Chapter 15
Polylines
AutoCAD 2D Tutorial

Pline Command 15.1

A polyline is a connected sequence of line segments created as a single object. You can create straight line segments, arc segments, or a combination of the two.

1. Choose Draw, Polyline.
   or
2. Pick the Pline icon.
3. Type PLINE at the command prompt
   Command : PLINE or PL
4. Pick A point on the drawing to start the polyline
   From point: (select)
5. Type One of the following options
   Arc/Close/ Halfwidth/Length/ Undo/ Width/<endpoint of line>:
   or
6. Pick A point to continue drawing
   Arc/Close/ Halfwidth/Length/ Undo/ Width/<endpoint of line>: (pick point)

Polyline as one segment
PLINE options:

- **Arc**: Toggles to arc mode and you receive the following: Angle/CEnter/CLose/Direction/Halfwidth/
  Line/Radius/Second Pt/Undo/Width/<endpt of arc>:
- **Close**: Closes a polyline as it does in the line command.
- **Halfwidth**: Specifies the halfwidth of the next polyline segments. Can be tapered.
- **Length**: Specifies the length to be added to the polyline in the current direction.
- **Undo**: Undoes the previous pline segment as with the line command.
- **Width**: Specifies the width of the next polyline segments. Can be tapered.

Polyline with arcs

Polyline with width .125

Tapered width polyline

Tapered width arc polyline
Editing Polylines 15.2

1. Choose *Modify, Polyline.*

   or

2. Pick the Pedit icon from the Modify II toolbar.

3. Type PEDIT at the command prompt

   Command: **PEDIT**

4. Pick Pick a polyline to edit

   Select Polyline: *(pick)*

5. Type One of the following options: Close/Join/ Width/Edit vertex/Fit Curve/Spline/Curve/

   Decurve/Undo/eXit

- **Close** Closes open polyline segments
- **Join** Connects polylines, lines, and arcs to existing polylines.
- **Width** Changes the width for all polyline segments.
- **Fit curve** Creates curved arc segments around pline vertices at the direction you specify.
- **Spline Curve** Creates a curve through control points on a polyline.
- **Decurve** Straightens curved segments.
- **Edit Vertex** Displays the following Edit Vertex Options:
Editing Multiple Polylines

1. Type the PEDIT at the command prompt. Command: PEDIT

   Select polyline or [Multiple]: M

   Pick multiple polylines to edit.
Editing Vertex Options 3.3

1. **Type**
   - One of the following vertex options:
     - Next/Previous/Break/Insert/Move/Regen/Straighten/
       Tangent/Width/eXit

   **Next**
   - Moves the X to the next vertex

   **Previous**
   - Moves the X to the previous vertex

   **Break**
   - Remembers the currently marked vertex and allows you to move to another vertex. You can then remove the segments between these vertices. Closed polylines will open.

   **Insert**
   - Adds a new vertex after the currently marked vertex.

   **Move**
   - Moves the location of the currently marked vertex.

   **Regen**
   - Regenerates the pline. Used with the width option.

   **Straighten**
   - Remembers the currently marked vertex and allows you to move to another vertex. You can then replace the segments between these vertices with a straight one.

   **Tangent**
   - Attaches a tangent direction to the current vertex for later use in curve fitting.

   **Width**
   - Changes starting and ending widths for the segment following the marked vertex.

   **eXit**
   - Exits from editing vertices.
Explode Command 15.4

1. Choose *Modify, Explode.*
   
   or

2. Pick the Explode icon.

3. Type EXPLODE at the command prompt.
   
   Command: **EXPLODE**
   
   or

4. Pick The object to explode. Select objects: (pick)
Turning Lines into Polylines 15.5

Use the PEDIT command to pick lines. AutoCAD will ask if you want to turn these lines into polylines. You can then use the JOIN option under PEDIT to join additional lines to the polyline.

1. Command: `pedit`
   Select polyline or [Multiple]: `pick line`
   Object selected is not a polyline
   Do you want to turn it into one? <Y>
   Enter an option [Close/Join/Width/Edit vertex/Fit/Spline/Decurve/Ltype gen/Undo]: `j`

**TIP:**
- Lines and Arcs must have a common endpoint to join them together.