SEW-EURODRIVE—Driving the world Vol. 1 April, 2014









Dear customers

It is with great pleasure and honor that I announce, with this first edition of the online customer magazine Drivelndia, a media platform which will be published quarterly and inform you about activities, services and news from SEW India.

Aside from many interesting topics, this platform will present ideas and solutions for your tasks concerning Drive and Automation technology helping you in opening up new potentials of the Indian market.

SFW believes in the Indian market and proves this with a sustainable investment policy. Visiting India in March to dedicate the new third assembly plant in Pune was once again a great pleasure for me.

India and its people inspire me very much, which is why I am thrilled about every single occasion to visit - hopefully, the next visit will be very soon.

I wish you a lot of fun reading this first edition of Drivelndia and hope for a sustainable success of our partnership relations.

Hans Sundwur

Hans Sondermann Managing Director

Marketing and Sales SEW-EURODRIVE GmbH & Co KG

Brakes India accelerates ahead with MOVITRANS®.

In 1981 Brakes India decided to race towards the future with a new Foundry Division at Sholinghur that would manufacture Permanent Mould Grey Iron castings. While the installed capacity was for 5,000 MTPA, the impetus and demand upon the division subsequently saw it hiked to 12,000 MTPA.

The Permanent Mould Process involves manufacture of Grey Iron castings in Grey Iron moulds.

Using CAD/CAM, the component cavities are accurately machined on mould blanks using CNC



Permanent Mould Foundry Division at a Glance	
Capacity	12,000 MT per year
Approximate casting weight	0.2 to 8 kg
Limiting size of castings (LXBXH)	300 x 250 x 50 mm

machines. Metal is melted in hot blast cupola of 6T/hr capacity. Dies are then mounted on the rotating carousels and the molten metal is poured. The castings produced are finally annealed, finished, inspected and dispatched to customers.

The advantages of Permanent Mould Castings produced in Brakes India's Foundry Division are tangible and numerous. These include consistent dimensions over large volumes of production, easy machinability, dense, non-porous structure, very close dimensional tolerances, and a high degree of pressure tightness that is ideal for hydraulic applications.

A perfect solution for transferring molten metal.

Electrified Monorail system (EMS) is used to transport molten metal from the Furnace area to the Die cast pouring area using SEW's MOVITRANS[®] contactless power supply **system.** SEW's MOVITRANS® technology supercedes other conventional systems, giving a high degree of reliability and flexibility in the challenging foundry ambience.

SEW had designed and manufactured the complete EMS line with four Electrified trollies with human and collision safety for transferring molten metal to 7 die-cast machines. Two automated track change- overs have been designed to support multi location transfer for maintenance and production.



The EMS System benefits customers by

- Reducing operator fatigue.
- Uniform distribution of molten metals to die-cast machines.

MOVITRANS® System – benefits galore!

MOVITRANS®



A boon to many industries, products and people.

MOVITRANS[®] for electrified monorail application is a boon to the foundry industry. It serves to reduce down time due to maintenance and ensures the safety of employees working with the system. It reduces the

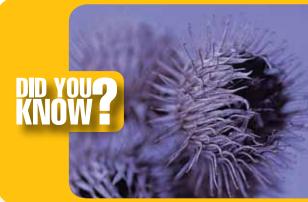
fatigue of employees pushing the ladle carrying 350 kgs of molten metal from the furnace area to the die-cast area. Indeed, in day to day work that is smooth sailing replacing rough weather!



- Maintenance-free
- High Safety level
- Simple installation
- Intelligent energy management system
- High flexibility, as the travel speed can be variable

Advantages of MOVITRANS® vs conventional systems

- The dusty atmosphere in conventional systems attracts very high maintenance.
- The live part causes safety hazards that are difficult to ignore.
- It's a needless challenge to run in constant speed at curves (curvature track). In fact, high speeds of 60 mpm are not recomended for the atmosphere with busbars.
- The conventional concept has to pay with a high wear and tear while in motion.



A dog, a man and Velcro.

On a fine day in 1941, Swiss engineer Georges de Mestral noted burrs (little dry fruits with hooks or teeth) clinging to his dog's fur. Mestral raised his eyebrows and euphorically noted that the burrs would cling to anything loop-shaped. "Now, if I can simply artificially re-create the loops, I'm on to something!" he mumbled to his dog.

