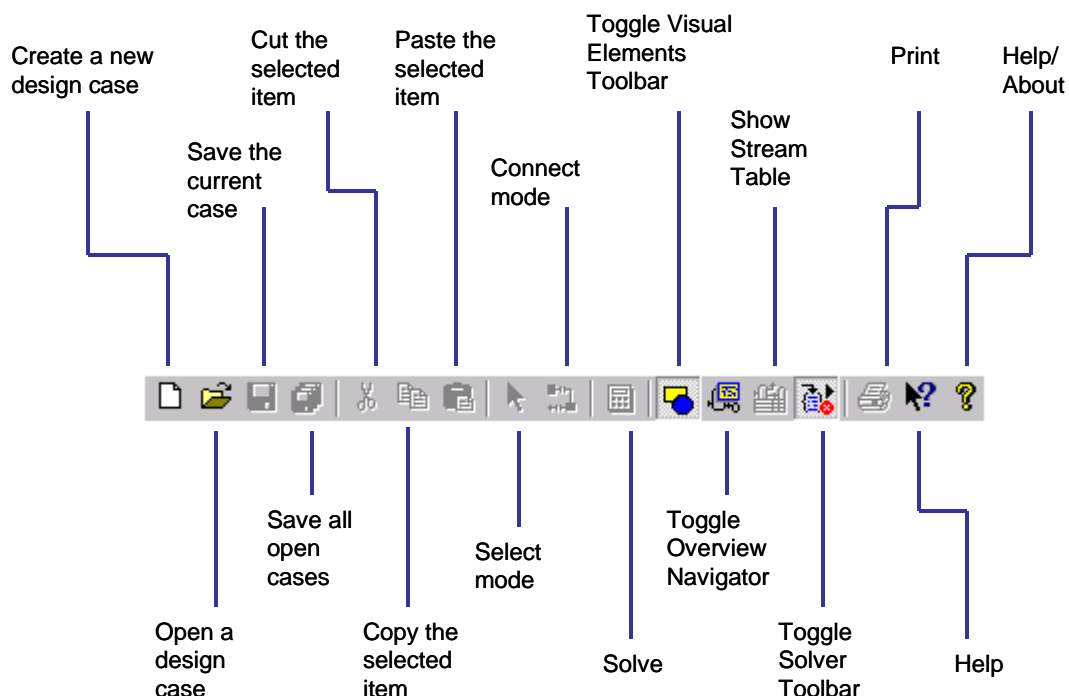


## 15.1 Main Toolbar



### Toolbar Buttons without Menu Equivalents

#### Select Mode



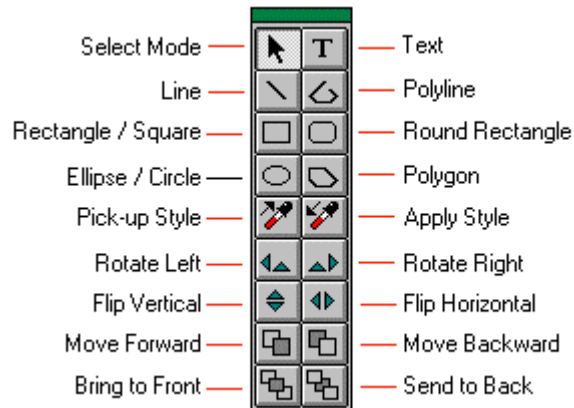
When this button is pushed, the system is in select mode. In that mode, you can select unit procedures and streams by clicking on them. All selected objects can be moved and deleted. Unit procedures can also be cut, copied, and pasted in another place within the same flowsheet or another flowsheet created by the program.

