# FLOW PLANNER WILL INSTANTLY HELP YOUR TEAM VISUALIZE AND QUANTIFY THE WASTE ASSOCIATED WITH FLOWS OF MATERIAL AND PERSONNEL

Flow Planner is designed for engineers that are responsible for industrial or commercial facilities with extensive material and/or people flow. Since it is hard to reduce or eliminate what you can't see, Flow Planner helps you visualize the flow.

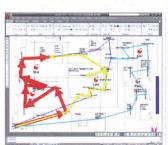
Working within AutoCAD, Flow Planner automatically generates flow diagrams and calculates statistics such as travel distance, time and cost. With variable-width flow lines color-coded for categories like people, part or material handling method, users quickly see how layouts should be arranged and where excessive people and material handling can be eliminated from the process. The ultimate result is a smooth flow with less waste.

# VISUALIZE AND QUANTIFY YOUR FLOW SO THAT YOU CAN ELIMINATE THE WASTE. EXAMPLES FROM CUSTOMERS OF BENEFITS REALIZED:

- Reallocated 59 material handling people, which generated a potential savings of \$4.3 million annually.
- Saved \$1.3 Million by integrating the Bar Code and ID systems to evaluate inefficient flow.
- Saved \$1 Million annually by reducing overhead and changeover time.
- Eliminated congestion in the Aisle Network.
- Improved Drop Zone Assignments and reduced the overall distance traveled by 3,558,430 ft per year.
- Improved Manpower Assignments and reduced the number of forklift operators from 11 to 7.
- Reduce handling time 67%, trips 57%, costs 39% and distance 82% for project shown below.



**Current State Material Flow** 



**Future State Material Flow** 



Reduce Handling Time 67%



Reduce Trips 57%



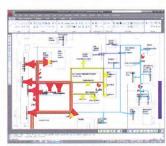
Reduce Handling Costs 39%



Reduce Travel Distance 28%



Current State Material Flow



**Future State Material Flow** 

### 3-STEP PROCESS

#### USING FLOW PLANNER ON YOUR NEXT MATERIAL HANDLING EVALUATION PROJECT IS AS SIMPLE AS 1, 2, 3.

- 1. Begin by creating a spreadsheet file of your people and material flows. Identify the QUANTITY of flow FROM and TO locations via the METHODS and CONTAINERS used for transport.
- 2. Open your layout drawing in AutoCAD and place TEXT labels in your drawing to identify the LOCATIONS specified in step 1. Also draw LINES down the center of your aisles to tell Flow Planner where people and materials can move in the layout.
- 3. Click CALC button in Flow Planner and watch it automatically draw the flow diagrams between your LOCATIONS and through your AISLES using its built-in shortest path routing technology. FLOW LINES will be color coded and scaled in thickness according to the frequency of travel.

IF YOU HAVE A SPREADSHEET OF PART ROUTINGS AND AN AUTOCAD DRAWING, THEN YOU ARE LESS THAN 1 HOUR FROM A FULL-COLOR, INTERACTIVE, CAD-BASED FLOW DIAGRAM.



# THE POWER TO DIAGRAM AND QUANTIFY FLOWS IN EVERY WAY POSSIBLE.

Flow Planner creates AutoCAD-based flow diagrams of people and materials for quick, easy, and accurate documentation and evaluation. Lite, basic and advanced versions are available.

#### FLOW PLANNER

#### LITE & BASIC\*

- -Six Flow Calculation Methods
- -Material Handling Equipment Reports
- -Relationship Charts and Calculations
- -Automatic Dock/Storage Selection
- -Flow Path Reports
- -Flow Path Filtering
- -Route Frequency Analysis
- -Route Color Legend
- -Aisle Congestion Diagram
- -Load/Unload Time Macros
- -Load/Unload Time Calculations by Route
- -Multi-Path Query
- One-Way/Multi-directional Aisle Support
- -Supports MTM/MOST/MODAPTS
- -Multiple Aisle Network Support
- -Spreadsheet Interface

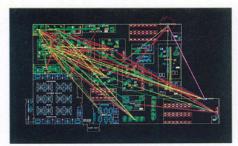
# ADVANCED (BASIC & TUGGER)

- -Fast or Optimal Traveling Salesman Solver
- -Uniform, Triangular, Scheduled or Sequenced Delivery
- Cart Capacity Calculation from Container
   Size or Quantity
- -Route Return Time and Volume
- -Fixed or Dynamic Route Definition
- -Multiple Plant Staging Area Support
- -Cart Load and/or Unload Analysis
- -Automatic AutoCAD Route Flow Calculation through Aisles

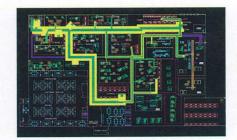
# MAINTENANCE PROGRAM

- -Product Updates & Phone Support
- -e-mail Support
- -Web Training

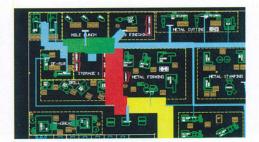
\*Lite includes up to 500 routings per study. Basic includes unlimited routings per study.



**Relationship Flow** 



**Aisle Travel Flow** 



**Aisleway Congestion** 

