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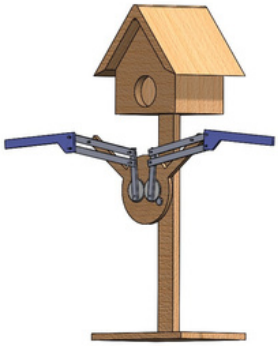
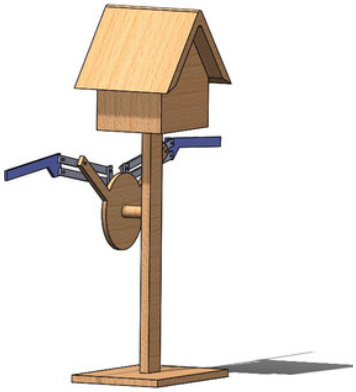
AUTOMATIC SCARECROW DESIGN 3D





What?

- A mechanical device designed to deter birds from cultivation areas. It could involve moving parts, sounds, or visual stimuli to scare away birds.

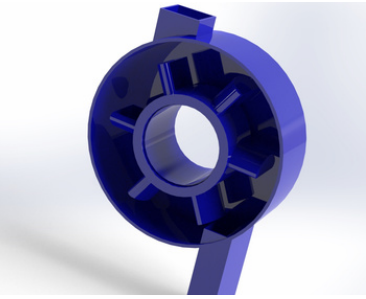
How?

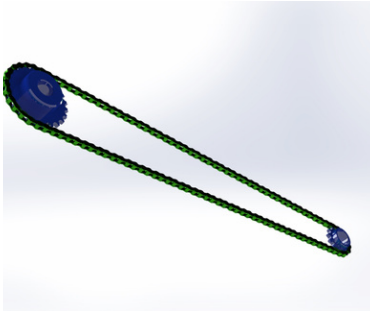
- Utilized SolidWorks commands like Sketch, Extrude Boss/Base, Revolve, and Assembly to create and combine 3D models, simulating movement ensuring functional accuracy.

Results

- The scarecrow effectively deters birds by simulating motion and sound, with simulations confirming its durability and functionality in outdoor conditions.

SEEDING MACHINE





What?

- A mechanical device designed to efficiently plant seeds in cultivated land, ensuring uniform seed distribution and depth.

How?

- Designed on **SolidWorks**
- Created the seeding machine using Sketch, Extrude Boss/Base, Revolve, and Assembly commands, with Motion Study and Motion Analysis to simulate the planting mechanism and ensure precise seed placement.

Results

- The seeding machine ensures consistent seed placement and depth, with simulations confirming its efficiency, reliability, and suitability for various soil conditions.

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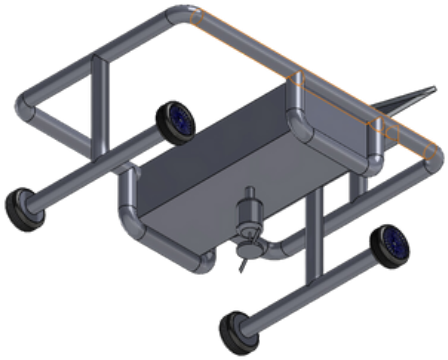
GRASS CUTTER DESIGN 3D



What?

- A solar-powered grass cutter designed in SolidWorks.

How?

- The solar-powered grass cutter was designed in SolidWorks using tools like Extrude, Revolve, Mate, and Fillet to create and assemble its chassis, motor, blades, and solar panels.

Results

- An eco-friendly, efficient, and sustainable grass-cutting solution that reduces reliance on fossil fuels and lowers operational costs.

TELEVISION & REMOTE DESIGN

What?

- A slim monitor television and remote designed in SolidWorks.

How?

- Designed on **SolidWorks**
- The design process utilized commands like Extrude for the body, Revolve for cylindrical features, Shell for hollowing, Fillet for smooth edges, Cut-Extrude for button and port creation, and Mate for assembly

Results

- A sleek, ergonomic television and remote design with precise detailing, ready for realistic rendering and manufacturing.

