
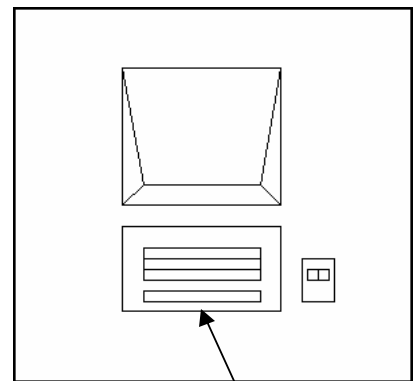
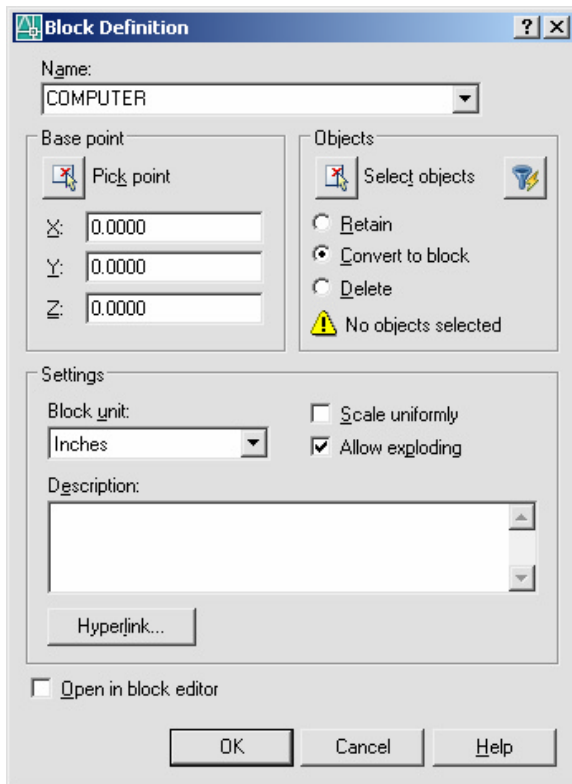

Chapter 19
Blocks and Attributes

AutoCAD 2D Tutorial

Creating Local Blocks (BMAKE) 19.1

1. **Choose** Draw, Block, Make.
or
2. **Click** the Make Block icon. 
- or**
3. **Type** BMAKE at the command prompt.
Command: BMAKE or BLOCK
4. **Type** the name of the block.
5. **Pick** an insertion point.
6. **Select** objects to be included in the block definition.
7. **Click** OK.




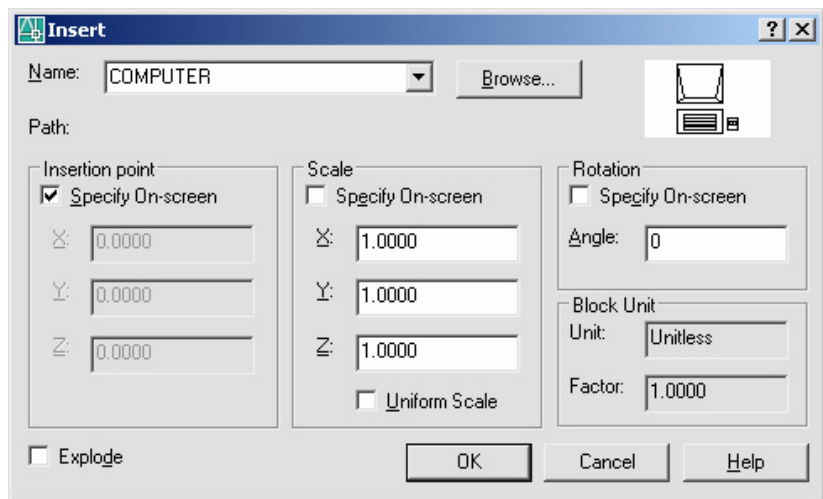
Insertion point

Note You cannot use DIRECT, LIGHT, AVE_RENDER, RM_SDB, SH_SPOT, and OVERHEAD as valid block names.