#### Connect Mode

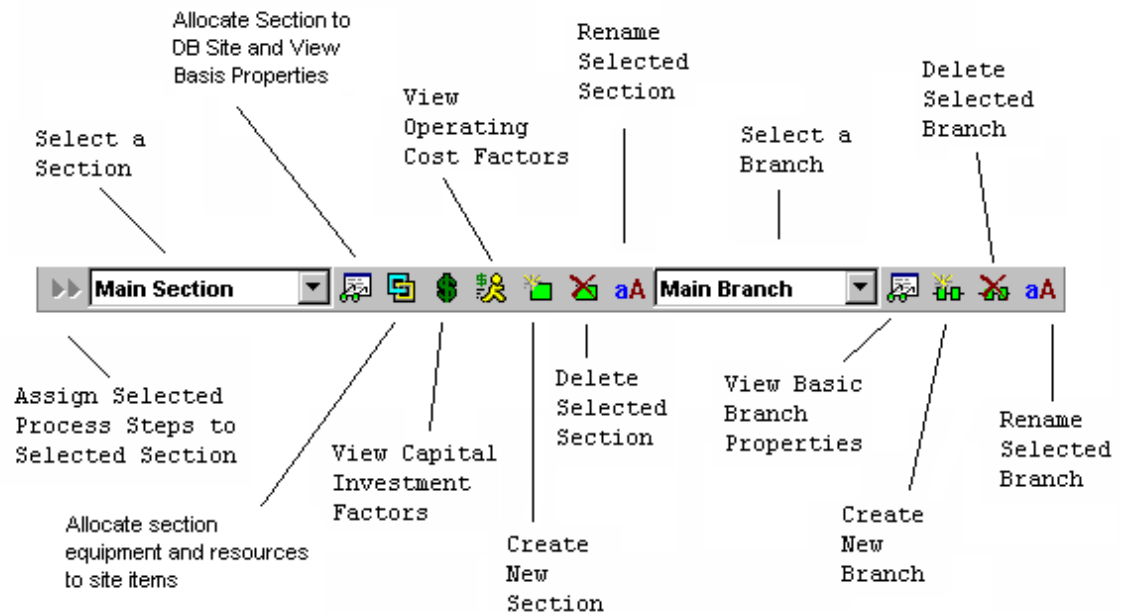


When this button is pushed, the system is in connect mode. In that mode, you can easily connect unit procedures by drawing process streams. When the system is in connect mode, the cursor changes to a characteristic shape indicating that mouse clicks will be interpreted specially. You cannot select or drag icons, bring up right-click menus etc. while being in connect mode.

## 15.2 Visual Elements Toolbar (Palette)

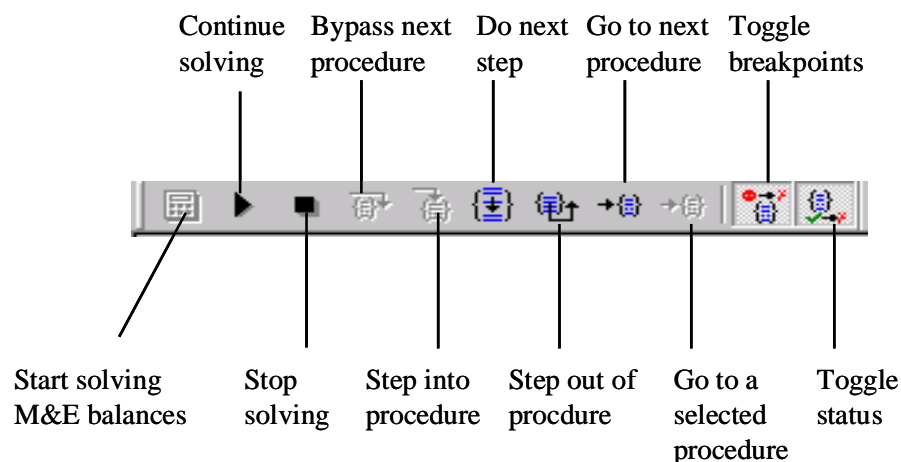


## 15.3 Sections Toolbar



## 15.4 Solver and Status Toolbars

The solver toolbar provides access to advanced solving features. It is used primarily when using breakpoints in a model. See section 2.1.6 for a summary explanation. Shown below are the controls on the solver and status toolbars, which are used together.



## 15.5 Status Bar







The status bar is displayed at the bottom of the Pro-Designer window. To display or hide the status bar, use the Status Bar command in the View menu.

As you highlight menu items, or move with the cursor over toolbar buttons, Pro-Designer uses the left side of the status bar to flash a short description of the menu item (or button action) your cursor is currently over. This area also is used sometimes to display error messages (accompanied by a beeping sound) generated during a Pro-Designer's operation (e.g. during stream drawing) when it is not appropriate to bring up an error dialog.

The right areas of the status bar indicate which of the following keys are latched down:

Indicator	Description
CAP	The Caps Lock key is latched down.
NUM	The Num Lock key is latched down.
SCRL	The Scroll Lock key is latched down.

## 15.6 File Menu

<i>Menu Item</i>	<i>Keyboard Equivalent</i>	<i>Palette Button</i>
<b>New</b> Creates a new document.	<b>Ctrl+N</b>	
<b>Open...</b> Opens an existing document.	<b>Ctrl+O</b>	
<b>Close</b> Closes an open document.		
<b>Save</b> Saves an open document using the same file name as it had when it was loaded.	<b>Ctrl+S</b>	
<b>Save As...</b> Saves an open document with a user-specified file name.		
<b>Drawing Size...</b> Sets the page size and the drawing size for this flowsheet. Also, allows you to change other printer-specific settings.	<b>Ctrl+G</b>	
<b>Print...</b> Prints a document.	<b>Ctrl+P</b>	
<b>Print Preview</b> Displays the document on screen as it would appear printed.		
<b>Application Settings</b> Allows you to customize several application settings.		
<b>Most Recently Opened Design Cases...</b> Up to four distinct filenames with the locations of the files of the four most recently opened design case files are displayed for express access.		
<b>Export Items as Metafile...</b> Allows you to save the flowsheet drawing of a design case or parts of it in a metafile picture format ("wmf" format) so that it can later be imported by any graphics or word processing program that can read "wmf" format files.		
<b>Export Items to AutoCAD...</b> Allows you to save the flowsheet drawing of a design case or parts of it in an AutoCAD compatible format ("dxf" format) so that it can later be imported by any graphics program that can read "dxf" format files.		
<b>Export to MS Project...</b> Export all scheduling and resource consumption data into SuperPro's MS Project Databank. MS Project can easily import that information.		
<b>Export to SchedulePro Recipe DB...</b>		

Export all scheduling and resource consumption data into SchedulePro's Recipe DB. SchedulePro is another application developed and marketed by our company that handles scheduling, capacity analysis, and debottlenecking of multi-product facilities.