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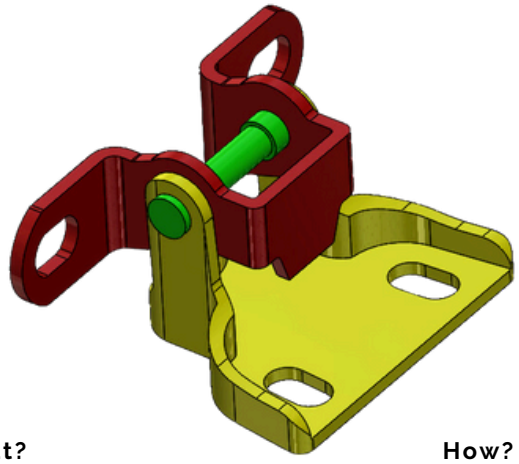
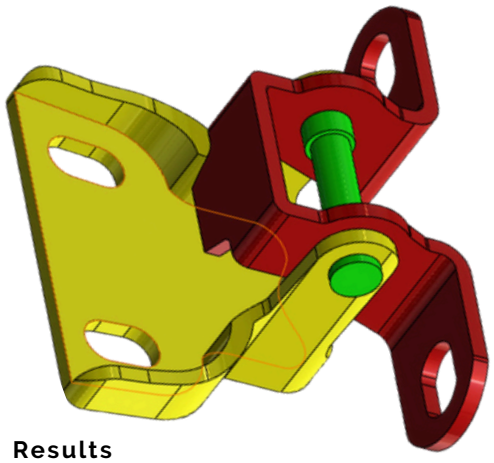
CAR DOOR HINGE





What?

- The Car Door Hinge is a component that enables the smooth opening and closing of vehicle doors.

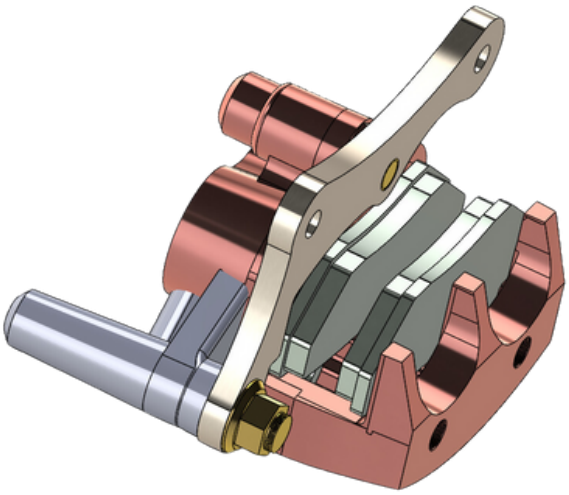
How?

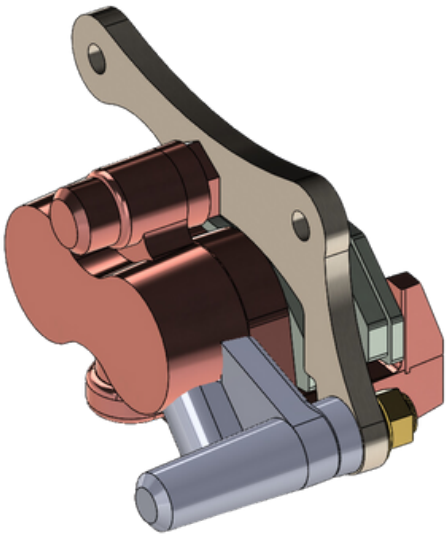
- Designed in SolidWorks and manufactured using precision techniques for durability and accurate fit.

Results

- Ensures reliable door operation and longevity, contributing to the vehicle's overall functionality and safety.

CAR BRAKE CALIPER





What?