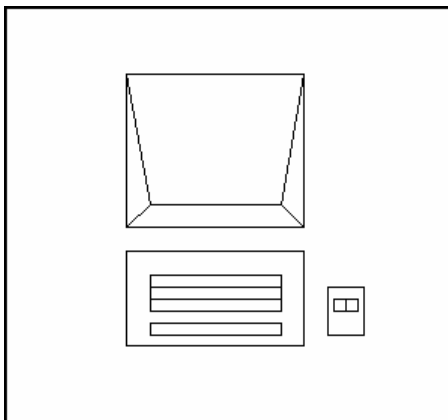
AutoCAD 2D Tutorial

Inserting Blocks 19.2

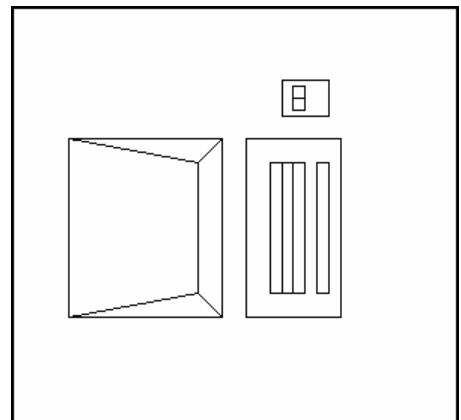
1. **Choose** Insert, InsertBlock
or
2. **Click** the Insert icon from the INSERT toolbar. 
3. **Type** INSERT at the command prompt.
Command: **INSERT**
4. **Choose** the name to insert a local block and Browse... to insert a Wblock.
5. **Choose** the insertion point, scale, and rotation of the block.



Block Inserted with a zero degree rotation angle



Block Inserted with a ninety degree rotation angle



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Typing Insert (-INSERT)

- Type** - INSERT at the command prompt.
Command: **-INSERT**
- Type** Block name to insert.
Insert block name or (?) **type name**
- Pick** An insertion point. Insertion point: **pick point**
- Press** ENTER to keep the same x scale factor as the original block.
X scale factor <1> Corner / XYZ:
- Press** ENTER to keep the same x scale factor as the original block.
Y scale factor (default=X):
- Press** ENTER to keep a rotation angle of zero. Rotation angle <0>:
or
- Pick** A rotation angle.

AutoCAD 2D Tutorial

Control the Color and Linetype of Blocks 19.3

The objects in an inserted block can retain their original properties, can inherit properties from the layer on which they are inserted, or can inherit the properties set as current in the drawing.

You have three choices for how the color, linetype, and lineweight properties of objects are treated when a block reference is inserted.

- Objects in the block do not inherit color, linetype, and lineweight properties from the current settings. The properties of objects in the block do not change regardless of the current settings.
- For this choice, it is recommended that you set the color, linetype, and lineweight properties individually for each object in the block definition: do not use BYBLOCK or BYLAYER color, linetype, and lineweight settings when creating these objects.
- Objects in the block inherit color, linetype, and lineweight properties from the color, linetype, and lineweight assigned to the current layer only.
- For this choice, before you create objects to be included in the block definition, set the current layer to 0, and set the current color, linetype, and lineweight to BYLAYER.
- Objects inherit color, linetype, and lineweight properties from the current color, linetype, and lineweight that you have set explicitly, that is, that you have set to override the color, linetype, or lineweight assigned to the current layer. If you have not explicitly set them, then these properties are inherited from the color, linetype, and lineweight assigned to the current layer.
- For this choice, before you create objects to be included in the block definition, set the current color or linetype to BYBLOCK.

