

Parametrik : Übersicht

- * **Aufzeichnen des Konstruktionsweges (Historie)**

Die Vorgehensweise beim Erstellen des Modells wird dokumentiert. Das Modell kann durch Ändern der Parameter neu aufgebaut werden. Neue Vorgehensweise zum Entwerfen von Bauteilen erforderlich. Grundprinzipien müssen verstanden sein, um dieses Werkzeug effektiv einsetzen zu können.

- * **Skizziertechnik**

Der integrierte 3D-Sketcher erlaubt ein schnelles Skizzieren von Geometrien und die Übernahme der Skizzen in das Parametrik-Modell. Die Skizzier-Geometrie kann direkt für Volumenoperationen genutzt werden.

- * **Abhängigkeitsverhältnisse / Constraints**

Die Beziehungen zwischen Parametern können durch Variablen und Gleichungen definiert werden.

- * **Integrierte Modelle**

Drahtkanten-, Flächen- und Volumenmodelle (Solids) werden integriert verarbeitet.

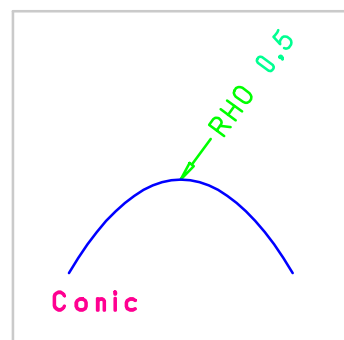
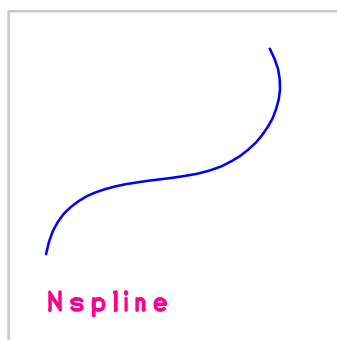
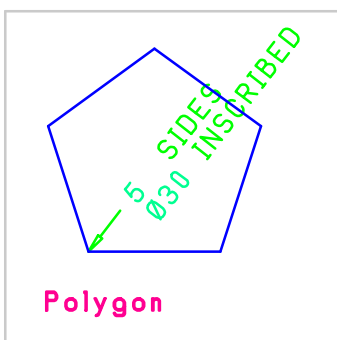
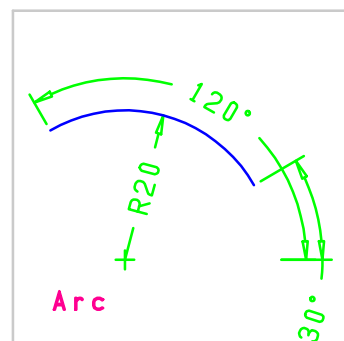
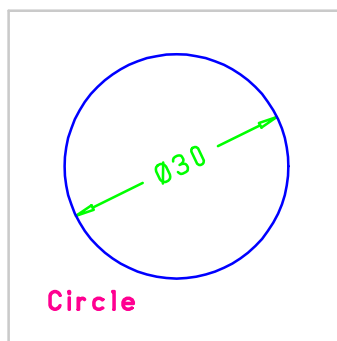
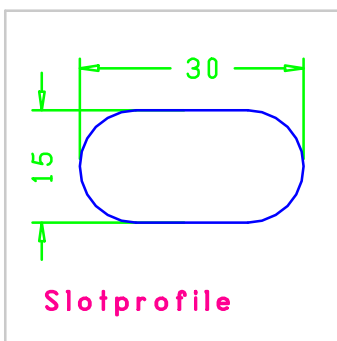
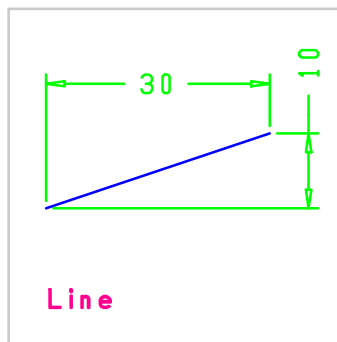
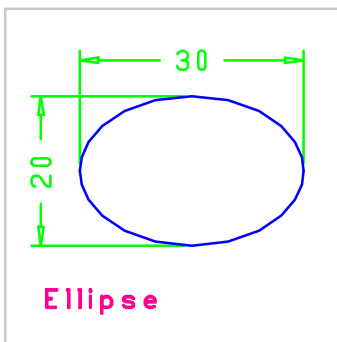
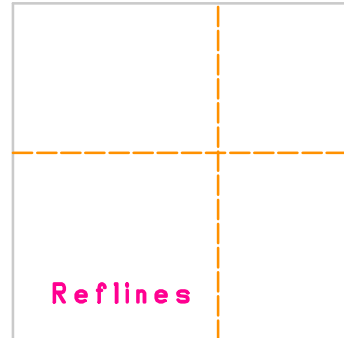
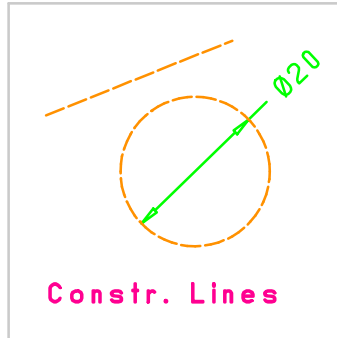
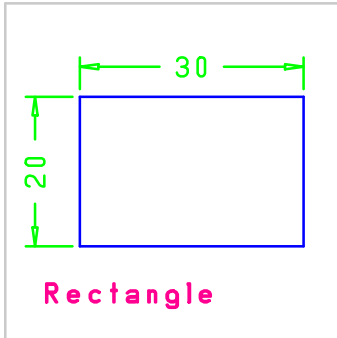
- * **Features**