The result was Velcro, a marriage of the words 'velvet' and 'crochet'. The material at first didn't hook on to the fashion industry, but found a curious initial user. In the 1960s, Velcro's most notable client was NASA, who used the stuff in its flight suits and to help secure items in zero gravity. Today, of course, Velcro is used to make almost anything stick. And it is also used to remind us that open eyes and an alert mind can change the future.

Powering ahead with yet another innovation!

Here's another feather in the cap of SEW-EURODRIVE's modular DR motor portfolio. No, we aren't talking yet another motor series. It's the new DR..J LSPM motors (Line Start Permanent Magnet). The most innovative, economical and compact energy-efficient motor concept for IE2 to IE4.

This series represents a modern, energy-efficient motor concept: One motor – three variants – three

energy efficiency classes: IE4: DRU..J (LSPM technology), IE3: DRP..J (LSPM technology), and IE2:

DRE..J (LSPM technology).Out in the industry the new DR..J Synchronous Motors, belonging to the same energy efficiency class but with a reduced frame size, are set to change a thing or two.

In comparison with convention.

Let's see how the DRE..J series is handier and more economical than the standard option. A standard DRE motor with 1.1 KW power rating of size 90 M meets the requirements of energy efficiency class IE2. To compare, you just need a DRE...J motor of size 80 S with LSPM technology. This new motor concept from SEW-EURODRIVE is particularly of phenomenal advantage where

higher energy efficiency classes are required - in the same energy class, a DR...J motor with LSPM technology is two frame sizes LSPM TECHNOLOGY

smaller than a standard motor of the same power rating.

Features and advantages:

- High efficiency
- Lower energy consump-
- Good power factor
- Compact and sturdy desian
- Synchronous operation with supply frequency
- Slip-free speed control without encoder feedback, ensuring lower

The full energy-saving potential of the LSPM motor is best utilized in continuous operation, as in pump and conveyor applications. Thanks to its synchronous operation properties, it is chosen for applications with a high speed consistency, such as spinning pump drives for material supply in textile machinery or baggage handling applications in airport logistics. The DR...J motor with LSPM technology is also suited for replacing reluctance motors, especially if a higher efficiency is stipulated or wanted.

installation and purchase costs

- Can be used as individual or group drive on the grid and with a frequency inverter
- Constant torque in the speed setting range without forced cooling fan
- · Smaller frequency inverters can be used due to reduced power consump-

- · Low maintenance
- Many additional features of the modular DR motor system available
- · Can be combined with the 7-series of the modular gear unit portfolio

The new address of progress.



Exactly five years and a month after the gates opened to SEW's second assembly plant in

Sriperumbudur, Chennai to serve customers in South India, the company inaugurates its

third assembly plant at Chakan in Pune.

As with the Chennai plant, the Pune one has also been commissioned right in the midst of a deep manufacturing slowdown. This capital investment from the SEW Group reflects their confidence in the underlying strength of the Indian economy as well as the confidence of the management team in India of the resilience of their customers and the importance they place on local competence and support. Of course, this trust has paid off in the

past; SEW has seen rapid growth of its business after commissioning of the Chennai plant and the

> company looks forward to being able to serve its Maharashtra customers even

better with the opening of the Chakan plant.

One longstanding ethos at SEW is the belief that

the quality of infrastructure should reflect the quality of products. This makes it a constant endeavor to make each plant better than the last, incorporate new innovations

Opening of the Pune plant

and learning. Customers are welcome to visit the plant and see for themselves how this vision has been fulfilled.

The Pune plant is the second in the Western region after the original assembly plant in Vadodara came up in 2000. It is starting up with a full-fledged repair facility for the geared motor product range

> and will feature a full-fledged competence for electronics by September. The plant should be able to start delivery of units within 3 months.

Pune Plant at a glance.	
Location	: Chakan MIDC Phase II
Land area	: 10 acres
Shop-floor area	: 70,000 sq.ft.
Employees at startup	: 20
Specialty	: Built as per 'Green' norms



Learning and innovation go hand in hand. The arrogance of success is to think that what you did yesterday will be sufficient for tomorrow.

> -- William Pollard. Quaker theologist and author

SEW-EURODRIVE INTERNATIONAL

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