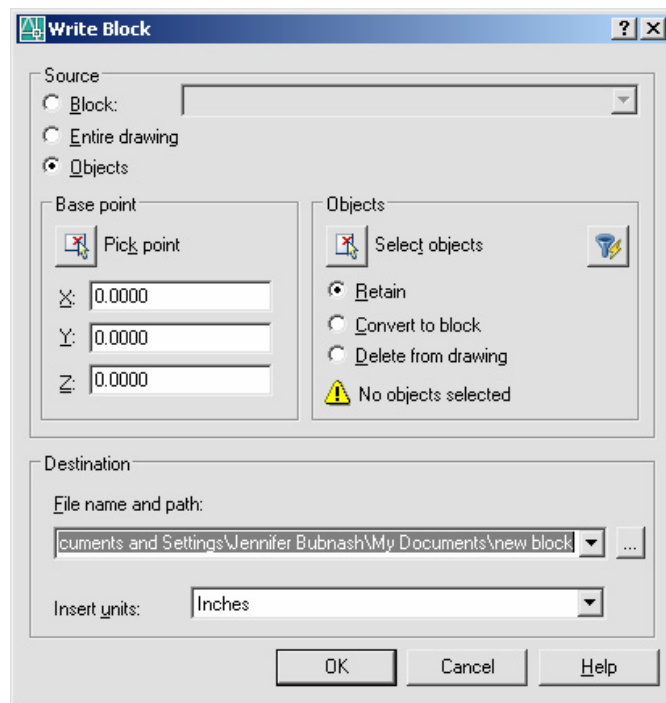
If you want objects in a block to	Create objects on these layers	Create objects with these properties
Retain original properties	Any but 0 (zero)	Any but BYBLOCK or BYLAYER
Inherit properties from the current layer	0 (zero)	BYLAYER
Inherit individual properties first, then layer properties	Any	BYBLOCK

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Wblock Command 19.4

Writes objects to a new drawing file.

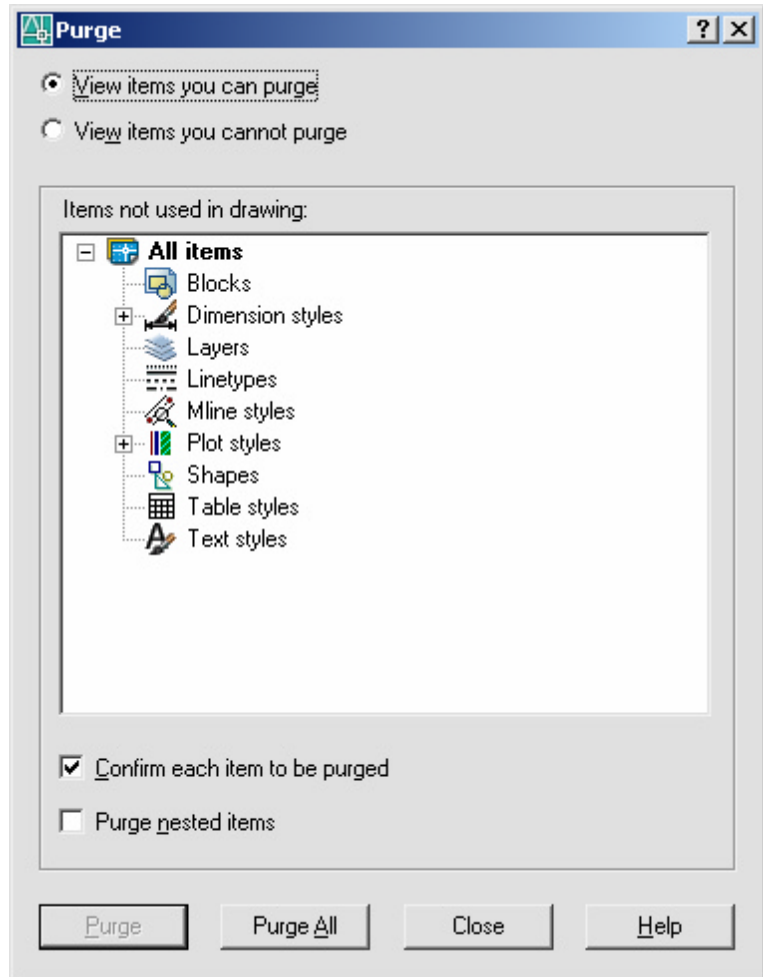
1. **Type** WBLOCK at the command prompt
 Command: **WBLOCK**
2. **Type** A drawing name (and location).
3. **Type** A block name if a local block already exists. Block name: **name**
 or
4. **Press** ENTER to create a block.
5. **Pick** An insertion point on the object
 Insertion base point: **pick a point**
6. **Pick** Objects to create the block.
 Select objects: **pick objects**
7. **Press** ENTER to end the selection set.



