Motovario

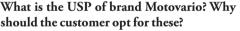
"In touch with the future"

The Motovario Group is a leader in power transmission products: gearmotors, moto variators, inverter-motors and electric motors. The company offers a wide range of products to meet the needs of numerous industrial sectors such as mechanical speed variators, helical and helical bevel gear reducers, shaft mounted, worm gear reducers, electric motors and motoinverters. Quality and precision are ensured by the cutting-edge technologies applied in the production process. The efficiency of the company's manufacturing divisions is guaranteed by 170 numerically controlled (NC) machines, with semi-finished products handled by robots and stored by LGV lines in automatic warehouse. Motovario products are reliable, robust and versatile – the best-qualified solution for any requirement in power transmission.

Mr Partha Pratim Sen, Managing Director, Motovario Gear Solutions Pvt Ltd, the Indian subsidiary of the company, responded to the IPF Questionnaire. Excerpts:

Motovario is well known as a premium manufacturer of motors and geared motor units. What is the origin and history of the company?

Motovario SpA was formed in 1965 at Formingine in the district of Modena at Italy. Motovario is synonymous with invention, quality and service which are the company's core values ever since its foundation. Motovario provides technologically advanced solutions in the transmission components field for industrial and civil applications worldwide.



Motovario is at the heart of the production process that drives industries worldwide. Quality and reliability are the company's fundamental assets coupled with worldwide service backups. Motovario also has its own electric motors which are of a great quality with aluminium housing (as is preferred in Europe) which can be a good alternative to local players. The motors are for their own gearboxes and are also sold as stand-alone units.

What is the nature of the company's operations in India?

Motovario Gear Solutions Private Limited (MGSPL) is a wholly owned subsidiary of Motovario SpA, Italy which was





formed in 2011 at Kolkata. It is spread over 10000 sq.ft of warehouse and assembly centre and the head office is located on the 1st floor.

MGSPL also has their representatives and branch offices in Chennai, Hyderabad, Coimbatore, Bangalore, New Delhi, Faridabad, Sonepat, Chandigarh, Ludhiana, Mumbai, Pune, Vadodara and Ahmedabad.

Motovario Gear Solutions Private Limited became a MAC in September 2012, to serve the domestic market further effectively with timely deliveries of the H, B and S series added with the optimum stock level of the VSF available in the warehouse. MGSPL assembles and markets all Motovario products in India, Nepal, Bang-

ladesh, Bhutan and Sri Lanka through their own Sales Network and Dealer Network.

How strong/effective is the after sales service?

MGSPL has trained Service Engineers located at major cities and also there is always a back-up from the Assembly Centre.

What are the company's achievements?

During the past 2 years after its establishment in India, MG-SPL has tried to focus on the segments where they are very well known globally like packaging, automation, ceramics, textiles,







food industries, material handling, etc., and has been able to have a strong presence in such segments where all the units are running very successfully.

MGSPL has also developed good dealership network and always look forward to develop focused partners who have a strong market presence, reputation and share their common goal.

How is the present business environment?

Having started the business only 2 years ago, the entire market is still to be explored and we are on a steady growth track with 100-150% growth rate.

What are the future plans?

MGSPL wishes to be a manufacturing unit in the Asian subcontinent of Motovario SpA as a part of global plans and a steady growth of 100% per year till 2020.

Transceiver Module for Cranes

Pircuit Design, Inc, Japan, has released a Low Power Radio Transceiver module, a version of the highly successful STD-302N-R-335 MHz for industrial use, for the Indian market. The version for Indian frequencies (335.7125, 335.7375, 335.7625, 335.7875, 335.8125 and 335.8375 MHz) supports industrial equipment manufacturers seeking to enter the Indian market for industrial remote control systems for crane opera-

tion. Other frequencies are also available.

Specifications: RF output power - 1 mW; bandwidth -<10 kHz; and TX/RX switching time -15-20 ms.

Features:

1. Superior interference rejection and high receiver sensitivity - after the antenna input, a matching circuit which also works as an ESD protection circuit is followed by a SAW filter*. There is a gain of 18.7 dB in the process from high frequency amplifying to

IF frequency generation performed by the SAW filter, LNA and down-converter.

2. Stable operation with narrowband FM – it is generally known that wideband FM is defined as the state in which the modulation index is more than 1, and for narrowband FM, 1 or less than 1.

For STD-302, the maximum frequency deviation is 4.8 kHz and the bit rate is 9600 bps (maximum modulation frequency 4.8 kHz), which determines the modulation index as 1.

For stable operation with narrow band FM, the provision of a binarisation circuit, and temperature drift characteristics are important factors. Circuit Design, Inc, has spent a lot of time on research and tests and has also maintained close contacts with crystal manufacturers in pursuit of the best specification,

resulting in the achievement of a binary FSK narrowband radio module that can operate in a temperature range from -20° C to $+60^{\circ}$ C

3. High TX/RX switching speed required for use in feedback (semi-duplex) systems – the company has succeeded in accelerating the TX/RX switching time up to 5 ms using one VCO and the MIX method.

> 4. Compact package with high shock and noise resistance-the GND of STD-302 is strengthened using a 4-layered PCB (full internal-layer GND). The VCO and PLL circuits, which are sensitive to noise, vibration and voltage change, are protected in a special shield casing. In addition, the whole PCB is covered from both front and back with a robust casing to provide resistance against noise and vibration caused by PCB bending.



5. Future-proof design for reliable long-term supply - Circuit Design, Inc, emphasises design using discrete, interchangeable parts to ensure a long-term supply of these product.

Applications: Industrial remote control systems; EOT cranes manufacturers for remote controls for cranes; and the control systems for factory automation machines.

(This product was designed to meet the specification above; users are required to verify that their final product meets the appropriate specifications and to perform the procedures for regulatory compliance)

Authorised distributor for Indian market: Adiv Techno Services Inc, No: 3/79A, "Annapurna" Building, Mahatma Basaveshwar Nagar (Koppa Tank), Dharwad, Karnataka 580 008. Mobile: 098456-23546, 098929-21656. Email: info@adivtechnoservices.com