#### **Check Consistency with Site DB...**

Allows you to reset the data of allocated sites and resources based on the updated Data Base.

#### **Save in a file without OLE objects...**

Saves only the design case (without the OLE objects)

#### **Exit**

Exits the program. If any open design case has not been saved, the program gives you the opportunity to do so at this time.

## 15.7 Edit Menu

<i>Menu Item</i>	<i>Keyboard Equivalent</i>	<i>Palette Button</i>
------------------	----------------------------	-----------------------

#### **Cut**

**Ctrl+X, Shift+Del**



Deletes data from the document and moves it to the clipboard.

#### **Copy**

**Ctrl+C, Ctrl+Ins**



Copies data from the document to the clipboard.

#### **Paste**

**Ctrl+V, Shift+Ins**



Pastes data from the clipboard into the document.

#### **Paste Special**

Pastes data from the clipboard either as a picture or as an object that is still associated with the application that created it. The data can either be linked or embedded into Pro-Designer's flowsheet.

#### **Clear**

**Del**

Clears (irreversibly deletes) the selected items.

#### **Clear All**

**Ctrl+W**

Clears (irreversibly deletes) all items of the current flowsheet.

#### **Select All**

**Ctrl+A**

Selects all the items in the current flowsheet.

#### **Refresh**

**Ctrl+R**

Redraws the entire flowsheet (refreshes the screen).

**Flowsheet Options**

Presents a submenu, the context menu of the flowsheet. It is active only if no items are selected. It includes the following options:

**Breakpoints (Appears only if breakpoints are set)****Clear All**

Deletes all the breakpoints

**Deactivate All**

Deactivates breakpoints for the next solve, but does not delete them.

**Economic Evaluation Parameters...**

Edit the parameters used to perform overall project economic evaluation.

**Section**

Presents a submenu through which you can edit the properties of the selected flowsheet section.

**Properties...**

Edit the properties of the selected section (yield-related streams, color index, etc.)

**Capital Cost Adjustments...**

Edit all section-level parameters related to section capital investment.

**Operating Cost Adjustments...**

Edit all section-level parameters related to the operating cost estimation of section.

**Resource Assignment...**

allocates the resources of the selected section (equipment, utilities, labor etc.) to resources that are part of a database facility (if the section is allocated to a database facility). For unallocated sections, reassigns new resources to those already utilized currently by the active section.

**Delete...**

Delete selected section.

**Rename...**

Rename selected section.

**Create New Section**

Allows you to create a new section that will be added to the current branch. The current branch is the branch whose name shows in the branch list-box.

**Branch**

Presents a submenu through which you can edit the properties of the selected branch.

**Properties...**

Edit the properties of the selected branch (add, remove or rename section, re-order sections, etc).

**Delete...**

Delete selected branch.

**Rename...**

Rename selected branch.

**Create New Branch**

Allows you to create a new branch.

**Ingredients...**

Lets you modify the properties (economic data, availability limits and inventory data) of ingredients (components and stock mixtures) employed in the current design case.

**Heat Transfer Agents...**

Lets you modify the description of the heating/cooling agents employed in the current design case (such as incoming and outgoing temperature, unit price, and availability limits). For databank site agents only the inventory data are editable. For generic agents, changes made in properties through this dialog window have a limited scope that includes their use exclusively by the present design case. The changes do not affect properties of agents as they exist in the heat transfer agent databank (see menu option **Databanks \ Heat Transfer Agents....**) If you wish to edit the properties of site agents, you have to use the **Databanks \ Sites and Resources...** menu option.

**Labor...**

Lets you modify the description of labor employed in the current design case (such as cost factors and availability limits). No data are editable for databank site labor or staff. For generic labor, changes made in properties through this dialog window have a limited scope that includes their use exclusively by the present design case. The changes do not affect properties of labor as they exist in the labor databank (see menu option **Databanks \ Labor....**) If you wish to edit the properties of site labor, you have to use the **Databanks \ Sites and Resources...** menu option.

**Consumables...**

Presents a dialog with all consumables used somewhere in your flowsheet. You can edit the properties of any consumable.

**Recycle Loop Options...**

Displays a dialog that allows you edit parameters used during loop convergence.

**Design Case Description...**

Allows you to input several items of information related to the current design case (e.g. the designer/engineer's name, comments, etc.)

**Preferences**

Activates a submenu that lets you modify a variety of options:

**Stream Summary Table****Edit Contents...**

Allows the addition or deletion of streams and components to the stream table

**Include in Printing**

Toggles whether the stream table is printed with the process diagram

**Physical Units Options...**

Allows the selection of the default units of measure

**Text Editor...**

Displays the name of the executable that is fired-up every time Pro-Designer needs to display a text (ASCII) file.

**Operating Cost Options...**

Allows you to choose a reference basis for reporting the annual operating cost of the process.