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Purge 19.5

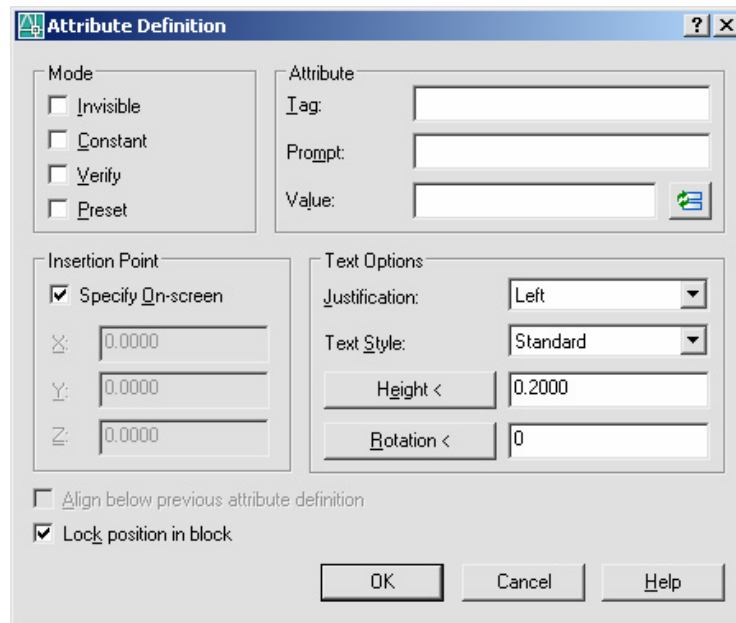
1. **Choose** File, Drawing Utilities, Purge.
or
2. **Type** PURGE at the command prompt
Command: **PURGE**
3. **Choose** One of the following purge options:
Purge unused
Blocks/Dimstyles/LAyers/ LTypes/
SShapes/SStyles/Mlinestyles/All:



AutoCAD 2D Tutorial

Defining Attributes 19.6

1. **Choose** Draw, Block, Define Attributes...
or
2. **Type** ATTDEF at the command prompt. Command: **ATTDEF**
3. **Choose** TAG to specify each attribute occurrence in the drawing.
4. **Choose** Prompt to fill in the prompt that the user sees when placing the attribute.
5. **Choose** Value to fill in a default value.
6. **Pick** An insertion point for each attribute
7. **Create** A block which includes the new attributes.




