KeyShot Product Animations

March 9, 2017

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Luxion Inc.

Before we Begin…

- This will be recorded
- Slideshow will be available
- KSP will be available
- Computer: 3 GHz 8 Core (16-thread)
  2013 Mac Pro, 16 Gb RAM
- If you have questions…
- KeyShot Animation is a Pro feature

Animation: Esben Oxholm

Product Animation Topics

- Why Animate?
- Animation Examples
- KeyShot Animation Principles
- Part Animation Types
- Hands On:
  - Creating Part Animations
  - Linked Animations
  - Animation Workflow & Organization
- Q & A

CPU Usage
88 %
80.0
Library
Materials
Materi...
Colors
Enviro...
Backp...
Textur...
Favori...
Downloads
Materials
Axalta Paint
Cloth and Leather
Custom
Gem Stones
Glass
Interior
Light
Liquids
Metal
Miscellaneous
Mold-Tech
Paint
Plastic
Stone
Toon
Translucent
Wood
A Little Lilac_745657
Amazing Grape_741904
Amazon Moss_743282
FPS: 2.7
Time: 2m 0s
Samples: 21
Triangles: 7,092,610
Res: 1435 x 807
Focal Length: 80.0
Why Animate in KeyShot?
Project
Scene
Material
Environ...
Lighting
Show
Search All
Parts
Material
Models
00 Master Assembl...
Up 100
Zoom Away
Drone Fade In
Drone Fade Out
Ground Turntable
Roll Left 2
Roll Right 3
Roll left 1
Down 10
Up 7
Down 5
Preflight Dip
Up 4
Down 3
01 Base A
01 Head A
01 Legs Assem...
01 Arms Assem...
01 Camera Ass...
Turntable v0
Cameras
Scene Sets
Scene
Materials
Scene Information
Name:
Drone1.bip
Units:
Millimeter
Animation
Timeline
Animation Wizard
FPS:
30
00:19:799 / Frame 595
14s
15s
16s
17s
18s
19s
20s
21s
22s
Camera 2 camera switch even...
Animate camera switch event 2
Camera 1
Camera Movement
Fade In
Up Down Wobble
Up 100
Down 10
Up 7
Down 5
Up 4
Down 3
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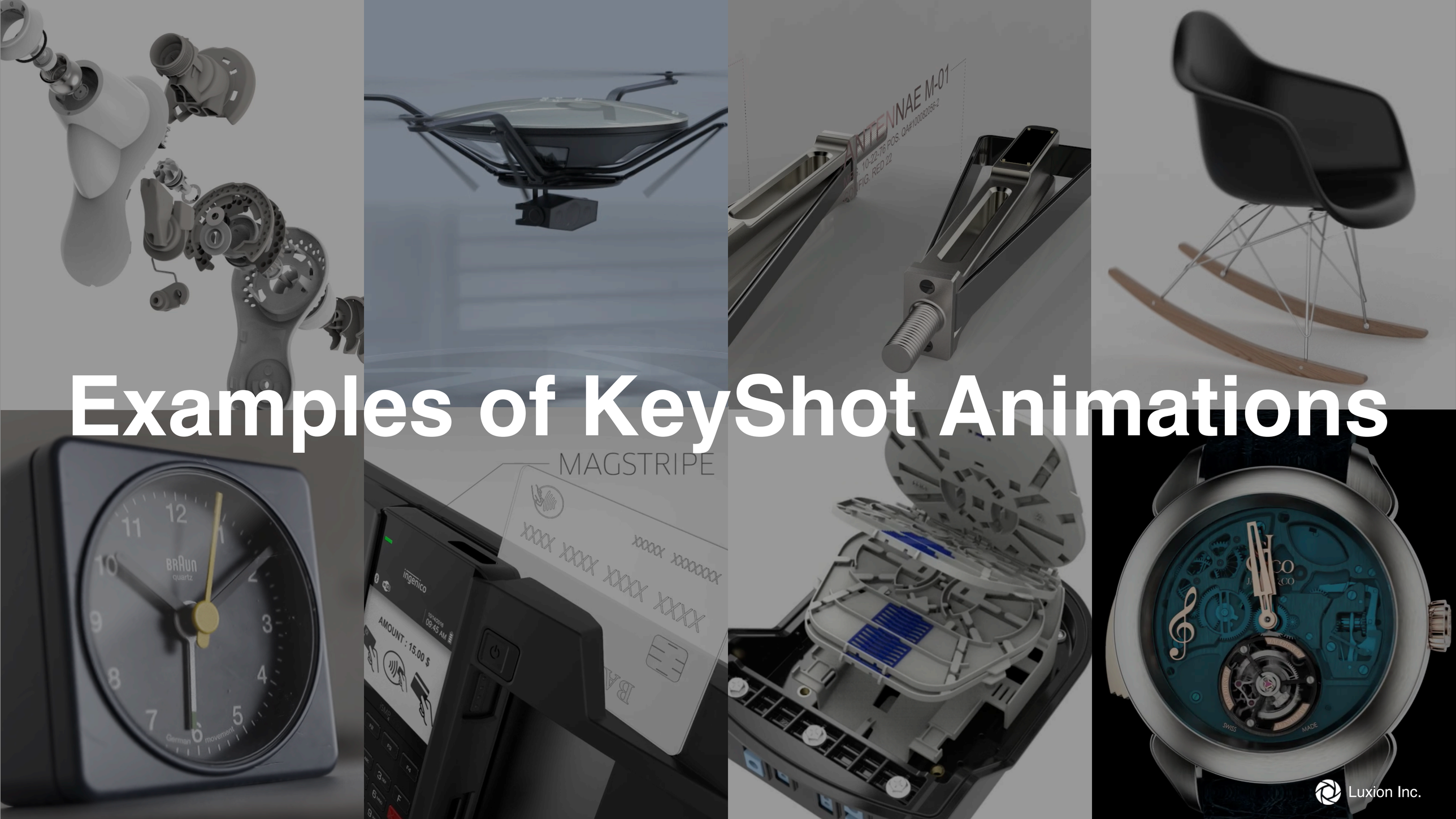
Rendering: Will Gibbons

Animations are Powerful

- Increase presentation engagement
- Convey a mood
  - Appeal to emotion

Show:

- Function
- Assembly
- Articulation
- Part relationships



Examples of KeyShot Animations

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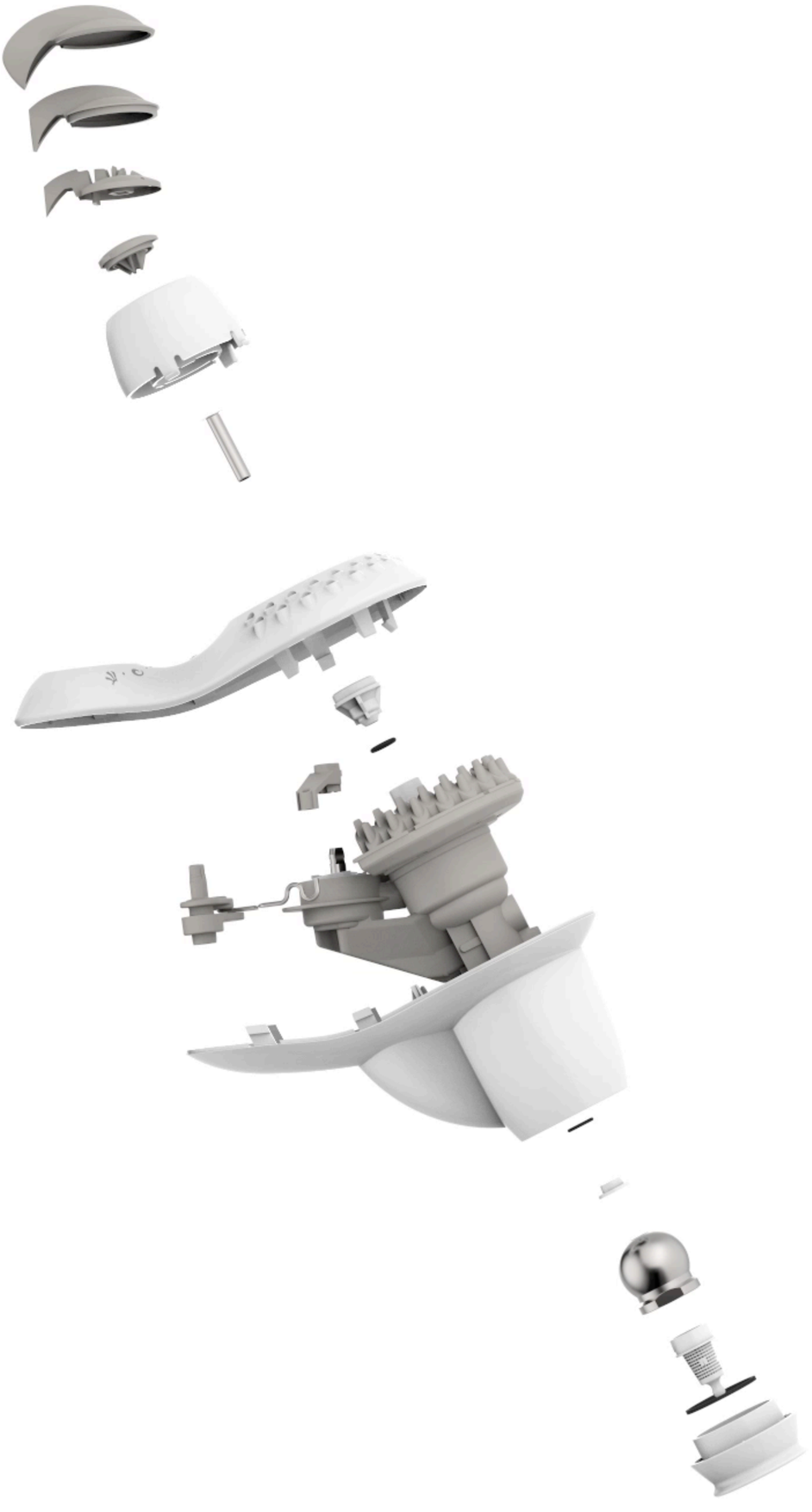