"Feature-based-Modeling" ermöglicht das Einsetzen intelligenter Geometrie in das aktuelle Modell.

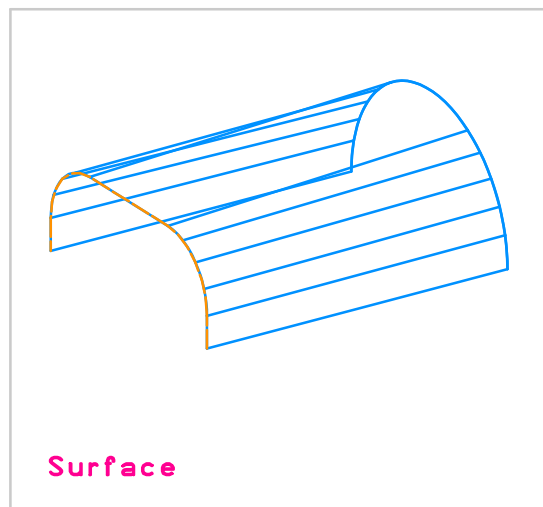
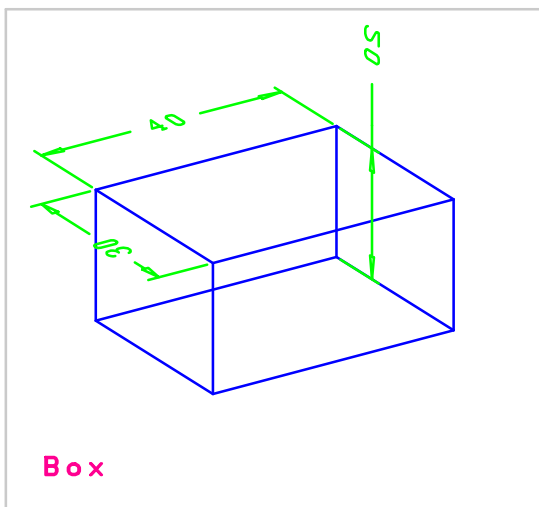
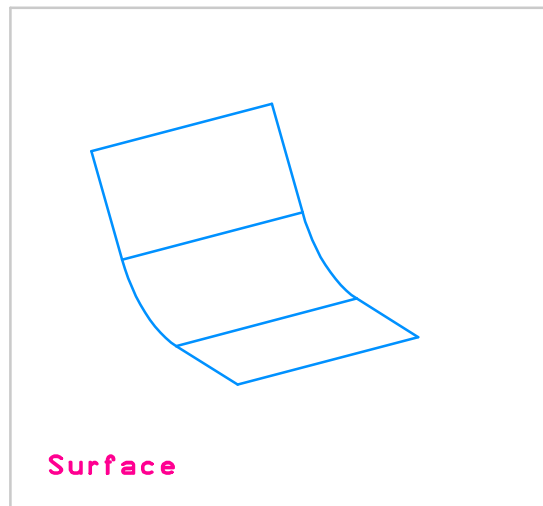
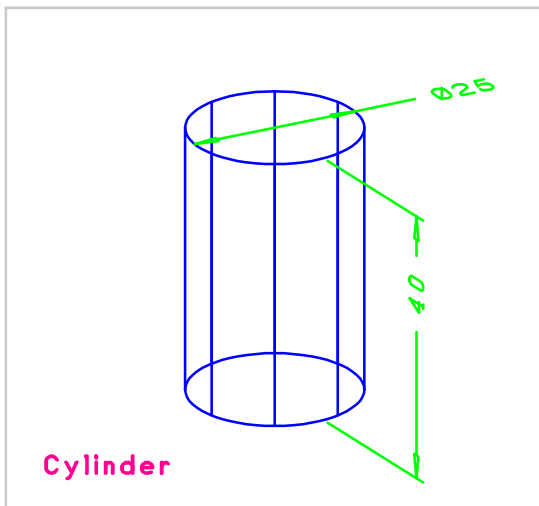
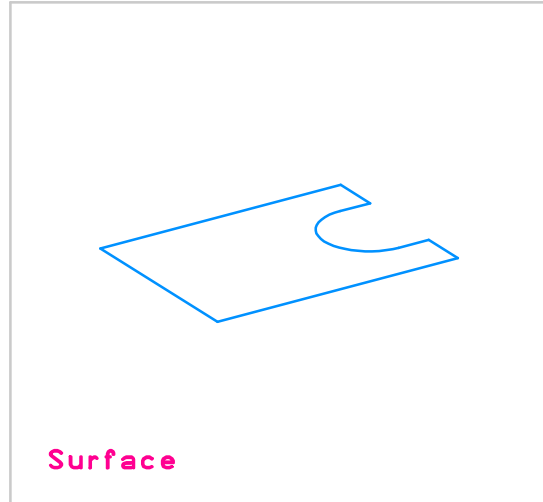
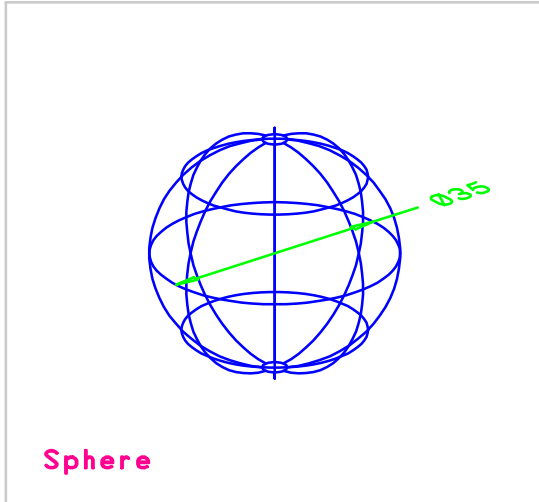
Dokumentation

