



OFFSET BLANKET: CONVERTING

We are aware that our clients' formula for success is: **Performance = Technology x Service**
So, why not apply it to our own work? That is in fact exactly what we have done.

OMC, PIONEER IN BLANKET CONVERTING



Having been resolutely committed to service from our beginnings over 20 years ago, and as the top supplier for offset blankets among other products in the home market, the way to go was clear: **TECHNOLOGY.**

The **only way to stand out is through innovation**, and so we have worked very hard to get equipped with the most innovative technology, as required throughout the blanket handling/converting process.

OMC invested heavily early in 2008 both in fixed assets (new premises) and in acquiring new technology for every phase involved in the processing of blankets (storage, cutting and barring).

New premises

Thanks to the acquisition of new premises alongside the existing ones, OMC can devote an area of **700** square metres solely to **blanket storage, converting and shipping.**

In this way, the entire production process is centralised, bringing greater control and monitoring potential throughout.

Storage

350 square metres devoted to **storing** supplies of blankets of various types and widths.

Converting

Marketing blanket manufacturing technologies like **Stabil-X** and **LibiX**, which are among the most innovative to be found in the market, entails being up to the task in terms of technical and technological resources to assure processing to the highest standards – particularly in **cutting precision and in excellent, reliable barring.** The technical and safety requirements of the various manufacturers of machinery, be it sheetfed, newspaper or commercial web presses, are ever more stringent, and meeting them assures greater reliability and security for our clients.

INVESTING IN HIGH-TECH BLANKET HANDLING TECHNOLOGY



Cutting

Through our recent adoption of a new **fully automatic high-tech blanket cutting and processing technology**, OMC is a pioneer in investing in such machinery in the home market.

Thanks to this new investment, OMC's blanket output capacity is now higher, reaching initial estimated levels of 7000 m²/month or 8500 pieces/month.

This automatic **oscillating-knife** cutting system features **Numerical Control (CNC)** and can cut printing blankets into regular and irregular shapes, as well as punch all kinds of blankets since interchangeable heads in the 2 to 12 mm range can be fitted.

Moreover, all the blankets are marked or coded on the back by a printing head, which brings much simpler and more controllable traceability.

Another notable feature is the possibility of working with **Preset Programming**, which enables standardisation to be achieved in blanket manufacturing in line with the systems provided by the OEMs, thus assuring the greatest precision and reliability as well as a significant increase in production capacity.

To achieve maximum cutting accuracy, positioning is handled by laser for alignment of grid lines, the "0" point

being marked for the launch of the CAD/CAM cutting program.

Lastly, it must not be forgotten that by working with technology of this kind we manage to **minimise the waste generated** in processing, and to achieve the best possible environmental performance.



Polymers and Aramid and Kevlar fibres are new, latest-generation materials that have been brought into the manufacture of printing blankets, and have a direct influence on blanket cutting. Both Aramid and Kevlar have **high mechanical and cutting strength**. This can be seen clearly in the use of such materials in critical applications such as bullet-proof waistcoats and flame-proof jackets (withstanding up to 500 °C), motorcycle helmets, gloves designed to resist cutting, grazing and other such injuries, and puncture-resistant bicycle tyres.

In short, introducing new, innovative materials demands technological innovations for handling them: a manual cutting machine would not be very efficient or reliable in processing those materials.

Technical characteristics:

| | |
|----------------------------|----------------|
| Numerical control | 2 axes |
| Largest format | 2200 x 2500 mm |
| Longitudinal cut precision | +/- 0,01 mm |
| Transverse cut precision | +/- 0,01 mm |
| Diagonal cut precision | +/- 0,01 mm |



ATTEMPTING TO ENSURE CONSISTENT BARRING FOR EACH BLANKET

Barring

If **precision, reliability** and **standardisation** are key factors in blanket cutting, they are more important still in barring – the most critical stage anywhere in the blanket processing process on account of its prominent role when the blanket is fitted on the printing machine/rotary press.

By bringing in recently our **hydraulic press machine** with its **numerical control** system (CNC), with four axes as standard

and capable of pressing bars of all kinds in aluminium and steel, we were attempting to ensure consistent, standardised barring for each blanket, taking the two fundamental variables into account at all times: the type of bar and its exact pressure in view of the machine it will be working with.

Technical characteristics:

| | |
|-----------------------|------------------|
| Numerical control | 4 axes |
| Maximum pressure | 70 metric tonnes |
| Maximum width | 2200mm |
| Thickness precision | +/- 0,01 mm |
| Parallelism precision | +/- 0,01 mm |

A bar **traction-control machine** provides reliability control for the finished piece.

For barring and pressing a conventional blanket (fabric-backed), that equipment might have been sufficient, but for working with the new polymer-based technologies, that hydraulic press had to be supplemented with a **delaminating** and **brushing system**. The purpose of those two units is to get the Aramid and Kevlar fibres to emerge on the outside, and so when the bar is added along with the adhesive the blanket is fully integrated and “bonded” with the bar, thus ensuring a degree of strength that is much higher than with traditional barring systems.

So much for the TECHNOLOGY variable. Our devotion to SERVICE and our long, solid EXPERIENCE in processing and supplying blanket to the Graphic Arts sector remain in place as always. For our clients to get the best PERFORMANCE levels, we must achieve the best balance we can between TECHNOLOGY and SERVICE.

For we here at OMC wish to talk about the FUTURE, about DREAMS, about PROJECTS... but also about REALITIES, TECHNOLOGY and INNOVATION, and above all else about our ongoing DRIVE TO PROVIDE EXCELLENT SERVICE for our clients.

DEVOTION TO SERVICE AND SOLID EXPERIENCE IN THE PRINTING INDUSTRY BUSINESS

