

# AS 9100 QUALITY

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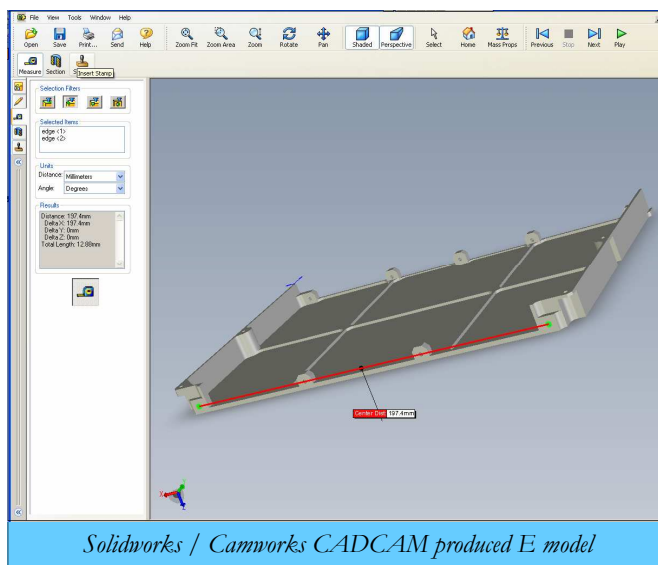
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## Special points of interest:

- New Technology

## A MODEL COMPANY

As from last month there are now computers at every CNC machine tool. This next stage of our computerisation gives us new and exciting capabilities. The most visible change is the addition of E drawings and models at the machine. These models can be sectioned, measured, animated or even amazingly weighed and surface area calculated. Users are reporting that the models are proving invaluable for checking sizes and interpreting complex geometries, as well as saving a lot of time. The transfer of tapes is also being substantially improved both in terms of transfer time and also in the ability to drip feed every machine with plans to improve data integrity. Some of the manual documentation issued with the works order will now be phased out as the information can now be displayed real time at the machine. Examples are; quality information, probe data, risk analysis, operation time performance graphs and overtime lists. More options will be added over the coming months. If any



operatives are confused or unsure how to use the new system please advise their foreman who will arrange training with the projects

The hardware part of the system should be fully operational by Christmas. Like probing measurement on the lathes this capability will be a

*"invaluable for checking sizes"*

office.

Now that computers are in place at all machines we are proceeding to install automatic tool tracking using optical recognition of 2D bar codes lasered into the tools.

world first. Apart from tracking tools we hope to make the system verify that the correct tools are correctly located in the machine tool changers, thereby eliminating a source of error.

## DON'T ASK FOR WHOM THE BELL TOLLS...

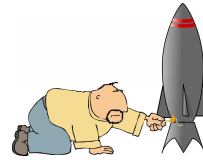
A doctor once told me "there are only two certainties in life, death and nurses". Old age comes to us all inevitably, and Alex Skinner our Engineering Director has turned 65. This led to him receiving the inevitable carriage clock to commemorate the event. As fitting this clock is driven

by hot air, at least indirectly, because changes in pressure will keep the clock running for at least 600 years or Alex's retirement, whichever comes first. The precision of the mechanism and its intricacy have led to the accusation that Alex is allegedly clock watching.



Legal history was made in Scotland today when a clock was cited as cause in a divorce case.

## 10. 9. 8. 7. 3. 5.....LIFTOFF



Sometimes it's important to get the order right. We have parts in the factory where we have ten parts and ten works orders and it is vital to process these in the right order. Why? What possible difference can it make which of ten identical parts gets done first. Simply put, our customers put individual delivery dates against each order. Early or late delivery impacts on their "just in time" philosophy. Although in reality they have the parts to build,

according to their system we are too early with some parts and too late with others. Because the customers measures do not accurately measure our real performance we developed our own measure, but even we can't cope with changes in order of processing works orders. Delivery performance is an important metric for measuring the company's performance and on the surface our performance is really poor. But it's not, we simply have

to process orders in the right order. Supervisors & operatives should take care to ensure that works orders are processed in delivery date order, normally the same order as works orders are raised in.



