

Are you managing projects where you need to get the plant back into production on schedule?



Turnaround Progressing System

THE CHALLENGE

Shutdowns and Turnarounds are very specialized types of projects. A typical refinery shutdown results in lost production in excess of 100,000 barrels per day. Naturally, managing such projects to get the plant back into production on schedule is of paramount importance to an organization and project visibility is subsequently very high.

Turnaround planners and schedulers have increasingly difficult jobs to undertake. They are faced with shorter, larger turnarounds, major project tie-ins, lack of trade resources and aging refineries. Contract planners need to be trained quickly and effectively. The only way to manage these challenges effectively is through the use of a proven turnaround methodology using proven tools and processes.

In order to provide the necessary detailed level of control, large amounts of data need to be managed and entered. One of the largest challenges is getting updates to the schedule entered in a timely manner. As each shift comes to an end, progress must be entered from the shift, forecasting the work for the next shift must be completed, work sheets generated and reports to management produced.

The largest bottleneck in this process is updating the schedule. As field reports come in, progress must be entered into each activity individually, which is time consuming and frustrating. Instead of analyzing the schedule and reviewing the upcoming work, the schedulers spend all of the update window frantically entering data.

THE SOLUTION



















Emerald's **Turnaround Progressing System (TAPS)** takes the update process and makes it simple and fast. Instead of searching for one activity among thousands, the scheduler simply uses a barcode scanner to access and update any activity within the schedule instantly.

How is this possible? A detailed shift report is created either through a custom web reporting tool or through the Primavera report writer which contains a barcode for each activity on the report in addition to the regular shift data. This report can be customized to match virtually any existing report format currently in use.

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Barcode Sample Report

Project ID

Activity ID	Activity Name	Start	Finish	Barcode_Act_ID
1000	Install scaffolding	20-Jun-08 07:00*	20-Jun-08 13:00	
1220	Plant shutdown	20-Jun-08 13:00	21-Jun-08 05:00	
1250	Install blinds	21-Jun-08 05:00	21-Jun-08 07:00	
1260	Open manways	21-Jun-08 07:00	21-Jun-08 11:00	
1270	Vent and clean vessel	21-Jun-08 11:00	22-Jun-08 05:00	
1280	Inspect vessel internals & electrical	22-Jun-08 05:00	22-Jun-08 07:00	
1290	Remove and repair safety valve	21-Jun-08 07:00	21-Jun-08 09:00	
1300	Test and install safety valve	22-Jun-08 17:00	22-Jun-08 19:00	
1310	Prepare to close vessel	22-Jun-08 07:00	22-Jun-08 08:00	
1320	Repair electrical components	22-Jun-08 07:00	22-Jun-08 15:00	
1330	QA and Energise	22-Jun-08 15:00	22-Jun-08 17:00	
1340	Identify and Repair Vessel Shell (WELD)	22-Jun-08 07:00	22-Jun-08 08:00	
1350	Inspect Vessel shell weld	22-Jun-08 08:00	22-Jun-08 09:00	
1360	Remove clean and Test Sight glasses	22-Jun-08 05:00	22-Jun-08 13:00	
1370	Install Sight Glasses	22-Jun-08 16:00	22-Jun-08 19:00	
1380	Close manways and Remove blinds	22-Jun-08 17:00	22-Jun-08 19:00	
1395	Plant Startup	22-Jun-08 19:00	23-Jun-08 11:00	
1500	Remove Scaffoldings	23-Jun-08 11:00	23-Jun-08 15:00	

Daily Progress Report: Above is a sample progress report showing activity information necessary for field workers to work on and progress each activity.

Combine best-of-breed software with innovative approaches, proven processes and industry standard reports to get up and running quickly.