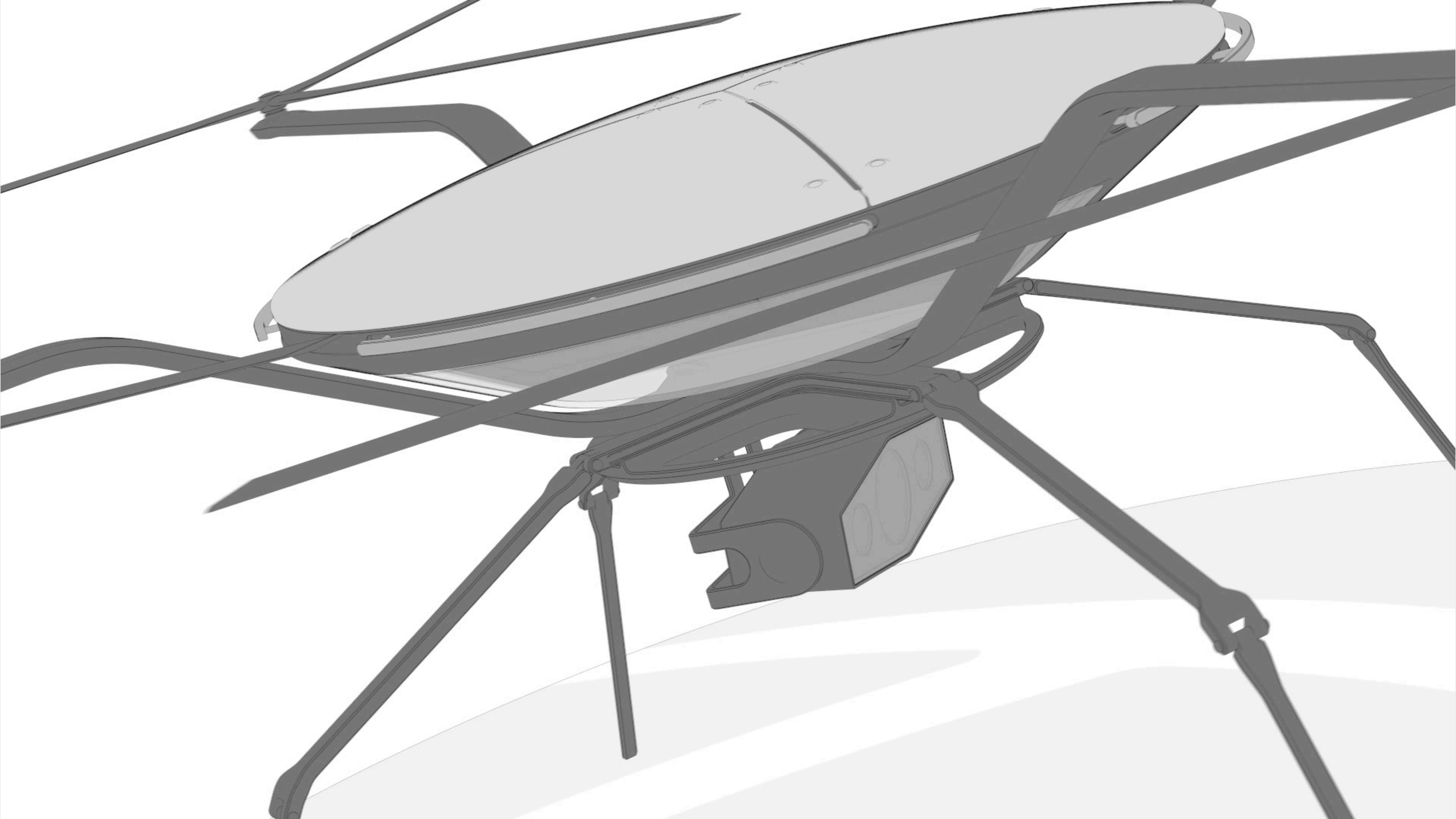
MAGSTRIPE
ingenico
10/14/2016
09:45 AM
AMOUNT : 15.00 $
iSMP4

JACOB&CO
PALATIAL
TITANIUM
3 ATM
SWISS MADE
150.500.2
TOURBILLON
MINUTE REPEATER
MINUTE
REPEATER
N° 01/18

COYOTE® DTC8

LATCHING HINGED COLLAR
SECURES THE COVER
TO THE BASE

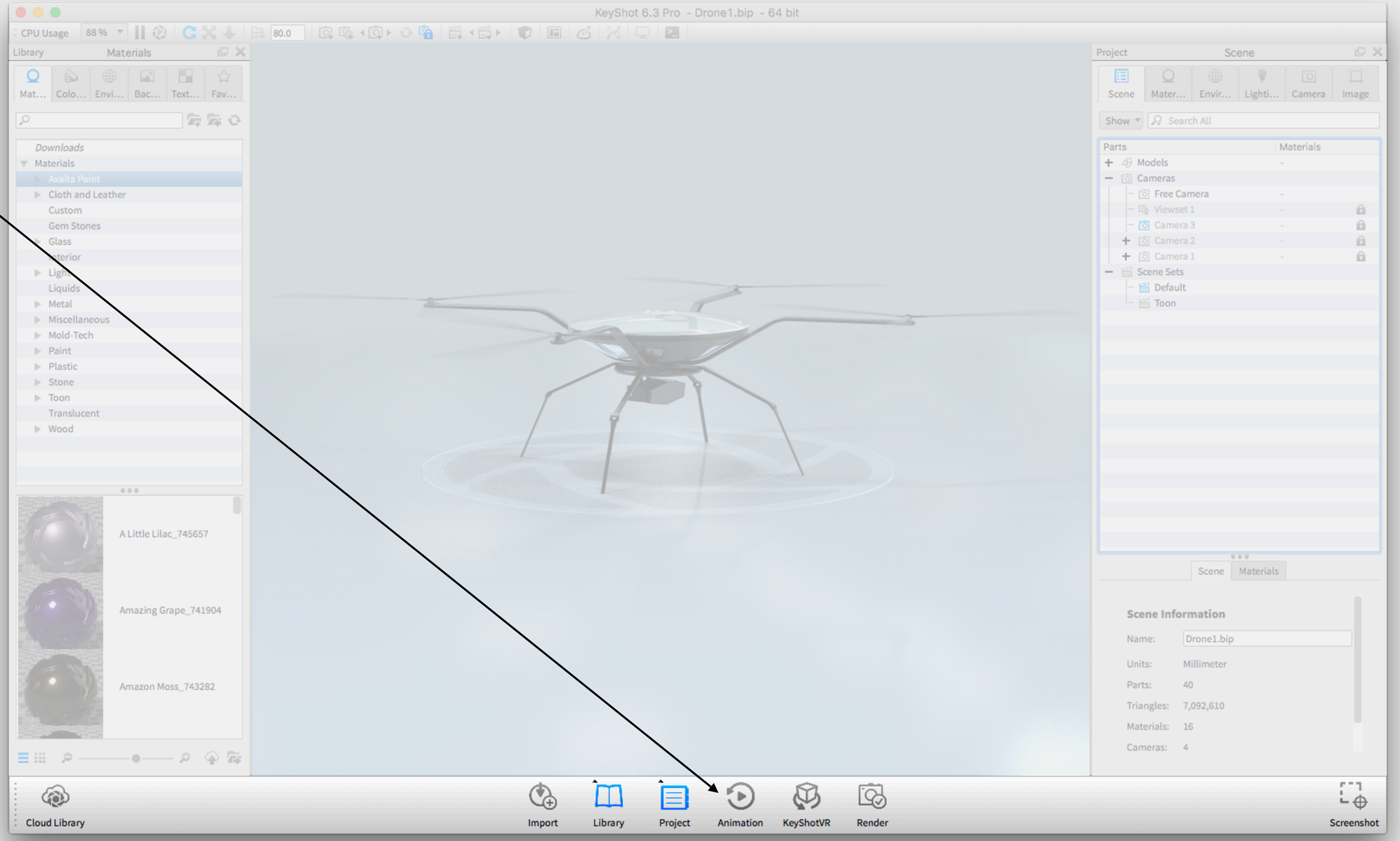
BRAUN
quartz
German movement



Access the Animation Workspace

To Open:

Click the Animation icon at located in the Toolbar along the bottom of the KeyShot interface



