# Exact

Application stories from around the world

## Inside Issue No.13



Grease is the word



Film premiere



Greasing the wheels of industry



Keeping it cool



News and events



National Sales Manager, Ron Bartosik

#### DOPAG launch subsidiary in the USA

Supporting customers, before and especially after sales has always been a top priority for the Hilger u. Kern / Dopag Group.

As one of the world's leading manufacturers of machines for metering and mixing systems for plural component polymers and single component media such as greases, oils and pastes, we are dedicated to customer satisfaction.

Throughout the world, this is entrusted to our highly experienced and knowledgeable distributors, who are ably supported by a network of local regional DOPAG subsidiaries.

Now, DOPAG has launched a subsidiary in California in order to upgrade support to our growing family of distributors in the USA.

Based in Newport Beach, the Company will be headed up by Ron Bartosik who has many years of hands-on experience in the fluids handling industry.

Ron's key objective will be to manage the business and provide local support to both distributors and their valued customers.

Commented Ron, "DOPAG products have been available for many years in the US through our network of distributors. Our aim in establishing a permanent presence in the USA, is for us to be able to afford our distributors local support, especially in terms of sales and marketing."

"We believe that DOPAG high quality, technically advanced, metering, mixing and dispensing systems offer significant benefits to our end users and give us cause to look forward to a bright future."







# Grease is the word

USA distributor supplies both oil spray and grease metering systems to automation integrator





The grease dispensing section of the assembly line under construction

As part of the FC Industries group of companies, the Dayton, Ohio based AFC Tool Inc., is in the unusual and enviable position of being able to offer a full service capability to its customers.

Associated companies within the FC Industries group, include a number who specialise in stamping and precision punching and who operate independently to serve their customer's specific needs.

However, the combination of these related companies, when called upon, is able to create a true full service capability for AFC Tool Inc..

Specifically, AFC Tool focuses on developing special machines from concept to commissioning, from dedicated machine tools to complex part assembly and inspection processes.

One such recent project carried out for Plastic Moldings Co. LLC (PMC), involved the design and build of a special assembly line for the assembly of steering components.

PMC manufacture the moulds for the plastic components included in the assemblies, whilst AFC designed and built the machine to assemble the plastic components produced by PMC.

Part of the process required the ability to automatically meter and dispense precise volumes of grease and oil onto the sub-assembly components in preparation for the following assembly stages.

Stage one of the assembly line process was to automatically lubricate the inside bore of plastic sensor covers with a small amount of oil, in order to facilitate the easy assembly of a shaft seal into the cover.

DOPAG dispensing valves fitted with spray adaptors applied atomised oil to the required areas automatically, fed from a 12 litre capacity pressure feed container with built-in level monitoring to ensure that oil was always available.

The second stage involved pumping and metering precise volumes of grease onto the lip of the seals.

For this application, a DOPAG P30 drum pump was utilised to draw grease directly from the shipping pail and feed it under pressure to twin DOPAG Mini Metering valves, each of which would accurately and consistently meter 0.2 grams of grease onto the components.

Explained Christopher Ludwig, President of Air Flo Spray Equipment, the distributor responsible for this project, "AFC Tool Company Inc. were familiar with DOPAG products and from their previous experiences were fully confident in achieving exactly what was required."

"AFC Tool Company Inc.
were familiar with
DOPAG products and
from previous
experiences were
confident in achieving
exactly what was
required."



Oil feed and grease pumping systems



The grease metering station



#### Film star

Installing a DOPAG
VARIO-MIX improves
quality and lead times for
South African film
laminator

Priding itself on outstanding production quality, Cape Town based Plasticwrap (part of the CTP Packaging group) extrudes high density, low density and linear low density polyethylene films, as well as producing cast polypropylene film, converting them into a range of sophisticated products - from multilayer and shrink films to superbly decorated bags, various laminates and lately High Shrink Sleeves and wrap around labels.

As part of their continuous review of flexible packaging technology, Plasticwrap has recently installed remote dispensing systems to serve the company's three laminators.

With two Nordmeccanica and a new Schiavi laminator, Plasticwrap has enviable capacity for both solvent based and solventless laminating, but the close proximity of the dispensing machines to the laminators has been an ongoing problem.

Explained Factory Manager Adrian Parenzee "We needed to improve productivity, to reduce the risk of hose damage, to have easy access to the 200 litre drums of laminating resins and to the metering units. Above all, we wanted a clean workplace with all-round access to the laminators."

The answer to these problems was to call in local Hilger u. Kern / Dopag Group distributor Resin Processing Solutions (RPS).