doc38300 / Parametric Modeling User Guide and Menu Reference

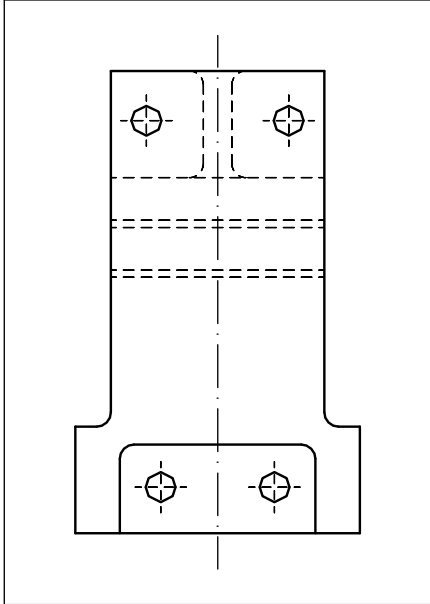
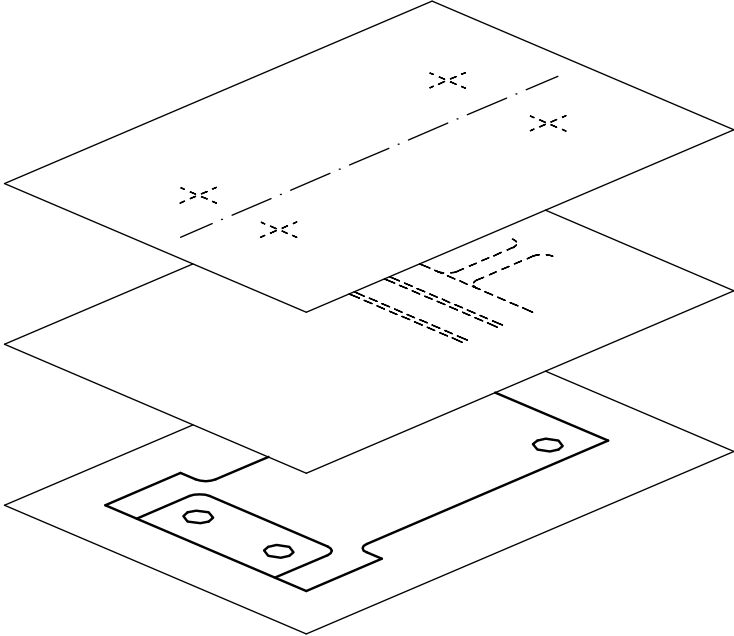
Parametrik : Basis-Elemente / Wireframe



