Meech IML Systems

Date: 27.10.2023



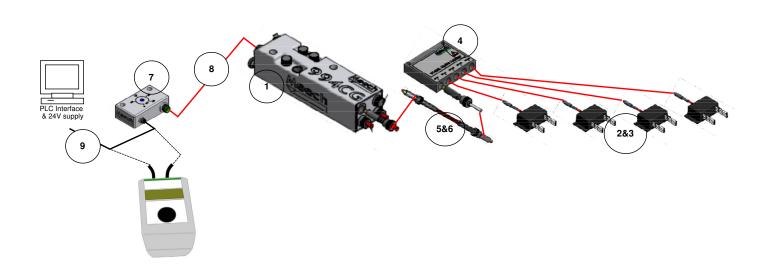
Meech designed their IML system to overcome all the common problems the industry found with existing IML technology.





The Meech 994CG IML system is made up of a number of different components, making it modular and simple to integrate with different robot requirements.

The following information shows how it fits together and how to order the different products to suit your application.



Product shown in this document may be covered by one or more patents, patents applied for and/or registered designs and/or trade marks. For further information please refer to our Head Office or visit www.meech.com

994 IML Generators

	Product Code	Product Description
1	A994CG-SOCKET-01	994CG Socket 994CG Miniture IML Generator, Socket version, Plug and Socket HT connections

Options for IML Hydra Pinning Equipment

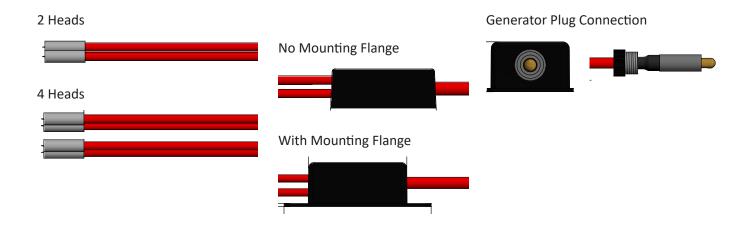
	Product Code		Product Description
7	A994CG-RSC-01	10 15 - 20 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	994CG Remote Setpoint Controller
8	A994CG-M12-FF10		M12 Cable, 5 pin, Female-Female, 10,000mm Drag Chain Spec
9	A900IPS-PCS2		Power Cable - 4 Pin M8 - 2m
4	A994-HY-SPLIT2	Hoda pana	Hydra IML splitter 2 way
4	A994-HY-SPLIT4	994ML tydis Santa	Hydra IML splitter 4 way
4	A994-HY-SPLIT8	994IM. Hydro Splitter To only only only only only	Hydra IML splitter 8 way
	A994CG-M12M8-1		M12-M8 Murr adaptor cable 1000mm for BarMaster to 994CG connection

5&6	A994-HY-HTCAB-M	Hydra HT Supply Cable 5000mm Male-Male
	A994-HY-HTCAB-F	Hydra HT Supply Cable 5000mm Male-Female
6	A994-HY-HT30	Extra 30kV Flexible HY Cable
	A994-HY-PINSHROUD	Titanium Pin and PTFE Shroud for 994 Hydra

994 IML Hydras

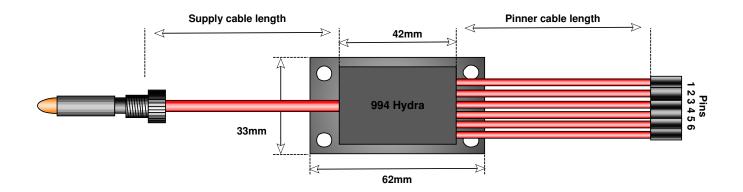
	Product Code	Product Description
2	A994-HYD-COMP01-S-4	Compact 4-way Hydra, Flangeless case Silicon cables, HT Plug-Socket connection
2	A994-HYD-COMP02-S-4	Compact 4-way Hydra, with Mounting Flanges Silicon cables, HT Plug-Socket connection
3	A994-HYD-COMP01-S-6	Compact 6-way Hydra, Flangeless case Silicon cables, HT Plug-Socket connection
3	A994-HYD-COMP02-S-6	Compact 6-way Hydra, with Mounting Flanges Silicon cables, HT Plug-Socket connection

Hydra Options

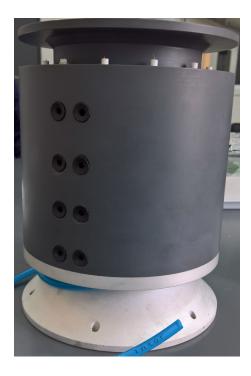


As standard the Hydras are supplied with 500mm supply cable length and 300mm Pinner cable length.