Animation Workspace

Animation Properties

Make edits to individual transforms

Timeline

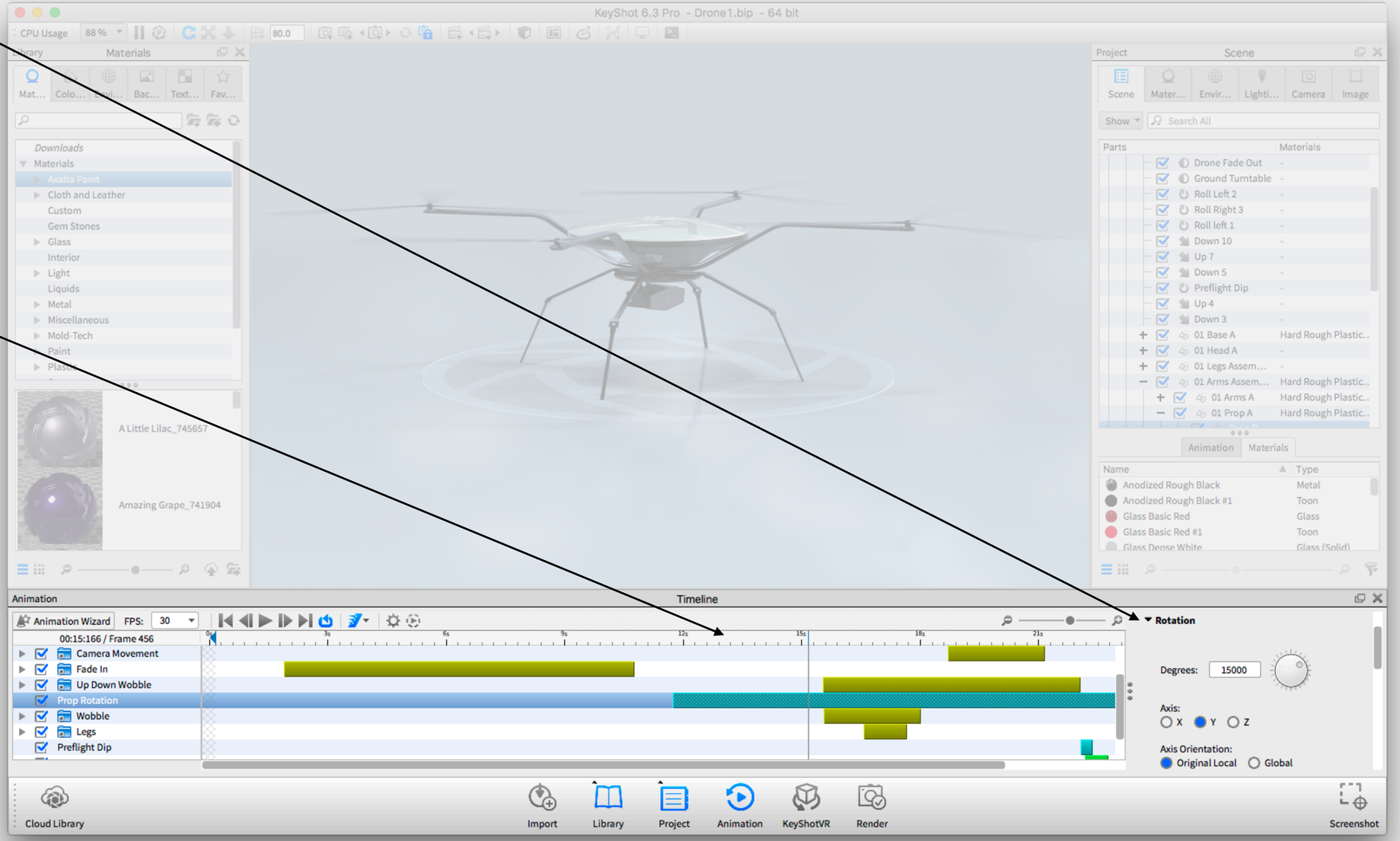
Chronological time-based workspace

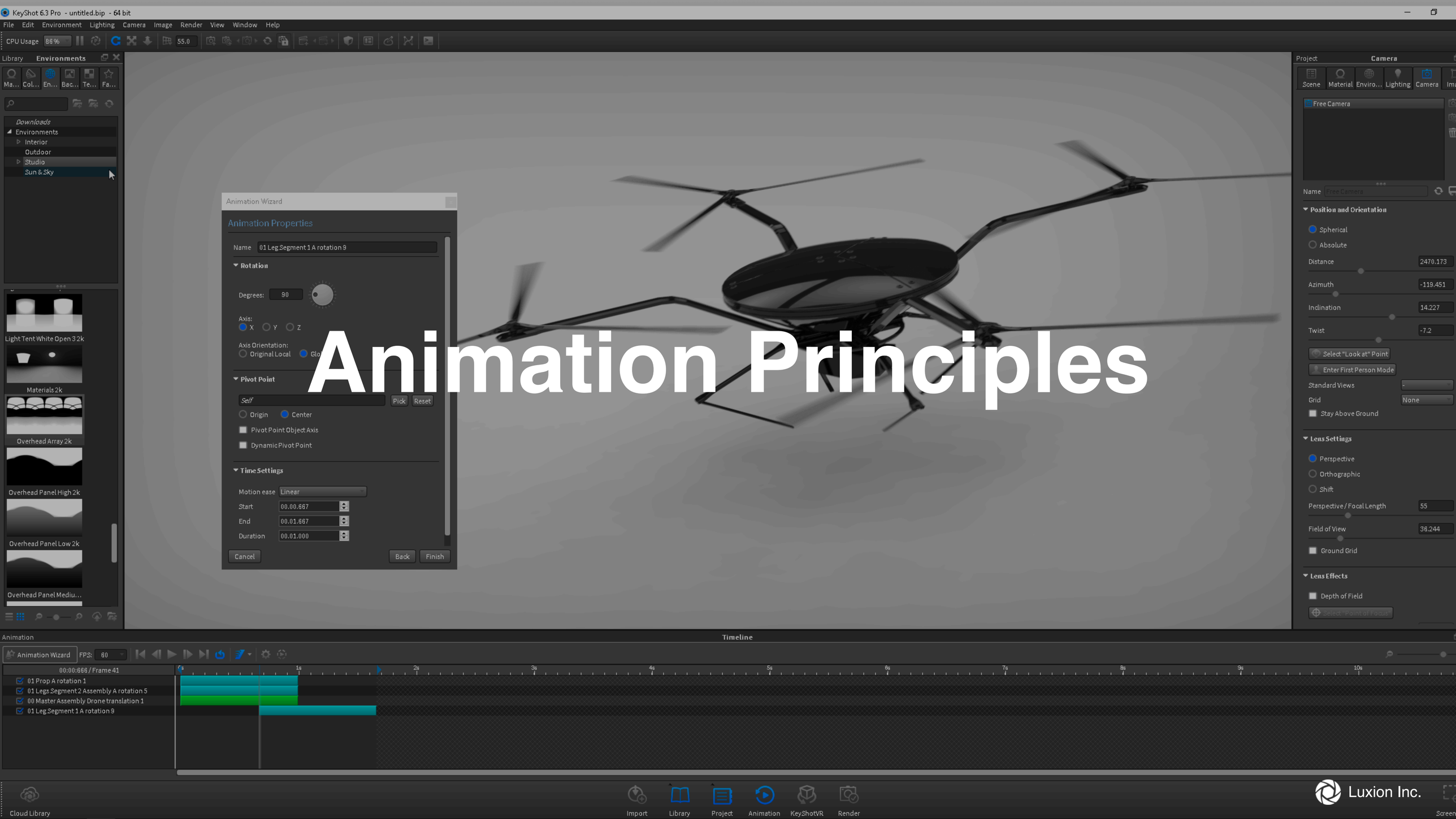
Animation Toolbar

Create transforms and interact with the animation

Animation List

All animations in the current Scene Set

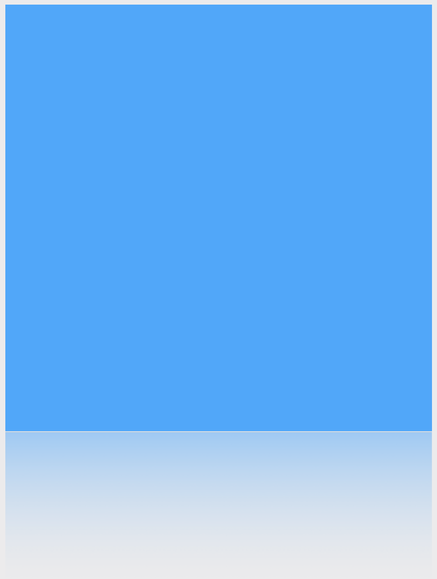




Animation Principles

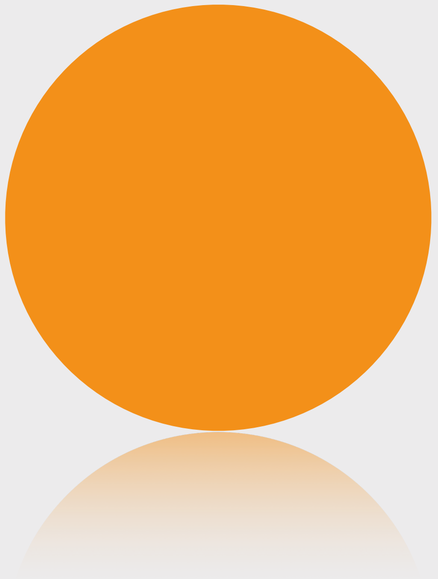
P1: Animation Types

Part Animations



Camera Animations

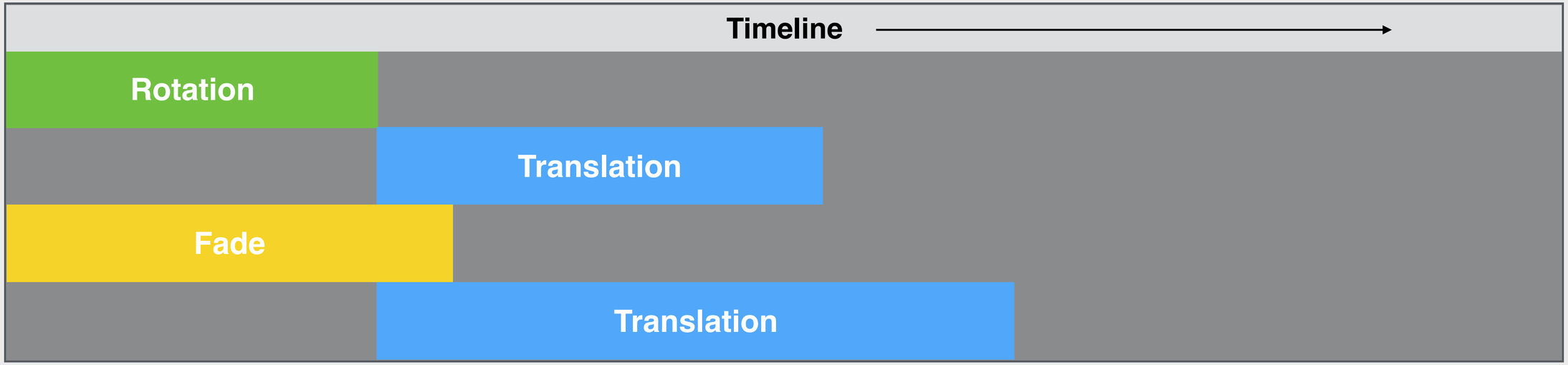
Material Animations



P2: Individual Transforms

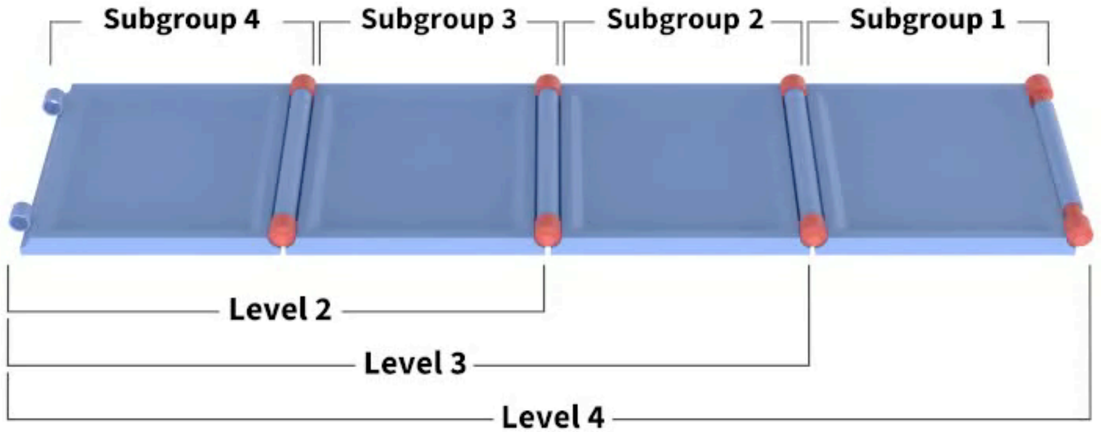
Can be:

- **Moved**
- **Linked**
- **Scaled**
- **Mirrored**
- **Grouped**



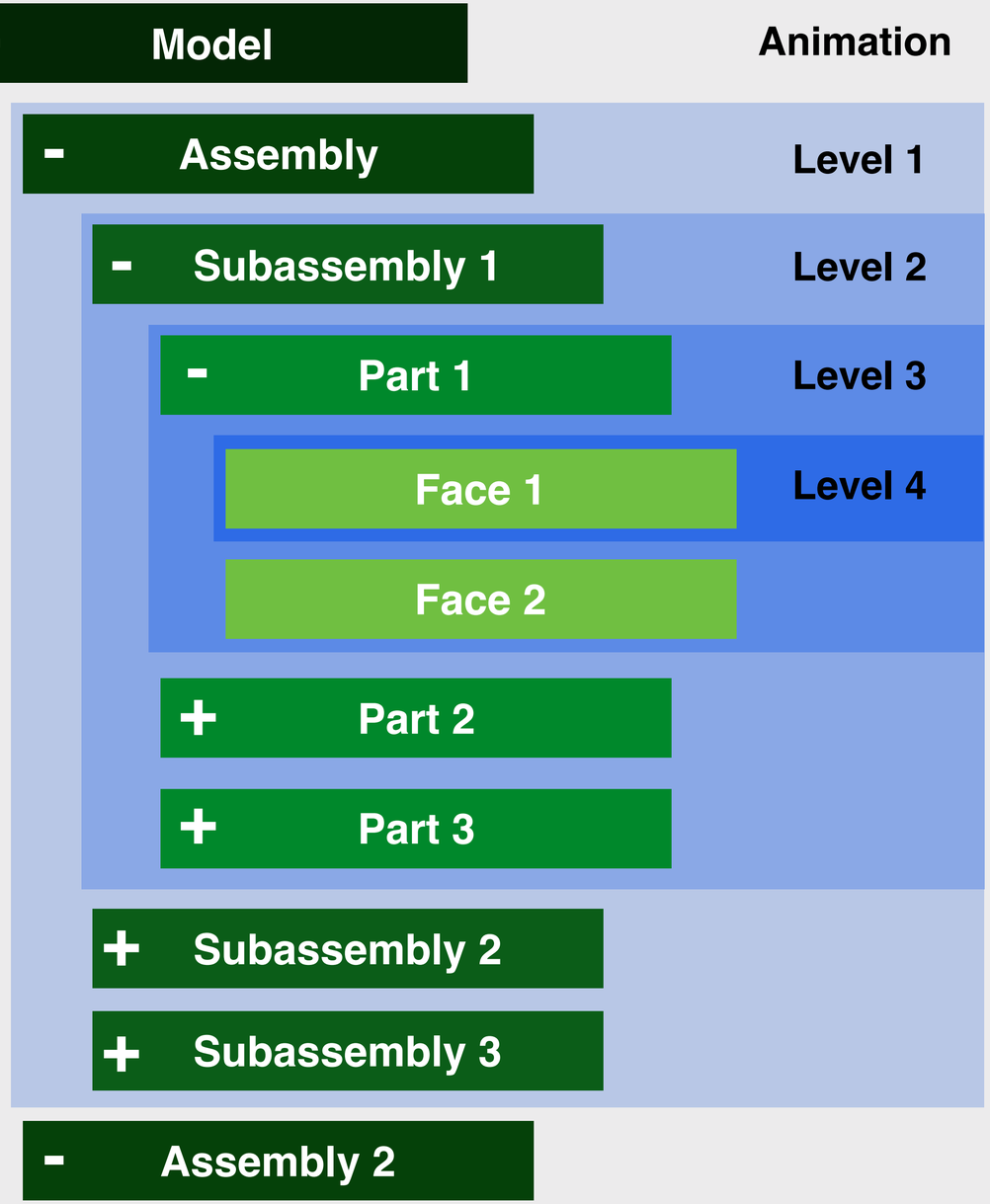
P3: Pivots

- Any geometry can be a pivot for an animation
