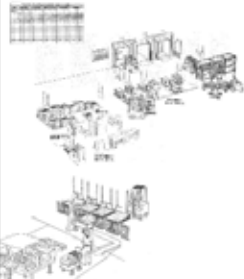


Kanban Event Overview

"Kanban Brain Busters" ADT Style

CPS Our Vision Changes Everything

Kanban Replenishment Networks



Advanced Planning

Advanced Execution

1

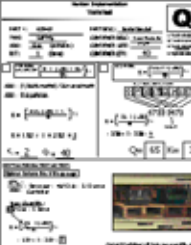
CPS Our Vision Changes Everything

Kanban is a Signal

A Kanban Network Provides Enough Materials to Sustain Production Throughout the Replenishment Process

Kanbans can be as:

- Card
- Cart
- Empty Space
- Container
- Stripe on the Floor
- Stripe on the Wall
- Golf Ball
- Light
- Button
- Color
- Rail Car
- Truck



7

CPS Our Vision Changes Everything


Example Kanban Card with Transactions

Training & Documentation

Kanban Type **Kanban Card Format** **Procedures & Transactions**

Withdraw To POU

Replenishment Cycle Time = 1 day

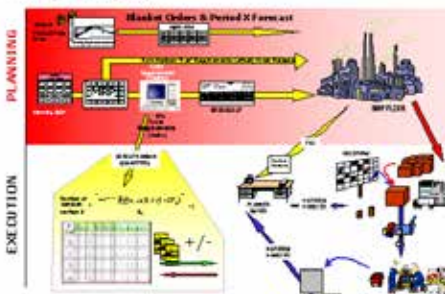


- Collect Kanbans, Empty Containers, Packaging and Any Defective Material that May Need Processed
- Dispose of Cardboard and Return Re-Usable Packaging
- Process Defects as Required
- Scan Kanbans for Location I.D.
- Pull Material from Stock
- Complete WIP Transfer By Scanning Back of Kanban Card
- Return Materials to POU

13

CPS Our Vision Changes Everything

Kanban 'System'



PLANNING

EXECUTION

52



Kanban Calculations + - / X ~ \$ % = Arghh...

CPS INNOVATIONS Kanban Implementation Worksheet

PART #: 7310003-00 PART DESC.: Pump (single dose)
 TYPE: Withdraw CONTAINER DESC.: Akro bin
 ADU (D): 4 per day CONTAINER SIZE: 230
 RLT: 5 CONTAINER QTY: 4 COST: .714 per day

STD EQN: # KANBANS = $\left[\frac{D \times (LX) \times RLT}{Qty} \right] + 1$
 MAX EQN: $K = \left[\frac{MAX \times (LX)}{Qty} \right] + 1$

MAX DEMAND PATTERN:


--	--	--	--	--	--	--	--	--	--

$\left[\frac{4 \times 1.05 \times 5}{4} \right] + 1 = 8$
 $\frac{2.1}{4} = .525 \times 1.05 = .55125$

Bonding
 Q = 4 K = 2

CONTAINERIZATION ACTION:
 Cont. Amt. = $\frac{Qty}{ADU} = \frac{4}{4} = 1 \text{ day}$
 8 hrs.
 $2 \times 4 = 8 \times .714 = 5.68$

NAME: Kathy/Tammy



Picture or Sketch of Container and Parts

CPS INNOVATIONS Kanban Implementation Worksheet

PART #: 7310003-00 PART DESC.: Alcohol Denatured
 TYPE: Withdraw CONTAINER DESC.: Pump Bottle (500)
 ADU (D): 5 Pump bottle per Day CONTAINER SIZE: 230 Akro bin
 RLT: 5 CONTAINER QTY: 4 (200) COST: \$ 310.50 (5 gal)

STD EQN: # KANBANS = $\left[\frac{D \times (LX) \times RLT}{Qty} \right] + 1$
 MAX EQN: $K = \left[\frac{MAX \times (LX)}{Qty} \right] + 1$