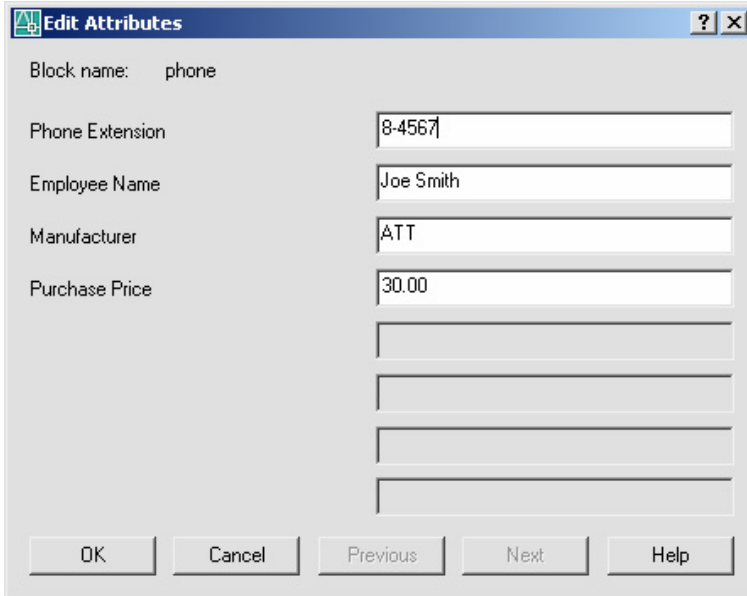
Toggle the following mode settings to on or off .

- | | |
|-----------|--|
| Invisible | Does not display, but allows extraction. |
| Constant | All occurrences of this Attribute have the same value. |
| Verify | Issues extra prompts to verify a proper value. |
| Preset | Does not prompt for this Attribute during Block insertion. |

AutoCAD 2D Tutorial

Editing Attributes 19.7

1. **Choose** Modify, Object, Attribute, Single...
or
2. **Click** the Edit Attribute icon from the Modify II Toolbar. 
3. **Type** **ATTEDIT** at the command prompt
Command: **ATTEDIT**
4. **Pick** The block to edit
Select block: **pick**



Block name: phone

Phone Extension: 8-4567

Employee Name: Joe Smith


Manufacturer: ATT

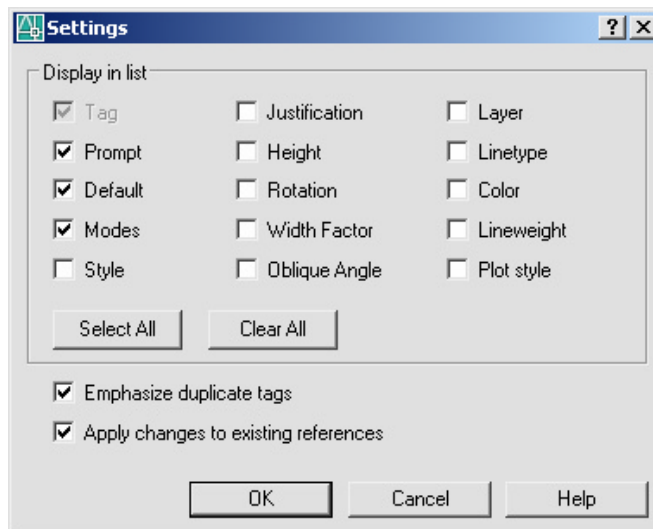
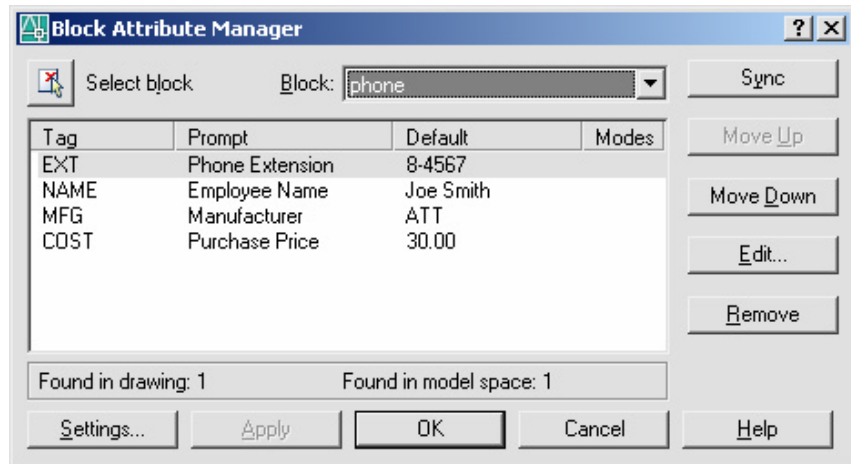
Purchase Price: 30.00