- A pivot can serve as the center of a rotation
- By default, the pivot is set to the center of the part that is being animated
- Pivots can be dynamic (moving)
  - This is used when the assembly isn’t built ideally with proper subgroups



P4: Assembly Structure

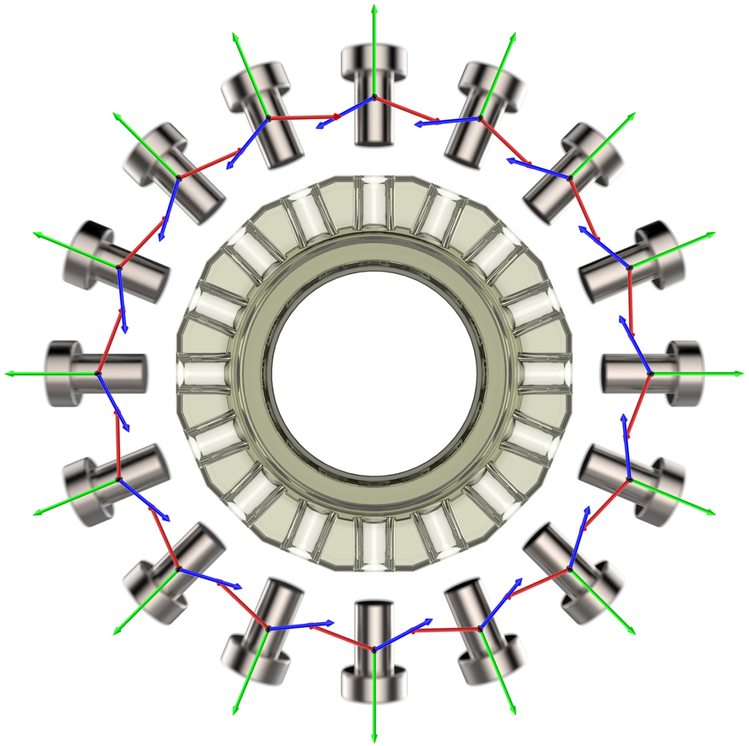
- Animating an assembly or subassembly affects everything it contains
- Animating a part that already is affected by an assembly animation will be affected by both animations



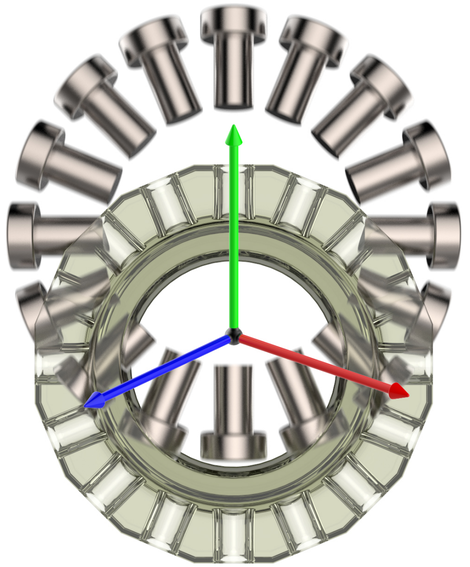
P5: Axis

Local vs Global Axis

- KeyShot respects local axis when available (CAD programs)
- Each level of a CAD assembly has its own local coordinates
- Gives you more options when animating in KeyShot
- When used, simplifies animation process