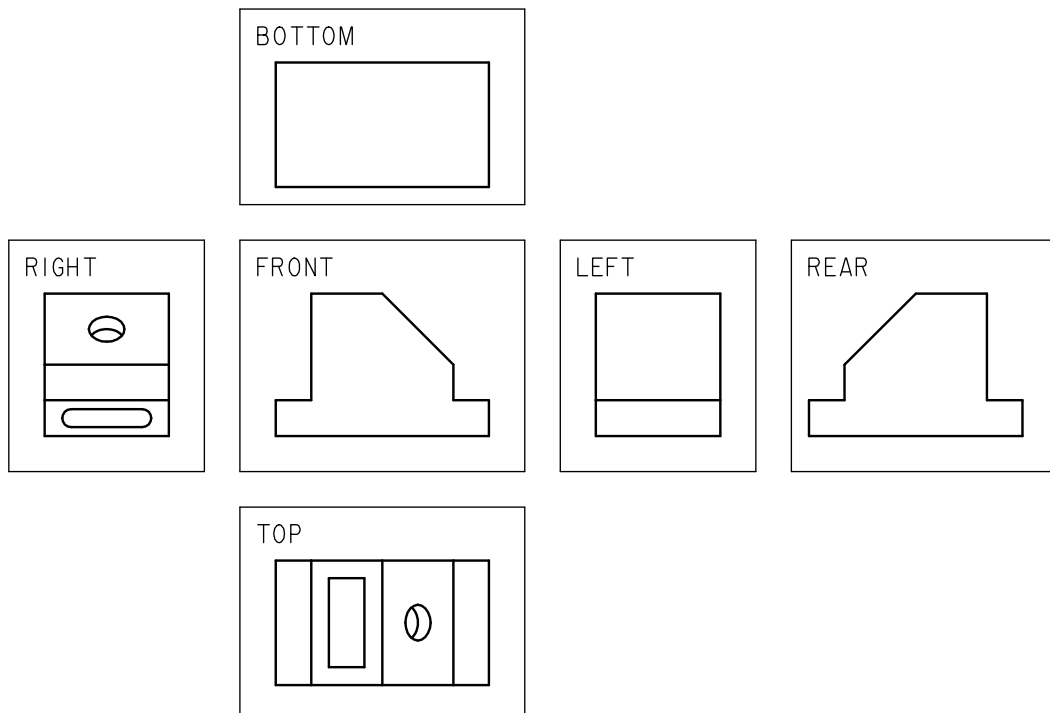
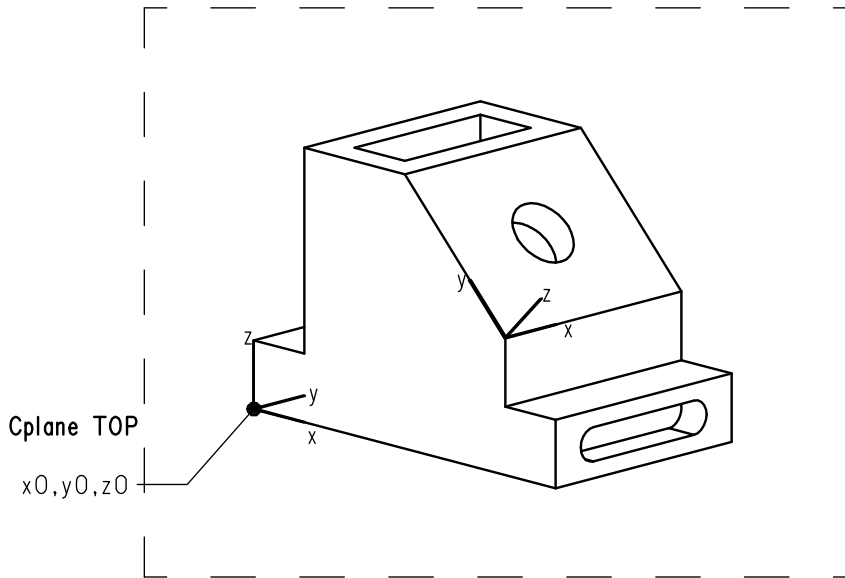
Parametrik : Basiselemente / Solids und Surfaces