- The Car Brake Caliper is a critical component responsible for applying braking force to the car's brake discs.

How?

- Designed in SolidWorks and optimized for performance and heat dissipation, ensuring precise braking action.

Results

- Provides effective and reliable braking performance, enhancing vehicle safety and control.

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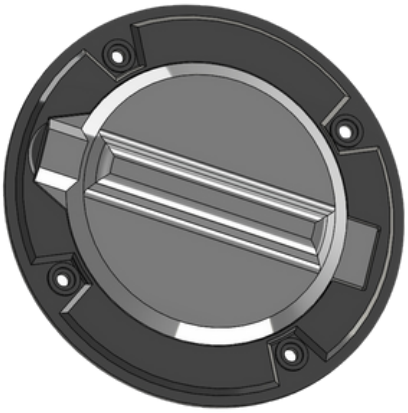
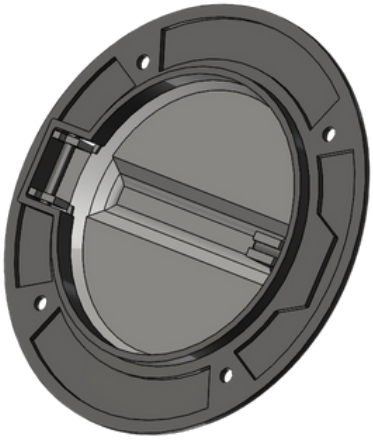
EV CHARGER MOUNT COVER.





What?

- The EV Charger Mount Cover is a protective enclosure designed for EV chargers

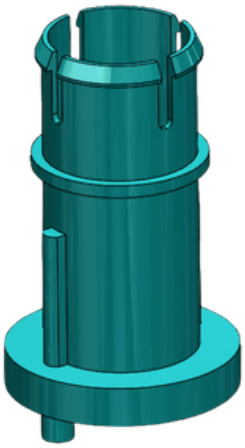
How?

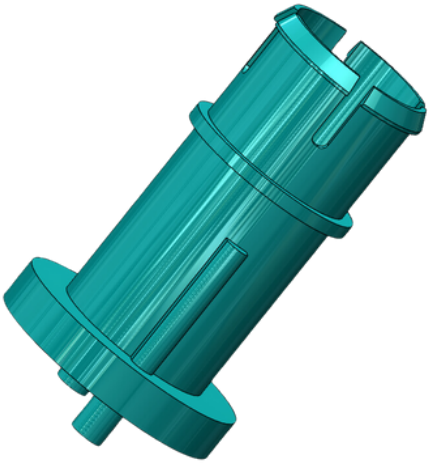
- Created in SolidWorks and 3D printed for precise customization and efficient production.

Results

- It offers durable protection and a polished appearance, ensuring both functionality and aesthetic appeal.

CAR STEERING ROD TURN SIGNAL SWITCH





What?

- The Car Steering Rod Turn Signal Switch is a component designed for managing turn signals in vehicles

How?

- Developed in SolidWorks and 3D printed to ensure precise fit and functionality.

Results

- Provides reliable signal control and a streamlined design, enhancing both driver convenience and vehicle aesthetics.

