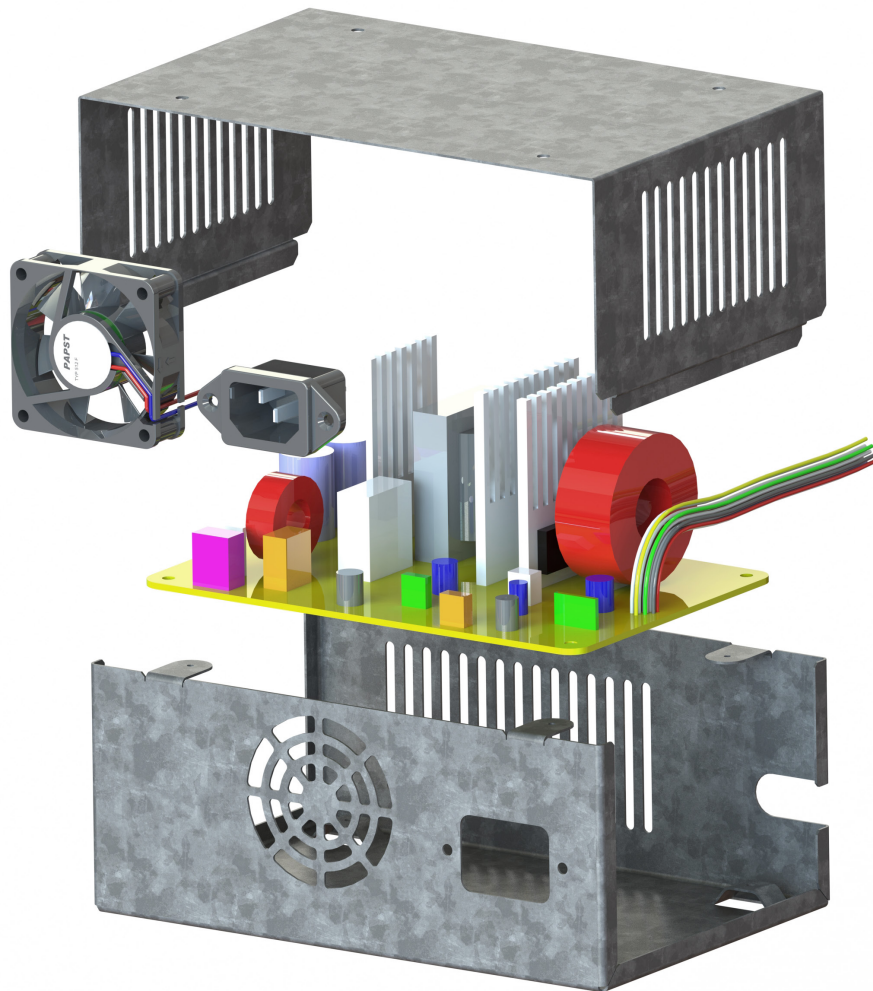


Beginner's Guide to SOLIDWORKS® 2021 Level II

Sheet Metal, Top Down Design,
Weldments, Surfacing and Molds



Alejandro Reyes MSME, CSWE, CSWI

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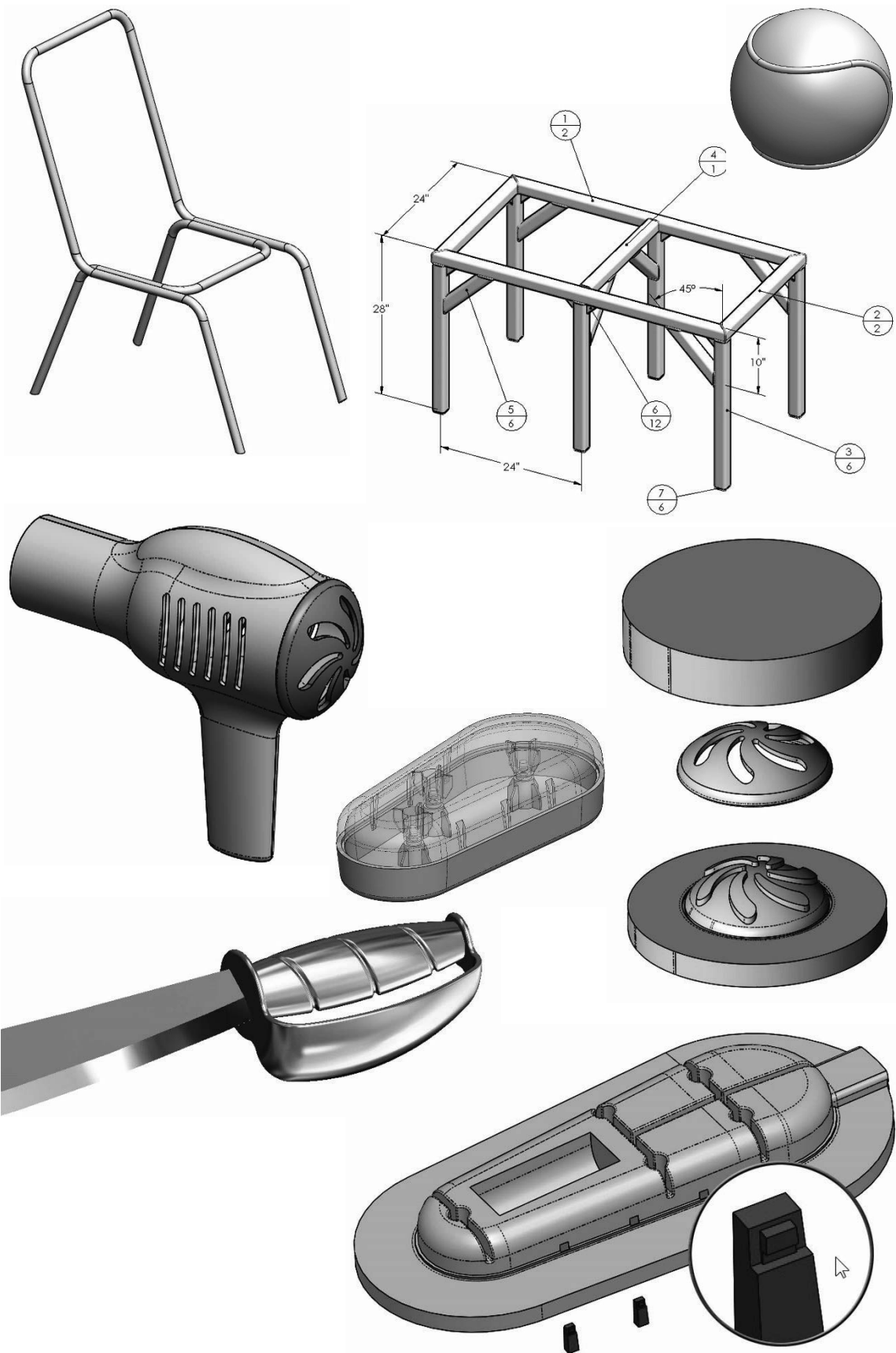
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List of commands introduced in each chapter. Note that many commands are used extensively in following chapters after they have been presented.