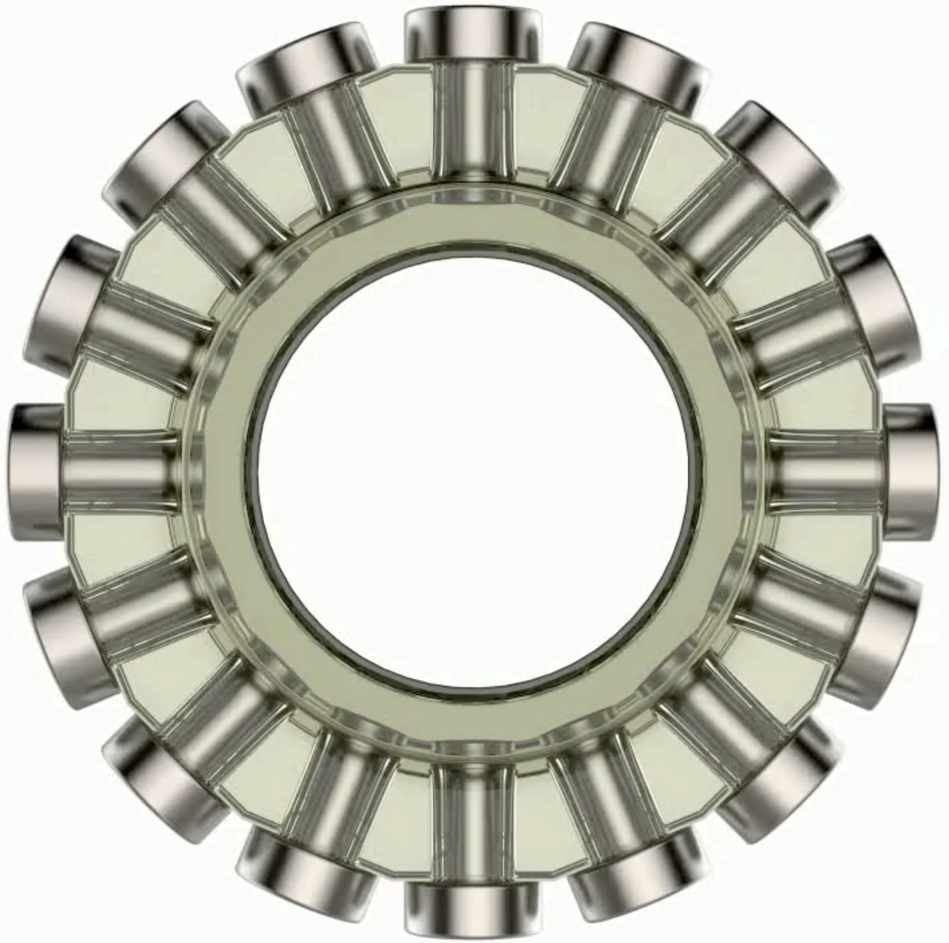


Local Axis

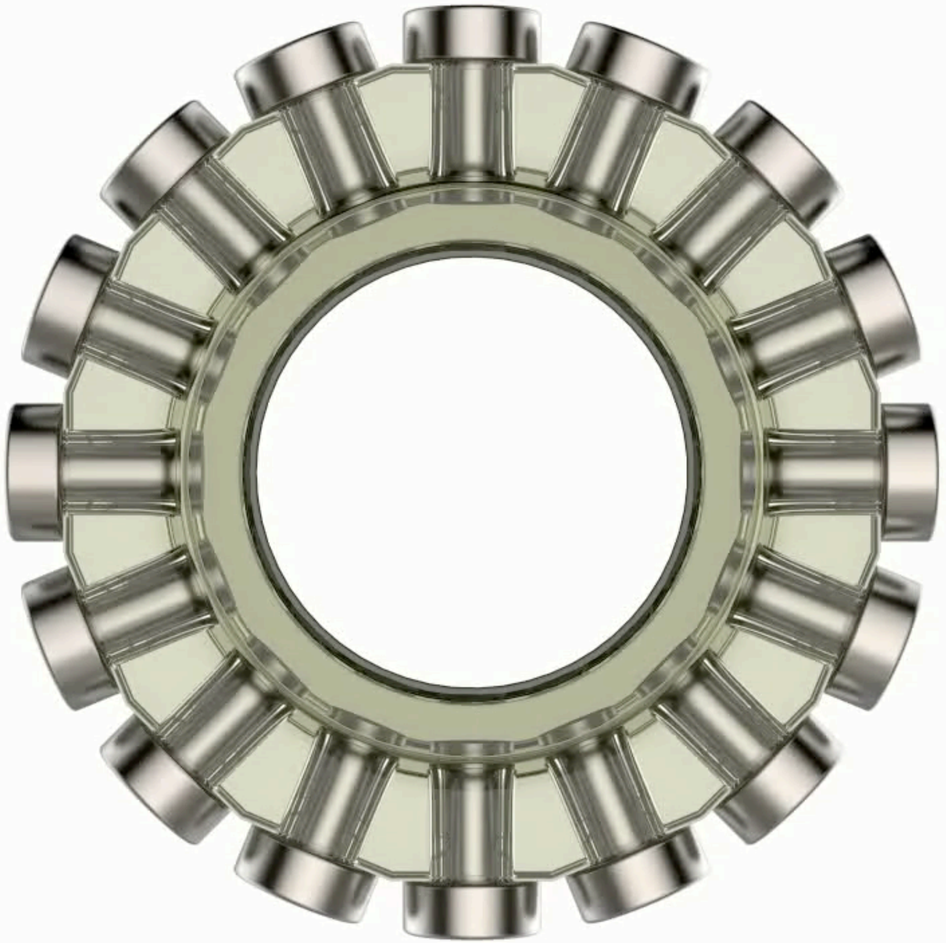


Global

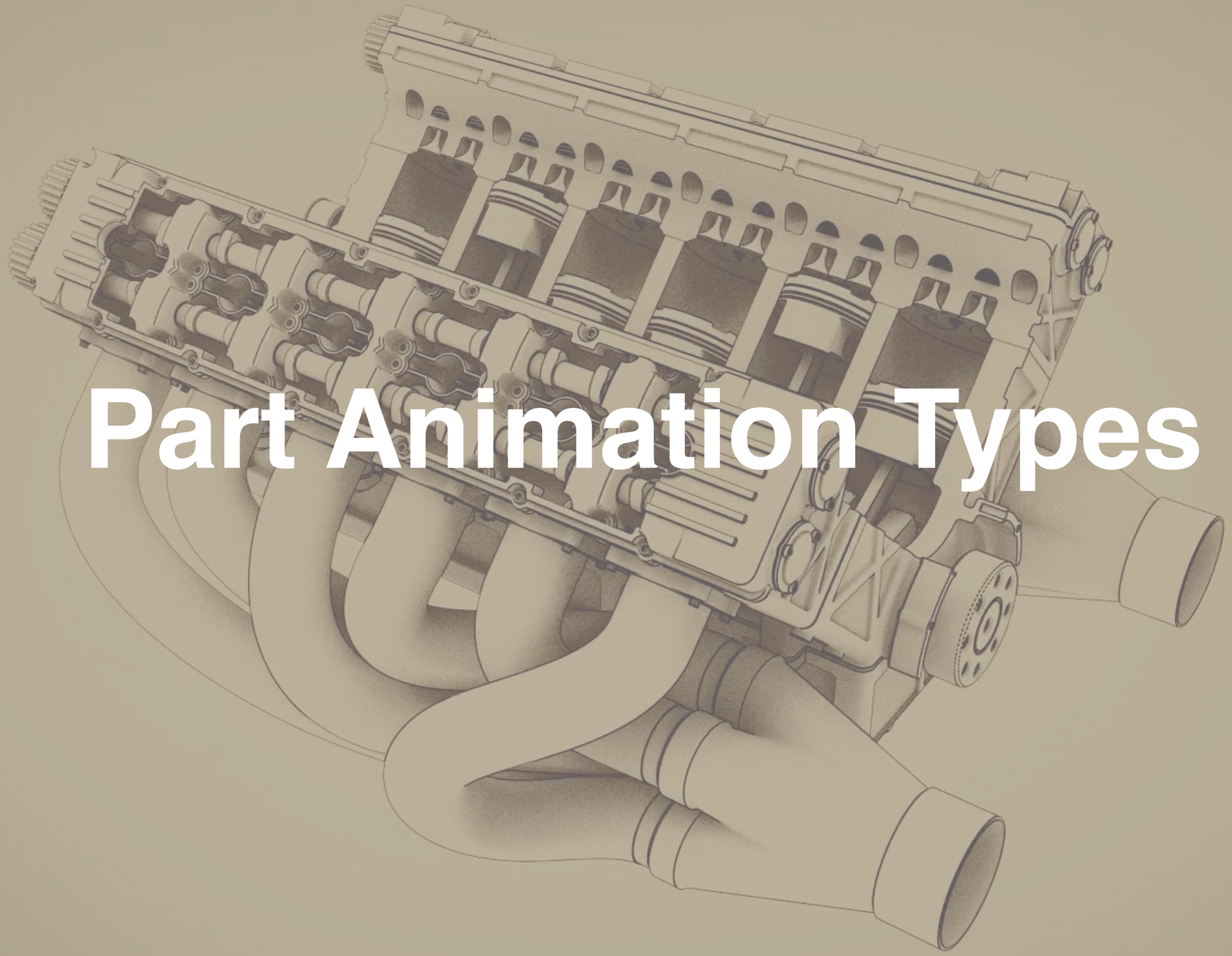
Global Axis Translation



Local Axis Translation



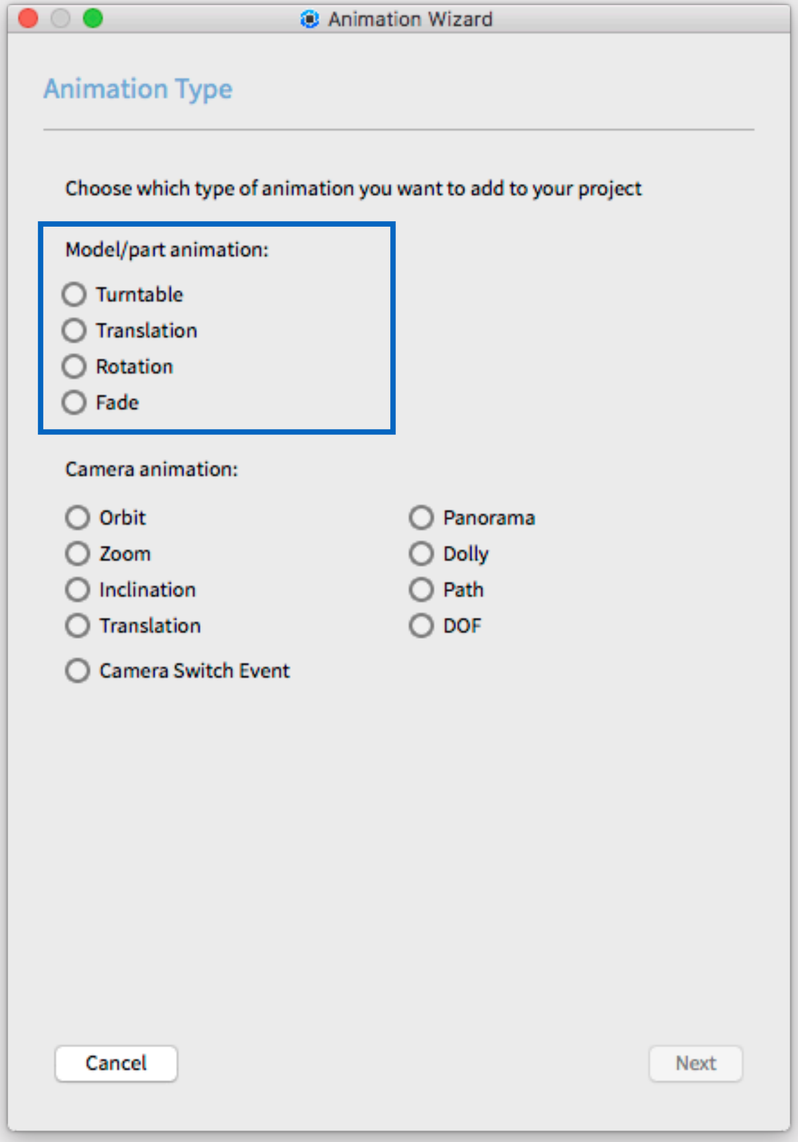
Rendering: Chad Holton



Part Animation Types

Part Animations

- Turntable
- Translation
- Rotation
