

# Micro Brewing



Pumps  
Inverters  
Sales  
Support

simplify pumping



Technology at work for you.

## Micro Brewing in the 21st century

The micro brewing industry has grown tremendously over the past few years and we have grown to understand the requirements of the pumps used.

There have been various manufactures who have been used based on various reasons from cost, application and personal choice.

We attempt to pass over our many years of pumping knowledge for your specific market and guide you to the correct pumping equipment for your own individual application.

The most common pump used by Micro Brewers is the Ebara CDX range along with the Lowara CEA. These pumps are not hygienic pumps but when used with good CIP [clean in place] practices they are a cost effective product. The down side is that they generate a minimum of 16mts pressure when in hydraulic balance [No cavitation] which against most systems is far too much pressure causing cavitation and premature failure, the velocity may also be damaging to your product. The majority of you use a maximum height of tank of 2mts along with a heat exchanger that has a loss of 0.5bar to 1bar. This equates to a pump pressure required of a maximum 1.2bar or 12mts.

The second issue you have is the materials of the pump and its components. The stainless steel is not highly polished so it has surface crevice's where growth can take place. This is where good CIP practice is important. Using a warm caustic wash the rubber element's in the pump have to be resistant, where the standard nitrile pumps and Viton fitted are not suitable.

Finally, you have an issue with the mechanical seal. As many of you transfer one pump around to carry out more than one application, the seals on standard pumps are not always suitable for each application, hence their premature failure.

The face materials of the seal have to be correct to allow the pumps to be used on different products. We have found through working with a seal manufacture and customers, a seal that is acceptable and meets the requirements of the majority.

We also have a pump with an open vane impeller to take solids / Wort, give an appropriate lower pressure to avoid cavitation and is fitted with the seal to cover the majority of applications. The pumps are the SMINOX/A.

We can assemble existing pumps and new pumps with inverters allow the varying of flow and pressures to meet the specific system. This will reduce energy costs and prolong the life of your pumping equipment.

### PUMP SOLUTIONS

- Ebara CDX Pumps
- Lowara CEA Pumps.
- Variable speed inverters.
- Seal selection.
- Hydraulic selection for your system.



## CUSTOMER SOLUTIONS

We offer to you the pumps and inverters for your application. If you require assistance or would just like to talk to someone about your pumping requirements please call 0161 428 0133

## SEAL OPTIONS

- ◇ Standard - Carbon Ceramic Nitrile
- ◇ Hot Water - Carbon Ceramic Viton
- ◇ Wort - Silicon Tungsten Viton
- ◇ Caustic - With EPDM
- ◇ All rounder - Silicon Carbon EPDM
- ◇ Best - Silicon Tungsten EPDM

## INVERTER

We use the Speedboard inverters which are integrated onto the motor housing keeping the Ingress Protection of the motor.

If you have to replace a pump or inverter you then do not have to replace the whole unit.



Supplier	Model	Suction BSP	Delivery BSP	Supply Voltage	Max Flow L/Min	Min pressure Mts	Max pressure Mts	Inverter 230v	Inverter 400v
Ebara	CDX 70/05	1 1/4	1	400/3/50	80	16	20.7		1305TT
Ebara	CDXM 70/05	1 1/4	1	230/1/50	80	16	20.7	1010MT	
Ebara	CDX 70/07	1 1/4	1	400/3/50	70	22	28		1305TT
Ebara	CDXM 70/07	1 1/4	1	230/1/50	70	22	28	1010MT	
Ebara	CDX 90/10	1 1/4	1	400/3/50	100	20.5	30		1305TT
Ebara	CDXM 90/10	1 1/4	1	230/1/50	100	20.5	30	1010MT	
Ebara	CDX 120/07	1 1/4	1	400/3/50	160	17	20.5		1305TT
Ebara	CDXM 120/07	1 1/4	1	230/1/50	160	17	20.5	1010MT	
Sumak	SMINOX/A100T	1 1/4	1 1/4	400/3/50	300	3	13		1305TT
Sumak	SMINOX/A100	1 1/4	1 1/4	230/1/50	300	3	13	1010MT	
Sumak	SMINOX12-220/2T	1 1/4	1/1/4	400/3/50	170	20	47		1305TT
Sumak	SMINOX12-220/2	1 1/4	1/1/4	230/1/50	170	20	47	1010MT	

## Our Products



**Sumak SMINOX**

Sumak SMINOX /A100 pump with open impeller for Wort, transfer, bottling and recirculation, hot water



**Ebara CDX**

Ebara CDX pump with closed impeller for Wort, hot water, heat exchanger cooling



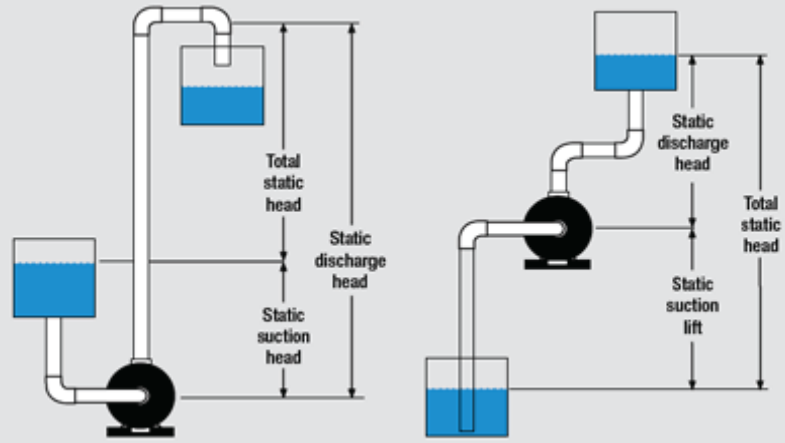
**Ebara CDX + Speedboard**

Ebara CDX pump with Speedboard inverter for Wort, hot water, heat exchanger cooling, transfer, bottling

Speedboard Inverters can also be fitted to the Sumak pumps. We can also retrofit to existing pumps.

<u>Heading</u>	<u>Input</u>	<u>Data</u>
Pipe Size Suction		Inch / MM
Pipe Size Discharge		Inch / MM
Static Height from pump		Metre / Ft
Bends / Elbows		Total Qty
Valves		Total Qty
Heat Exchanger loss		Metres / Ft
Filter Loss		Metres / Ft
Clean in place with		Yes / No
Energy Saving Inverter		Yes / No
Supply Voltage		Single / Three

Centrifugal Pump Services Ltd are here to assist. Please do not hesitate to call and ask for pumping advice, IT IS FREE !



**Static Head** – The hydraulic pressure at a point in a fluid when the liquid is at rest.

**Friction Head** – The loss in pressure or energy due to frictional losses in flow.

**Discharge Head** – The outlet pressure of a pump in operation.

**Total Head** – The total pressure difference between the inlet and outlet of a pump in operation.

**Suction Head** – The inlet pressure of a pump when above atmospheric pressure.

**Suction Lift** – The inlet pressure of a pump when below atmospheric pressure.

Simplify Pumping

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