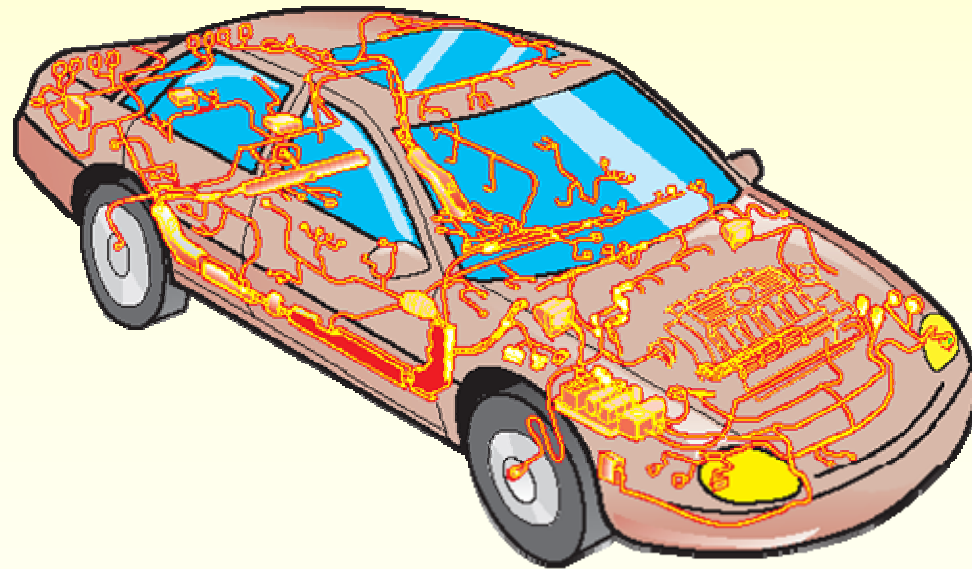


# ***Harness CAD System***

***MFG. Design System (MDS)***

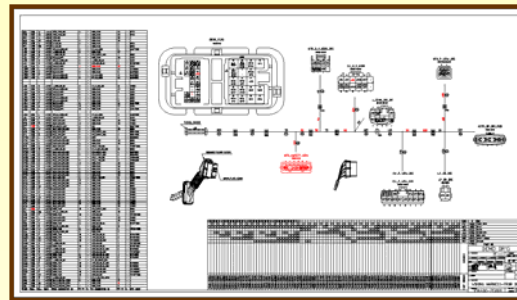


**H***CAD***MD**  
*Harness* **DaeShin Engineering Inc.**

# H-CAD MD system - Block Diagram

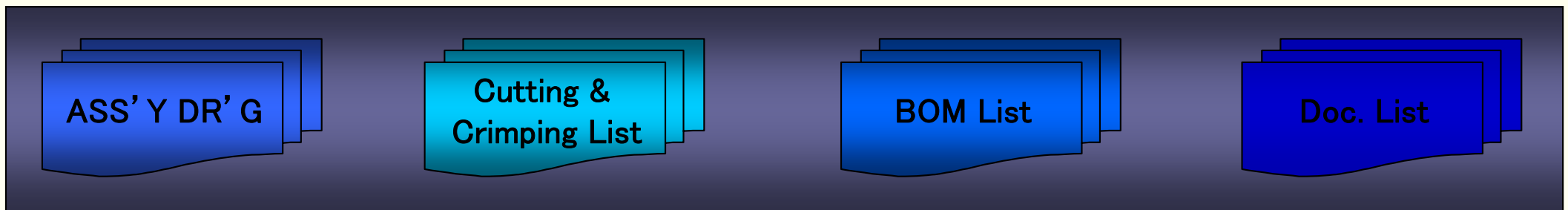
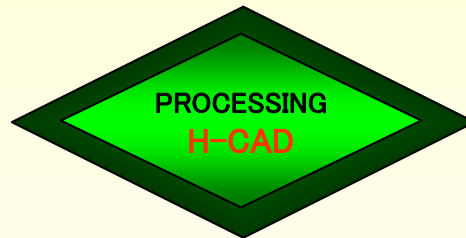
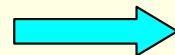


- ◆ Automatic Wire Harness MFG Process Design Tool through systematic conversion from Car maker's original drawing/spec to manufacturer's workable drawing/list



< W/H DR' G >

- 1.Option(P/NO) Table
- 2.Circuit(Wire) Table
- 3.Wiring Layout DR' G



# *Main Characteristics of H-CAD MD system*

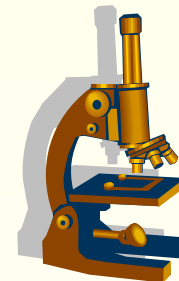
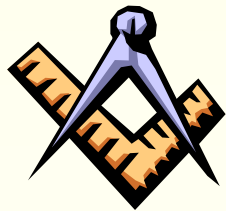
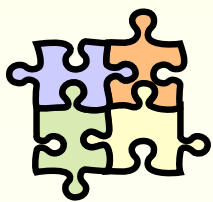


