

# EXAMPLE ORDER PROCESS FUTURE STATE

## TCM SOFTWARE SALES ORDER / SHOP ORDER SYSTEM

**SALES**

**CUSTOMERS**

QUOTE / ESTIMATE SOFTWARE

FAB PLAN  
QUOTING / ESTIMATING

HIGH LEVEL MATERIAL  
LABOR ESTIMATE

SALES ORDER

SHOP ORDERS  
AND BOMS

MATERIAL  
REQUIREMENTS  
AND DATES

MATERIAL RECEIPT  
DATES AND POS

ACTUAL LABOR  
START DATE,  
JOB STATUS

SHIPPING  
PROCESS OUTPUT

SALES ORDER, REQUEST DATE,  
MATERIALS AND LABOR EST.

SHOP ORDERS, BOMS,  
ROUTINGS, CUSTOMER  
REQUEST DATE

MRP PLAN

SHOP ORDERS, ROUTINGS,  
MATERIAL STATUS, START DATES

ACTUAL LABOR  
MATERIAL COSTS

### QUOTE / ESTIMATING

- GROSS MATERIAL REQUIREMENTS
- REVIEW ACTUAL LABOR TRENDS AND ESTIMATE
- ENTER SALES ORDER
- ENTER CUSTOMER REQUEST DATE
- GENERATE CUSTOMER ORDER CHANGE REQUESTS

### ENGINEERING SERVICES

- PRODUCE BOM ALIGNED WITH PRODUCTION PRIORITY PLAN
- ESTABLISH DETAILED ROUTINGS (BREAK UP ESTIMATED HOURS, DEFINE WORK CENTERS)
- PRODUCE SHOP ORDERS
- RELEASE MATERIAL REQUISITIONS FOR LONG LEAD TIME ITEMS ONLY
- GENERATE AND PROCESS ORDER CHANGE REQUEST

### SCHEDULING

- REVIEW LONG LEAD TIME ITEMS AGAINST REQUEST DATE WITH PURCHASING
- REVIEW MILL CUT OPTIONS WITH PURCHASING
- BACK SCHEDULE SHOP ORDERS
- RUN MRP
- ANALYZE MATERIAL EXCEPTIONS AGAINST SHOP ORDER REQ. DATES
- ANALYZE WC CAPACITY
- SET SHOP ORDER DATES
- SET CUSTOMER PROMISE DATE
- REVIEW CUSTOMER ORDER CHANGE AND REQUEST FOR MATERIAL AVAILABILITY AND PROMISE DATE IMPACT

### PURCHASING

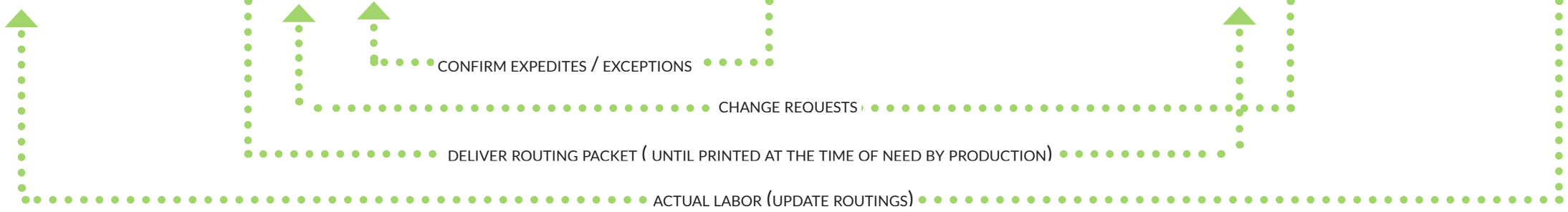
- REVIEW REQUISITIONS
- PLACE PURCHASE ORDERS
- ENTER MATERIAL DELIVERY DATES
- REVIEW EXPEDITES WITH SCHEDULING

### PRODUCTION

- PRINT JOB PACKETS AND DRAWINGS
- REVIEW SHOP ORDERS, DATES, JOB SEQUENCE THROUGH WORK CENTERS
- SUBMIT ROUTING / BOM CHANGE REQUESTS BACK TO ENGINEERING SERVICES
- PROCESS ORDER, ESTABLISH ACTUAL START DATE FOR WC, RECORD ACTUAL PROCESS TIMES
- REVIEW

### FINANCE

- REPORT ACTUAL LABOR / MATERIAL
- CALCULATE ACTUAL / ESTIMATE VARIANCES



OUTPUT: GROSS LABOR / MATERIAL  
KPI: VARIANCE-ACTUAL VS. PLAN  
QUALITY: SALE / MARGIN  
PROCESS TIME: 1 DAY

OUTPUT: BOM'S AND ROUTINGS  
KPI: ESTIMATED VS ACTUAL TIME  
QUALITY: ACCURACY  
PROCESS TIME: 1 DAY

OUTPUT: MATERIAL REQ'S AND SO DATES  
KPI: ON TIME DELIVERY  
QUALITY: MINIMAL EXPEDITES  
PT: 1 DAY

OUTPUT: MATERIAL DELIVERY DATES  
KPI: ON TIME DELIVERY  
QUALITY = % PROMISE DATE MET  
PT: 1 DAY

OUTPUT: ORDER BUILDCS  
KPI: ON TIME START / FINISH  
QUALITY = ON TIME COMPLETION  
PT: 1 DAY

OUTPUT: ACTUAL LABOR NUMBERS  
KPI: RELIABLE JOB STANDARDS  
QUALITY = USABLE ROUTING DATA  
PT: 1 DAY



TOTAL PROCESS LEAD TIME = ### - ### DAYS  
FIRST TIME YIELD (FTY) = 26%

KPI - KEY PERFORMANCE INDICATORS  
FTY - FIRST TIME YIELD

QUEUE TIME: 5 DAYS  
PROCESS TIME: 10-74 DAYS