

# *iGX NEXT GENERATION DRYPUMPS*

The iGX Dry Vacuum Pump Series sets new standards for zero maintenance between major overhauls. Improved efficiency lowers the cost of ownership and provides continuous pumping duty throughout the pressure range. iGX drypumps include Ethernet connectivity allowing key data to be viewed via web pages, as well as a comprehensive set of networking options to assure continuous pump availability.



iGX pumps are available in a wide range of peak speeds and variants to address applications from clean through to medium-duty processes. A modular design allows users to configure iGX drypumps to suit individual fab requirements. A compact footprint allows installation options including on-tool, close proximity, or remote.

## *Features and Benefits*

- **Reduced Cost of Ownership**
  - Up to a 50% reduction in utilities cost compared to iL/iH drypumps
  - No preventative maintenance
- **Flexible Installation Options**
  - Small and light for easy installation
  - On-tool, close proximity, or remote
- **Possible Tool Throughput Improvements**
  - One of the fastest loadlock pumps available
- **Consistent Pumping Performance Globally**
  - Pumping speed identical at 50 and 60 Hz
- **Reduced Ambient Noise**
  - Only 55 dB(A)
- **Wide Range of Peak Speed**
  - 100, 300, 600 and 800 m<sup>3</sup>h<sup>-1</sup>

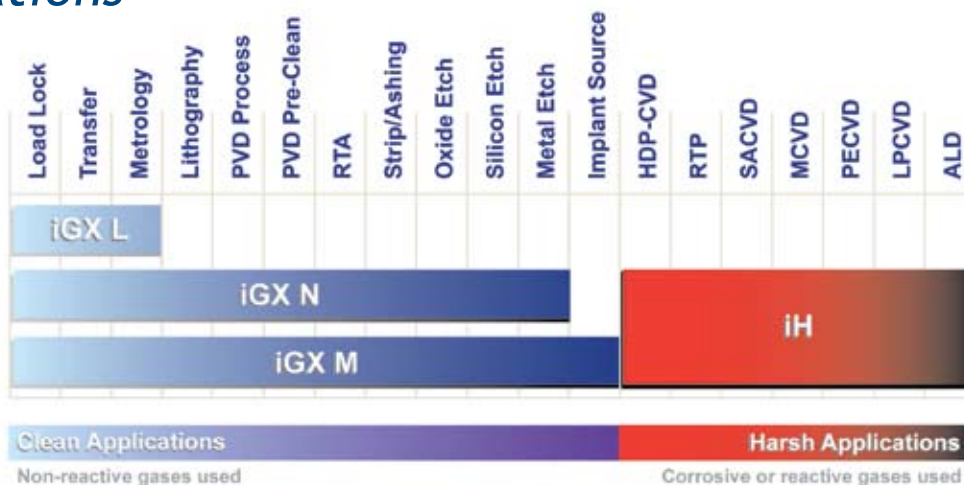
# iGX NEXT GENERATION DRYPUMPS

## Specification

	iGX	100	300	600	1000
<b>Performance</b>					
<i>Peak Speed</i>	m <sup>3</sup> h <sup>-1</sup>	105	365	620	800
	cfm	62	215	365	471
	l min <sup>-1</sup>	1750	6083	10333	13333
<i>Ultimate pressure</i>	mbar	5.00E <sup>-03</sup>	7.00E <sup>-04</sup>	7.00E <sup>-04</sup>	1.00E <sup>-03</sup>
	torr	3.75E <sup>-03</sup>	5.25E <sup>-04</sup>	5.25E <sup>-04</sup>	7.50E <sup>-04</sup>
	Pa	0.50	0.07	0.07	0.10
<b>Power at 700 torr exhaust</b>					
<i>Ultimate</i>	kW	1.0	1.6	1.6	1.6
<i>AUC (Active Utility Controller)</i>	kW	0.05	0.05	0.05	1.05
<b>Water*</b>					
<i>Water inlet</i>	slm	1.0	2.0	2.0	2.0
<b>Nitrogen</b>					
<i>L Variant</i>	slm	0	0	0	N/A
<i>N Variant</i>	slm	4 or 14	4 or 14	4 or 14	4 or 14
<i>M Variant</i>	slm	4 to 44	4 to 44	4 to 44	N/A
<b>Installation details</b>					
<i>Footprint (excl. exhaust)</i>	m <sup>2</sup>	0.20	0.20	0.20	0.20
<i>Weight</i>	Kg	120	200	220	230
<i>Inlet connection</i>		ISO63	ISO100	ISO100	ISO100
<i>Outlet connection</i>		NW25	NW25	NW25	NW25
<i>Noise at ultimate</i>	dB(A)	<55	<55	<55	<55