OK Cancel Previous Next Help

AutoCAD 2D Tutorial

Block Attribute Manager 19.8


1. **Open** a drawing with attributes.
2. **Type** BATTMAN at the command prompt.
Command: **BATTMAN**
or
3. **Choose** Modify, Object, Attribute, Block Attribute Manager
or
4. **Click** the Block Attribute Manager icon from the  Modify II Toolbar

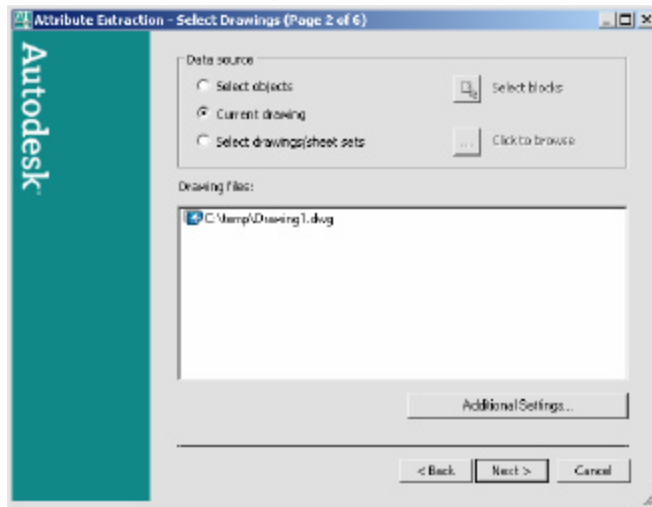


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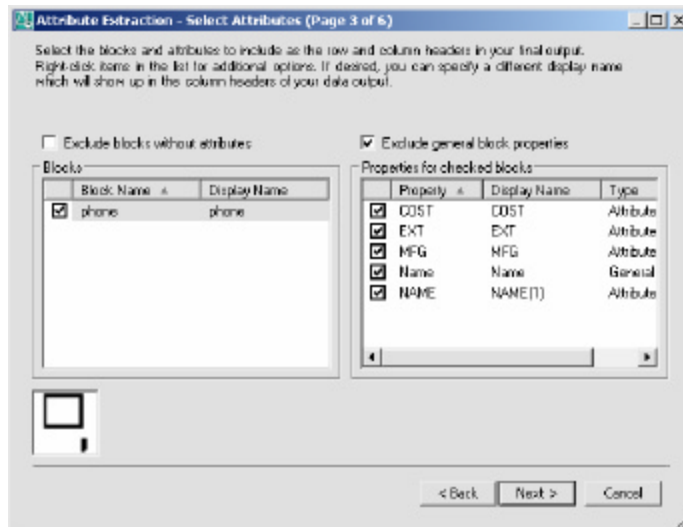
Enhanced Attribute Extract Wizard 19.9

The Editor enables you to edit the attributes in an individual block as opposed to the Block Manager which is used to Block Definitions.

1. **Open** a drawing with block attributes.
2. **Choose** Tools, Attribute Extraction...
or
3. **Click** the Attribute Extract icon from the Modify II toolbar. 
4. **Choose** the Current Drawing radio button and Next.

