

AS 9100 QUALITY

INSIDE THIS ISSUE:

Manifestly Better	2
Flame Grilled	2
Smoking Ban	2
TQM	3
Health & Safety	3
New Technology	3
GD&T	4
Contract Review	4
And Finally	4

Special points of interest:

- New deliveries improving
- Systems now meet AS9100 requirements
- GD&T vs. Engineering Review

GET KNIGHTED OR HOW TO GET LETTERS AFTER YOUR NAME

Want a title? Need letters after your name? Send large sums of money to a well known person of your choice. Strictly a loan of course. Alternatively, work really hard, deal with any minor non conformances and get assessed on the 10th of April after which, all being well, we can add the letters AS/EN 9100:rev B. after our name. This aerospace standard replaces our ISO 9002 approval. On the environmental front our ISO 14001 application is still on course for approval end of May. A pre audit is planned for the end of April which should uncover any missed problems.

To our new and ever expanding readership welcome to the new year . We now have readers in all four corners of the globe. Faraway places with exotic food and strange names, places like New York, Barnsley and Bradford. By the way if anyone knows where the four perpendicular right angles are on a sphere, could they please inform our quality department because they are having trouble measuring them. To help

them out we have ordered a new larger CMM. Still not big enough for the whole world but big enough to accurately measure a Blisk. The Brown and Sharp CMM is due for delivery at the beginning of June and will be located in the 211 factory in a temperature controlled enclosure opposite the SH8000. It is intended that once programmed [offline] that the responsibility for the operation of the unit should be from the factory floor and not from the quality department. As part of the purchase all Global units on site will be brought up to software level four, which now incorporates the capability to measure



Global Performance 12.22.10 CMM

with the projects office who will give you an explanation, or find out what the correct

Send large sums of money to a representative of your choice

composite tolerances. In March Castle hosted a seminar on Geometric Dimensioning & Tolerancing. [see article page 4] This is a complex area and not fully understood even by the experts. So if you get a drawing with symbols that you do not understand, don't worry, you're not alone, but please, please check

interpretation is. It is vital that before you start a machining operation you have reviewed and understood all the relevant data including,:drawings, previous quality issues, risk assessments, tooling sheets, internal, route card, productivity graphs, and on occasion change proposal sheets.

NEW MORI SEIKI DURACENTER INSTALLED.

Last month the company took delivery of it's first Mori Seiki Duracenter 5A Vertical Machining Centre. Initial results have indicated that this is a very fast machine tool capable of super accurate work. Fitting a full integrated Nikkon fourth axis indexer, allows for most of

benefits of a horizontal machine tool whilst retaining the rigidity and accuracy of the vertical configuration.

Aerospace customers who have received parts made on the machine have expressed delight with the quality of the components which they have received.



AS 9100 Quality Page 2

MANIFESTLY BETTER

It took a while but on the 6th of March 2006 a day that will go down in the annals of fame we commenced shipping to RR Derby utilising their manifest system. This has contributed to a substantial improvement in delivery performance, which is very encouraging.

The documentation required new labels incorporating RR bar codes and harmonisation of the delivery, invoice, and CoC numbers. This has had the added benefit of simplifying processing and traceability as well as expediting payment of accounts by reducing confusion.

Mention should be made of our new member of staff Alistair, who has coordinated our computerised planning to ensure that product is ready for shipment on agreed manifest dates. This improvement would not have occurred without the cooperation of all the departments involved including quality and administration to ensure that the necessary documentation package is ready for despatch at 8:30 am each day.



THE ASHTRAY IS FULL, IT'S TIME TO CHANGE



Flame grilled the way you like it!

On a separate note our old lorry was disposed of by fireman Sam, and as a result we are examining the market for a replacement which will also replace the small lorry. Criteria for the new vehicle includes load capacity, economy, comfort and of course flame resistance. Amazingly they still come with ashtrays!

"We do not support smoking and we will enforce the ban"

ABSTINANCE MAKES THE HEART GO LONGER

From 26th March 2006 6am smoking will be banned in all public places. Virtually the only place you can smoke indoors is in a private home or a mental asylum. (How come the loonies get to play with matches?)

As we probably do not qualify under either category it means that not only do our employees have to abstain but visitors from England must be informed of the new regulations. The regulations

also cover lorries and vans, so that should save us a fortune in lorries.

Interestingly the law gives right of access to local Environmental



Health Officers. Considering that the police need probable cause or a court warrant to enter premises, it would appear that the Scottish parliament is stamping all over our civil rights with size 9 boots. And just for the record we don't and never have smoked, but this looks like another excuse to erode our civil rights in the name of political correctness. We do not support smoking and we will enforce the ban but we do recognise that it will be very hard for some individuals who have smoked for many years.



