

INEOS Chlor Significantly Reduces Commissioning Time at Chlorine Plant Using Emerson's AMS[®] Suite: Intelligent Device Manager

RESULTS

- Instrument commissioning completed two weeks earlier than planned saving 20 man / weeks of commissioning resource
- Early start up enables additional production worth €130K



APPLICATION

300 Million chlorine cell room and chlorine processing plant.

CUSTOMER

INEOS Chlor is one of the largest Chlor-Alkali producer in Europe and a global leader in chlorine derivatives. The Runcorn site, in the UK, is INEOS Chlor's largest site.

CHALLENGE

INEOS Chlor has invested significant amounts of capital into the replacement of one of its chlorine production plants. The new cell room is required to ensure that INEOS Chlor can become one of the lowest cost producers in terms of manpower requirements, operational efficiency and reliability. The new plant also enabled the closure of a cell room using the energy intensive mercury float process.

Quick and safe commissioning of this new asset was critical to INEOS Chlor achieving the full potential of the new plant and reducing production costs at a time when raw material costs were rising dramatically on the back of oil prices.

SOLUTION

The plant automation strategy had been designed and developed around Emerson's PlantWeb[®] digital plant architecture, with Emerson's DeltaV[™] digital automation system at its heart. The field instruments were predominantly Emerson FOUNDATION[™] fieldbus devices for process control and Emerson HART[®] devices for the safety systems. The HART[®] devices were multiplexed back to Emerson's AMS Suite of software applications to enable the predictive diagnostics to be accessed.

“The ease with which potential instrument faults could be diagnosed took two weeks off the overall field instrumentation commissioning time.”

Paul Young,
Automation Manager



For more information:
www.assetweb.com



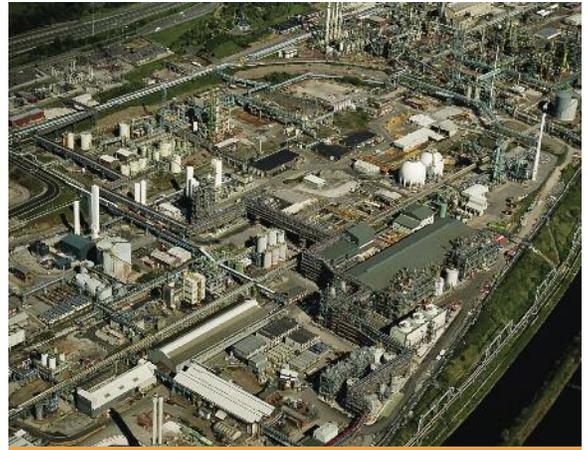
By adopting the PlantWeb architecture, virtually every instrument on site could be configured and managed by AMS Device Manager.

This was the first fieldbus installation on site and the first installation where AMS Suite was universally applied. The use of AMS Suite enabled INEOS Chlor to move away from their traditional methodology and approach to commissioning and maintaining the field instrumentation. Most instruments were pre-configured by Emerson and thanks to the capabilities of FOUNDATION fieldbus, installation testing was reduced to little more than confirmation of correct location as the instrument was powered up and allocated to the right place in the control system and AMS Suite.

This approach not only reduced the number of faults found post installation (due to how simple the process had become), but also through the power of AMS Suite, the commissioning technicians could get to the root of problems much faster.

Often, during the start-up of a new plant with a new and inexperienced operating team, many faults are reported where in fact, the instruments are working correctly but the technicians understanding is insufficient to diagnose the true reason for what seems to be an instrument fault. Emerson's AMS Suite software is invaluable in providing an immediate diagnosis tool which focuses the investigation towards the correct area of the fault.

The new cell room was started up two weeks earlier than planned which meant that the project teams could be disbanded earlier and this highly specialised and trained resource used elsewhere on site. In addition the earlier start up meant that the plant being replaced could be shut down earlier, making savings in energy consumption and also - due to the greater capacity of the new plant - more product was made than expected. The additional production was calculated to be worth €130K.



“The PlantWeb architecture has proven unbeatable in delivering a well commissioned plant with a small commissioning team.”

Paul Young,
Automation Manager

Emerson Process Management Asset Optimization Division

12001 Technology Drive
Eden Prairie, MN 55344 USA
Tel: 1(952)828-3206
Fax: 1(952)828-3006
www.assetweb.com

©2009 Emerson Process Management. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. PlantWeb, DeltaV, and AMS are marks of one of the Emerson Process Management family of companies. All other marks are the property of their respective owners.

The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.



AMS Suite: Intelligent Device Manager powers PlantWeb through predictive and proactive maintenance of intelligent field devices to improve availability and performance.

