

INCREASED PRODUCTION AND REDUCED SAWING COSTS AT EXPANDED METAL

Installation of a Bauer six metre feeder automatic mitre bandsaw has solved a production bottleneck and reduced costs at Hartlepool based Expanded Metal Company.

Their production process involves the manufacture of gates, security fencing and allied products requiring the purchase of bundles of section which are then cut to length. A large portion of the production requires the use of sections with opposing mitres which suppliers struggle to provide.

Cutting multiple sections with double mitres.

As cut lengths up to 2 metres are required, a conventional automatic bandsaw with multi feed was not suitable due to the time lost in feeding the stock material through. Expanded Metal approached Kettering-based sawing specialists Prosa who recommended a Bauer VG450-ST Automatic bundle cutting bandsaw with a six metre incremental feeder and the

ability to cut mitres 45° left and 60° right.

The principle of operation is different in that feeder mechanism clamps the end of the six metre stock material; it isn't released through the whole of the cutting cycle. NC control allows different lengths and angles to be cut without re-programming.

Automatic discharge for "lights out" cutting.

Certain circular sections which cannot be cut in bundles and sections requiring opposing mitres are cut in a raft.

Stresses in rolled hollow sections have a tendency to jam the blade when it is retracting but the Bauer saw overcomes this problem by pushing the cut pieces away and retracting the stock material slightly before the blade is retracted.

Controls are operator friendly despite the machine's ability to perform complex mitre operations. The setup is straightforward without the need for separate setters. Once programmed, the



system is totally automatic enabling the operator to carry out other tasks whilst sawing is taking place. An additional benefit is that the crane and forklift are freed up to carry out other tasks.

Having solved the problem of mitre cutting long lengths, the saw could only realize its full potential by incorporating an automatic discharge system.

Prosa's in-house material handling department supplied the solution using powered rollerways to move the cut pieces away from the saw and an integrated sweep discharge system to transfer the cut pieces sideways onto a stillage.

This allows "lights out cutting", a complete job can be loaded at the end of the day, the saw started, operators can go home and the job is completed when they arrive back in the morning.

Operations Manager George Hutchinson says "We are delighted with the cutting capability of the Bauer mitre saw, especially as it is cutting bundles of section and angle. This is a tough sawing challenge which the saw handles with ease. We particularly like its ability to cut mitres left and right together with the operator friendly NC controls that allow complex cutting to be achieved.

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