PATENTA

A UNIQUE self clamping MAGNET



SITUATION 1:

• A big job to be clamped for machining

SOLUTION 1:

• Using conventional clamps.

Limitations of the solution:

- 1. A lot of time is wasted in clamping the job mechanically using several components.
- 2. Uniformity of clamping is not assured every time.
- 3. Not all surfaces are free for machining due to clamps

4. The job may get deformed due to clamping, as illustrated in the picture

A BETTER SOLUTION 1:

Using conventional magnetic beds

Difficulties of the solution:

- 1. The magnet itself needs to be clamped at predetermined locations and when they are shifted, again they need to be declamped and clamped.
- 2. When there are several magnets, several cables come out and spread on table.
- 3. For a large number of big magnets big controller is required.

SITUATION 2:

• Clamping of jobs during welding

SOLUTION 2:

• Tack welding at several places.

Problems of the solution:

- 1. Once a location is welded it takes a lot of time to clean the same spot.
- 2. Repeated welding damages the master welding bed.
- 3. Not all surfaces are free to work due to tack welds

THE RIGHT SOLUTION 2:

• Unique self clamping magnets: DOUBLEMAG

Features and benefits of the solution:

- 1. Simple modules of EPM magnets.
- 2. Magnets can be interconnected to each other hence minimum cables come out of the machine.
- 3. Clamps the job and the master welding bed instantaneously hence no clamping of the magnets themselves required.
- 4. Self clamping which makes these modules very versatile and easy to locate under the job as no special locations for the magnets are required.

THE RIGHT SOLUTION 1:

- Unique self clamping magnets: DOUBLEMAG
- Features and benefits of the solution:
- 1. Handy modules of EPM magnets.
- 2. Magnets can be interconnected to each other hence minimum cables coming out of the machine.
- 3. Clamps the job and the machine bed instantaneously and thus magnets themselves need not be clamped.
- 4. Magnets can easily be placed where required.
- 5. Any module of the magnet can be used to switch ON and OFF as all the modules are interconnected with detachable connectors. This gives a great deal of flexibility.



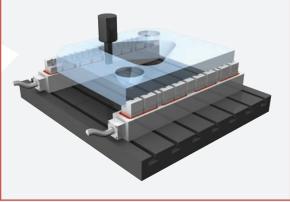
Double mag modules also come with an option in which there is a pair of additional magnets on one face which are activated by a separate signal. The advantage of this system is that even though

you switch off the double mag and releases the job, the module remains clamped to the bed there by repeated positioning of the module is not required.

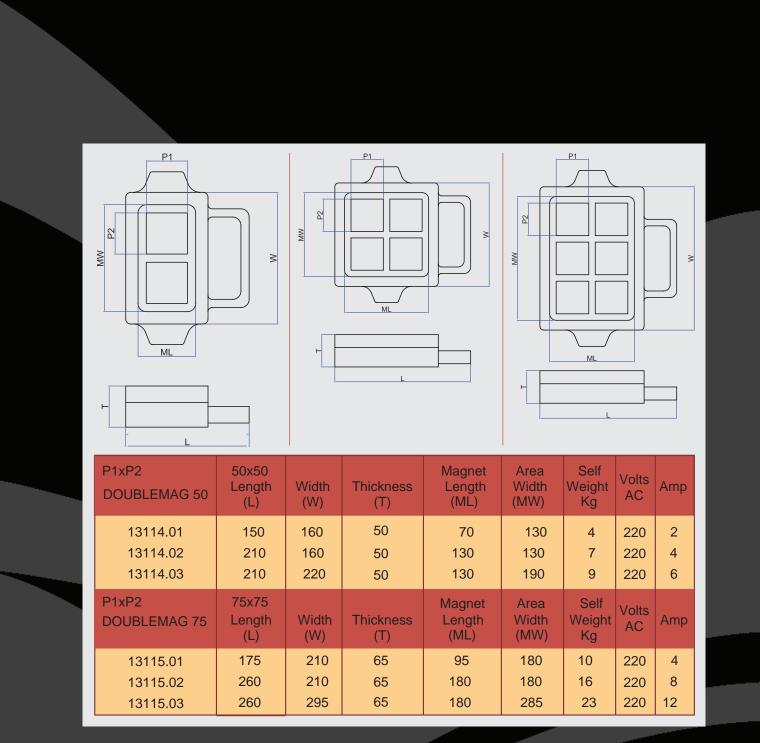
Thus the job can be released while the magnet remains at same position. This feature gives a new level of flexibility.



Custom versions of the double mag can also be manufactured. As can be seen in the application, a pair of double mag in single row pole profile is used to clamp a job for through machining. No other system gives such flexibility.



DOUBLE MAG



Due to continuous upgradation in design there could be changes in specifications.

Dother sizes on request.



New EPM Controller: EPMD-40

Features:

- Very compact and light weight controller
- Operates in 220V AC 50 Hz.
- The controller box adheres to IP56.
- Programmable microcontroller based controller.

Application:

• For switching ON and OFF EPM magnets.



EAST COAST MAGNETS PRIVATE LIMITED 100% EOU

44/1/6, Phase 1, I.D.A. Jeedimetla, Hyderabad - 55, India Ph.: (91-40) 2309 8262 • Fax: (91-40) 2309 8261 E-mail: info@sardamagnets.com Website: www.sardamagnets.com

EAST COAST ENTERPRISERS LIMITED

33, Brabourne Road, Kolkata - 01, India Ph.: (91-33) 2242 1796 • Fax: (91-33) 2242 6568 E-mail: info@sardamagnets.com Website: www.sardamagnets.com