- Fade



Turntable

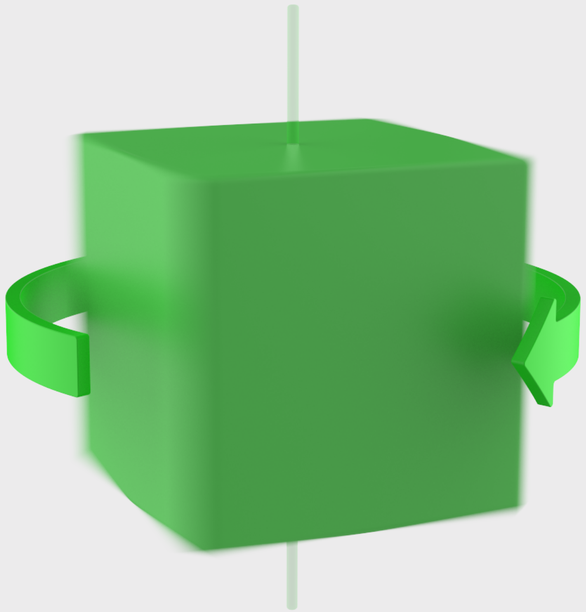
- ***Rotate a model around the KeyShot's up-axis (Y)***

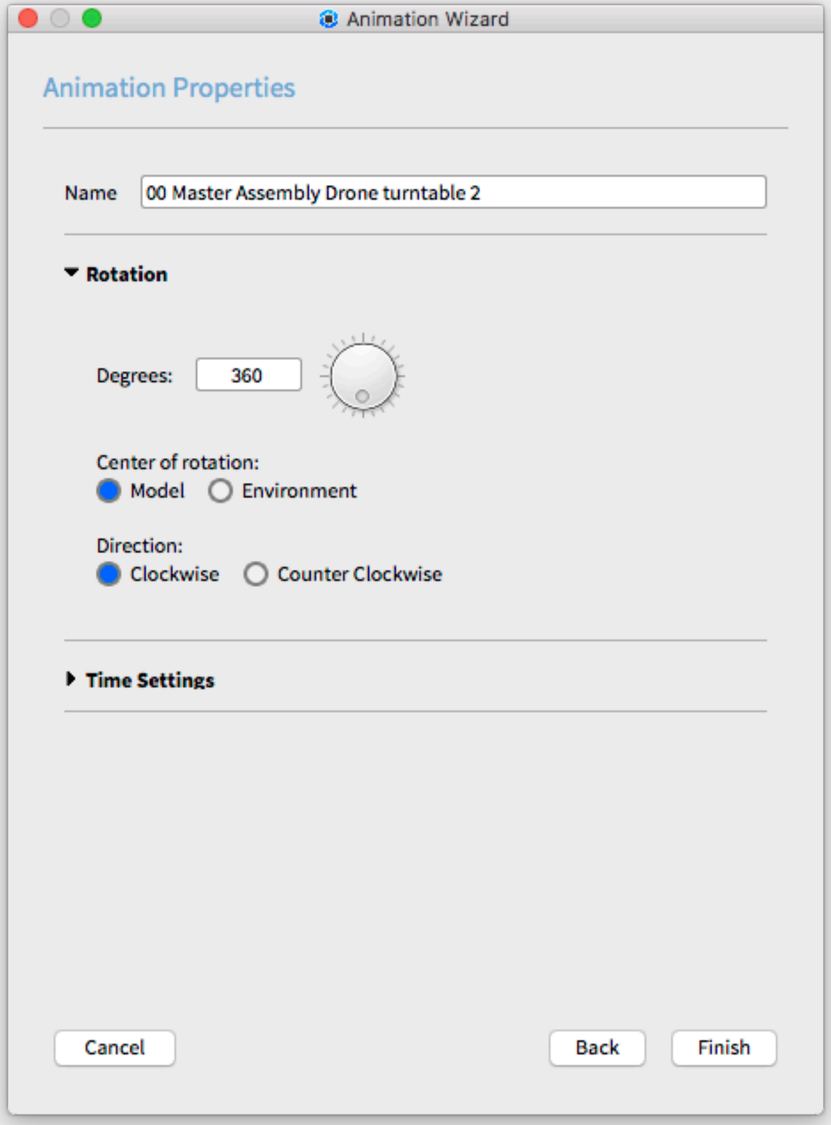
Properties

Degrees: Total number of degrees the model will rotate

Center of rotation: Model or environment center

Direction: Clockwise or Counter-clockwise (top view)