\* Requires constant flow valve accessory

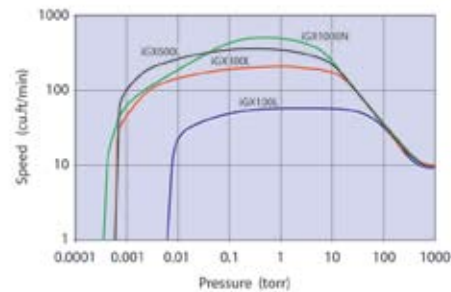
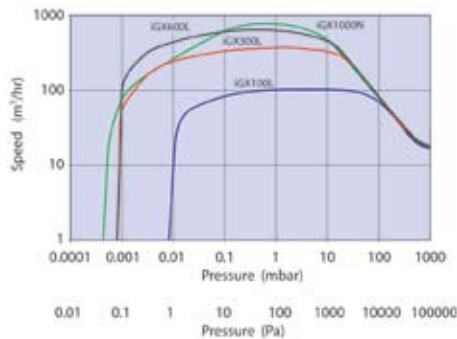
## Applications



(1) If process carryover is expected, use the iGX 'N' variant.

Contact Edwards for additional technical information on a particular application.

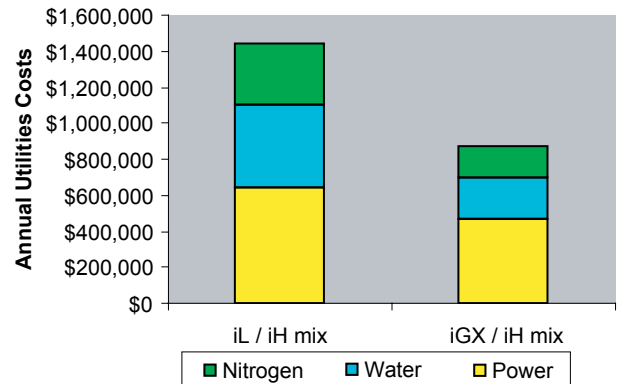
## Speed Curves



## Lower Utilities Costs

Typically a 40% saving can be made on utilities costs over an entire fab.

- Based on a 300mm fab in the US, containing 200 tools, 537 pumps
- 70% iGX pumps, 30% iH pumps
- iGX fitted with constant flow water valve



## Designed for Energy Efficiency

- High performance motors and inverter drives  
*Low operating power consumption*  
*Lower power standby mode using Active Utility Control (AUC)*
- Nitrogen dilution can be tuned to the application requirement  
*Minimizes gas usage*
- Highly efficient cooling  
*High conductivity materials and good design enables low water flow*
- Precision ceramic bearings  
*Very high load capability for reliability*  
*Low noise and vibration*

## Ethernet Connectivity

The iGX Series includes unique web serving functionality that allows viewing of key parameters through a simple Ethernet connection and browser.