<p>Multi Body Parts</p> <ul style="list-style-type: none"> Multi Body Local Operations Hide/Show Body Merge Feature Scope Delete Body Body Pattern Combine Bodies <ul style="list-style-type: none"> Add Subtract Common Bodies to keep Offset from Surface Sketch Picture <p>Contour Selection</p> <ul style="list-style-type: none"> Regions available Contour Selection Shared Sketch Start From: Condition <p>Part Editing</p> <ul style="list-style-type: none"> What's Wrong Parent/Child relations Sketch Editing Dangling Relations Delete Absorbed <ul style="list-style-type: none"> Features Sketch Relations Over Defined Sketch Not Solved Sketch SketchXpert View Sketch Relations <p>Equations</p> <ul style="list-style-type: none"> Rename Dimensions Pattern Seed Only Add Equations Edit Equations Delete Equations Link Values 	<p>Top Down Design</p> <ul style="list-style-type: none"> New Part Edit In Context Assembly Transparency Internal Part Externalize Part Edit Assembly External References <ul style="list-style-type: none"> In Context Out of Context Locked Broken List External References <p>Sheet Metal and Top Down Design</p> <ul style="list-style-type: none"> Base Flange Sheet Metal Thickness Bend Radius Bend Allowance Bend Deduction K-Factor Auto-Relief <ul style="list-style-type: none"> Rectangular Obround Tear Flat Pattern Forming Tools Modify Sketch Link to Thickness Normal Cut 3D Content Central Vent feature Miter Flange Unfold/Fold Bend Edge Flange Build Library Features Library Parts Mate Reference Break Corners Jog bend Flat Pattern Drawing Bend Notes 	<ul style="list-style-type: none"> Convert to Sheet Metal Closed Corners Selection Filters Sketch Pattern Feature Driven Pattern Hem Feature Creating Forming Tools Component Pattern Collision Detection Flexible Sub Assemblies Assembly Features <p>3D Sketch</p> <ul style="list-style-type: none"> 3D Sketch 3D Sketch Relations Derived Sketch Projected Curve <p>Weldments</p> <ul style="list-style-type: none"> 3D Sketch review Cut list Weldment feature Structural Member Corner Treatment <ul style="list-style-type: none"> End Miter End Butt Locate Profile Rotate Profile Trim/Extend Gusset End Cap Weld Beads Weldment Cut List Weldment Drawings Cut List Table Weld Table Weld Symbols Save Bodies to <ul style="list-style-type: none"> Assembly Structural Member Libraries
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Surfacing

Revolved Surface
Lofted Surface
Extruded Surface
Direction of Extrusion
Extrude with Draft
Trim Surface
Mutual Trim
Planar Surface
Filled Surface
Knit Surface
Constant Width Fillet
Thicken
Body Split
Face Fillet
Extend Surface
Extrude From
Mirror Bodies
Swept Surface
Twist Along Path
Sweep Cut
Master Model
Mounting Boss Feature
Lip/Groove Feature
Snap Hook/Groove
Feature

Mold Tools

Draft Analysis
Direction of Pull
Positive Draft
Negative Draft
Draft
Neutral Plane
Rollback/Roll Forward
Scale
Parting Line
Parting Surface
Tooling Split
Composite Curve
Swept Surface
Shut Off Surfaces
Move/Copy body
Delete Face
Face Classification
Manual Parting Line
Selection
Select Open Loop
Rib
Side Core