

VISUAL OPTIMIZER

The Ultimate Aid For Better Extrusion

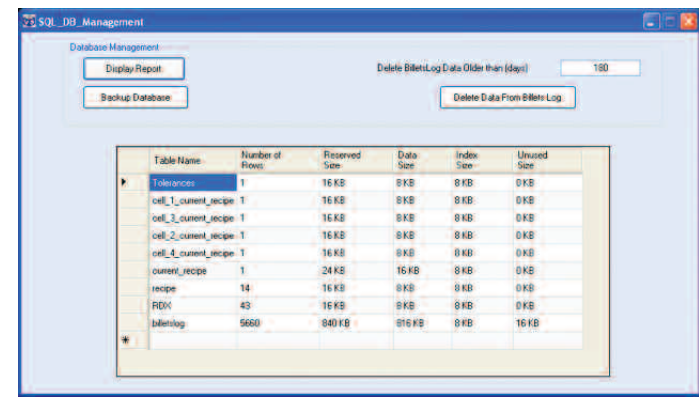
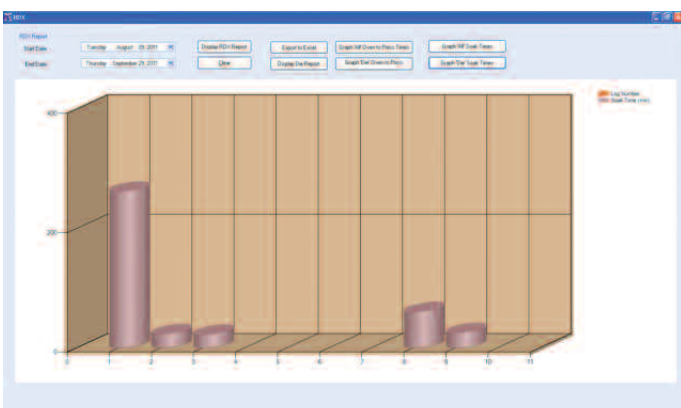
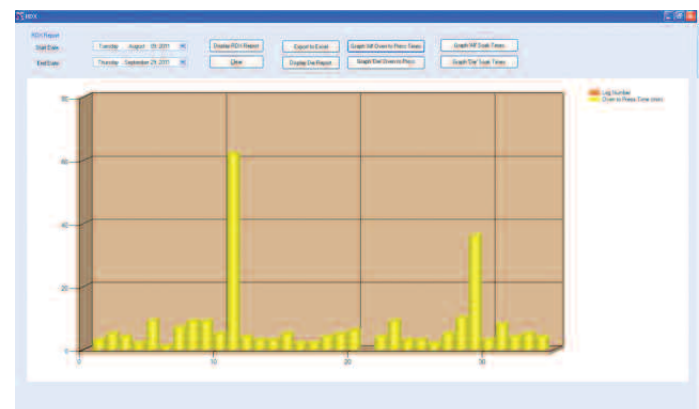
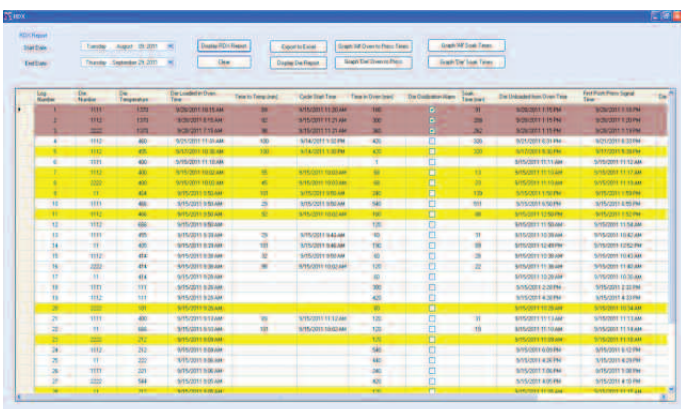
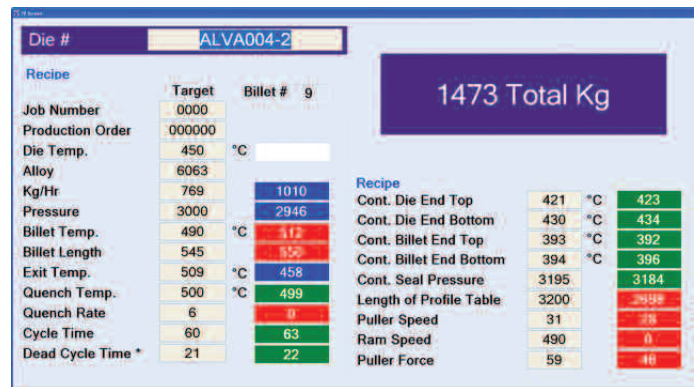
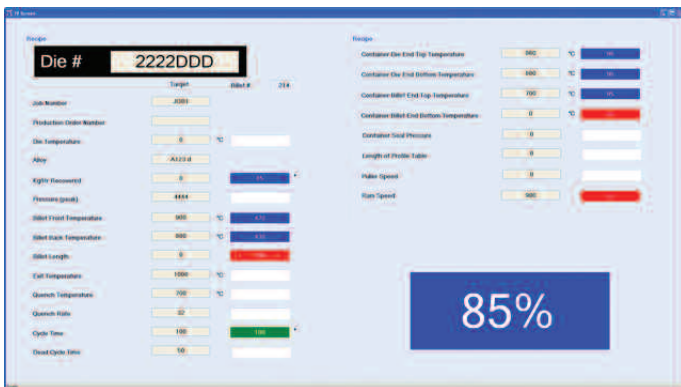
Every extrusion production process can be improved. There are no exceptions. There are few other mature industries where even world-class productivity is so unusually far less than optimal.