**Emission Limits...**

Allows you to set the maximum allowable emission level for each pollutant category. Also allows you to define new pollutant categories and set their limits.

**Miscellaneous...**

Displays various options that affect Pro-Designer's behavior (such as page break display, etc.)

**Default Styles**

Activates a submenu that lets you modify the following:

**Visual Objects...**

Presents a dialog describing the default style used to create every new visual object.

**Text...**

Presents a dialog describing the default style used to create every new text object.

**Procedure Icons...**

Presents a dialog describing the default style used to create every new procedure's icon.



**Bulk Streams...**

Presents a dialog describing the default style used to create every new bulk stream (input / output / intermediate).

**Discrete Streams...**

Presents a dialog describing the default style used to create every new discrete stream (input / output / intermediate).

**Time Line (Common)...**

Presents a dialog allowing you to edit the characteristics of the default time line used by all time charts (Gantt Charts, Resource Tracking Charts, etc.)

**Gantt Chart...**

Presents a dialog describing the style for Gantt Charts (operations and equipment).

**Power Consumption Chart...**

Presents a dialog describing the style used to display power consumption charts.

**Labor Demand Chart...**

Presents a dialog describing the style used to display labor demand charts.

**Ingredient Consumption Chart...**

Presents a dialog describing the style used to display ingredient consumption charts.

**Ingredient Inventory Chart...**

Presents a dialog describing the style used to display ingredient inventory charts.

**Utility Consumption Chart...**

Presents a dialog describing the style used to display utility (heat transfer agents) consumption charts.

**Utility Inventory Chart...**

Presents a dialog describing the style used to display utility (heat transfer agents) inventory charts.

**Equipment Utilization Chart...**

Presents a dialog describing the style used to display equipment (main and support) charts.

**Throughput Utilization Chart...**

Presents a dialog describing the style used to display throughput utilization charts.

**Throughput Potential Chart...**

Presents a dialog describing the style used to display throughput potential charts.

**Physical Units Format...**

Presents a dialog describing the style used to display the physical units.

**Unit Procedure Options**

Activates a submenu that is identical to the context (right-click) menu of a unit procedure. It includes the following options:

**Operation Data... (with a submenu of operation names)**

Brings up the i/o simulation dialog for each of the operations included in the procedure.

**Add / Remove Operations...**

Brings up a dialog that allows you to add, remove or re-order the operations in this procedure. This menu option is missing if the procedure's operating mode is continuous.

**Operating Mode...                      Ctrl+U**

Allows you to set the operating mode of a procedure (batch or continuous). In case of batch procedures, it also allows you to set the number of cycles (and if the overall operating mode is continuous, the holdup time).

**Equipment Data...**

Allows you to select an equipment for the procedure (if equipment sharing is desired); also allows you to set the sizing for the equipment, request the program to estimate it or allocate it to a database site or vendor equipment. Finally, it allows you to set several factors affecting the purchase and operating cost of the equipment associated with that procedure.

**Equipment Contents...**

Allows you to view the intermediate states of the selected procedure, or in other words, the contents of the vessel during that unit procedure's execution.

**Operation Sequence...**

Allows you to view the intermediate states of the selected procedure along with the stream that either bring in or removed material during each operation's execution.

**Set Breakpoints...**

Allows you to place solution breakpoints around procedures.

**Edit Labels...**

Allows you to edit the all the labels associated with that procedure: the name of the procedure, the name of the host equipment, and a description label for the procedure.

**Flip (Reverse Direction of Flow)**

Reverses the direction of the procedure's icon. This menu item appears only if there are no streams already connected to the procedure. To activate this item on a unit procedure with existing connections, choose the Disconnect option first (which will remove all connecting streams) and then revisit this menu and chose the Flip option.

**Disconnect**

Deletes all the streams connected to the unit procedure. This menu item appears only if there is at least one stream connected to the unit procedure.

**Order**

Activates the following submenu:

**Bring Forward**

Will advance the icon's drawing order, thus allowing to be drawn over another item on the screen.

**Send Backward**

Will drop the icon's drawing order, thus allowing it to be hidden behind another item on the screen.

**Bring to Front**

Will bring the icon to the front of the drawing order, ensuring that it will be fully visible.

**Send to Back**

Will send the icon to the end of the drawing order, thereby making it possible to be partially or fully hidden behind other elements on the flowsheet.

**Style**

Activates the following submenu:

**Pick up**

Will retain a copy of the entire style of the unit procedure's icon.

**Apply**

Will apply the style copied earlier (using the pick-up style options) to the selected icon(s).

**Edit...**

Will present a dialog that allows you to edit the selected procedure's drawing style for its icon (color, label fonts, label visibility, etc.)

**Use Default**

Will force the icon to follow the default style for unit procedure icons kept by the flowsheet (with a possible color overwrite by the section's color code).

**Pick a Color...**

Lets you pick a color to be used for drawing the procedure's icon. Your choice stays associated with the specific unit procedure even if the default icon color is changed.

**Set Default**

Changes the color of the icon back to follow the default choice.

**Stream Options**

Activates a submenu that is identical to the context (right-click) menu for a stream. It includes the following options:

**Simulation Data**

Brings up the simulation dialog for the process stream (with composition information, temperature, pressure, density, etc.)

