current system of planning and operating is certainly the most efficient to date.

Daily Planning Boards

The objective of the planning boards used on site is that a "Visitor" must be able to assess how the plan is preforming from the layout of the board in less than 3 minutes.

There are three types of board in use on site (TIER, DOR & ITF):

- TIER 1-4 Production related meetings run at different levels of management from shop floor up to higher management
- DOR Daily Operations Review
- ITF Implement Task Force

The HAON DOR (shown opposite) is what JEG use on site at the morning meeting with the ACMT. It's held at 8.05am every work morning and attended by all ACMT members. It lasts no more than 5mins and runs through the plan for the day and the review of the work completed yesterday. This board is updated by Paddy Kenna (JEG Supervisor) in advance of each meeting listing any changes to the planned works or any safety items that need to be highlighted.

A weekly meeting is also held using the same board (plus another one) and this lasts 20mins. This is attended by a representative of each craft division on the ACMT (Mech, Elec, I&C, Condition Monitoring, JEG Site Supervision, JEG Health and Safety rep, JEG Management and engineering team. This meeting reviews each area on site maintained by the team and gives updates on upcoming works and project details. It is used to track Audit schedules and highlight/discuss any issues attendees may have or need assistance with. It also gives a look ahead at planned works and outages so each team can be aware of upcoming works that could benefit each area, (it helps for

maintenance and project teams to understand each other's plans).

"The boards seem like they have a lot of info to get through but once you keep to the agenda and move along with yes or no (Green or Red) updates and all actions clear they work very well. The Key is to keep them updated and relevant to the people attending. The best way is to make sure each Board has an owner and each meeting has someone chairing it along with someone taking actions."

Paddy Kenna



JEG 'Daily Operations Review' (DOR) Board



Some of Diageo TIER 1-4 and DOR boards

Any site operating a similar system and promoting good communication between teams will notice productivity improvements.

GOT A STORY TO TELL?WELL, WHAT'S THE STORY BUD?

If anyone has information or news they want to share regarding innovations or Lean Principles on their site, or maybe you have an article or story you want to share. Please feel free to contact the LEAN Development Group at the email address below and we will be delighted to help.





How do you make sure that your meetings end on time? Are never-ending meetings a problem on your project?



We have all been in those meetings that just go on and on, ramble off the agenda or maybe even have no agenda at all.

Everyone is busy these days and cannot afford to waste time in this way.

The team in Diageo have come up with a novel way to monitor the 20 minute timeslot for their weekly planning meeting....the clock shown above is on the wall beside the operations board and the green segment provides a great visual indicator for them not to overrun.

The team also have a list of prompts for each meeting:-

- Start on Time
- Finish on time
- All attendees present
- All boards updated
- All actions addressed

Keep up the good work guys! 丫

Catch-up Corner

7th Annual WIT Lean Enterprise Forum First of a Kind Sikla Supporting an easier installation What about Cordless Welding QSP 16 & 18 lean@joneseng.com

Sharing information is one of the keys to Lean

Jones Engineering were recently asked to facilitate a visit from a group of 30no. German Engineering students under the guidance of Prof. Siri Krauss & Prof. Claus Nesensohn. The students are currently studying Lean as one of the modules on their course. We arranged to show the group around the Guinness brewery in James' Street and explained how JEG form an integral part of the daily planning system used by Diageo to co-ordinate all site activities, without interrupting the brewing process. Tom Horan of Diageo very kindly agreed to act as tour guide for the group and did a great job of explaining :-The brewing process 1.

daily work activities changes over this period, but the

Jones Engineering Group, bringing Lean to where we brought safety in construction



As-Builts Made as Easy as a Walk in the Park Visit by German Students to see JE LEAN Implementation Minor Works, Maintenance and Internal Audits....QSP's 15 & 17

Issue 76



Engineering students from HFT Stuttgart in Guinness Brewhouse No.4

- 2. How all parties on the site have to interact seamlessly to complete

JEG have worked on the Guinness site for over 50 years and have seen many

Cont. on back page 📥



Students emerging from tunnel in brewery



Tom Horan (Diageo) explains how Lean principles streamline St. James' Gate



Have the Geo-Survey lads found a solution to the age old problem of As-Builts?

Anyone site based who has been around at the end of a project will understand how laborious it is to capture any 'redline' changes to allow our BIM teams to update models and drawings prior to handover.

Introducing "Point Cloud Lite", the use of a Handheld Laser Scanner for guick and inexpensive point clouds, the data from this can be used after construction by BIM to alter IFF Models (Issued For Fabrication) to an As-Built 3D Model, which are often required as part of contractual obligations.

Rob Hughes and his JEG Geo-Survey Division have invested in a Geoslam Zeb Revo. This is a handheld instrument that allows surveyors to quickly measure installations with unrestricted mobility.



