

New Literature

Our literature update and expansion continues, and this issue we can announce a new **Marine MSV Clutch** brochure, a restyled **Azur** brochure, a Marine Clutches and Brakes overview, and an **HC Oil-Immersed Clutch** brochure. You can order these from Wichita by their reference numbers, **99999-409**, **99999-412**, **99999-413** and **99999-429** respectively. So that you can ensure all of your literature is up-to-date, we thought it might be useful to have a reference list of items currently available for you to check against. Here it is:

Wichita part No.	Description	Pages	Issue no. & date	Previous part number
99999-400	ModEvo Tension Control Brake	6	Issue 1, Apr. 2001	-
99999-401	Tension Control Systems catalogue	56	Issue 1, Feb. 2001	MC507-gb-0005
99999-402	Who's Who at Wichita	2	Issue 1, Jan. 2001	-
99999-403	Free Aftersales Service	2	Issue 1, Jun. 2001	-
99999-404	Metana Hydraulic Caliper Brake	6	Issue 2, Sept. 2000	Wic494r-gb-0009
99999-405	Pneumatic Caliper Brake	4	Issue 2, Mar. 1998	Wic450r-gb/d-9803
99999-406	CAB Copper Alloy Tension Brake	6	Issue 2, Jan. 1997	Wic398r-gb-9701
99999-407	Mistral Pneumatic Tension Brake	6	Issue 2, Sept. 1999	Wic428-gb/d-9909
99999-408	Pneumatic Clutch & Brake master	52	Nov. 1995	Wic384-gb-9511
99999-409	MSV Marine Standard Ventilated Clutch	6	Jul. 2001	-
99999-412	Azur CCB Combined Clutch/Brake	6	Aug. 2001	CB437r-gb/d/f-9808
99999-413	Marine Clutches and Brakes – an overview	2	Sept. 2001	-
99999-429	HC Oil-Immersed Clutch	6	Sept. 2001	105-ICP-ADV.05/01



New CAD system shortens design time

Wichita was forward-thinking even back in 1987, investing in one of the first CAD/CAM combination packages available. Over the years, we've kept on top of new developments and continually upgraded to later versions of the software.

But in May this year, we decided it was time for a 'step change' to the latest state-of-the-art product design system from SDRC, called 'I-DEAS 8'. This package, which is used widely throughout the automotive industry, provides a complete environment for 3-D design, draughting and management. A major advance is the reduction in time taken from design to first prototype – known as 'rapid prototyping'. So now Ian Hakon's engineering team can design the product, add the machining data and send the result electronically to a tooling manufacturer, removing the potential for error that is present when working from traditional drawings. The software is designed for a team-working environment too, so several users can work on elements of the same project at the same time. Once models have been produced on the new system, they can be issued to sales personnel and customers, who can display the 3-D design on a viewer to aid discussion on any aspect of a design.

One of the longer-term aims for the package is to blend Wichita's design and production disciplines, so eventually production engineers can contribute to the design – but for the moment, the impact is already noticeable in producing the right component, of the right quality, at the right time, which is shortening product development times dramatically.



Suitably attired

This issue we take a look at an application that presents opportunities for new business literally anywhere in the world that vehicle tyres (or tires, depending on which side of the Atlantic you reside) are manufactured.

Stone Stamcor, Wichita's South African distributor, has supplied more than thirty Wichita SSM 106 spring-set safety brakes to upgrade Shaw McNeil Bag-O-Matic tyre presses at the Dunlop tyre factory in Ladysmith, South Africa. The function of the brake in this application is to hold the tyre forming press closed during the moulding process, an operation that typically takes twenty minutes. The Wichita brakes are normally vertically mounted for this purpose, as seen in the accompanying picture. The tyre presses were originally fitted with Stern brakes, but these proved unreliable, hence the reason for the conversion. In



contrast, Michael Van Kan, Dunlop's Making and Moulding Engineer commented, "The beauty of the Wichita brake is that you fit it and forget it." Clearly a satisfied customer!

Although not of Wichita's making – literally – there was one hitch during the conversion process that is worth mentioning here, as it's something to be on the lookout for in your own sales area. Part way through the conversion programme, Dunlop were duped into buying a pirate copy of the Wichita brake. We won't name the rogue supplier here, but suffice to say their product Won't Pass the Test – a point proven when the brake they supplied failed prematurely in service. There were balance pressure problems with the pirate brake too: Whereas the optimum balance pressure for the Wichita brake on the tyre press was 3 bars, the pirate copy demanded a whopping 6 bars

air pressure to do the same job. Dunlop also reported premature airtube failure with the pirate unit. The pirate copies have since been replaced with original equipment Wichita brakes, which are performing perfectly.