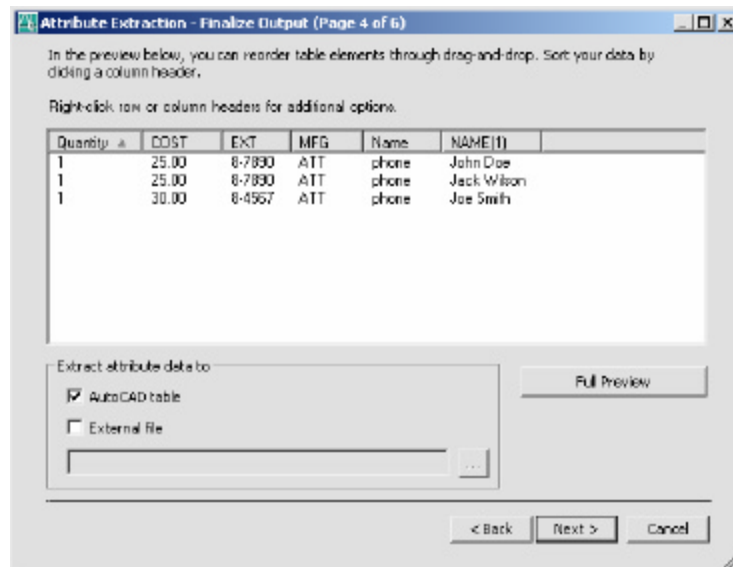


5. **Click** Next to choose Xrefs and nested blocks from the Settings window.
6. **Click** Next to not choose an existing template.
7. **Choose** the Blocks and Attributes to extract and Next.

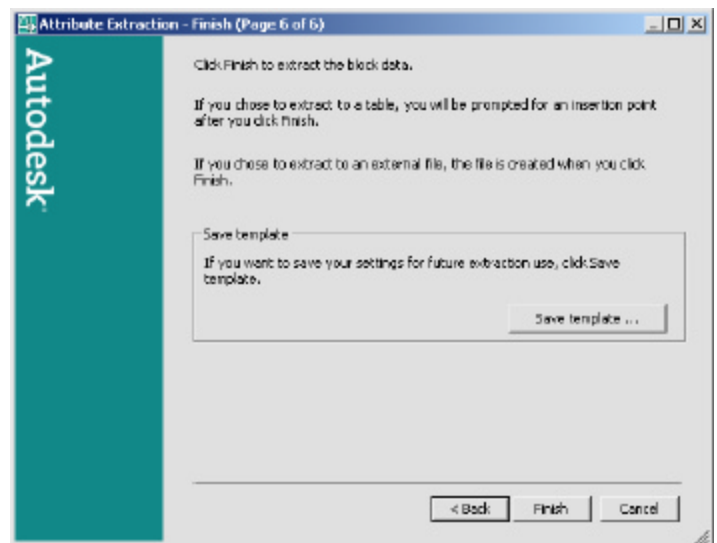
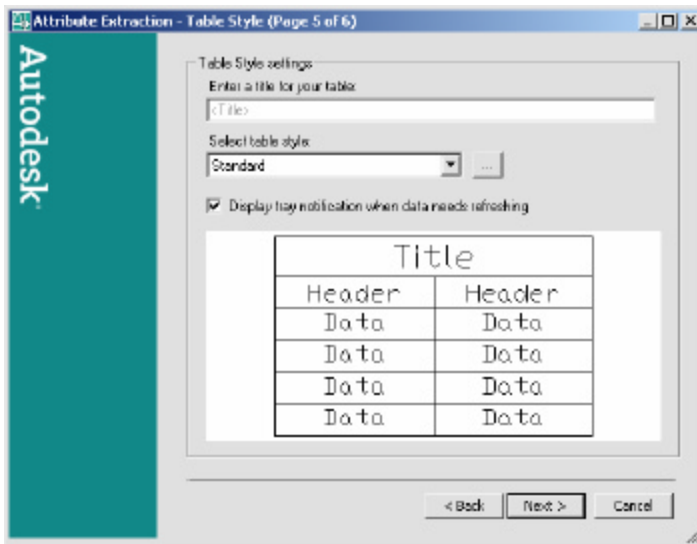


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8. **Choose** the View output.



9. **Click** Next.
10. **Save** the file phone.xls
11. **Open** the template in Excel.



AutoCAD 2D Tutorial

Tables and Spreadsheets 19.10

1. Click Draw, table.