Parametrik : Layer - Technik

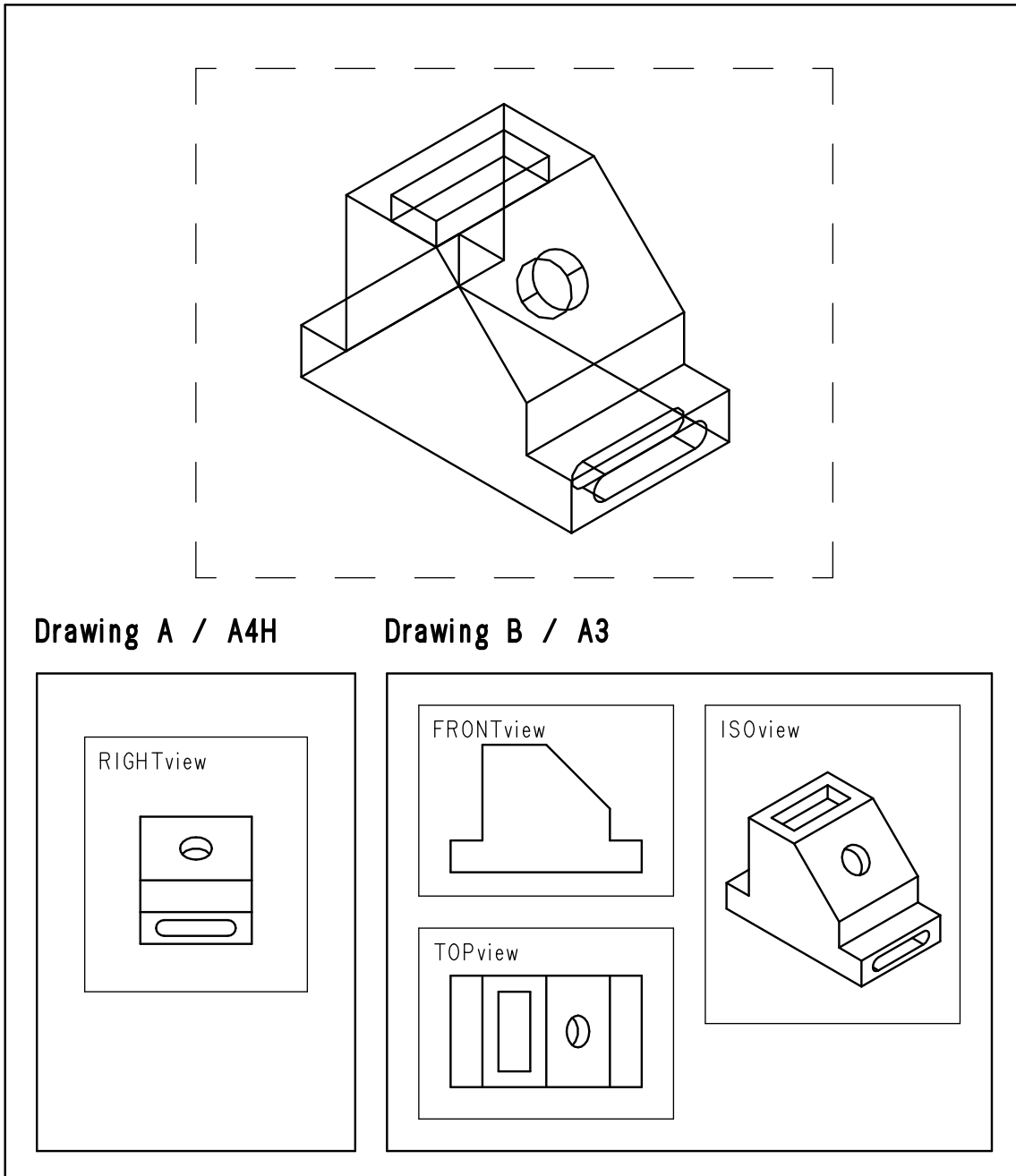


Parametrik : Cplanes / Konstruktionsebenen

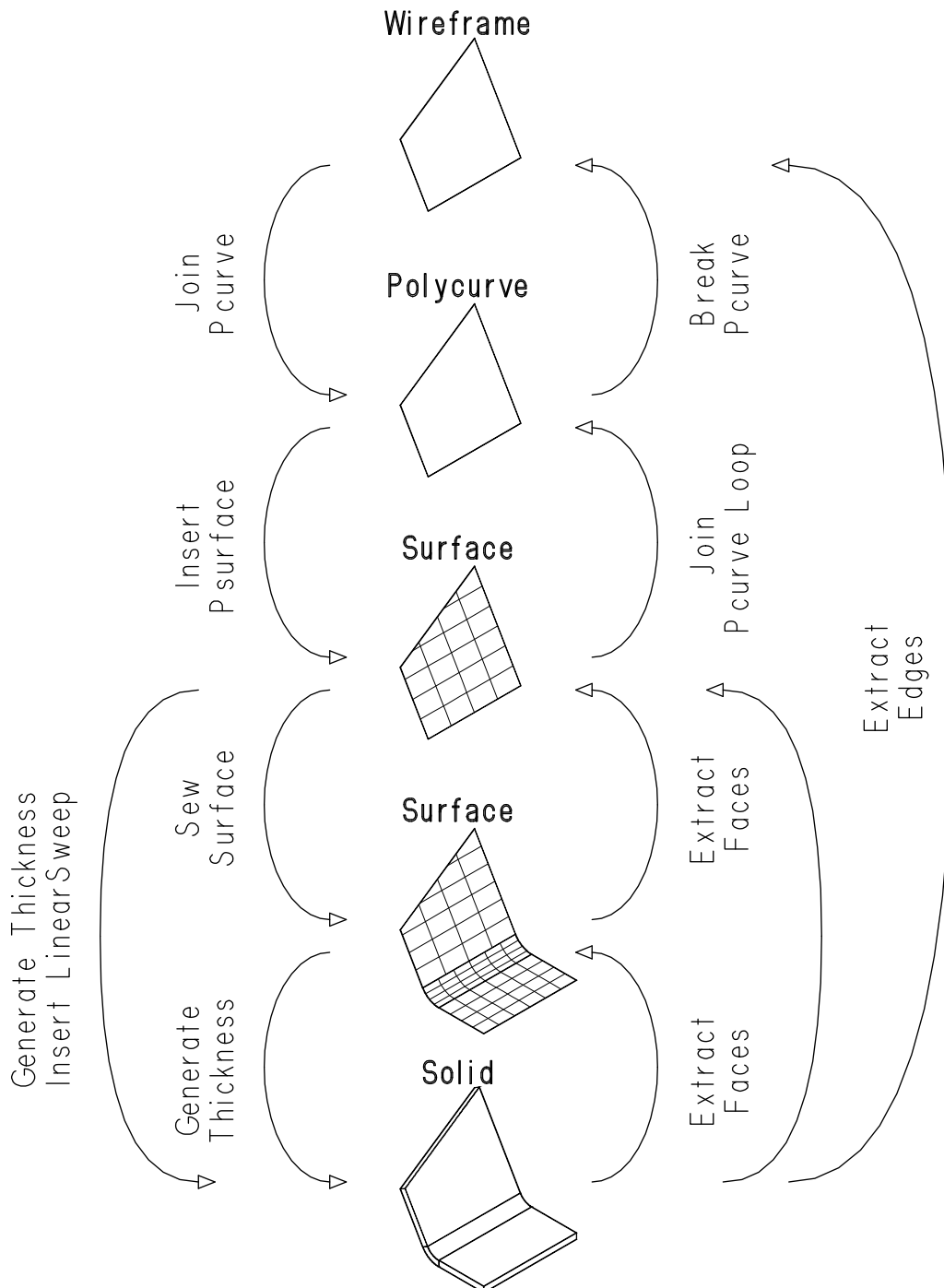


Parametrik : Partkonzept / Part - Drawing - View

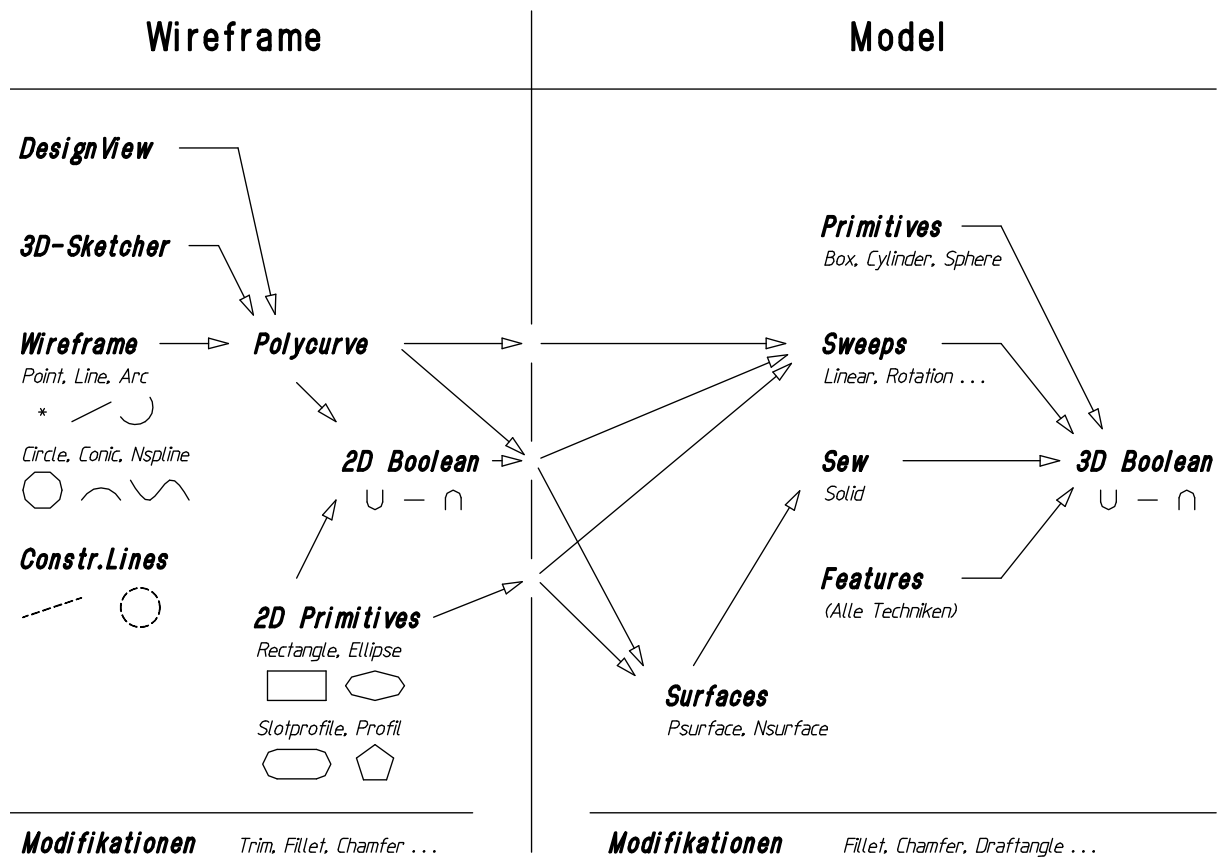
Part



Parametrik : Integration / Wireframe - Surface - Solid



Parametrik : Arbeitstechniken



Parametrik : Kommando-Syntax

VERB - NOUN - MODIFIER - GETDATA

```