## PERSONNEL NEWS

Congratulations to Alastair Furniss on his promotion to Sales and Operations Manager. His new responsibilities include oversight and monitoring of the Production Control System to ensure job profitability. His previous experience as a Purchasing Manager at BAe is proving invaluable in his new role.

Congratulations to Andrea Ferri on her promotion to Administrations Manager. Her remit includes a variety of operations issues, including Health and Safety; 14001; apprentices; and

new building projects.

The managing director is looking for a new PA and in accordance with new ageist, sexist, weightiest, colour & PC legislation, suitable candidates must have the following qualifications.

1. A pulse; only people with a pulse will be considered.
2. Homo Sapiens; Cro-Magnon need not apply.
3. Fluent Scottish.
4. Phylogenetic tree hugger.
5. Amateur dramatics an advantage.

Congratulation to Tommy Grassie on thirty years service. Tommy who started as an apprentice in 1976, is now a Projects Manager with prime responsibility for CNC turning.

Nikki Hutton who controls the issue of documentation for the production system is training Paula McInarlin to replace her in that function. Sometime early next year Nikki will move to the quality department where her in depth knowledge of the production control system will prove invaluable.

*"A pulse; only people with a pulse will be considered"*



## IT'S NOT EASY BEING GREEN

CPE has a requirement driven by its customers to secure accreditation to the Environmental Standard, ISO14001. We currently have in place a fully documented procedure containing audits, processes, legislation etc. in accordance with ISO14001 regulations as compiled by our external Consultants together with our Environmental Management Team. However, we are currently

unable to proceed further with accreditation to this Standard due to one environmental non-conformance with regard to coolant. Proposals and plans have been discussed to bring this area up to standard however, as mentioned elsewhere, delays with the Council to extend our factory within this area have prevented us from progressing further. Once this aspect of confor-

mance has been rectified it would seem that we are very close to gaining ISO14001 accreditation.

Our use of energy saving equipment, re-cycling of materials and good housekeeping puts us in the forefront of manufacturing companies.

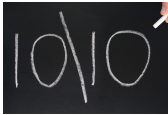
Watch this space for updates on our progress!!!  
A. Ferri



## CONTINUOUS IMPROVEMENT

Since we upgraded our computer servers last quarter the old servers have been deployed in a new role. The volume of internet traffic and reliance on our e-mail systems for everything from e-drawings to customer orders means that we require a fault tolerant system with built in redundancy. The system upgrade incorporates new email server software which greatly increases our ability to deal with the multitude of 'spam' received on an ever increasing basis. Further refinements to the 'spam detection' capability will allow each individual user to 'blacklist' messages getting through our outer defences ! Training will be given shortly to all affected.

We receive many visitors every week, and in addition we are audited by a variety of organisations on a regular basis. All these people comment on our level of technology and the sustained rate of improvement. It is a credit to our workforce that we have a culture that not only accepts change but actively welcomes it. Ten out of ten.



Last quarters issue came in for some criticism as well as praise. Comments from our residents, Statler and Waldorf, ranged from "bravo, magnificent, to boo, terrible" generally in the



same sentence. It would appear that themed issues aren't to everybody's taste.

On a different note Castle's football team thrashed the Linn football team 7 - 4.



John Laverty scored two and Martin Newman, Jack Hazard, Craig Thomson, Robert Smith and Gary Senior all scored (at football).

## HEALTH AND SAFETY

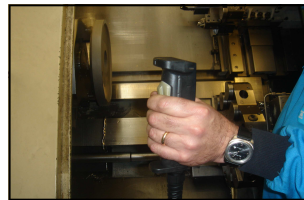
Graffiti in toilets is offensive, moronic, illegal, pathetic, sad and reinforces bigotry, but on the plus side it costs money to remove, thus providing employment for someone. On balance then a monumental pain. If you are the culprit, stop it!



As part of the computer upgrades all the remaining CRT monitors in the factory have been replaced by 19" TFT flat screen panels. These are more energy efficient, easier to read, take up less space and emit no harmful radiation.

The installation of safety devices to allow safe operation of the CNC lathes has

now been completed on all the CNC lathes and must be used any time the interlocks have to be defeated, such as during set up operations.