**Copy Contents**

Copies the composition, temperature, pressure etc. of the selected stream. Later you can select an input stream and paste the stream contents to quickly initialize it with the copied stream data.

**Paste Contents**

Pastes the composition, temperature, pressure etc. of the stream that was last issued a "Copy Contents" command.

**Edit Tag Name**

Allows you to edit the name of the stream.

**Edit Elbows**

Places selection handles on the corners (elbows) of the stream. The elbow handles can be moved in directions indicated by the shape of the cursor.

**Order**

Activates the following submenu:

**Bring Forward**

Will advance the icon's drawing order, thus allowing to be drawn over another item on the screen.

**Send Backward**

Will drop the icon's drawing order, thus allowing it to be hidden behind another item on the screen.

**Bring to Front**

Will bring the icon to the front of the drawing order, ensuring that it will be fully visible.

**Send to Back**

Will send the icon to the end of the drawing order, thereby making it possible to be partially or fully hidden behind other elements on the flowsheet.

**Style**

Activates the following submenu:

**Pick up**

Will retain a copy of the entire style of the stream. The style can be applied later to one or more other streams.

**Apply**

Will apply the style copied earlier (using the pick-up style options) to the selected stream(s).

**Edit...**

Will present a dialog that allows you to edit the stream's drawing style (line thickness, color, etc.)

**Use Default**

Will force the stream to follow the default style for process streams kept by the flowsheet.

**Include in Stream Report**

Toggles whether the stream is included in the stream report

**Visual Object Options**

Activates a submenu which is the context menu of a visual object. It includes the following options:

**Reshape**

Allows you to edit the corners of the visual object (active only for polygons and polylines).

**Rotate Left**

Will rotate 90° to the right the selected visual object(s).

**Rotate Right**

Will rotate 90° to the left the selected visual object(s).

**Flip Horizontal**

Will flip the selected visual object around an imaginary horizontal axis.

**Flip Vertical**

Will flip the visual object around an imaginary vertical axis.

**Order - Bring Forward**

Will advance the visual object's drawing order, thus allowing to be drawn over another item on the screen.

**Order - Send Backward**

Will drop the visual object's drawing order, thus allowing it to be hidden behind another item on the screen.

**Order - Send to Front**

Will bring the visual object to the front of the drawing order, ensuring that will be fully visible.

**Order - Send To Back**

Will send the visual object to the end of the drawing order, thereby making it possible to be partially or fully hidden behind other elements on the flowsheet.

**Style - Pick up**

Will retain a copy of the entire style of the visual object. The style can be applied later to one or more visual objects.

**Style - Apply**

Will apply the style copied earlier (using the pick-up style options) to the selected visual object(s).

**Style-Edit...**

Allows you to edit the style of the selected visual object (line thickness, color, etc.)

**Style - Set Default**

Forces the visual object to follow the default style set for all visual objects.

**Text Options**

Activates a submenu which is the context menu of a text object. It includes the following options:

**Edit Text**

Allows you to edit the text displayed (same as double-clicking over the text object).

**Order - Bring Forward**

Will advance the text's drawing order, thus allowing to be drawn over another item on the screen.

**Order - Send Backward**

Will drop the text's drawing order, thus allowing it to be hidden behind another item on the screen.

**Order - Send to Front**

Will bring the text to the front of the drawing order, ensuring that will be fully visible.

**Order - Send To Back**

Will send the text to the end of the drawing order, thereby making it possible to be partially or fully hidden behind other elements on the flowsheet.

**Style - Pick up**

Will retain a copy of the entire style of the text object. The style can be applied later to one or more other text objects.

**Style - Apply**

Will apply the style copied earlier (using the pick-up style options) to the selected text object(s).

**Style - Edit...**

Allows you to edit the style of the selected stream (line thickness, color, etc.)

**Style - Set Default**

Forces the stream to follow the default style set for all process streams.

**Find**

Brings up the Find Dialog that allows you to search for a specific unit procedure, equipment, stream or operation, by name or type.

**Find Next**

Repeats the last search request (with the same criteria).

**Insert New Object**

Inserts and embeds an object, such as a picture or spreadsheet in a document.

**Links**

List and edit links to embedded documents.

## 15.8 Unit Procedures Menu

From this menu you can select the desired unit procedure through a series of hierarchical submenus. There is an entry for each procedure group included in your program. If you own a license of EnviroPro, some of the following groups or group-members may not be available. All entries are of course available in SuperPro Designer.



