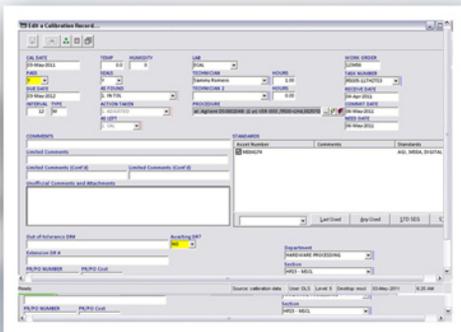




Innovation @ WSTF 2011

Calibration and Measurement Standards Laboratory



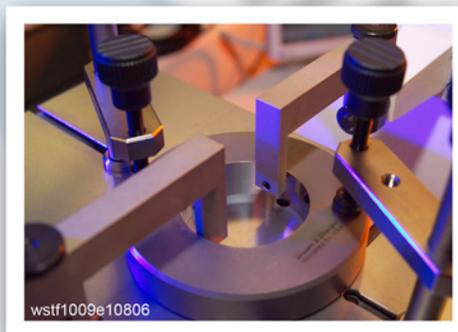
	24-Apr-11	1-May-11	8-May-11	15-May-11	22-May-11	29-May-11	Total
			0.7				0.7
ECAL - VENDOR	6.3			0.9	0.7		7.9
ELECTRICAL LAB	15.8	57.8	7.1	40.0	9.0	12.4	142.1
FLOW LAB			8.0				13.9
PHYSICAL & DIMENSIONAL LAB	2.9	15.5	27.6	11.4	3.0	34.0	94.4
PRESSURE LAB	1.9	21.4	37.9	2.0	3.8		66.8
TEMPERATURE & HUMIDITY LAB		58.3	39.5		18.2		116.0
TORQUE & FORCE LAB	4.5	26.2	20.0	31.5	27.5	14.9	124.5
VACUUM LAB			3.4				3.4
Total	31.2	194.4	140.9	85.8	62.1	61.2	575.7

MSCL SCHEDULED DATA FROM 03-May-2011 TO 20-May-2011

PRESSURE LAB

Calendar Date	Estimated Hours
03-May-2011	8.7
04-May-2011	28.6
05-May-2011	4.1

(Note: The table contains many rows of detailed scheduling data for various calibration items.)



Issue

For the past two decades, WSTF used a scheduling database that interfaced with both Component Services and the Measurement Standards and Calibration Laboratory (MSCL) to cross reference items simultaneously scheduled for both labs. However, analysis revealed that only 5% of the ~6000 annual calibration workload items also went to Component Services within the same work ticket. The disconnect between the scheduling system and the calibration management system caused dual data entry and unnecessary make/model estimating for each calibration event—obviously an unproductive process.

Solution

MSCL now uses Fluke Met/Track®, a complete solution for automating calibration processes plus managing and reporting measurement assets. MSCL integrated the Work Control scheduling functions directly into the calibration management software and modified the receiving process to accommodate the 5 % workload that goes between Component Services and MSCL.

By adding a few additional fields to allow for scheduling, elimination of the dual entry for receiving and scheduling quickly came to fruition. Prior to the process improvement, lab staff would enter labor estimations for each asset into the scheduling database, often without detailed knowledge of the make/model family performance. An algorithm was added to compile historical labor performance against the model, allowing the schedulers much better labor data. In addition to a scheduling report that provided more detailed visibility, a summary report was added that generated an overview of weekly labor hour projections for each lab.

Printing work orders on a dot matrix printer required a tremendous amount of effort, print time, and unnecessary noise. Within the process change, work orders were eliminated, and staff are now able to work off the service request in conjunction with the schedule.

Results

The Calibration Lab process performance has more than doubled since implementation of these innovative process changes. One of two data entry points for process tracking were eliminated, as was labor estimation input. Estimate uncertainty has been greatly reduced, as well as the time it takes to schedule work. Also, environmental impact was reduced by eliminating the need for three-page carbon copy work orders. These process improvements have paved the way for future planning of online service request submittal, automatic e-mail notification of equipment ready to be picked up, and other customer-focused applications.



Hardware Processing