Turntable

Translation

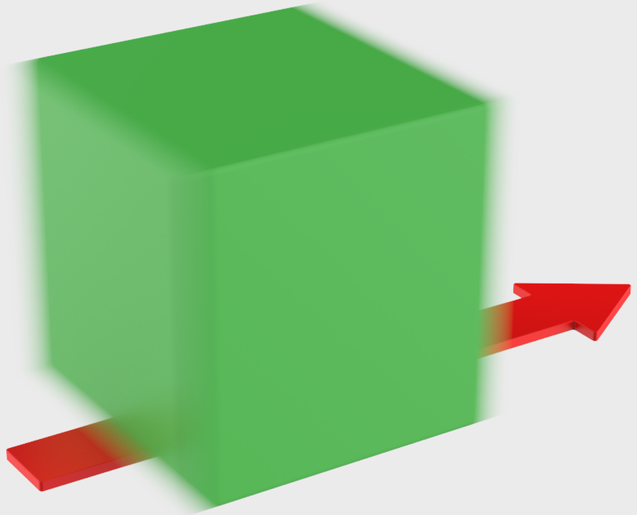
- *Move a part in a linear direction*

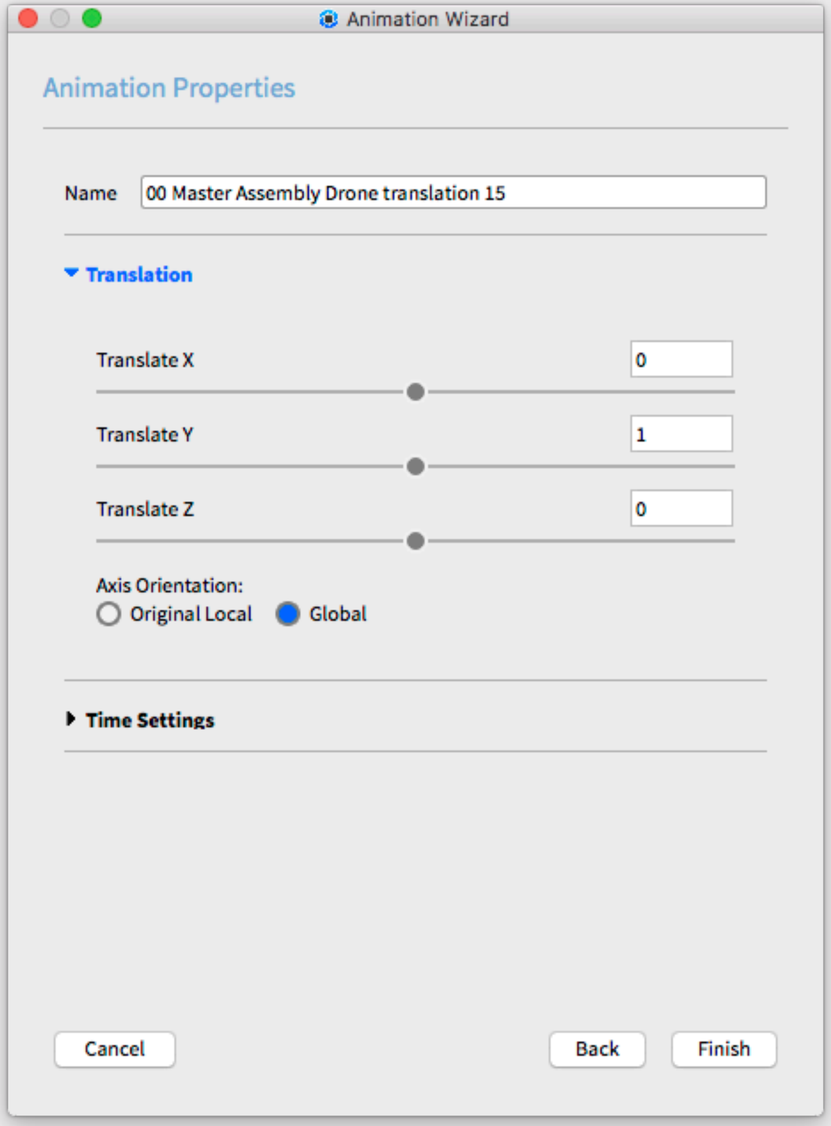
Properties

Translate X,Y,Z: Distance to be moved along each axis (enter negative values to move in opposite direction)

Values are in scene units (i.e. mm, in, cm)

Axis Orientation: Global (KeyShot's) or Original Local (Part's) axis





Translation

Rotation

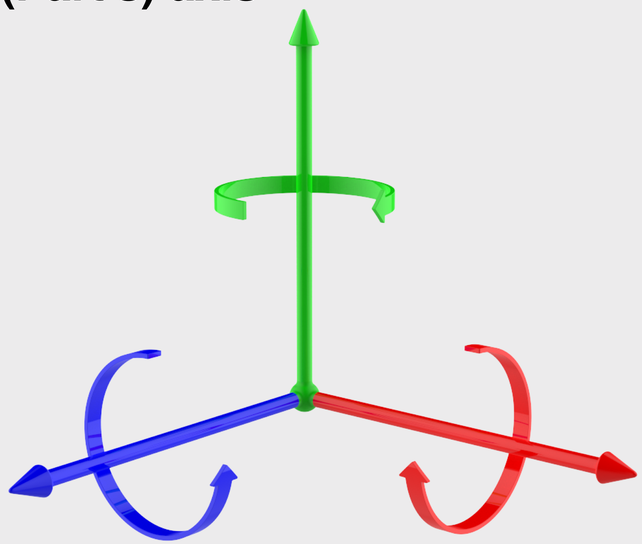
- ***Rotate a model or part around global or local axis, including pivots***

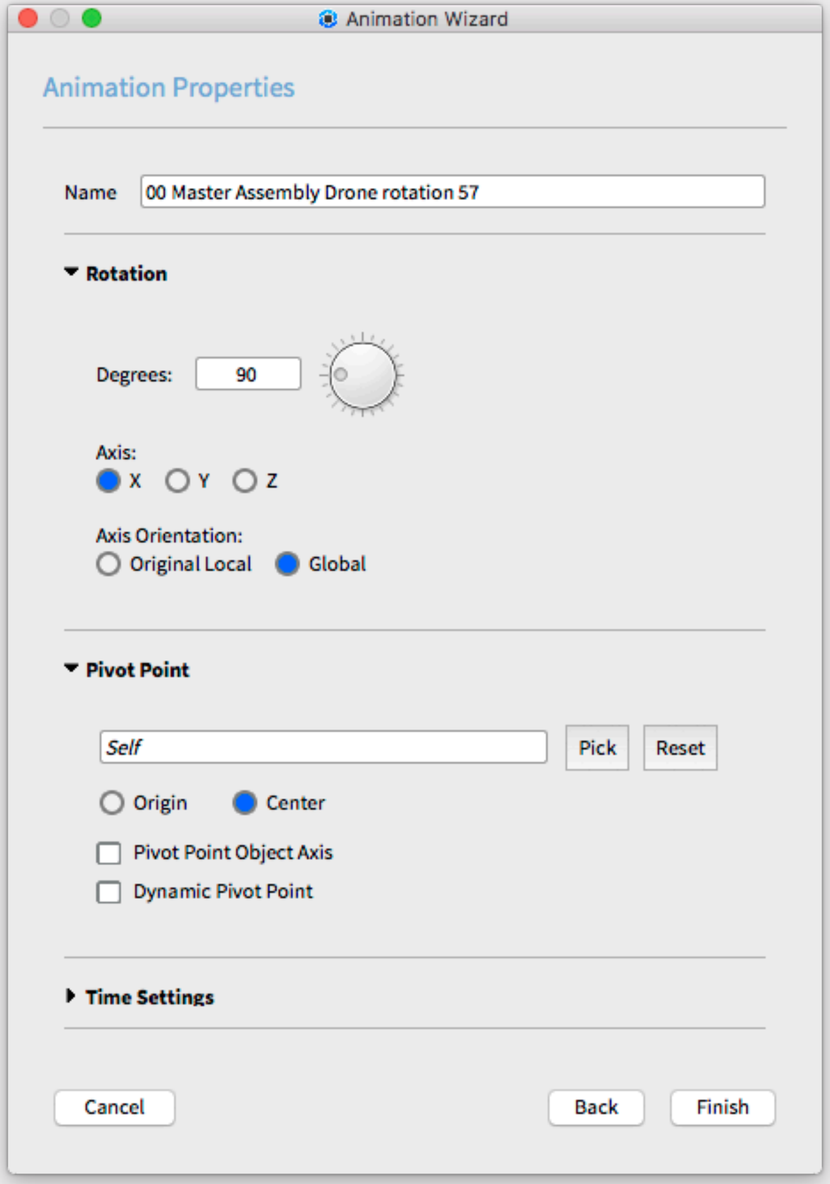
Properties

Degrees: Total number of degrees the model will rotate

Axis: X, Y, Z

Axis Orientation: Global (KeyShot's) or Original Local (Part's) axis





Rotation

Fade

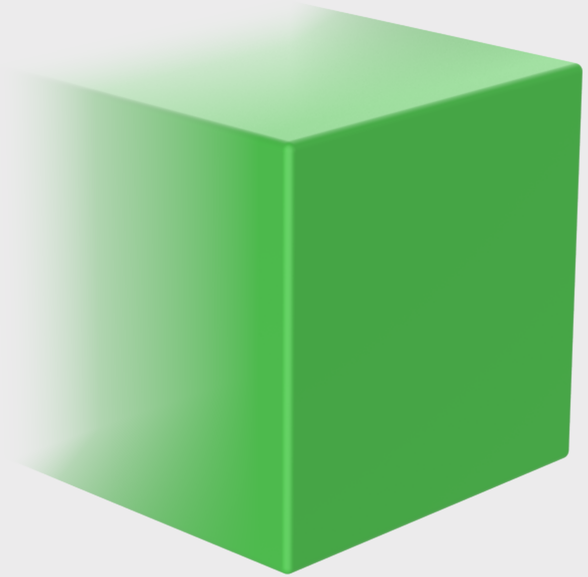
- ***Animate the opacity of a model or part***