**Vessel Procedure**

- In a Reactor
- In a Seed Reactor
- In a Fermentor
- In a Seed Fermentor
- In an Air-Lift Fermentor

**Continuous Reaction****Stoichiometric**

- In a CSTR
- In a PFR
- In a Fermentor
- In a Seed Fermentor
- In a Air-Lift Fermentor

**Kinetic Reaction**

- In a CSTR
- In a PFR
- In a Fermentor
- In a Seed Fermentor

**Equilibrium**

- In a CSTR

**Environmental**

- Well-Mixed Aerobic BioOxidation
- Plug Flow Aerobic BioOxidation
- Anaerobic Oxidation
- Trickling Filtration
- Anoxic Reaction
- Neutralization
- Wet Air Oxidation
- Incineration
- UV Radiation

**Inoculum Preparation**

- In a Disposable Bioreactor
- In a Roller Bottle
- In a T-Flask
- In a Shake Flask
- In a Test Tube

**Filtration**

- Microfiltration (batch)
- Microfiltration (feed and bleed)
- Ultrafiltration (batch)
- Ultrafiltration (feed and bleed)
- Reverse-Osmosis (batch)
- Reverse-Osmosis (feed and bleed)
- Diafiltration
- Dead End
- Nutsche
- Plate & Frame

- Rotary Vacuum
- Air Filtration
- Belt
- Granular Media
- Baghouse
- Electrostatic Precipitation

**Centrifugation**

- In a Decanter Centrifuge
- Disk Stack
- Bowl
- Basket
- Basket (Bottom Discharge)
- Centritech
- In a Gas Cyclone
- In a Hydrocyclone

**Homogenization**

- High Pressure
- Bead Milling
- Nano Milling

**Chromatography / Adsorption**

- Gel Filtration
- PBA Chromatography
- EBA Chromatography
- Ion Exchange (for Demineralization)
- GAC Adsorption (for liquids)
- GAC Adsorption (for gases)

**Drying**

- Tray
- Freeze
- Freeze (Discrete)
- Double Cone
- Cone Screw
- Sphere
- Drying/Granulation
- Spray
- Fluid Bed
- Drum
- Rotary
- Sludge

**Sedimentation**

- Decanting
- Clarification
- IP Clarification
- Thickening
- Flotation
- Oil Separation

**Distillation**

- Flash

Batch

Continuous (Short-Cut)

**Extraction**

In a Mixer / Settler

Differential

Centrifugal

**Phase Change**

Condensation

Evaporation (Multi-Effect)

Thin Film Evaporation

Crystallization (Continuous)

**Absorption / Stripping**

Absorption

Stripping

Degasification

**Storage****Bulk****Batch**

Blending Tank  
Flat Bottom Tank  
Receiver  
Horizontal Tank  
Vertical Tank on Legs  
Horizontal on Wheels Tank  
Horizontal with Mixer Tank  
Drum  
Disposable Container  
Silo (For Solids)  
Bin (For Solids)  
Drum (For Solids)

**Continuous**

Blending Tank  
Flat Bottom Tank  
Receiver  
Horizontal Tank  
Vertical Tank on Legs  
Horizontal on Wheels Tank  
Horizontal with Mixer Tank  
Drum  
Disposable Container  
Silo (For Solids)  
Hopper (For Solids)  
Bin (For Solids)  
Drum (For Solids)  
Equalization  
Junction Box Mixing

**Discrete**

Bin  
Drum  
Rag  
Tray

**Heat Exchange**

Heating  
Electric Heating  
Cooling  
Electric Cooling  
Heat Exchanging  
Cooling in Tower  
Heat Sterilization  
Frying

**Mixing****Bulk Flow**

2-,3-,4-,5-,6-,7-,8-,9- Stream  
Custom

Mixture Preparation

Tumble

**Discrete Flow**

2-,3-,4-,5-,6-,7-,8-,9- Stream

**Splitting**

**Bulk Flow**

2-,3-,4-,5-,6-,7-,8-,9- Stream

Custom

3- 5-10 Way Flow Distribution

**Discrete Flow**

2-,3-,4-,5-,6-,7-,8-,9- Stream

**Component Flow**

2-,3-,4-,5-,6-,7-,8-,9- Stream

**Size Reduction**

Grinding (Bulk)

Grinding (Discrete)

Shredding (Bulk)

Shredding (Discrete)

**Formulation and Packaging**

Extrusion

Blow Molding

Injection Molding

Trimming

Filling

Assembly

Printing

Labeling

Boxing

Tableting (General)

Tableting (Pharma)

Tablet Coating

**Transport (Near)**

**Liquids**

Centrifugal Pump

Diaphragm Pump

Gear Pump

**Gases**

Compressor

Fan

**Solids by**

Belt Conveyor (Bulk)

Belt Conveyor (Discrete)

Pneumatic Conveyor (Bulk)

Pneumatic Conveyor (Discrete)

Screw Conveyor (Bulk)

Screw Conveyor (Discrete)

Bucket Elevator (Bulk)

Bucket Elevator (Discrete)

**Transport (Far)****By Land**

- Truck (Bulk)
- Truck (Discrete)
- Train

**By Sea**

- By Sea

**By Air**

- By Air

**Pressure Change (Valves)****Liquid Flow**

- Gate Valve
- Globe Valve
- Butterfly Valve

**Gas Flow**

- Gate Valve
- Globe Valve
- Butterfly Valve

**Generic Boxes****Bulk****Continuous**

- 1x1 Pass Through
- 1x1 Reaction
- 1x2 Reaction / Separation
- 2x2 Reaction / Separation
- 3x2 Reaction / Separation

**Batch**

- 1x1 , 3x3 , 5x5, 10x10

**Discrete**

- Pass Through
- Bulk-to-Discrete
- Discrete-to-Bulk

**Design Specs**

The above list is being continuously expanded by our development team in order to include more unit operations based on feedback collected from our customers. For the latest information on the unit operations available in your version of the program, please consult your on-line help facility.