So, if you have a tyre manufacturing plant in your area, contact them today regarding safety brakes – and be alert for pirates on the horizon!

On time, all of the time

That's our aim, to deliver Wichita orders on time, every time – and continuous monitoring of our performance in this area shows that we're definitely getting there, with more than 95% of orders delivered on schedule. Although that's a pretty good record by anyone's standards, we're not content yet, and we'll continue to strive towards 100%. You can help us by responding promptly to our customer survey included with this issue of All Torque – see the following item for details.

New e-mail addresses

E-mail addresses for Wichita's UK personnel are about to change for the better! We've adopted a simple, easily-remembered generic structure that will enable you to e-mail anyone on our team, so long as you know their name.

Just substitute their first and last names into **firstname.lastname@wichita.co.uk**, and send your mail. For spare parts, it's even easier – just mail to **spares@wichita.co.uk**. Update your e-mail address book now, and look forward to easier communications!

Have your say

A copy of the Wichita 2001 Customer Survey should have arrived with this issue of our newsletter (call us for a replacement if it's been lost or mislaid). Please help us to help you by taking a few moments to tick a few boxes and add your comments – it's your opportunity to rate our performance and give us your candid views on where we excel and where we can still do better.

You'll be helping our chosen charity too – for every completed questionnaire we receive, Wichita will make a cash donation to Oxfam International, an organisation that strives to fight poverty and injustice around the world. If you can get your responses back to us quickly, we'll be able to share the survey results with you in our next issue.

Distributor Focus

Leif Barkvall



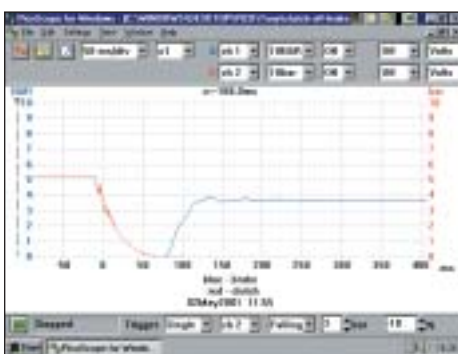
Another new feature begins in this issue of All Torque – a behind-the-scenes look at one of our many distributors. Following on from the victories that Sweden's influence has brought to the England football team recently, we thought we'd kick off with one of Wichita's own Scandinavian success stories, in the form of Barkvall Engineering AB.

Leif Barkvall started his company in 1972 with his wife Ann, working from an office at his home in Sollentuna, some 20 km north of Stockholm. With an engineering background, and previous experience in the distribution of caliper brakes and torsionally flexible couplings, Leif was an obvious choice to appoint as the Wichita distributor for Sweden.

A high level of customer visits, plus advertising in trade media and participation in exhibitions have helped to raise and maintain Leif's profile and grow his business. Consequently, Barkvall Engineering has grown to a team of six people operating from offices and storage facilities conveniently situated between Sweden's capital and Arlanda international airport. A comprehensive stock of spare parts, together with a fully-equipped workshop, ensures that full support is available to Swedish customers, with servicing offered in-house or at the customer's site.

It's service in all senses of the word that has established Barkvall Engineering's reputation. Leif Barkvall and his team, including Wichita specialist Willi Grosser, are particularly well-versed in the needs of customers in the paper, metal-forming, steel and marine industries. Naturally, the company services and supports the Wichita pneumatic and Warner electromagnetic clutches and brakes and Wichita/Warner tension control systems that it sells, and it also provides commissioning and after-sales service on the range of MCS2000 tension control systems. But the team takes service a stage further, adding value to the Wichita and Warner ranges by supplementing the brakes and tension controllers with mounting brackets and guards custom-manufactured in the Barkvall workshops, enabling them to offer their customers a fully-engineered package to suit the needs of machine upgrades. As well as these accessories, Barkvall also puts its 35 years of engineering experience into developing, assembling and testing its own brand of electro-pneumatic adhesive-dispensing systems, working closely with each customer on the designs before carrying out final assembly and commissioning at the end-user's own premises. For more details or to contact Leif, visit www.barkvall.com.

Footnote: During the compilation of this article, Barkvall Engineering won the contract to supply 32 Wichita ModEvo brakes to a paper mill – more on that story in our next issue.



CSD logs on..

Our Customer Services team usually prefers to stay behind the scenes, making sure that everything runs smoothly with Wichita products once they're installed at the customer, but here we take a more public look at one of the department's areas of troubleshooting expertise that is proving ever more vital as machine operations get faster and more complex.