André Schlenk, MD of RPS takes up the story: "The traditional location of metering, mixing and dispensing equipment close to laminating machines severley limits the operator's movement. At the same time high pressure hoses connecting the 200 litre drums of raw material to the holding tanks on the metering unit run along the floor, posing a risk of damage. Similarly,

high pressure hoses between the metering unit and the dispensing valve also often run along the floor, again with the risk of damage," Adding "Yet another problem is that the changeover of drums by forklift truck often interferes with laminator operation."

The solution was to install a new DOPAG VARIO-MIX system to serve the new Schiavi and to upgrade the two previously installed DOPAG VARIO-MIX units serving the Nordmeccanica laminators.

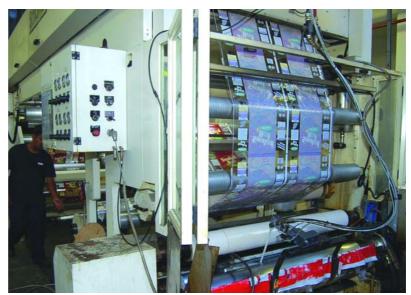
The new systems are decentralised, with the metering units 15 metres away from the 200 litre resin drums, with all feed lines now constructed from rigid steel tubing located overhead, well out of harms way.

In addition, the drums of raw material are tucked neatly away in a separate temperature controlled room and all the controls now wall mounted, leaving several metres of clear space all around the laminators.

"Our operations have been streamlined to such an extent" confirms Adrian Parenzee, "that the machine operators can now concentrate entirely on the quality of lamination. As a result, we're achieving better quality lamination and improved lead times."



DOPAG VARIO-MIX



Dispensing mixed adhesive into the film laminator

### Silent running

Purpose designed application system reduces grease usage and leads to quieter operation

LDV is a long established and well-loved brand in the United Kingdom, having been founded in Birmingham in 1925. The group designs, manufactures and distributes the multi award-winning MAXUS range of light commercial vehicles, which includes vans, minibuses, combies and chassis

Under new ownership since 2006, the group scooped a plethora of industry awards in 2007 including the "UK Company of the Year 2007" by the Institute of Transport Management.

The group continues to expand both its product range and its worldwide distributor network, having doubled the output of its MAXUS vehicles during 2007.

Sales and Marketing Director, Tony Lewis, is extremely pleased with the progress made. He commented: "This has been a remarkable year for us. Every area of the LDV business has been transformed over the past 12 months. At the Commercial Vehicle Show in April 2008 we will be showing eight new variants of the MAXUS range, which is a clear demonstration of our position as the UK's light commercial vehicle specialist."

Many variants are provided with a wide opening side-load sliding door, which allows easy access to the interior space of the vehicle from the kerbside.

The sliding door running mechanism makes use of roller bearings, which are attached to the door and are captive in a steel channel section on the floor of the vehicle. To ensure smooth running of the mechanism during use, the channel section requires to be lubricated.

Until recently, the channel was lubricated manually by the operator



the channel using a brush. Since the channel is quite long, it was always difficult for the operator to judge whether or not the grease had been applied in a consistent way on all surfaces of the channel, or indeed if the correct quantity had been applied.

Recognising the problem, LDV reviewed the process and discovered that although the grease that they were using lubricated the bearings adequately, the process was wasteful and did little to reduce the noise generated during the operation of the door. Having sourced a more appropriate grease,

LDV approached DOPAG (UK) Ltd. to provide a more efficient method of application.

The solution was to design purpose made applicator nozzles, which fitted the profile of the channel perfectly which were able to apply beads of grease exactly where needed, every single time.

The grease is pumped directly from 25 litre shipping containers by DOPAG P30 pumps and fed via flexible hose to the dispensing valve assembly, where the operator merely locates the nozzle into the channel and slides the nozzle along the channel whilst activating the trigger mechanism.

The new systems have greatly reduced the amount of grease used in this process as well as guaranteeing the quality of this operation.

The added bonus is the significant reduction in noise experienced when opening and closing the door.









#### Keeping it cool

DOPAG France helps a refrigerated vehicle manufacturer meet surging sales demand

"Certain ideas are universal, certain needs - inevitable.
Refrigeration is one of them; needed by everyone, all around the world." So said Philippe Lamberet, Chairman and Managing Director of Lamberet Constructions Isothermes, the refrigerated vehicle manufacturer.

Lamberet is the European leader in temperature-controlled vehicles with production plants in France, Germany and Vietnam.

The company designs, manufactures and markets a complete range of insulated and refrigerated units from 1 cubic metre to 100 cubic metres capacity, ranging from car derived vans for smaller business applications to semi-trailers for international transport and distribution.