*"Safety devices must be used any time the interlocks have to be defeated"*

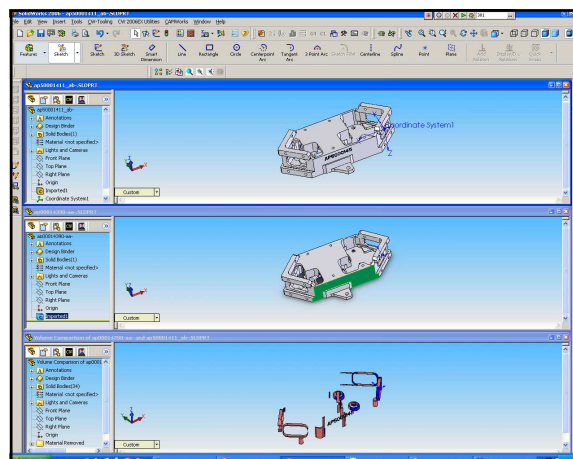
## NEW TECHNOLOGY

Often new revisions don't itemise every change to a component. Since you have no idea how many changes there may be, when do you stop playing spot the difference. To solve this problem we have acquired new software from Solidworks that highlights changes.



*Spot the difference*

The red and blue in the third panel indicate metal on and metal off conditions.



(Need More INPUT)



*AS9100 is our future.*



## NUMBER 5 ALIVE STEF & ME

Stef & I are looking forward to our fifth SL603 which is due to arrive in January and because of space constraints will be located in the 235 building close to the Max Mullers in Stef's section. The machine comes with a MAPPS control. All our SL603s have special high torque motors and custom pulley systems.



*Here's one I made earlier*

Our second Duracenter 5 CNC Vertical Machining Centre was installed last month. Highly accurate, this machine is working mainly on defence parts. Initial reports are that manufacturing times are about half that of the MV55 which it replaced.



*Precise, fast, with a powerful control*



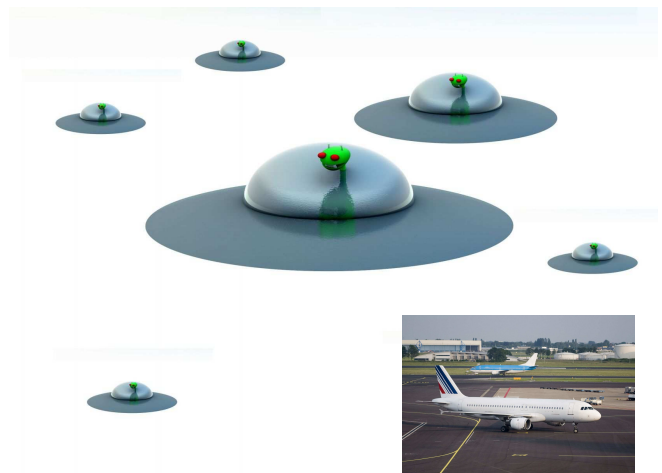
Our second Global 12.22.10 CMM is now fully functional in it's new room in the new factory. In total we now have four fully automated CMM's and one manually driven CMM.

## SPACE THE FINAL FRONTIER

We can't cling on to plans to develop the current site indefinitely. We are running out of space for new machines and almost all the old machines that can be replaced have gone. We need room and talks with the council to develop our existing site are proceeding very slowly. As a result to give us other options we have obtained a new site close to the orbital motorway. We have started the planning permission process but this could take many years or we might never get approval, but if and when we are successful the new site would provide us with expansion room for the foreseeable future. An excellent location with good access, the new site would



*It's Scotland! You were expecting the sun?*



*One of these is a real spacecraft and the other is the shuttle.*

allow us to start with a clean sheet to provide a world class, state of the art, environmentally friendly, light manufacturing facility. A high priority for the new location was a short commute to the existing factory in order to facilitate communication between the two sites, and as we will be retaining our existing site for the foreseeable future no one should worry about the move. At present we still have not given up hope on developing

our existing site, but we do not appear to be a priority for the council. Perhaps the possibility of our moving will give them pause for thought.



*This man has a warped drive.*