

PROSAW

Sawing Times

Issue No.3

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News and application stories from **PROSAW**



Open Days “a real success”

With over 60 pre-registered visitors and other customers arriving on the individual open days, the Prosaw Open House and Sawing Seminar was a real success.

The latest blade technology from KR Saws was demonstrated on the High Specification, High Production Danobat bandsaws using the very latest Intelligent Cutting Software. Orders were received during the week for 7 machines with further interest and enquiries generated. Prosaw are the UK's largest supplier of the World's Finest Sawing Machines and working alongside KR Saws, using the New Roentgen Wave Blade, a 30% increase in production without loss of blade life was demonstrated. Power consumption was also shown to be at the same level as using conventional blades on the Danobat bandsaws. The complete extensive range of machines available from Prosaw were on show in their large purpose built showroom

from manufacturers Mega, Bomar, Waytrain and Bauer plus Prosaw's bespoke handling solutions designed to save money and increase throughput.

Prosaw's Sales Director, Robert O'Brien said "The success of our open house, demonstrates why we are the largest supplier in the UK of the very latest in Sawing Equipment, designed to meet all customer's needs from the small workshop through to international metal stockists. One thing that we never do at Prosaw is make wild claims of blade life and production capabilities, we would rather prove these with practical demonstrations and show a real payback for customers on our complete range of equipment."

Prosaw have a 5,000sq/ft. technical centre at their Kettering premises with over 40 machines under power and ready to demonstrate at any time.

PROSAW

Exchanging heat exchangers



Purpose built bandsaw system drastically reduces recycling times of oilfield heat exchangers

When **Prosaw** was approached at an International exhibition to provide a system that would saw through heat exchanger tube bundles that were three metres in diameter, the immediate reaction reflected the fact that none of their standard products offered a solution suitable for the application, however **Prosaw's** in house technical design team came up with a solution for cutting through a product of such a large diameter.

It emerged during discussions that the product in question was a particular type of heat exchanger known as a shell and tube heat exchanger which is most frequently used in oil refineries and other large chemical processes.

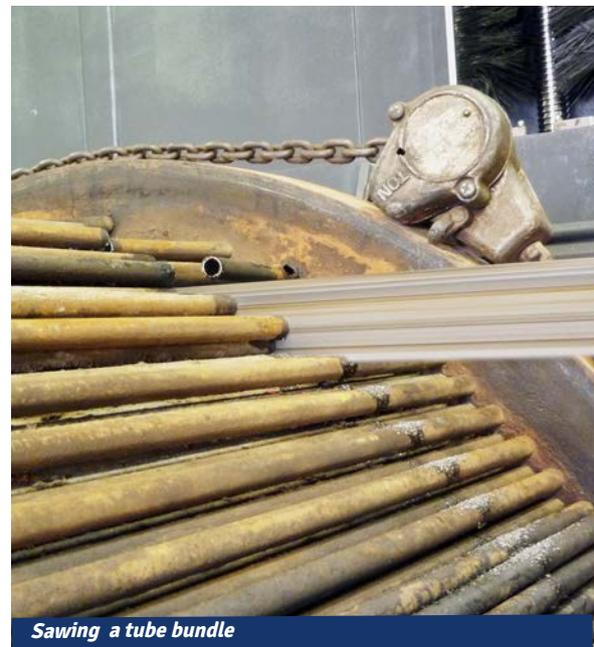
As the name suggests, this type of heat exchanger consists of an outer shell, packed internally with a bundle of tubes. To fulfil its function, one type of fluid passes through the tubes and another flows over the tubes in order to transfer the heat.

Eventually however, there will come a time when corrosion within the tubes is likely to occur, at which point they will need to be replaced and the first stage of this process is achieved by sawing through the entire tube bundle.

In response to this challenge, **Prosaw** designed a special purpose heavy duty machine which they called HCS-3000 and has a capacity of up to 3000mm in diameter. Featuring a horizontally mounted bandsaw fitted with a 67mm wide blade, the saw is able to slice through tube bundles in less than one

third of the time taken using conventional sawing machines. The bandsaw is mounted onto a vertical axis, the feed rate of which is very precisely controlled and pre-programmed to be infinitely variable in order to take account of the constantly changing profile of the tube bundle as sawing takes place. There is no operator involvement during the process of cutting the bundles.

Commented **Prosaw** Sales Director, Robert O'Brien, "We are very proud of our achievement in carefully designing and producing this remarkable system which delivers a massive reduction in process time compared with traditional methods, whilst simultaneously achieving a significantly extended blade life."