Andy Smith, Wichita's customer service manager explains: "When a reciprocating machine such as a press or shear has cycle times of only 300-400 milliseconds, it's impossible to monitor each part of the operation manually, so we turn to electronic instrumentation to be our eyes and ears. At Wichita, we use the latest version PC based data logger, and it has quickly become an essential part of the CS department's diagnostic armoury when we have to trace operating faults in a customer's process."

In the right hands, the data logger is especially useful in monitoring processes using clutches and brakes in combination, where precise timing between engaging one and disengaging the other is vital to the correct and safe operation of machinery. Data are acquired during several operating cycles, and the resulting logs examined for indications of a fault. A common problem is overlap between the application of air to one unit and the exhaust of air from another, causing drag that creates heat and component wear, and in extreme circumstances, failure of the machinery to fully complete its cycle. Once this has been established, it narrows down the solution to simpler matters like checking that air is being supplied at adequate pressure and volume, and that valves are responding quickly to signals to perform their duty.

In addition to curing faults, the CS department also carries out pre-sale calculations to determine the correct Wichita unit for an application, and preventive care in the form of on-site after-sales service and process 'health-checks'.

Since our acquisition by Colfax Corporation, there have inevitably been changes to Wichita's sales and manufacturing operations, and these in turn are highlighting the need for more modern premises. So... we've made the exciting decision to move our UK headquarters!



We're not about to forsake our roots to make this adventurous journey, though. Wichita has been based in Bedford for nearly 40 years, a location that has served us and our many customers across Europe well. Our new centre of operations will be only a short distance away, still in Bedford, on a green-field site ideally suited to the future development of our business. From the ground up, this will be a purpose-designed, high technology manufacturing and service environment, offering faster production turnaround and even more efficient customer support facilities. Most important of all, it will give us the flexibility to take on new challenges to meet market demands, so we can continue to lead the field of industrial clutches and brakes well into the future. We'll keep you informed as soon as we have a firm time-scale for the move, so watch this space!

Torque Sense!

Continuing our regular troubleshooting tips feature, this time we look at the problem of clutches and brakes that don't operate as fast as they should. You're also welcome to contact us with any hints and tips of your own for working with Wichita products that may be useful to other readers.

Troubleshooting slow response time on clutches and brakes

Possible Cause	Solution
1. Insufficient volume (flow) of air into unit, due to:	
1.1 Control (solenoid) valve and/or piping too small.	1.1 Increase size of valve and piping.
1.2 Control valve too far away from unit.	1.2 Position control valve as near as possible to unit
1.3 No air reservoir, or reservoir too small.	1.3 Fit suitable air reservoirs (tank) in airline upstream of control valve.
1.4 Clearance in unit is too large.	1.4 Check and adjust in accordance with maintenance instructions.
1.5 Solenoid valve not functioning correctly.	1.5 Many valves require a minimum of 30 psi (2 bar) air pressure to operate correctly - check and give valve separate supply if necessary. See also below 2.5
2. Air not exhausting quickly enough, due to:	
2.1 See cause 1.1 above.	2.1 See solution 1.1 above.
2.2 See cause 1.2 above.	2.2 See solution 1.2 above.
2.3 Quick exhaust valves sticking.	2.3 Strip and clean quick exhaust valve.
2.4 Silencer, where fitted, may be clogged.	2.4 Clean, or preferably replace silencer.
2.5 Control valve not functioning correctly.	2.5 If sticking, replace with new valve, but first check that all plastic plugs have been removed from valve ports.

Possible Cause	Solution
3. Insufficient air pressure to release spring-set brakes.	Ensure air pressure is at least 5 bars (70 psi) to overcome spring force quickly.
4. Electrical signal to solenoid valves delayed by slow-acting relays used in control circuit.	Rectify as necessary
5. Delayed engagement on high-torque clutches, caused by the integral roto-coupling or adaptor or back of air inlet (brass ring) sealing on the inner face of the pancake airtube.	File across groove in the back of the roto-coupling or adaptor or grind a groove in the inner face of the airtube rubber to allow air into the full area of the airtube.

FAX BACK

Please add my colleague to the All Torque mailing list. Please fill in their details below:

NAME _____

COMPANY _____

ADDRESS _____

POSTCODE _____

TEL _____

Please fax this back to +44 (0)1234 350317

Not too early for Christmas shopping

We may only just be leaving summer behind, but now is the time to start thinking about ordering your spares for that essential maintenance work during the Christmas shutdown. Call us on +44 (0)1234 350311, or e-mail spares@wichita.co.uk with your requirements.



Don't leave it to the last minute!



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