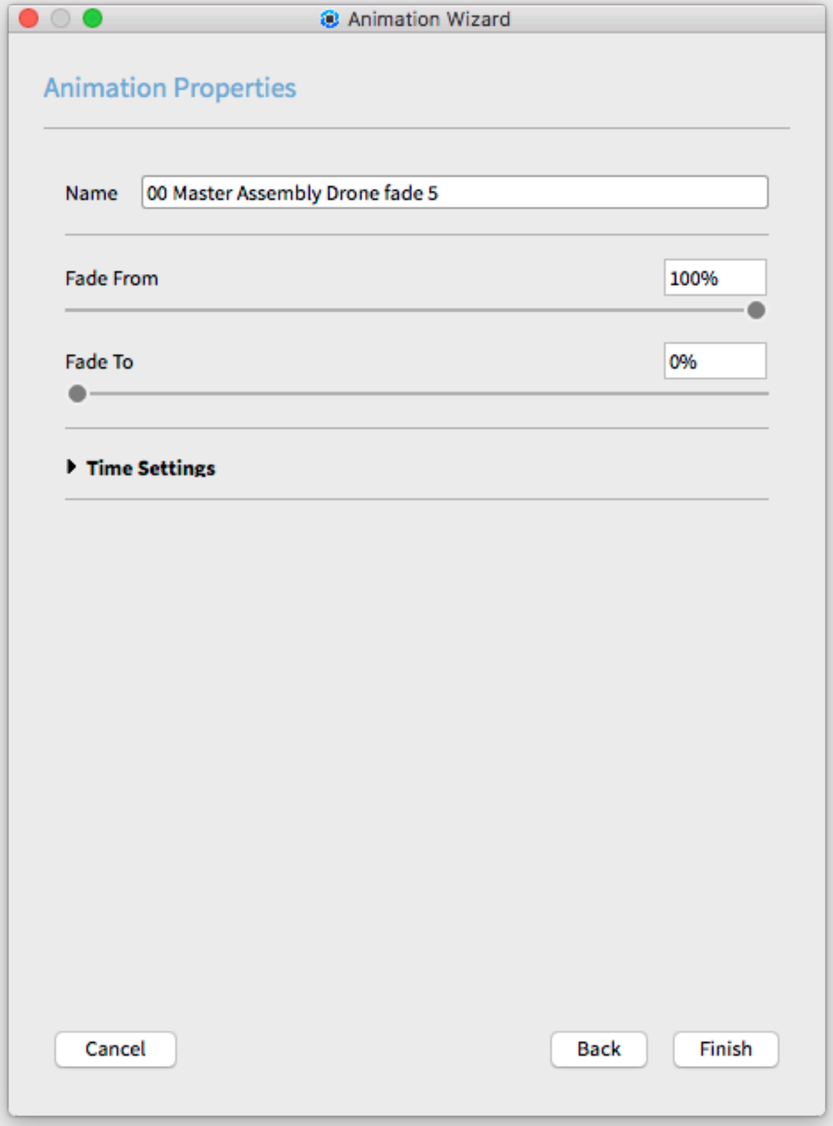
Properties

Fade From: Starting opacity

Fade To: Ending opacity

Best Practice: Fade out before trying to fade in for best results





Fade

Time Settings

- *Control the timing or speed of animation*
- All animations share the Time Settings parameter

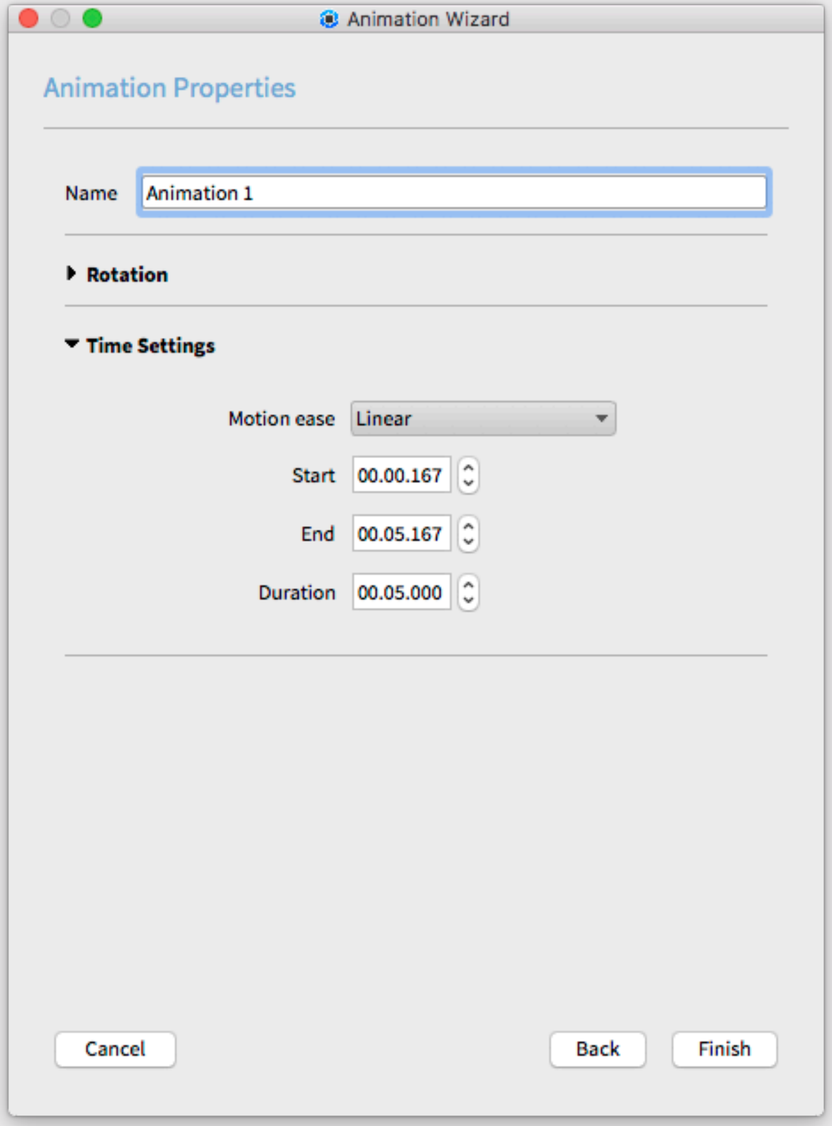
Properties

Motion Ease: Linear, Ease-in, Ease-out, Ease-in/out

Start: Beginning of transform in timeline

End: Conclusion of transform on timeline

Duration: Total length of transform



Linear Motion vs Easing

Linear

Ease In, Ease Out

Motion Blur

Disabled

Enabled

Hands On

Rendering: Nils Piirma

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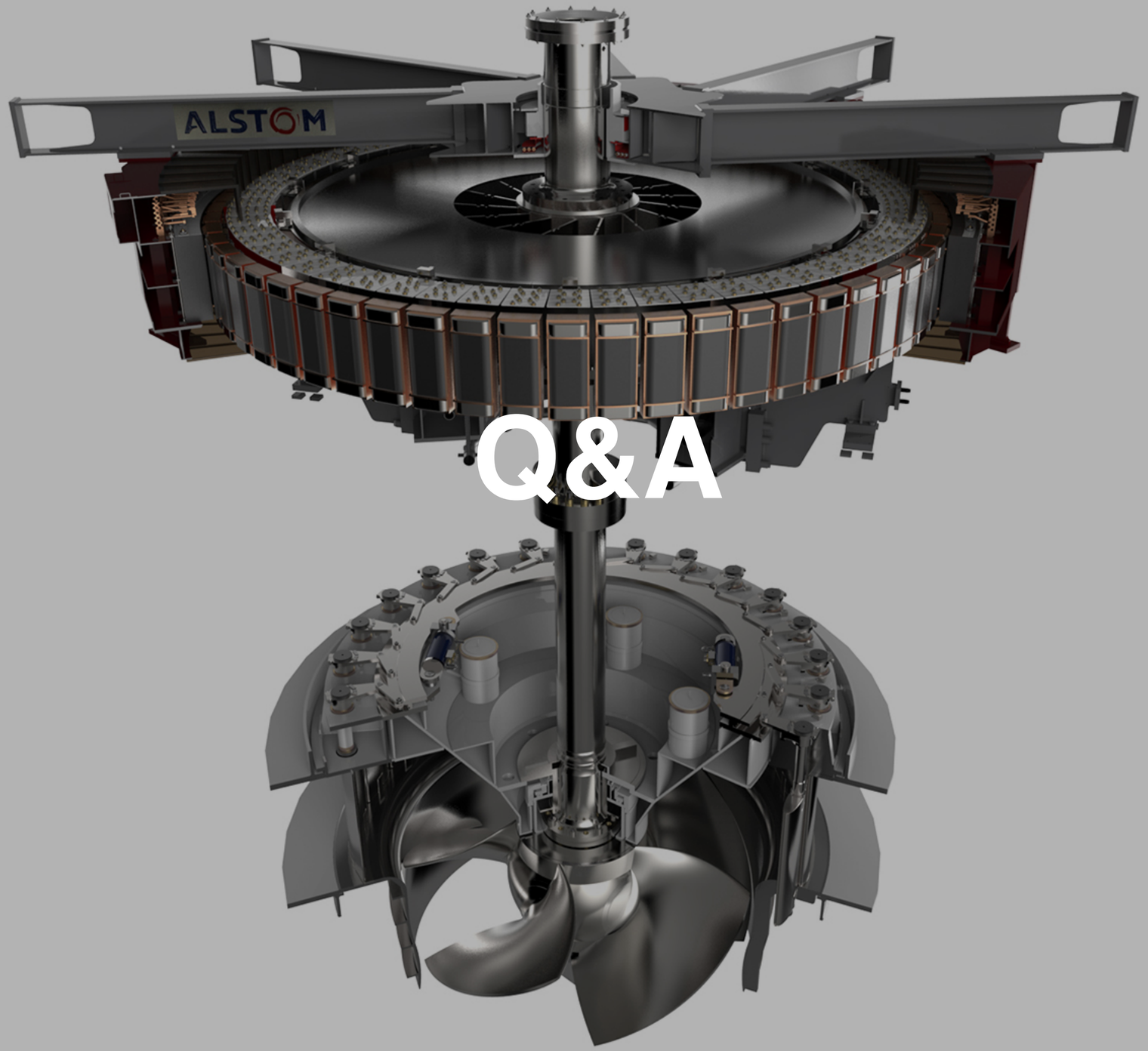
Rendering: Alstom



Q&A

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