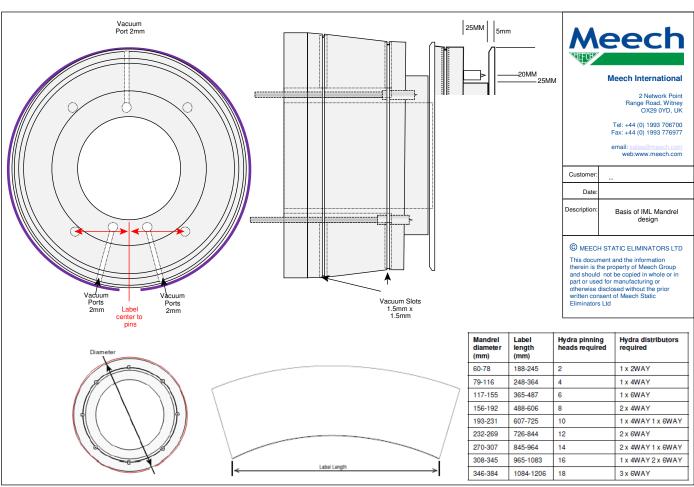
Other lengths can be supplied to suit design requirements are available at time of ordering. Below is a table which can be used.



Mandrel Design



The below drawing shows the basic principles of an IML application requiring the label to be applied to the side walls of a container. The pin requirement is calculated by the diameter of the container or the length of the label as seen in the table bottom right of the drawing.



Mandrel Design for Smaller Containers

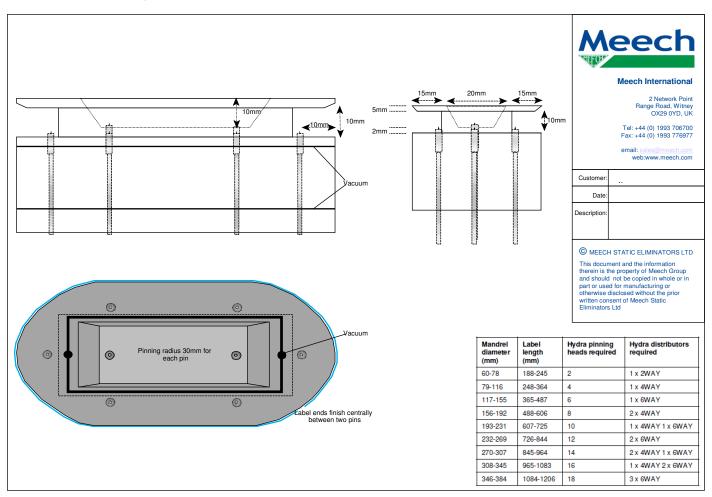




Smaller containers will require a smaller pinning recess. This smaller recess will require a reduced output voltage thereby reducing the pinning radius of each pin.

Where the $25x\ 25mm$ recess will allow 14-17kV providing 30mm pinning radius. The smaller $10\ x\ 15mm$ recess will limit the output voltage to 8-12kV, to prevent sparking in the mould tool.

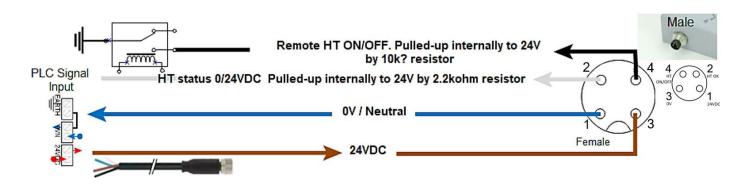
Failure to prevent sparking can result in label slip, and or electrical noise.



Wiring

The output voltage of the generator needs to be controller. This is done using a remote set point controller or a PLC interface. **Remote Set Point Controller**

The four pin MURR cable from the PLC to the Remote Set Point Controller requires the following wiring configuration.



PLC Interface

The M12 5 pin MURR cable connected directly to the PLC will require the following wiring configuration.