- ◆ Efficient MFG process design capability using design standard and library
- ◆ The same and assured design quality by both of people skillful and unskillful
- ◆ Capable of keeping powerful material library and design superiority
- ◆ Capable of interface with ERP system
  
- ◆ Automatic and speedy generation of MFG process materials and reports
- ◆ Spec comparison/management, Cutting tag, Quotation and so on
- ◆ Ensure of the fastest skill enhancement for engineering resources
- ◆ A powerful system proven by several harness makers in Korea
  
- ◆ Workable based on general PC and Auto-CAD
- ◆ Lower price than other system requiring expensive server and DB S/W

# Major effectiveness from H-CAD MD



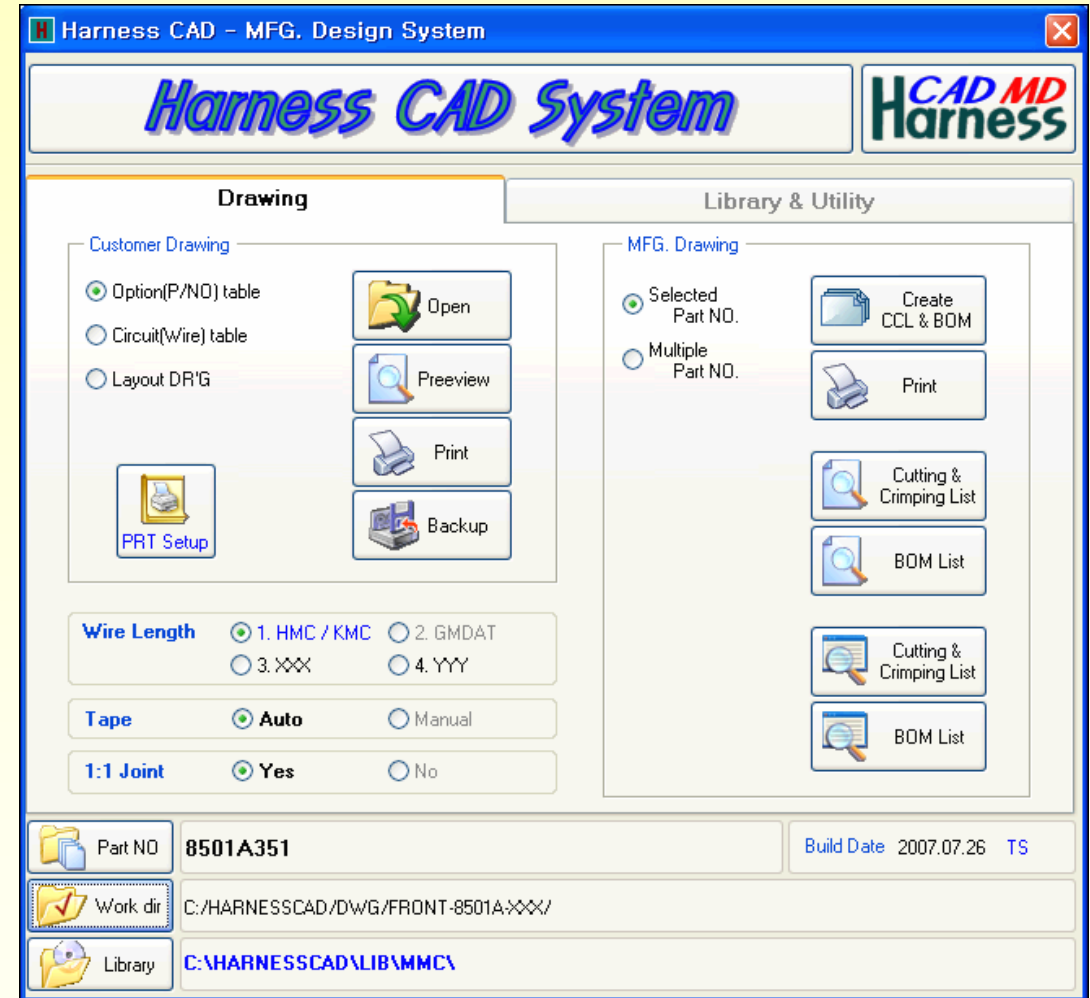
- ◆ Standardization : MFG process design
- ◆ Simplicity : Design procedure
- ◆ Fast Speed : MFG process development
- ◆ Integration : All data to library and DB
- ◆ Reliability : MFG process quality
- ◆ Accuracy : Design review & assessment
- ◆ Economic Cost : Systematic MFG process design and build-up
- ◆ More project opportunity from car maker, thanks to :
  - Highly advanced technological application
  - Agile and systematic response to car maker' s design change