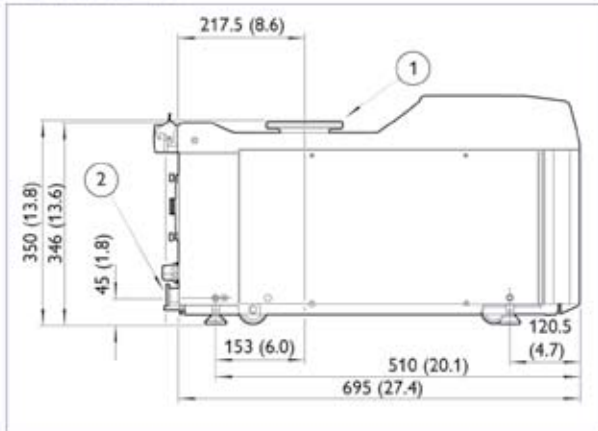
Any user can simply connect to the pump to view a range of information, such as:

- Operating status
- Key parameters
- Parameter setpoints
- Alert summary

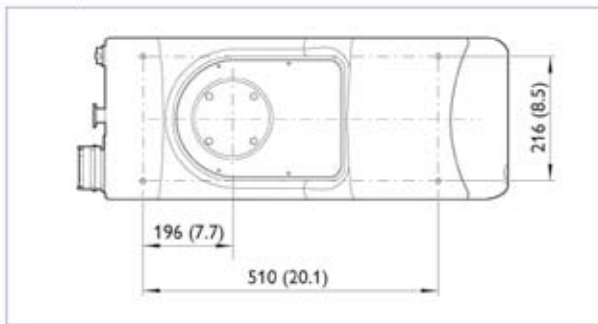
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## Dimensions - mm (Inches)

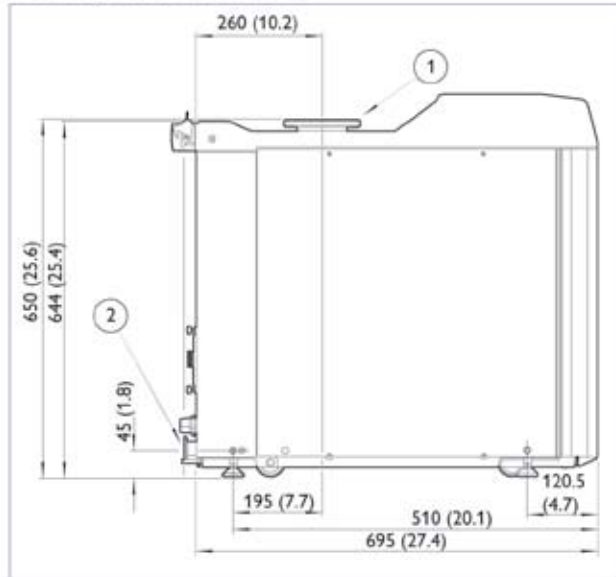
iGX100 Side View



iGX Top View



iGX 300, 600, 1000 Side View



1 Inlet Flange

2 Exhaust Flange



## Ordering Information

iGX100L 200 - 230V 50/60Hz	A54610958	iGX300L 380 - 460V 50/60Hz		iGX600N 200 - 230V 50/60Hz	A54631958
iGX100L 380 - 460V 50/60Hz	A54610959	iGX300N 200 - 230V 50/60Hz		iGX600N 380 - 460V 50/60Hz	A54631959
iGX100N 200 - 230V 50/60Hz	A54611958	iGX300N 380 - 460V 50/60Hz		iGX600M 200 - 230V 50/60Hz	A54632958
iGX100N 380 - 460V 50/60Hz	A54611959	iGX300M 200 - 230V 50/60Hz		iGX600M 380 - 460V 50/60Hz	A54632959
iGX100M 200 - 230V 50/60Hz	A54612958	iGX300M 380 - 460V 50/60Hz		iGX1000 200 - 230V 50/60Hz	A54681958
iGX100M 380 - 460V 50/60Hz	A54612959	iGX600L 200 - 230V 50/60Hz	A54630958	iGX1000 380 - 460V 50/60Hz	A54681959
iGX300L 200 - 230V 50/60Hz		iGX600L 380 - 460V 50/60Hz	A54630959	iGX100MTI 200 - 230V 50/60Hz	A54648958

Edwards continually updates its products to match the evolving needs of the semiconductor industry. Specifications given here are subject to change without notice.

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