

Creating the perfect fold with Stahlfolder



The modular Heidelberg Stahlfolder TH 66 folder at Multiprint Litho

When it comes to printing, in all its various forms, there are certain areas throughout the production process where bottlenecks can and do occur. Very often the solution which most printers will adopt is to throw more manpower at the problem with the hope that it will solve the problem. The result, generally, is that the 'temporary' solution becomes a permanent feature and the costs associated with that step in the process continually increase.

Problems of this nature often occur, when somewhere further upstream, or occasionally downstream in the process, an improvement in technology results in faster productivity. The habit of assigning more personnel to assist with the aim of clearing the backlog only creates the illusion of solving the problem. For many commercial printers the area where this backlog occurs is very often after the printing has been completed. Their new high-speed presses, digital or conventional litho, can handle many thousands of sheets per hour but the subsequent steps are not quite as fast. Even if the finishing department has been upgraded to match, the one process which can slow things down is the folding step. This is a very deliberate and important part of the process.

This was exactly the situation which high-quality Johannesburg printer Multiprint Litho found itself faced with. Its Heidelberg XL 105 press is more than capable of churning out top-quality printing at the full rated speed of 18000 sheets per hour. Further down the line its saddle stitching and binding lines can handle the volumes they are required to process, but the midway step of folding was letting the side down. As with most other companies, the interim solution was to assign

more people to assist and the temporary answer became a permanent fixture.

The problem with this solution is that it innocuously adds costs to the production process. The additional staff are not factored into the process because their salaries are being paid anyway, but when those staff are forced to work overtime alongside the main operator costs can increase very rapidly. This was precisely the situation which Dave Baker, managing director of Multiprint Litho found had occurred. Folding had become the bottleneck and the problem had slowly achieved critical levels.

When considering a new folding machine Dave and his production director Marc Casais were set on staying with a brand they felt comfortable with, the Heidelberg Stahlfolder. The only choice which had to be made was the specific model which could best meet the company's production requirements. Following discussions with the knowledgeable staff at Heidelberg Graphic Systems, the decision was made in favour of the Stahlfolder TH 66 fully automatic folder, the first in the country.

The installation of the new folding machine was not just about alleviating the bottleneck which had occurred in this department, although it was the main factor. Of equal importance was the ability to handle a wide range of jobs with the same attention to detail and drive for quality as given to all the other production processes in the company.

One of the most innovative features of the new generation of Stahlfolders is the fact that the system is modular. Traditionally folders have to be configured with a specific set and type of folding options. The TH/KH series of folders is designed in a completely modular manner in order to allow feeders, folding units and deliveries to be connected or moved out of the way according to the requirements of the job.

According to Mark this feature offers another benefit. 'All the folding units make use of buckle plates as opposed to folding knives. The benefits of this system are enormous. Not only is a buckle plate system much faster than a knife folder, it also more accurate allowing us to achieve far superior folding accuracy than with our old folding machine.'

The folder at Multiprint Litho has been configured with four buckle plates, another four buckle plates and then two buckle plates allowing a full spread of folds according to the requirements of the jobs routinely handled by the company. Dave commented, 'The nice thing about the modular design and construction of the folder is that if we should ever require a different set of folds, we can simply order the specific unit we want and connect it. It really is a simple matter of plug and play.'

As one would expect from a Heidelberg product the Stahlfolder is computer-operated and links to the prepress system allowing JDF data to be used in the setting up of the folder. This considerably speeds the makeready process allowing more jobs to be handled in a day. It also allows for jobs to be stored which means that future makereadies are even faster. Mark commented, 'With the Prinect system on the folder connecting to our prepress data our makeready times are far shorter and when we have a repeat job we can handle the complete makeready

in around two minutes compared to old manual makeready process which would take around 40 minutes to an hour. This means that we can effectively handle as many as four additional jobs per day.'

The folder has been configured with the VSA 66 vertical stacker allowing for products to be delivered into easy-to-manage stacks, rather than the standard stream feeder which often requires that the machine is run slower or needs an assistant to take the folded products off the delivery.

Dave added, 'This folder has not only completely removed the bottleneck which had formed in our folding department, it has also meant that we no longer require two people to operate the folder. Our operator can run the machine at full speed and still has time to feed and remove product from the folder.'

Given the computerised nature of the new generation folder, extensive training was required to allow the operator to be able to master the smooth running of the machine. This training was provided by Ian Trengrouse, the Product Manager in Finishing from Heidelberg UK, who came to South Africa for three days to train Multiprint Litho's senior folder operator – Lesley Stillies.

Mark commented, 'The training was quite intensive but it was also comprehensive allowing our operator to master all the different aspects of running the Stahlfolder. Since then, he has been training one of our other operators so that we always have a back-up. Once the training was concluded we realised that it is a very intuitive system which is easy to understand.'

Dave concluded, 'This was the one of the best purchases we have ever made. Not only did it solve a problem but has gone a long way to allowing us to further improve our quality, something which we constantly strive to achieve. We have completely eliminated the backlog, we have reduced the number of staff required in the folding department and we have avoided the need for overtime. All of which impact on the profitability of every job we produce. It really has been a fantastic experience.'



Senior folder operator Lesley Stillies at the Stahlfolder TH 66