Sawing a tube bundle



The Prosaw HCS-3000

Copper bottomed investment



Aluminium/bronze billets are cut up to four times faster than previously possible

As a leader in copper and nickel based alloys, supplying forgings, castings and components to engineers around the world, Stoke-on-Trent based Copper Alloys Ltd are renowned for their particular expertise in the defence, aerospace and petrochemical industries, supplying precision engineered products for use in many diverse applications principally in the marine environment, from oil rigs to nuclear submarines.

After encountering speed and accuracy difficulties with an existing production bandsaw, Managing Director John Dudley knew exactly who to call to solve the problem, having previously purchased two Danobat bandsaws from **Prosaw** for similar applications.

The process in question involves cutting

cast aluminium/bronze billets of up to 810mm in diameter. The billets are cast adjacent to the cutting facility, to where they are transferred on cooling.

The machine specified by **Prosaw** is a Danobat HDS8A bandsaw which has the capability of an automatic feed system which automatically positions the billets in the correct location for cutting following each completed cut, meaning that continuous production is possible. This is an important upgrade on the previous system as the Danobat machine requires little or no operator interaction and is reliable enough to operate automatically for 24 hours each day.

The Company's standardisation of

Danobat bandsaws has a further advantage in that all three Danobat machines now operate using the same programme, leaving the operator free from the necessity of reprogramming.

Commented Managing Director John Dudley "We purchased our first Danobat machine from **Prosaw** ten years ago and have always been delighted with the quality of the machines and of the excellent service provided by **Prosaw**. The replacement of our previous machine with the Danobat HDS8A bandsaw means that the improved speed and straightness in cut that this machine achieves will increase our yield and significantly reduce the risk of producing scrap products."



Pipe dreams



Prosaw slashes the cost of cutting large diameter steel tubes



Tata Steel is one of the world's most geographically diversified steel producers, with operations in 26 countries and commercial offices in 35 countries. The company serves many demanding markets worldwide, including Aerospace, Automotive, Construction, Defence, Energy, Rail and Shipbuilding.

Tata's UK tube manufacturing business is located on the North East coast of England in Hartlepool. The company is one of Europe's leading manufacturers of hot finished, cold formed welded steel tubular products including large diameter pipes, many of which have been used in applications as diverse as the construction of the Millennium Stadium in Cardiff and the restoration of St. Pancras Station in London.

In Hartlepool, tubes of between 219mm diameter and 508mm diameter are produced and finally cut to length, a process that had previously been accomplished by means of a circular sawing facility.

However, with single cuts taking up to 25 minutes to complete, coupled with a relatively short blade life, there was always a danger of creating a serious production bottleneck. Additionally, the frequent overhauls that were needed to the circular saw blades were not only expensive, but also time consuming to carry out.

The acquisition of a Danobat iDS5 bandsaw from **Prosaw** has now transformed this process, bringing with it a regime of fast cutting and ultra long blade life. Besides which, bandsaw blades are comparatively inexpensive, so are able to be discarded economically at the end of their life with no requirement for overhaul.



Tata Plant Engineer John Hall, who was responsible for the acquisition and commissioning of the Danobat bandsaw had this to say about his experience: "**Prosaw** were prepared to engage with Tata's requirements in a way that other suppliers were reluctant to. For example, they were happy to adapt our diablo roller clamping devices to the centreline of the conveyor, whilst simultaneously delivering an on-time system, including commissioning and training at a competitive price," adding "Working with **Prosaw** was a very positive experience."

Speeding up the laundry



New Bomar bandsaw with automatic feed system increases throughput for laundry systems manufacturer



Founded in 1948 by Herbert Kannegiesser, the company started life producing ironing machines for the garment industry. Production originally commenced in a wooden shed near Vlotho, Germany with just four employees, where their ironing presses made specifically for use with dress shirts quickly became their speciality and helped to establish an international reputation for the young company.

More than six decades later, Kannegiesser now offers a full range of industrial laundry equipment including washer extractors, continuous tunnel washer systems, moisture extraction presses, dryers, feeders, ironers and folders, garment sorting and tunnel finishing systems. In their Banbury plant, the company

specialise in producing what is known as the “Supertrack Monorail System” which has been designed to transport soiled laundry through all of the necessary laundry processes, working in harmony with the entire range of Kannegiesser laundry equipment.

The monorail tracks, which are constructed from stainless steel were previously cut to the required lengths by means of a hydraulic saw that relied on a simple manual feed system, so in order to simplify the production process as well as increase efficiency and throughput, Kannegiesser turned to sawing specialist **Prosaw** for the complete sawing and material handling solution.