## 15.9 Tasks Menu

*Menu Item**Keyboard Equivalent***Set Mode of Operation**

Set the operation mode of the plant to either batch or continuous.

**Edit Pure Components...****Ctrl+0**

Allows you to register (introduce) the pure components (single elements) participating in the current process.

**Edit Stock Mixtures...****Ctrl+Shift+0**

Allows you to register (introduce) the stock mixtures that you will need to use in order to initialize the input streams of the process.

**Edit Other Resources...**

View and edit the properties of resources including heat transfer agents, labor, consumables, and raw materials.

**Recipe Scheduling Information****Ctrl+1**

Presents a dialog that allows you to edit the scheduling parameters related to the recipe directly, e.g. annual operating time, number of campaigns, etc. This menu option is only active if overall operation mode is batch.

**Gantt Chart \ Operations GC****Ctrl+2**

View and edit the scheduling information for all operations and procedures in this recipe as a Gantt chart. This menu option is only active if the flowsheet is in batch operating mode.

**Gantt Chart \ Equipment GC****Shift+Ctrl+2**

View and edit the scheduling information for all equipment in this process as a Gantt chart. This menu option is only active if overall operation mode is batch.

**Gantt Chart \ Operations GC (Multiple Batches)**

View and edit the scheduling information for all operations and procedures in this recipe as a Gantt chart. It will display more than one (possibly overlapping) batch executions. This menu option is only active if overall operation mode is batch.

**Gantt Chart \ Equipment GC (Multiple Batches)**

View and edit the scheduling information for all equipment in this process as a Gantt chart. It will display more than one (possibly overlapping) batch executions. This menu option is only active if overall operation mode is batch.

**Solve M&E Balances****Ctrl+3**

Solve the material and energy balances around the entire process.

**Stream Classification...****Ctrl+5**

Characterize input and output streams as revenue, raw material and waste; provide information about purchase cost, selling cost and / or waste treatment cost for waste streams.

**Perform Economic Calculations****Ctrl+6**

Perform economic analysis for the entire process. Will recalculate all economic parameters (capital cost, annual operating cost, ROI, etc.

**Adjust Process Throughput...**

Allows you to scale up or down the throughput of the process quickly (without having to visit all input stream dialogs).

## 15.10 Reports Menu

### **Stream & Mat. Balance (SR)**

Generates, saves, and displays the Materials & Streams report.

### **Economic Evaluation (EER)**

Generates, saves, and displays the Economic Evaluation report.

### **Cash Flow Analysis (CFR)**

Generates, saves, and displays the Cash Flow Analysis report.

### **Itemized Cost (ICR)**

Generates, saves, and displays the Itemized Cost report.

### **Throughput Analysis (THR)**

Generates, saves, and displays Throughput Analysis report.

### **Environmental Impact (EIR)**

Generates, saves, and displays the Environmental Impact Analysis report.

### **Emissions (EMS)**

Generates, saves, and displays the Emissions report.

### **Emissions (EMS)**

Generates, saves, and displays the Emissions report.

### **Equipment (EQR)**

Generates, saves, and displays the Equipment report.

### **Input Data (IDR)**

Generates, saves, and displays the Input Data report.

### **View Any Report**

Brings up the file browse dialog and allows you to view any existing reports.

### **Create and Save As**

Brings up a dialog that allows you to generate and save multiple reports simultaneously.

### **Reports Options**

Brings up a dialog that allows you to set the options that affect the format and the contents of the reports.

### **Batch Sheet Options**



Brings up a dialog that allows you to set the options that affect the format and the contents of the batch sheet.

**Batch Sheet Generate**

Generates the Batch Sheet.

**Batch Sheet View**

Launches an existing batch sheet document based on the current batch sheet options. If either simulation data or batch sheet options have been modified, prompts for the generation of a new batch sheet.

**Batch Sheet View Any**

Brings up a file selection dialog that allows you to view any existing batch sheet document.

## 15.11 View Menu

**Equipment Occupancy Chart \ Single Batch (or Multiple Batches)**

Present for viewing purposes only a chart that shows how equipment is occupied during a single or multiple batches. This menu option is only active if overall operation mode is batch.

**Resource Consumption Tracking Chart \ Ingredient \ Single Batch (or Multiple Batches)**

Presents for viewing purposes only a chart that shows the rate of consumption for an ingredient (raw material) during the execution of a single or multiple batches. This menu option is only active if overall operation mode is batch.

**Resource Consumption Tracking Chart \ Heat Transfer Agent \ Single Batch (or Multiple Batches)**

Presents for viewing purposes only a chart that shows the rate of utilization for a heat transfer agent during the execution of a single or multiple batches. This menu option is only active if overall operation mode is batch.

**Resource Consumption Tracking Chart \ Power \ Single Batch (or Multiple Batches)**

Presents for viewing purposes only a chart that shows the rate of power consumption during the execution of a single or multiple batches. This menu option is only active if overall operation mode is batch.