Better extrusion is done by better extruders, not just better equipment. They are challenged, however, by the number of constantly changing variables in the extrusion production system. Because light metal extrusion is a process in which components interact and temperatures continually change,

the number of combinations and permutations that can occur at any point in time is virtually infinite.

If the press operator can know the temperatures at several critical areas during the extrusion cycle, plus the ram speed, he can positively control the process while the press is running. He will then have a much better opportunity to operate considerably closer to optimum productivity. Castool now makes this possible.

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EXTRUSION

Recent advances in the technology of ultra-accurate remote temperature measurement, plus the development of smart containers, has made it possible for Castool to develop the Visual Optimizer, the best tool yet devised to assist the extruder in improving his productivity.

Recipes For Success

The operator is given the press, the profile, the die and the alloy. From this information, plus his experience and talent, he can prepare an initial recipe. This will contain all necessary temperatures, ram speed, dead cycle time etc. that he can instantly and positively control, and that will safely produce saleable product.

The Monitor

At the operators post, above the press a large back-lit monitor screen shows the actual temperature or speed at each point being monitored, plus the target from the previously prepared recipe. If the actual is within 5% of target, it will appear in green. If not, it will be shown in red. The operator will then be able to tell at a glance how close he is to target at each point being monitored, and take whatever action is required to bring the system back on track.

The Castool Visual Optimizer is customized to fit each customer's needs, and budget, but it will typically include ram speed, dead cycle time, billet temperature, container liner temperature top and bottom at both entrance and exit, die temperature, profile exit temperature, quench rate,

and also graphically, the temperature status of the die in each single cell die oven... time to temperature, and time at temperature.

The Freeze-Frame

When the extruder wants to record the combination of temperatures and speeds that is producing a new level of productivity to be used as a base for further improvement on the next repeat run, a Freeze-Frame can be taken to record all the information being monitored at that precise instant, This is then the new recipe for the next repeat run.

Eventually every die will be accompanied by a current recipe.

Optimal Extrusion

The pursuit of optimal extrusion is never-ending. It is a goal can never be reached. The logic of ongoing improvement is, however, unassailable. Extruders who thought that their productivity and recovery rate was well above average, are invariably surprised at the increased level of efficiency they have achieved over time after committing to ongoing improvement, assisted by the Castool Visual Optimizer. The ROI is outstanding.

For Better Extrusion

Fill the container as much as you can. Empty it as fast as you can. Do this as often as you can. With help from the Castool Visual Optimizer, better extrusion can be assured.