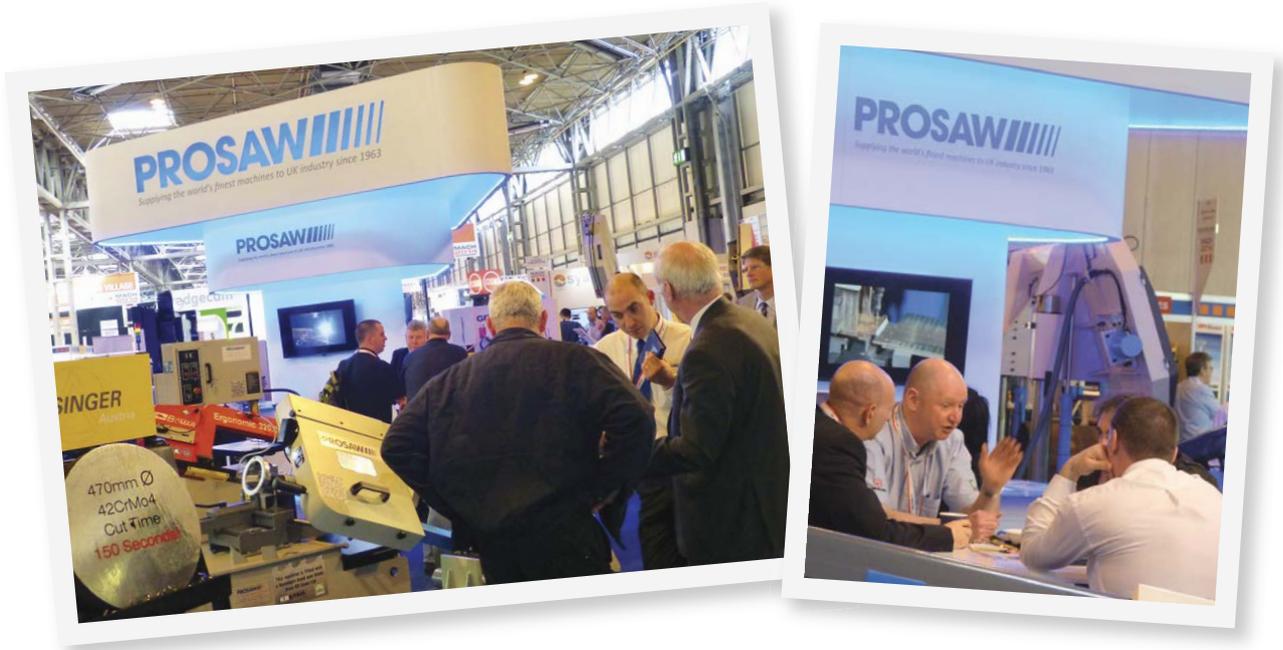
Prosaw’s answer was to propose the use of a Bomar ergonomic model 290.250 DGA bandsaw. This advanced system features automatic programming in order to eliminate the possibility of manual errors, whilst simultaneously simplifying the process and increasing efficiency.

Importantly, **Prosaw** also designed and produced a purpose-built mechanical handling system in order to automatically introduce the lengths of track stock into the bandsaw, thus greatly simplifying the crucial in-feed part of the process.

The resulting automatic sawing system has proved to be a major benefit by simplifying an important element of Kannegiesser’s Monorail manufacturing process.



Part of the Prosaw automatic handling system designed to load the bandsaw with monorail track



MACH 2014 took place at Birmingham’s NEC in April and has proven to be Prosaw’s most successful show ever, resulting in the delivery of over 25 machines throughout the UK.

Highlights of the week included UK premiers of the NEW Danobat HDS series bandsaw with the very latest Intelligent Cutting Software and the Exactcut TAC75 high production carbide circular saw designed for cutting both carbon steel and stainless steel.

Prosaw now look forward to an even bigger and better MACH 2016, which they have already committed to with an even larger stand giving them the opportunity to demonstrate their growing range with more NEW machines poised to display.

The dates for MACH 2016 are already confirmed 11-15 April and Prosaw’s stand number is 4410 in Hall 4.

Prosaw Certificated Training Courses

- Can you meet your obligations to the Health & Safety of your bandsaw operators?
- Are your saw operators trained and certified?
- Are you running at maximum productivity in your cutting department?
- Are you getting maximum life from your blades?

If you cannot answer yes to all of these questions, then you cannot afford to miss one of our training sessions.

We were established in 1963 and our specialised tutor is a respected authority in bandsaw theory and practice gained in over 20 years of practical experience.

You will benefit from:-

- A thorough working knowledge of bandsawing techniques
- A comprehensive reference package for you to take away
- A certificate of completion, an acknowledgement of your operator’s competence

Call us today to
book your place
01536 410999



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