MAX DEMAND PATTERN:


--	--	--	--	--	--	--	--	--	--

$\left[\frac{5 \text{ Pump bottles per day} \times 1.05 \times 5}{4} \right] + 1 = 8$
 $\frac{26}{4} = .65 \times 1.05 = .6825$

Bonding
 Q = 4 K = 2

CONTAINERIZATION ACTION:
 Cont. Amt. = $\frac{Qty}{ADU} = \frac{4}{.5} = 8 \text{ days}$

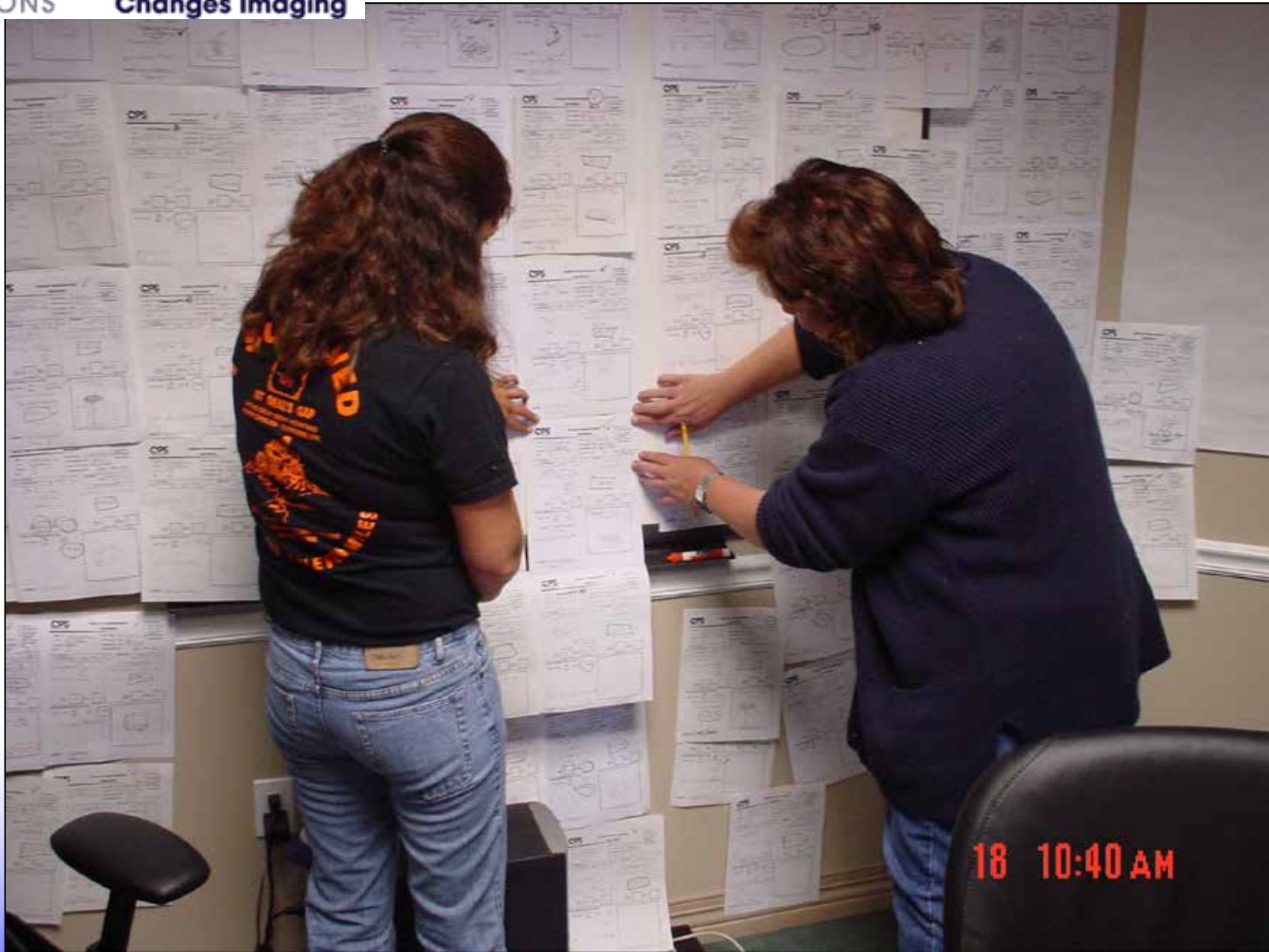
* Cost per Bottle MA
 NAME: Kathy/Tammy



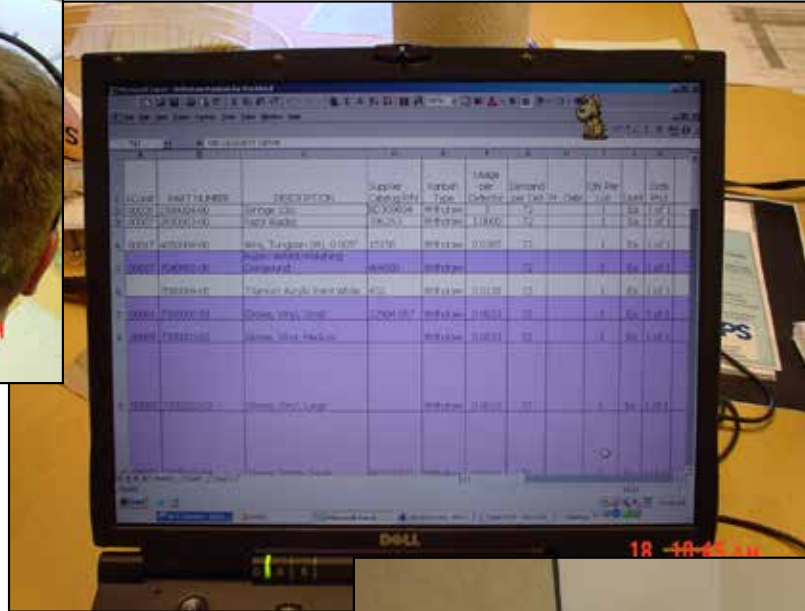
Picture or Sketch of Container and Parts



Kanban War Room



Kanban Replenishment Networks



Then we entered all the Kanban info into a spreadsheet. Behind the scenes Mike Kedl runs the Kanban Card Management program in DIS that we used to print the Kanbans and Joe Camp led the digital photo integration.



Training & Documentation

Kanban Type

Kanban Card Format

Procedures & Transactions

**Withdraw
To POU**

**Replenishment
Cycle Time = 1 day**

PART INFORMATION: 3200438-01 Lasers			
KANBAN CONTROL NUMBER: 00001	KANBAN TYPE: WITHDRAW	QUANTITY: 2	
QTY Per LAB: 1	UOM: EA	# OF CARDS PER LOT: 1 of 1	PRINT DATE: 8/6/03
APPROXIMATE VALUE EACH: \$400.00			
KANBAN USAGE POINT: Station 1			
CONTAINER TYPE: Bin			
KANBAN COLLECTION POINT: Station 1		SYSTEM TRANSACTIONS: WIP TRANSACTIONS PRINTED ON BACK OF CARD	
		PLANNER INFO: Contact: Mitch Gray Phone: 218-3219 CPS INNOVATIONS	

- ① Collect Kanbans, Empty Containers, Packaging and Any Defective Material that May Need Processed
- ② Dispose of Cardboard and Return Re-Usable Packaging
- ③ Process Defects as Required
- ④ Scan Kanbans for Location I.D.
- ⑤ Pull Material from Stock
- ⑥ Complete WIP Transfer By Scanning Back of Kanban Card
- ⑦ Return Materials to POU