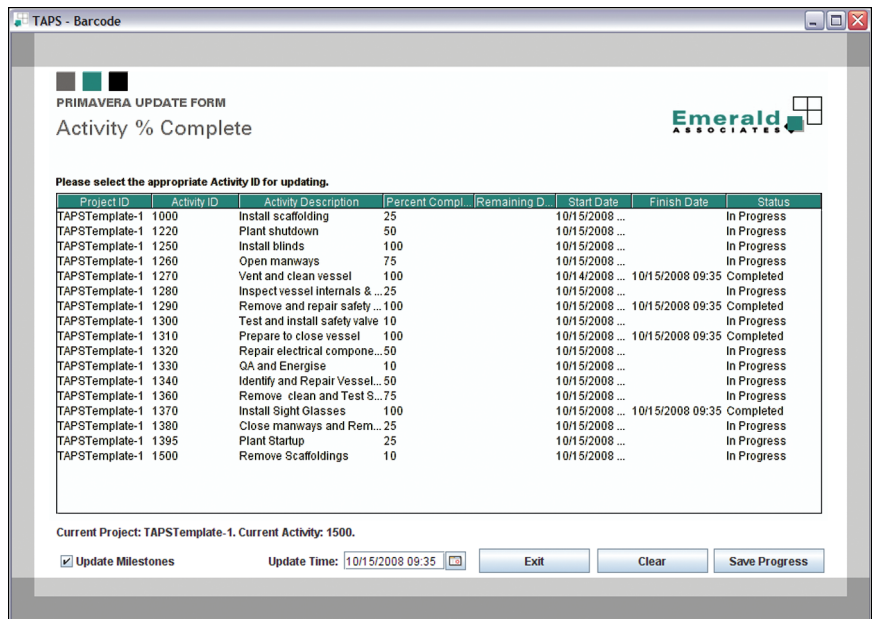
THE BIG PICTURE

TAPS (Turnaround Progressing System) is a part of Emerald Associates' Turnaround (TA) Methodology, combining best-of-breed software with innovative approaches, proven processes and industry standard KPI reports. We also provide TA specific training and hands-on assistance to get clients up and running as quickly as possible. Data conversion and system integration services are also available to leverage existing technologies.

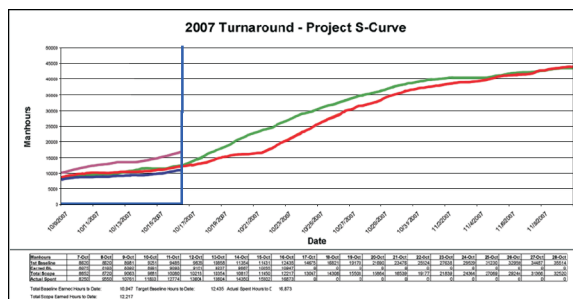
Once the field staff marks the progress on the report, a simple scan of this barcode tells the system which activity is currently being updated, while another barcode tells the system the current progress, saving many keystrokes in Primavera. If required, a custom dialog box can be opened using the barcode reader to enter custom data on the activity.

Once the update is completed, the data can be reviewed by the scheduler for accuracy before submission to the Primavera database for scheduling and resource leveling.

Schedule updates that would previously take many man-hours to enter can now be completed in minutes, leaving the project team free to analyze the schedule and get the shift reports out on time. This removes stress from the TA management team and makes updates a seamless process.



Barcode Summary Screen: As activities and percent completes are scanned, they are added to an update table which allows the user to do a final accuracy check. Progress can be scanned from a barcode or entered manually by the user.



S-Curve: As a part of Emerald's Turnaround Methodology, TAPS works in collaboration with other tools, which show how a Turnaround is progressing compared to the plan and the forecast to completion. This S-Curve shows a number of key performance indicators (EV, PV, SPI, CPI, ETC, EAC) all on one easy to read graph.

To find out more about TAPS and/or Emerald's Turnaround Methodology please contact your Emerald Solutions Executive.

p. 403.686.7100 CALGARY ■
 780.466.7180 EDMONTON ■
 905.361.2787 TORONTO ■
 www.emerald-associates.com ■
 emerald@emerald-associates.com ■

