

## IDEAL BRIDGE INSPECTION AND MAINTENANCE SYSTEM

Gemini Power Hydraulics introduces – GINJOE MBIU – an innovative inspection and maintenance system for bridges made for the first time in India.

Gemini Power Hydraulics has launched its new product – Ginjoe Mobile Bridge Inspection Unit (MBIU). This product is much indispensable for carrying out bridge inspections and maintenance tasks.

### Versatile and efficient

The GINJOE MBIU is a versatile and efficient machine, built on the reliable TATA PRIMA 3123 or equivalent cabin chassis, without there being a need for modifying the chassis. It is designed to provide a safe, quick and economic system of access to those structures where setting of scaffolding is not feasible or not economical. These units take a few minutes to launch – from the rest position to the work position – without personnel on board. After initial launching, maneuvers are completed and operators can easily descend on the platform through the provided protected access.

### Need of the hour

There are thousands of old bridges in the country, many of which are in a dilapidated state needing immediate repairs. Therefore, such a special purpose vehicle can only be termed as the need of the hour. Such machines are available from imported sources, few of such machines are already in India, which have been imported at exorbitant prices. Due to the high cost of imported spare parts and poor availability of service facilities, most of these imported units are lying idle.

### Made in India

Gemini Power Hydraulics, well-known for providing work saving solutions to the industry well ahead of time, is the first in the country to supply such indigenously manufactured MBIUs matching in specifications at almost half the price of the imported units. As these units are built on Indian vehicle chassis, the after-sales service support and the spare parts are easily available.

This is an initial foray of Gemini Power Hydraulics into manufacturing activity, which is in sync with the current national mission of 'Make in India'.

### Improved reliability and safety

These MBIUs are built under Technology Transfer Licence from CSIR-CRRI. The CRRI design is a basic electro-mechanical one, but Gemini has improved on

the basic model by incorporating a hydraulic-mechanical design for better reliability and safety. This change, as well as other features that have been incorporated, makes the product several notches above the basic model of CRRI.

Gemini Engineers and Consultants after studying, analysing, and taking user feedback, took it upon themselves as a challenge to deliver a product which is technologically superior, more reliable and safer. The first MBIU has been designed, fabricated and manufactured under the Make in India campaign.

### Thoroughly tested

Within a short span of period, Gemini have received orders for two units and the first unit has already been supplied and is acquitting itself to full user satisfaction. This was because the unit was thoroughly tested not only in the factory but also at a nearby bridge before it was dispatched to the customer.

### For India and the world

Considering the large need for such Bridge Inspection Units, Gemini is confident that they will soon have a fleet of these units in every state of India. They are also looking at the market for these units in the neighbouring countries.

Three models are available – Ginjoe – 10, Ginjoe – 12 and Ginjoe – 15, having under-bridge horizontal platform span of 10 m, 12 m and 15 m, respectively. Mast Lowering Depth for all the models is 8 m.

### Other salient features

- Ergonomic design and assist in quick repair.
- Easy trouble shooting and maintenance.
- Wind monitor and alarm.
- Multiple interlocks for added safety.
- Dedicated power supply – DG set.
- Compressor unit for operating maintenance tools and general cleaning.
- Sensors for monitoring stability.
- Dedicated remote PLC box and remote access controls.
- Security and CCTVs monitoring.
- Automatic alarm and emergency cut-off system.
- Remote diagnostic system for troubleshooting.

(Communication by the management of the company)