**Resource Consumption Tracking Chart \ Labor \ Single Batch (or Multiple Batches)**

Presents for viewing purposes only a chart that shows labor demand during the execution of a single or multiple batches. This menu option is only active if overall operation mode is batch.

**Resource Inventory Chart \ Ingredient \ Single Batch (or Multiple Batches)**

This option opens a dialog that allows the user to set raw materials inventory capacity and replenishment schedules and displays a chart showing material inventory and consumption data for single or multiple batches. Similar charts are generated for storable heat transfer agents.

**Throughput Analysis Chart \ Utilization**

This option displays a bar chart showing the time, capacity, and combined utilizations for the procedures in the process. (Equipment must be in rating mode to appear on the chart.)

**Throughput Analysis Chart \ Potential**

This option displays a bar chart showing the conservative, realistic, and theoretical maximum batch sizes for the procedures in the process. (Equipment must be in rating mode to appear on the chart.)

**Executive Summary**

Presents a dialog with summary and summarized cost information about the current project.

**All Procedures**

Brings up a dialog that displays all the unit procedures in this project categorized by branch and section.

**All Equipment**

Displays all the equipment items employed in this project categorized by branch and section.

**CIP Skids & SIP Panels**

Displays all the CIP skids and SIP panels employed in this project.

**Main Toolbar**

Shows or hides the main toolbar.

**Status Bar**

Shows or hides the status bar.

**Visual Objects Toolbar**

Shows or hides the visual objects toolbar.

**Sections Toolbar**

Shows or hides the sections toolbar.

**Simulation Control \ Toolbar**

Shows or hides the solver toolbar.

**Simulation Control \ Status Control**

Shows or hides the status indicator tools.

**Overview Navigator**

Shows or hides the overview Navigator tool which enables quick navigation of large flowsheets.

**Scheduling Summary**

Shows or hides the scheduling summary form.

**Stream Summary Table**

Shows or hides the stream table.

## 15.12 Databanks Menu

<i>Menu Item</i>	<i>Keyboard Equivalent</i>
<b>Components...</b>	<b>F2</b>
Add, delete or edit the properties of a pure component in the component databank.	
<b>Stock Mixtures...</b>	<b>Shift+F2</b>
Add, delete or edit the properties of mixtures available in the mixture databank.	
<b>Heating Transfer Agents...</b>	<b>F3</b>
Add, delete or edit a heating or cooling agent from the heat transfer agent databank.	
<b>Labor...</b>	<b>Shift+F3</b>
Add, delete or edit a labor type from the labor databank.	
<b>Consumables...</b>	
View, add, delete, or edit consumables and consumable types from the consumables databank.	
<b>Equipment Materials...</b>	<b>Ctrl+F3</b>
Introduce a new construction material and/or edit the material factor for any (equipment-material) combination.	
<b>Currencies...</b>	<b>Ctrl+F4</b>
Add, delete, or edit currencies from the currencies databank.	
<b>Equipment \ in Sites...</b>	<b>F4</b>
Add, delete or edit equipment in the sites databank.	
<b>Equipment \ from Vendors...</b>	<b>Shift+F4</b>
Add, delete or edit vendor equipment in the vendor equipment databank.	
<b>Equipment \ Vendors-Manufacturers...</b>	<b>F5</b>
Add, delete or edit a vendor/manufacture in the vendor/manufacture databank.	

**Equipment \ Types...****F6**

View declared types of equipment used by the program and add or delete specifications for every equipment type in the equipment types databank.

**Equipment \ Specification Variables...****Shift+F6**

Add, delete or edit specification variables to be used as equipment specs in the equipment specs databank.

**Sites and Resources...****F8**

Add, delete sites and edit their resources (equipment, labor etc.) in the sites databank.

**Processes - View...**

View the contents of the Processes databank.

**Processes – Search**

Search the contents of the Processes databank.

**Processes - Export Current Process**

Export the current design case to the Processes databank.

**Edit Databank Location...**

Specify a new location for all databank (‘.db’) files.

**Import Data to Databanks...**

Import data from a previous version databank to current User databank.

## 15.13 Windows Menu

**Duplicate**

Creates a new window that displays a view of the same document.

**Cascade**

Arranges windows in an overlapped fashion.

**Tile Horizontal**

Arranges windows in non-overlapped horizontal tiles.

**Tile Vertical**

Arranges windows in non-overlapped vertical tiles.

**Arrange Icons**

Arranges icons of closed windows.

**Close**

Closes the currently active view (worksheet) and prompts the user to keep changes if the file has been modified.

**Close All**

Closes all currently open views (worksheets) and prompts the user to keep changes for files that have been modified.

**Flowsheet 1,2,..**

Allows you to switch (activate) to any of the currently open Pro-Designer flowsheets.

## 15.14 Help Menu

**Help Topics...**

Offers you a table of contents for the entire help system.

**Index**

Offers you an index to topics on which you can get help.

**Using Help**

Present helpful tips on how to use the on-line help system.

**About...**

Displays the version number of this application.

**GO TO TOP LEVEL CONTENTS**