

Drawing Organization Layers Blocks Properties

Concepts



- Drawing procedure
 - Construction
 - Modify
 - Finish
- Blocks
- Layers
- Plines
- Layer / Linetype manager
- Object properties

1. Initialize drawing

• Limits:

- Lower left: -1,-1
- Upper right: 4,5

• <u>Snap</u>

- Spacing: .0625
- <u>Grid</u>
 - Spacing: .25

• <u>Zoom</u>

• Option: All

Note: These settings are optional



2. Drawing Construction

- <u>Rectangle Pline</u>
- *Line*
- <u>Circle</u>

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Note:

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- Use Dimensions from other slides
- May have to turn off Osnap

3. Modify Construction





- Fillet (Polyline)
 - Radius: .25
- Command: Copy
 - object
 - Base Point
 - Displacement
- Command: Trim
- Command: Mirror
 - Select (Crossing
 - Mirror Line
 - First point-OSNAP: midpoint
 - Second point-Vertical
 - Delete: No

4. Block Definition

Block Definition		X
Name: Hole Detail Base point Specify On-screen Pick point X: 0.7500 Y: 0.5000 Z: 0.0000	Objects Objects Specify On-screen Select objects Retain Convert to block Delete 3 objects selected	Behavior Annotative Match block orientation to layout Scale uniformly Allow exploding
Settings Block unit Inches Hyperlink	Description	Cancel Help

Block - Create

- Name:
 - hole detail
- Base Point:
 - Pick Center of the circle
- Objects:
 - Select objects:
 - Circle
 - Crossing lines
 - Convert to block





5. Arrays



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• <u>Command: Array:</u>

- Rectangular
- Select objects:
 - Block: hole detail
- Rows: 5 Between: 0.75
- Cols: 3 Between: 0.75



6. Creating new layers

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•	Sel	lect

- Layer Properties manager
- New Layers
 - ✓ Hidden
 - ✓ Center

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7. Setting layer colors



- Select the Layer
- Select the Color
- Set the following colors
 - Center: green
 - Hidden: cyan

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8. Set linetypes for the layers

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- Select the layer
 - Center
- Select the linetype
 - Select: load
 - Select: center
- Repeat for Hidden
 - Layer: Hidden
 - Linetype: Hidden
- Select: Apply

9. Move lines to the hidden layer

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10. Edit the block





• Block: Edit

- Select the block: Hole Detail
- Select two lines
- Select: Center Layer



11. Adjusting Linetype scale



Command: LTSCALE

• Factor: .25

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12. Verify / Add Dimensions



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• Linear

- Radius
- Diameter

(Use Object Snaps)



- Add title
- Print (same as previous)

ADDITIONAL INFO

- Blocks Insert
- Properties

Inserting Blocks



🔛 Insert		? 🛛
<u>N</u> ame: <u>hole detai</u>	Browse.	
Path:		∇
Insertion point Insertion point Image: Specify On-screen	Scale Sp <u>e</u> cify On-screen	Rotation Spe <u>c</u> ify On-screen
≚: 0.0000	≚ 1.0000	Angle: 0
¥: 0.0000	¥: 1.0000	Block Unit
⊑: 0.0000	⊑: 1.0000	Unit: Inches
	<u>U</u> niform Scale	Factor: 1.0000
Explo <u>d</u> e	ОК	Cancel <u>H</u> elp

- Insert Block
 - Name:
 - hole detail
 - Insertion Point:
 - On-screen: .75,.5
 - Rotate: 0

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