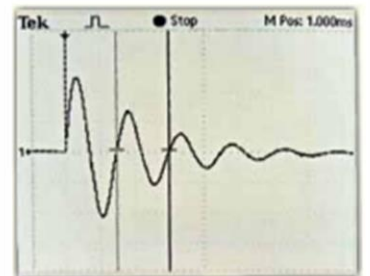


GROW CONTROL
POWER TECH PVT. LTD.

We Provide Solutions....

AN ISO 9001:2015 COMPANY



ELECTROMAGNETIC FORMING MACHINE



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GROW CONTROL is a research-based power electronics organization that blends technology, innovation, and engineering to transform concepts into world class products and solutions.

GROW CONTROL Electromagnetic Forming Machine is a cutting-edge solution for high-precision metal forming applications. Utilizing the principles of electromagnetic induction, this machine enables the rapid and efficient shaping of metal components without the need for traditional tooling. Our indigenous technology ensures high reliability, accuracy, and versatility, making it suitable for various industries, including aerospace, automotive, and defense.

GROW CONTROL Electromagnetic Forming Machine offers a high-performance solution for various metal forming applications, ensuring reliability, precision, and efficiency. Utilizing **indigenous technology**, these machines are engineered to meet the demands of aerospace, automotive, and defense sectors, delivering exceptional performance and versatility.

Features

- **High-Speed Forming Capability:** Capable of forming metalssignificantly reducing cycle times and increasing productivity.
- **Flexible Forming Options:** Supports various forming processes, including flanging, bulging, and deep drawing, adaptable to different metal types and thicknesses.
- **Compact and Modular Design:** Space-efficient and modular, allowing for easy integration into existing manufacturing lines or experimental setups.
- **Advanced Control System:** Equipped with a digital control interface for precise parameter adjustments, including current, pulse duration, and forming distance.
- **Safety Mechanisms:** Integrated safety features, including emergency stop functions and safety enclosures to protect operators during operation.
- **Energy Efficient:** High efficiency in energy consumption with minimal waste, leading to lower operational costs.



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Key Advantages

1. Indigenous Technology:

Developed and manufactured in India, ensuring compatibility with local industry standards and accessible technical support.

2. Versatile Applications:

Ideal for a wide range of applications in aerospace, automotive, and defense, providing flexibility in metal forming processes.

3. High Reliability and Precision:

Engineered for stability and accuracy, ensuring consistent results in demanding production environments.

4. Reduced Tooling Costs:

Eliminates the need for costly dies and molds, significantly lowering production costs and lead times.

5. Comprehensive Customization:

GROW CONTROL offers tailored solutions to meet specific operational requirements, ensuring optimal functionality for every application.

Applications

1. Aerospace Components:

Ideal for forming complex shapes in lightweight materials such as aluminum and titanium for aircraft structures.

2. Automotive Parts:

Supports the production of high-precision components for vehicles, improving performance and safety.

3. Defense Applications:

Utilized in manufacturing military components requiring high strength and precision.

4. Manufacturing Industries:

Suitable for high-volume production runs, delivering rapid and accurate metal forming solutions.

5. Research and Development:

Supports experimental setups in laboratories and R&D facilities, facilitating the exploration of new forming techniques and materials.

Customization Options

GROW CONTROL provides a variety of customization options for the Electromagnetic Forming Machine to accommodate specific application requirements:

- **Custom Forming Parameters** (Force, Pulse Duration, Frequency)
- **Integrated Monitoring Systems** for real-time performance feedback
- **Optimized Cooling Solutions** (Air or liquid)
- **Modular Configurations for Increased Capacity**
- **Communication Interfaces** for enhanced integration with manufacturing systems

Our engineering team works closely with clients to deliver tailored solutions that precisely fit their operational needs, ensuring optimal performance and compatibility.

Why Choose **GROW CONTROL**?

- **Indigenous Expertise:** Tailored to meet Indian industry standards with local support for customization and maintenance.
- **Reliable and Consistent Performance:** Ensures precise and repeatable forming essential for critical applications.
- **Low Maintenance Requirements:** Durable design reduces wear and tear, minimizing downtime and maintenance costs.
- **Energy Efficient and Cost-Effective:** Low energy losses lead to cost savings and enhanced operational efficiency.
- **Customer Support:** From initial design consultation to installation and ongoing support, **GROW CONTROL** offers a full range of services.

Certifications

- **EN 55022** – EMI Compliance
- **ISO 9001:2015** – Quality Management Systems



Model no.	GCEMF10KV10KJ	GCEMF16KV20KJ
Energy storage (kJ)	10	16
Input voltage	415V, 50Hz, 3-ph	
Voltage output (kV)	10	16
Output frequency (kHz)	30	12.5kHz
Current control unit	Voltage output discharge control by touch sensitive graphical user interface	
Current measurement	Rogowski coil with integrator with an external slot for connecting Oscilloscope	
Safety device	Automatic damping	
Discharge switch	Automatic damping actuator	