Geoslam Zeb Revo scanner

The benefits include:

Specifications:-

- Small, light-weight handheld laser scanner (only 1Kg) 1kg
- 40,000 points per/sec
- Accurate to +/- 10mm
- Produces 3D point clouds of built environment.
- Works best internally with a range of 30m.
- 'scan as you walk' instrument

Advantages for Data Collection:-

- ٠ Efficient means of data acquisition
- Data acquisition possible in hard to reach areas (no scaffold or other access required)
- Full coverage of mechanical and ٠ electrical services.
- Limited range but ideal for detaildense internal environments.
- Can be coordinated with BIM model •

Advantages for BIM:-

- Alternate method for **Redlining As-builts.**
- No need for initial paper based documentation of As-builts.
- BIM technicians obtain information from point cloud rather than 2D drawings
- Dense detail rather than single tape • measurements.

When compared to other forms of Laser Scanning, the handheld option can produce data in a timeframe 75% faster and at a 75% lower cost.

75% Faster

75% Lower cost

A Standard Laser Scanner can record 1 Million Points Per Second, while the handheld scanner can record 40.000 Points Per Second, hence the handheld scanner provides a lower level of detail. It has been found that the detail provided by the handheld scanner is sufficient for



QSP 15 Minor Works & Maintenance

This procedure covers the scheduling and performance of planned maintenance activities, unplanned repairs and minor works across the three main disciplines (Mech, Elec & Sprinkler)

Each Division operates under different guidelines and so has its own section of the QSP.

There are many different types of documentation attached to this procedure including:-

- Dockets
- Schedules
- Logs
- Registers
- Records
- Maintenance Reports

QSP 15 itself should be read to avoid confusion as to where each document is required.

Mechanical Division

The Maintenance Division Manager has ultimate responsibility for all activities undertaken in this division. Activities are carried out by a nominated Engineer and are co-ordinated by a Maintenance Supervisor.

The Maintenance Help Desk is really the nerve centre where all activities are recorded and

activities are planned and agreed with the



required time to allow the nominated Engineer to complete the task efficiently.

To verify completion of the activity the nominated Engineer and the customer both sign the Work Docket.



Critical spares are retained on site by each customer for emergency purposes.

•



desk to be recorded and assigned to an operative for completion.

before contacting the

Support service.

•

Manufacturer's Technical

an important part of this operation and require careful management to ensure all are logged on the system and dealt with in a structured manner.

an electronic Work

Docket to record

completion of all

details and

works.

Only upon receipt of an official Purchase Order from our client can works begin on any Minor works.

Sprinkler Division

- ٠ Sprinkler Maintenance and Minor Works Manager is responsible to keep a register with all agreed details of requirements for each client.
- Scheduled works are allocated to a ٠ suitable operative and when completed, a record is signed by that operative and verified by the client.
- The Maintenance Manager generates a report which is issued to the client, outlining any recommendations for future work on the system.
- Minor works or additional maintenance activities are dealt with

"A goal without a plan is just a wish." Antoine de Saint-Exupèry



Eoin Gorman using the Geoslam Zeb Revo

Due to the savings above, interim scans

construction, any clashes are picked up as

the project progresses, eliminating issues

As this method is adopted on all projects

going forward we should start to see

manhours normally spent on red lines

being redirected to other activities at a

critical time in the project schedule.

points per

1 million

second

points per

40,000

second

can be carried out throughout

that may occur thereafter.





For planned activities all necessary materials, information, manpower, tools and equipment are made available at the



If our Engineer is unable to identify the problem, he first escalates internally



Any additional scope requires a commercial instruction to proceed from the customer before commencing work.

Electrical Division

The Service Manager has responsibility to maintain a register with specific maintenance requirements for each client.



Any client requests for additional works are directed through the help

Minor works OR smaller projects form





in a similar manner to the Electrical system above.

Where instructions to proceed are received in a verbal manner from the client, the Maintenance Manager will confirm these prior to commencing the works.

QSP17 Internal Quality Audits



We all need to be checked periodically by a 'fresh pair of eyes' to ensure we are doing what our Quality protocols say we should be.



• The Group Quality Manager has ultimate responsibility for



ensuring internal audits are carried out on a regular basis by persons designated to be appropriately trained.

- Audits should happen at least once a year.
- Prior to the audit, any outstanding areas of action from previous audits shall be added to the check sheet.
- Audit findings shall be discussed with personnel in the area under audit and any corrective actions required will have time frames agreed for completion.
- The Quality Manager will monitor progress on closing of corrective actions by reviewing Audit Report Forms on a monthly basis.
- Audit Report Forms shall be forwarded to the Managing Director for appropriate action where items are not closed out in a timely manner.