server - all you have to do is plug it into the facility's Ethernet and pull up the unique web address on any web browser on the network.

All devices communicate with each other through the Ethernet, allowing you to access the event logs of each device, see the pertinent information and statistics, and view trends right from your desktop or any computer in the facility. Each device is capable of sending text/e-mail alerts for all warnings and alarms.



Most Efficient Vacuum Technology Available

Utilizing a dry, frictionless, multi-claw technology, the BeaconMedæs Claw Vacuum System can provide significant savings in energy costs. The rotors (claws) spin in opposite directions, synchronized via precision gears. Although the pump design holds very tight clearances, the rotors never contact the housing or each other. This removes the need for any lubricant or seal fluid inside the pumping chamber and provides a highly efficient operation. High efficiency equals less horsepower and therefore less power cost over the life of the system. Uniquely, the variable speed drive option enhances power saving and machine life.

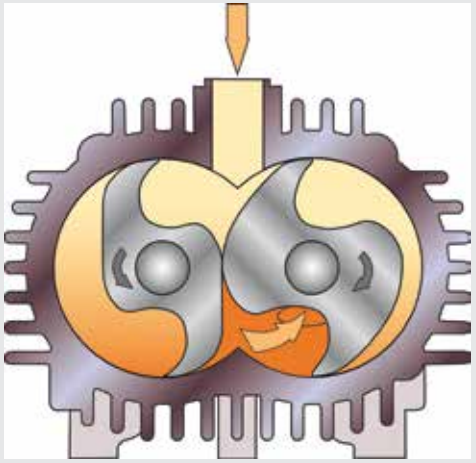
Low Maintenance

The BeaconMedæs Claw has the lowest maintenance requirements of any vacuum system. Due to the contactless operation and no lubricant in the pumping chamber, the only maintenance required for the Claw is simply changing gear lubricant and changing an inlet filter annually.

Claw Principle

As the rotors rotate, a void is created on the inlet side of the pumping chamber, pulling air inward.

The trapped air is then pushed to the discharge side of the pumping chamber where it is first internally compressed then discharged.



Lowest Operating Costs

The Claw is the least expensive technology over a five year cost of ownership when compared with any other medical vacuum technology. Due to the superb efficiency of the Claw, which creates higher SCFM per HP, other technologies require more horsepower to achieve equivalent flows to the Claw. When you combine the high efficiency of the Claw with the low maintenance requirement, you will find it has superior operating costs over the life of the system.

Variable Speed Drive Option

Variable Speed Drive

In medical facilities, the vacuum system must react to continuous demand fluctuations. Variable Speed Drive technology matches motor speed to vacuum demand, resulting in maximum efficiency of the vacuum system. The VSD provides the right amount of vacuum at all times: no more, no less.

Energy Efficiency

Conventional vacuum pumps run at full capacity to fill even the slightest demand, often running at partial loads but consuming power at full capacity. The VSD minimizes energy consumption and significantly reduces your energy expenses by matching the motor speed to the changing vacuum demand.

Longer Machine Life

Operating with low starting currents and slower pump speeds decreases machine and component wear. This results not only in lower maintenance costs, but lengthens the vacuum system life.

Reduced Noise and Heat

The Variable Speed Drive runs the vacuum at lower revolutions per minute than conventional systems. At lower operating speeds, the vacuum pumps emit less noise and heat into the equipment room, creating a better working environment.

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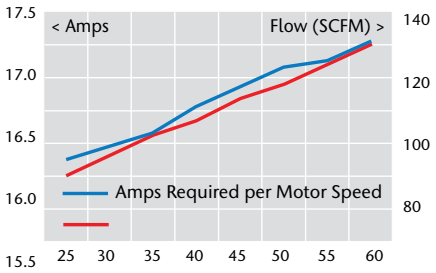
Vacuum Consistency

Functioning with a single vacuum level set point and adjusting motor speed in reaction to demand changes, the VSD maintains vacuum level consistency. This consistency improves the overall efficiency and quality of all vacuum end processes.