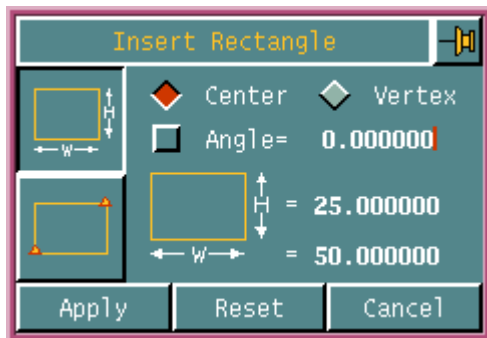
Insert Line Free          Loc [0,0,0] dx 50

!Insert Line             Online-Dokumentation
                          Textdateien unter
                          /usr/apl/cadds/data/doc/para

?                         Liste aller Verben
                          Abort
                          Activate
                          ...

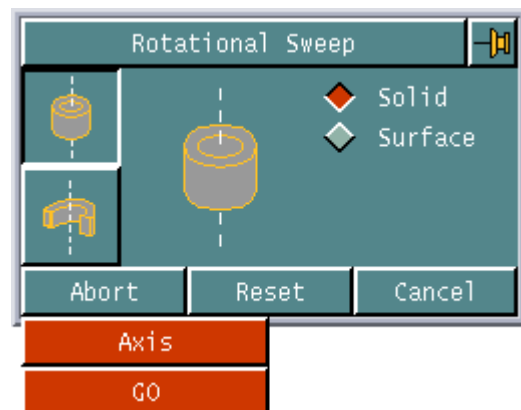
Insert ?                  Liste aller Substantive zu 'Insert'
                          Adimension
                          Arc
                          ...

Insert Line ?             Liste aller Optionen zu 'Insert Line'
                          Between
                          Free
                          ...
    
```



```

Insert Rectangle
Height 25 Width 50 Center org *
    
```



```

Insert Rotational Sweep
Solid Circular * Axis X * Go
    
```