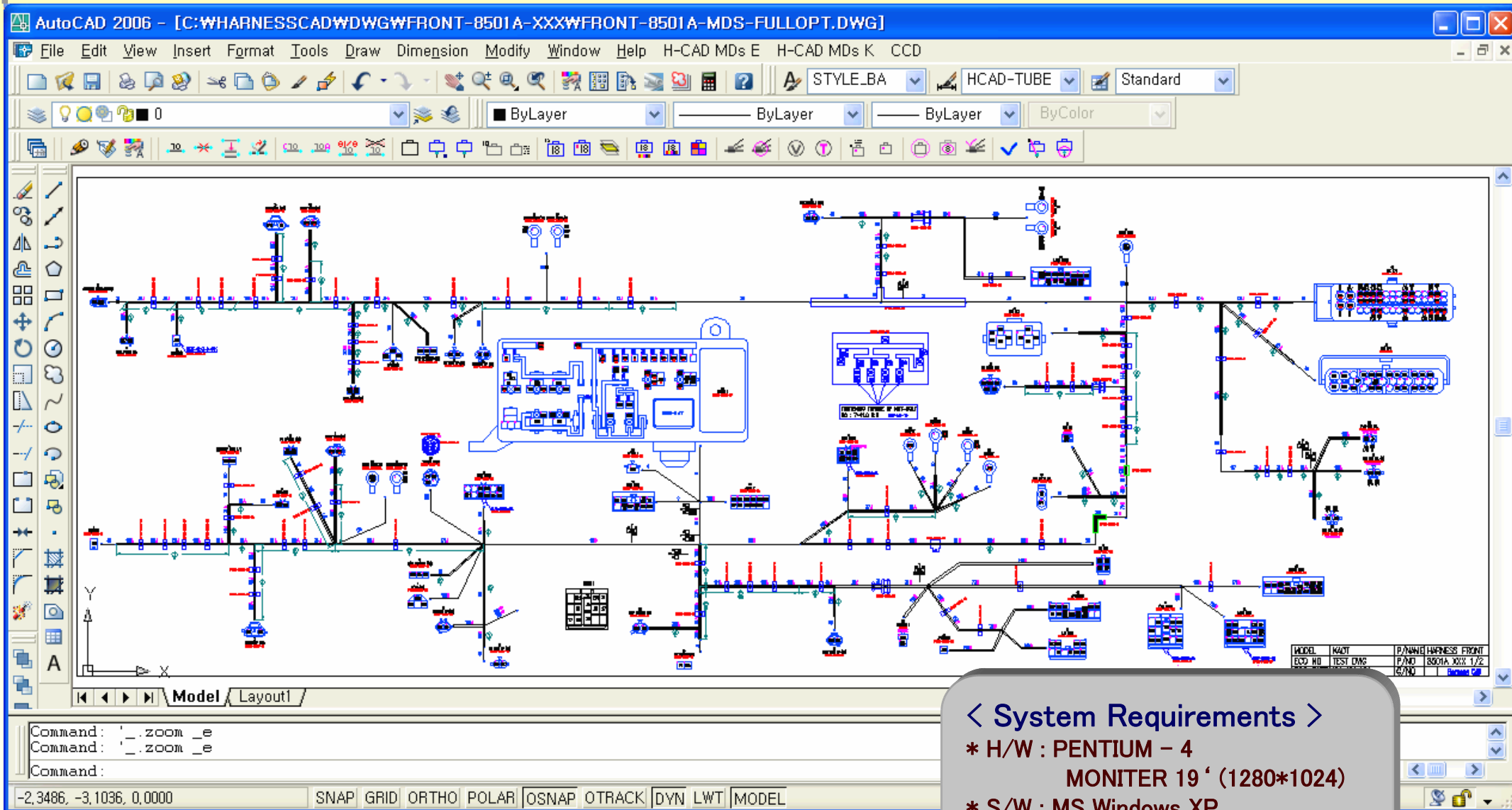
# Details of H-CAD MD System



- ◆ Data input (Full Option DR'G)
  - ❖ Option (P/NO) Table
  - ❖ Circuit (Wire) Table
  - ❖ Wiring Layout DR'G
- ◆ MF'G DR'G Generation (each P/No.)
  - ❖ ASS'Y DR'G
  - ❖ Cutting & Crimping DR'G
  - ❖ BOM List
- ◆ Utility Functions
- ◆ Library Management Tool



# Details of H-CAD MD System



## < System Requirements >

\* H/W : PENTIUM - 4  
MONITER 19 ' (1280\*1024)

\* S/W : MS Windows XP

Auto CAD 2004 ~ 2006