Variable Speed Drive Option

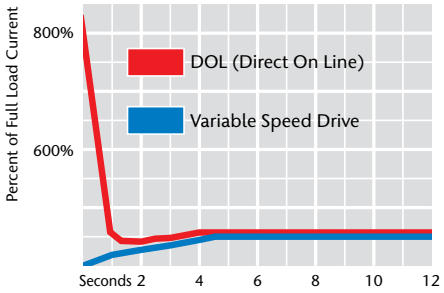
Variable Motor Speed



Energy Savings

While conventional pumps operate at full motor speed (60 Hz), the VSD modulates the motor speed between 25 and 60 Hz to match vacuum flow demand while reducing the amps required by the system (Data is typical 15 Hp with 19" Hg vacuum set point).

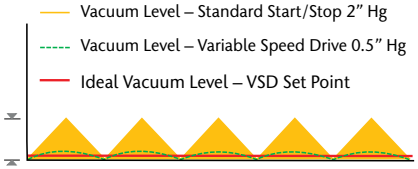
Low Starting Current



No current peaks

Variable Speed Drive creates smooth vacuum pump starts. This eliminates current peaks and reduces demand charges from the utility company.

Vacuum Set Point



Consistent vacuum level

Virtually constant vacuum level over a wide capacity range (vacuum level band of 0.5" Hg) minimizes energy consumption and ensures vacuum level stability.

BeaconMedæs

Multiple Configurations

BeaconMedæs offers the Claw in a variety of formats in an effort to match your specific requirements.

- *Space saving vertical package for smaller horsepowers, with VSD available on 5.4 HP*
- *Single Point Connection base mount systems in all sizes 5.4 HP and larger, with the VSD option available*
- *Modular base mount systems to accommodate unique space requirements in all sizes 5.4 Hp and larger, with the VSD option available*

System Start Up

Your BeaconMedæs Claw Vacuum plant includes the official start up by a BeaconMedæs service technician. With critical functions relying on your medical vacuum system, it's essential to have proper installation and functionality from start up.

- *Proper system operation is assured*
- *Time and money savings if problems occur at start up*
- *Elimination of potential warranty issues in the future*

Preventive Maintenance

The efficient operation and service friendly design of the Claw Medical Vacuum Systems keep maintenance interventions to a minimum. Effective service access combined with extended service intervals reduces maintenance downtime and increases vacuum availability.

- Low level of consumable parts
- Direct access to all service points
- Service warning function available via the TotalAlert Embedded controller
- BeaconMedæs Planned Maintenance Program available

Claw Medical Vacuum

Vertical Configuration			
Power[1]		System Capacity[2]	
HP	Kw	SCFM@19" Hg	lpm@450 mmHg
2	1.5	16	453
3	2.2	21	595
4	3.0	29	821
5	4.0	38	1,076

Modular or Single Point Connection Configuration			
Power		System Capacity	
HP	Kw	SCFM@19" Hg	lpm@450 mmHg
DUPLEX			
5	4.0	38	1,076
6.4	4.8	52	1,473
7.5	5.5	65	1,841
9	6.5	77	2,181
10	7.5	87	2,462
15	11.2	129	3,509
TRIPLEX			
5	4.0	76	2,152
6.4	4.8	104	2,946
7.5	5.5	130	3,682
9	6.5	154	4,362
10	7.5	174	4,924
15	11.2	258	7,018
QUADRUPLEX			
5	4.0	114	3,228
6.4	4.8	156	4,419
7.5	5.5	195	5,523
9	6.5	231	6,543
10	7.5	261	7,386
15	11.2	387	10,528
PENTAPLEX			
15	11.2	516	14,037
HEXAPLEX			
15	11.2	645	17,546

Notes:

1. Power is nameplate motor Hp and not necessarily the exact draw of the vacuum pump. kW are a conversion from horsepower.
2. All capacities are shown as NFPA system capacities (reserve vacuum pump

Life is in the details.®

ISO 13485 ISO 14001 OHSAS 18001

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