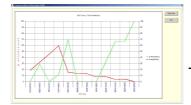
AS 9100 Quality Page 3

CONTINIOUS IMPROVEMENT

Training in the last quarter included two management courses; training in Solidwork\Camworks CADCAM from NT CADCAM, and machine verification using Vericut from CG tech.

Congratulations to Julie our Finance Manager on the half year audit which verified our management accounts were pretty much spot on.

Progress towards ISO 14001 continues with ongoing training on the Environmental Management System with representative from most departments including, Maintenance; Production, and Projects.



Our measured delivery performance continues to show marked improvements.

Congratulations to Carolann who is expecting her first child (a Boy) at the end of June. We expect another on time delivery.

Staying with Carolann congratulations on passing your driving test. We have contacted the ward and they say that your instructor is making good progress and is now stringing whole sentences together.

From January to March the Company recorded over 1700 man hours of training.

An unexpected improvement in perception has occurred on the shop floor, with John Laverty seeing the light.

Congratulations to Kenny

Harper on 40 years loyal service at Castle. We are fairly confident



that you will become a long term employee.

Mild mannered

Clark Kent always

wears his glasses



HEALTH AND SAFETY

The next meeting of the Health & Safety Committee is set for beginning of April.

The installation of "dead mans handles" continues apace and these should always be used anytime the machine guarding has to be defeated in order to do the job.

New fire extinguishers have been installed throughout the factory after a review of the existing unit found deficiencies.

Smoke alarms were fitted in all the toilets to comply with the new smoking regulations.

Safety glasses are still not being worn all the time in the CNC turning section.

Machinists are reminded this is a mandatory requirement. Andrea our safety officer is empowered to enforce the rules & failure to comply could have dire consequences.

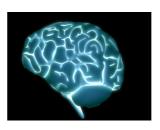
NEW TECHNOLOGY

After evaluation of five different telephone systems an order for a completely new telephone system was raised in the middle of March for delivery end of April. As well as offering more flexibility than the old system which has been in place for nine years, the new system will also deliver better functionality. One major improvement is in the area of conference calling, with the ability to initiate multiple site confer-

ence calls whilst making the actual calls much more intelligible.

The companies computer servers although still performing well are now over five years old and due for replacement. The requirement for the new system is for dual or quad core 64 bit processors, 8/18 Gigabytes of EEC memory, Terabyte Raid farm, clustered systems with full redundancy. We're thinking of calling it Marvin.

DON'T PANIC



"Brain the size of a planet and all they want me to do is park cars" 241 Drakemire Drive Castlemilk Glasgow

0141 634 1377

See us on the web at castleprecision.com

AS9100 is our future.

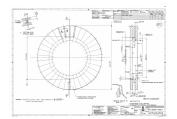


CASTLE HOSTS GD&T SEMINAR

Castle hosted a seminar on Geometric Dimensioning & Tolerancing on the 15th March 2006. The purpose of the seminar was to resolve the issues around interpretation of composite tolerancing. Currently CMM's are not able to cope with this type of dimensioning, but representatives at the seminar from Hexagon Metrology assured us that their latest software revision solves this problem. It became apparent that the complexity of GDT issues could not be resolved in one meeting with designers, engineers and quality personnel.

The ASME standard is meant to simplify the manufacture of components and improve the communication of information from design to manufacturing. We have issued all manufacturing personnel with GD&T guides which they should try to familiarise themselves with. Given the complexity of the subject we are investigating training materials and courses suitable for the subject. It is planned that we will run or bring in external experts to run a series of training courses later in the year.

From time to time we have



meetings with design engineers at which ways of reducing costs through design for manufacture techniques are discussed. In many ways this is a much more fundamental method of making improvements than novel methods of applying tolerances. More effort in this area would definitely be beneficial.

COMPLETION OF CONTRACT REVIEW

The new system to record Risk Assessment; Contract Review; Sales Engineering Review: Production Engineering Review; Quality Engineering Review and Compliance Review all going live from the beginning of March. In addition the system caters for the definition and production of F.A.I.R.s. Early indications are that the system is operating well with few problems. A meeting to review progress will be held mid April. If you have any proposals bring them to the meeting.



THE LAST TESTIMONIALS

Every quarter we receive a few comments from customers that we can print without offending the profanity laws, so here goes. Rolls Royce Purchasing "Sincere thanks for all your efforts in terms of recycling titanium".

Selex Procurement
"Please pass on our thanks to everyone involved in organising the GD&T forum"

Vetco Gray performance and delivery report.

On time 100% Quality 100% Linn Products
"A most enjoyable and insightful visit and the passion for what you do is so obvious in everyone & everything we saw"

Rolls Royce Derby "Please thank all at Castle" "We here in Disc appreciate all you have done for us over 2005"