

Eder

## Steel plate flamecuts deburred simultaneously on both sides

A LISSMAC Model SBM-GS plate deburring and corner rounding machine has been supplied to a manufacturer of ready-to-install heavy, complex welded assemblies for construction machinery, transport vehicles, plastics processing machines and much more.

"Last year our flame cutting machines handled steel plates with a total weight of around 10,000 tonnes of plates from 25 millimetres up to 120 millimetres. The thicker the plates the larger the nodules and burrs. With very thick plates, the nodules are removed using chisels. The cut plates prepared in this way were then deburred using hand-held angle grinders. That is strenuous work with an unhealthy body posture, noise, sparks and intensive dust development. Manual deburring cannot guarantee exact and uniform edge machining, nor is uniform rounding of the cut edges possible. In order to be able to carry out this work in line with the high quality standards that we set. We looked for a suitable special grinding machine and found it at Lissmac".

"Our company has established itself as a supplier of large welded parts and assemblies that are always cut and further processed to form finished components in line with the customers' wishes. We manufacture, for example, excavator chassis,





booms and base frames for plastics processing machines.

After cutting, we deburr the pre-cut parts, bend them as necessary and weld them together to form assemblies. The welded parts are subsequently straightened and then machined on modern CNC machine tools, in some cases to IT6 precision. The ready-to-install manufacturing also includes the desired paint finish. It protects the parts and assemblies, first during transport and later also in practical operation.

Some edges of the numerous cut parts are visible even in the finished product. The rounded edges produced by the Lissmac machine contributes to enhanced quality and service value. The rounding of the cut edges also ensures safe manual handling of the cut parts. The SBM-GS 1500 grinding and deburring machine completely deburrs the thick plates on both sides in a single pass and rounds off all inside and outside edges. It operates just as reliably in the thin sheet range as in the range of thick plates up to 120 millimetres where it can remove burrs up to 5 millimetres in height. We save around two-thirds of the time previously needed for manual deburring.

The SBM-GS 1500 grinding and deburring machine has a total of eight grinding units with which the plates are dressed. After delivery of the sheet metal parts from the feed belt, the work pieces are guided through the machine by pressure rollers. In the front part of the machine there are two abrasive belt grinding units positioned parallel that grind the sheet metal parts from the top, and two units that dress the sheet metal parts





parallel from below. These first four units grind off the burrs and nodules produced during flame cutting. Only when the plates are clean can the following four grinding units carry out the precision rounding work. For this, two units each above and below the plate drive counter-rotating abrasive belts.

The intuitive display allows setting of the grinding units quickly and easily. The frequency controlled feed permits continuously variable setting of the throughput speed. When the grinding belts are new, only the thickness of the plates has to be set. As the abrasive is worn off the belts the feed speed can be adjusted accordingly."

The pivot system for the tool change on the machine has proved to be extremely useful in practice. It allows for easy changing of the abrasive belts in about fifteen minutes

Photos attached

For further information call Klaus Lehnen on 0121 359 4322

Pr/lissmac/edersurtech









Model SBM-GS with conveyor

The priciple of Model SBM-GS. 4 abrasive belts for deburring the top side and 4 abrasive belts for the bottom side