The company has a turnover of 200 million Euros and employs 1200 people in Europe alone.

In 2007, the European market for semi-trailers was in a state of unprecedented demand, with orders actually being declined by Lamberet's distributors as demand quickly exceeded maximum production capacity.

Lamberet were determined to bring this positive market situation under control.

It was against this background that DOPAG France was invited to tender for a total of four automated systems to process and apply adhesive to trailer panels during the manufacturing process and help to boost production output.

The adhesive chosen for the applications was a two component polyurethane with a mixing ratio of 3.7:1 by volume. Unusually, the polyol component was a heavily filled high viscosity product, whilst the isocyanate component had a light viscosity.

Fortunately, DOPAG France has enjoyed a good deal of experience in the design and installation of systems for applying adhesives to "sandwich" panels, so it was natural for them to specify the use of a piston type pump for dealing with the potentially abrasive polyol component, whilst still utilising a gear type pump for the isocyanate component.

The systems featured a high level of security in production with ratio

control, flow control and automatic correction of both the ratio and flow rates.

The mixed adhesive is applied automatically by means of programmable three axis robots, onto which is mounted a multi nozzle applicator which dispenses the mixed polyurethane onto the panels at a closely controlled flow rate of 3 kg per minute.

Speed of supply and installation by DOPAG France was a critical requirement in order for Lamberet to increase production rates as quickly as possible to meet the growing demand for their products.



Dispensing polyurethane onto the panels with the multi-nozzle applicator





#### American distributor meeting



Ten Hilger u. Kern / Dopag Group distributor delegates from North, Central and South America met at the Embassy Suites Hotel in Chicago between the 27th and 29th of November 2007 to discuss strategy and define objectives for future expansion of sales in the Americas.

Chaired by DOPAG Sales and Marketing Manager Alois Tschopp and supported by Carlo Cairoli, Bob Jones and Ron Bartosik, representatives of distributors from Brazil, Canada, Mexico and the United States enthusiastically contributed to the formulation of the new vision for future success.

Seen opposite, from left to right: Ron Bartosik (DOPAG), Butch Pannell (Air Equipment & Repair Inc.), Carlo Cairoli

(DOPAG), David Guzman (Alpha-Tex de Mexico), T. W. Kirkparick (KIRKCO), Bruno Sordi (B. Sordi), Alois Tschopp (DOPAG), Paul Carveth (FLO Components Ltd), Scott Kirkpatrick (KIRKCO), Ken Walker (Hydrotech Inc.), Chris Ludwig (Air Flo Spray Equipment Co. Inc.).

#### Swiss Plastics Exhibition success



The 15th January 2008 was a special day in Switzerland, PLASTICS being the opening day of a brand new three day plastics fair in Luzern.

Promoted by the organisers as the shop window of the Swiss plastics industry, this well attended fair aimed to present technically advanced and innovative products.

Commented Sales and Marketing Manager Alois Tschopp, "We were lucky enough to be invited to present a paper at the seminar, which ran concurrently with the exhibition, which helped to bring DOPAG products to a wider audience." adding, "We will certainly be participating in future fairs."



#### Forthcoming exhibitions

The Hilger u. Kern / Dopag Group will be exhibiting at the following exhibitions during the next three months. Please come along and see us if you can.



27 - 29 February, PV Expo, Tokyo, Japan



05 - 08 March, Aimex 2008, Seoul, Korea



14 -18 March, Syskevasia, Athens, Greece



30 March - 03 April, EWEC 2008, Brussels Expo, Belgium



01 - 03 April, JEC Composites, Paris, France



21 - 24 May, KOFAS 2008, Changwon, Korea

Hilger u. Kern / Dopag Group Marketing Communication Copyright Hilger u. Kern / Dopag Group ® Registered trademark DOPAG

Author: Bob Jones: bjones@dopag.com

1500 copies printed Printed on chlorine free bleached paper Druckerei am See, Arth, Schweiz / 2008





#### Hilger u. Kern / Dopag Group

Hilger u. Kern Dosiertechnik • Käfertaler Strasse 253 • 68167 Mannheim • GERMANY Tel. +49 621 3705-0 • Fax: +49 621 3705-200 • dosiertechnik@hilger-kern.de • www.hilger-kern.com DOPAG Dosiertechnik und Pneumatik AG • Langackerstrasse 25 • 6330 Cham • SWITZERLAND Tel. +41 41 7855-757 • Fax: +41 41 7855-700 • info@dopag.ch • www.dopag.com