Parametrik : Einstellungen (1 / 2)

Read Commandfile setup-para

```
; =====  
;                               CADD5-Parametrik  
;                               Parameter-Einstellung  
;                               Texthoehe 3,5 mm  
; =====  
  
; ANNOTATION  
Select Text Height 3.5 Width 2.5 Ljt Bjt Spacing 1.0 Lspace 2.0  
  
; CONSTRUCT  
Select Construction Font Dash  
Select Refline Font Dash  
  
; CPL GRID  
Select GridDefault Rec Dx 25 Dy 25 Color Lightblue  
  
; DIMENSION  
Select Dimension Text Place Inline  
Select Dimension Text Orientation Parallel  
Select Dimension Decimal Comma Leading0  
Select Dimension Arrowhead Standard  
Select Dimension Nonsolid Arrowhead Length 3.5 Arrowhead Width 1  
Select Dimension Extension Gap 1 Extension Length 1.75  
Select Dimension Extension Stublength 0 Taillength 3.5  
Select Dimension Radialsymbol None  
  
; DRAW GRID  
Select DrawGridDefault Rec Dx 10 Dy 10 Color Lightblue  
  
; SELECTION  
Select Highlight Scolor Red  
Select Trap 10  
  
; SHADING  
Select Graphics Shade Smooth 1 Shade Spec Shade Ambient Intens 0.3  
  
; TOLERANCES  
Select Mextents 500  
Select Epsilon 0.005  
  
; LIGHTSOURCE  
Delete Lights Name default  
Ins Lights Name L1 Intens 1 Col Lightyellow Loc [5000,-5000,10000]  
Ins Lights Name L2 Intens 1 Col Lightblue Loc [-5000,5000,10000]  
Ins Lights Name L3 Intens 1 Col Lightgreen Loc [-5000,-5000,-10000]
```

Parametrik : Einstellungen (2 / 2)

```
; =====  
;                               Layerbelegung  
; =====  
;  
;           0   frei  
;    1 - 99   Parametrische Daten  
; 100 - 199   Explizite Daten  
;           200   Trash  
;  
; -----  
  
Select Ldiscr Layer    0 Name Frei  
  
Select Ldiscr Layer    1 Name Fertigteil  
Select Ldiscr Layer    2 Name Dimensions  
  
Select Ldiscr Layer   10 Name Construct  
Select Ldiscr Layer   20 Name Wireframe  
Select Ldiscr Layer   30 Name Surface  
Select Ldiscr Layer   40 Name Solid  
  
Select Ldiscr Layer   60 Name Section  
  
Select Ldiscr Layer 100 Name Explizit  
Select Ldiscr Layer 200 Name Trash  
  
; -----  
  
Select Ldiscr Layer    0-254 Color White  
  
Select Ldiscr Layer          1 Color Carnation  
Select Ldiscr Layer   10-19 Color Orange  
Select Ldiscr Layer   20-29 Color Tan  
Select Ldiscr Layer   30-39 Color Fuchsia  
Select Ldiscr Layer   40-59 Color Peacockblue  
Select Ldiscr Layer   60-69 Color Peach  
Select Ldiscr Layer   70-79 Color Teal  
Select Ldiscr Layer   80-89 Color Steel  
Select Ldiscr Layer   90-99 Color Lightgray  
  
Select Ldiscr Layer 101-109 Color Pumpkin  
Select Ldiscr Layer 110-119 Color Magenta  
Select Ldiscr Layer 120-129 Color Green  
Select Ldiscr Layer 130-139 Color Cyan  
Select Ldiscr Layer 140-149 Color Rose  
Select Ldiscr Layer 151-159 Color Lightyellow  
Select Ldiscr Layer 160-169 Color Salmon  
Select Ldiscr Layer 170-179 Color Wedgewood  
Select Ldiscr Layer 180-189 Color Aquamarine  
Select Ldiscr Layer 190-199 Color Gray
```

Parametrik : Farben