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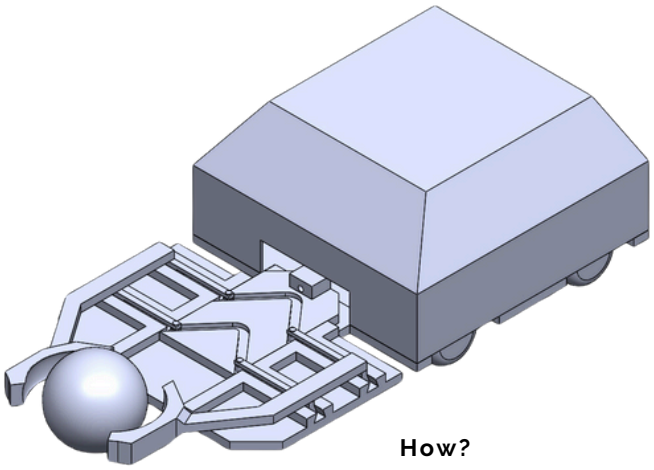
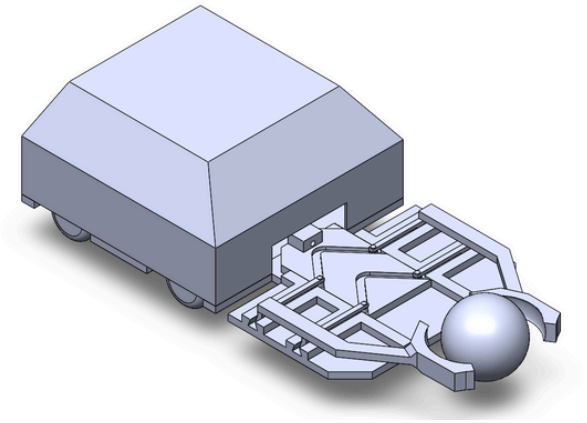
SOCCER BOT DESIGN





What?

- A soccer bot designed in SolidWorks with a front bracket to carry the ball.

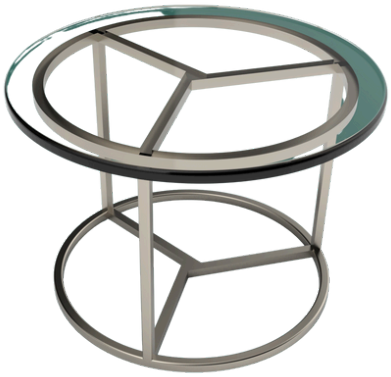
How?

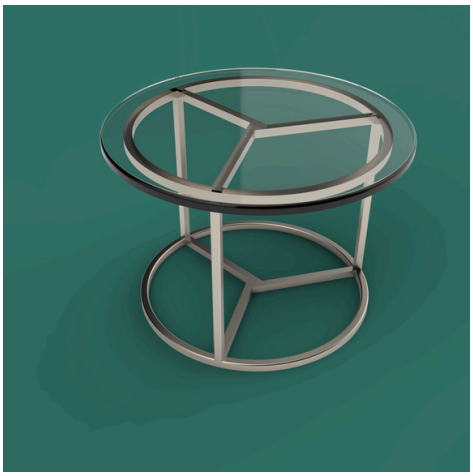
- The design process utilized commands like Sketch and Extrude for the bot's body, Fillet for smooth edges, Cut-Extrude for openings, and Mate to assemble the bracket with the main body.

Results

- A functional soccer bot with a precisely designed bracket for ball handling, ready for simulation and testing.

TEA TABLE DESIGN





What?

- A tea table designed in SolidWorks featuring a transparent glass top and a stainless steel frame.

How?

- Commands like Sketch and Extrude were used to create the stainless steel frame, while the glass top was modeled using Boss-Extrude. Fillet was applied for smooth edges, and Mirror was used to ensure symmetrical design elements.

Results

- A modern, elegant tea table with a clear glass top and a sturdy, stylish stainless steel frame, ready for production.

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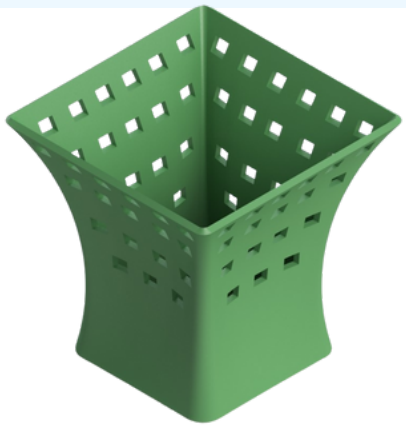
PLASTIC BOX AND BIN



What?

- A SolidWorks model of a dust bin and a 3D box made out of plastic.

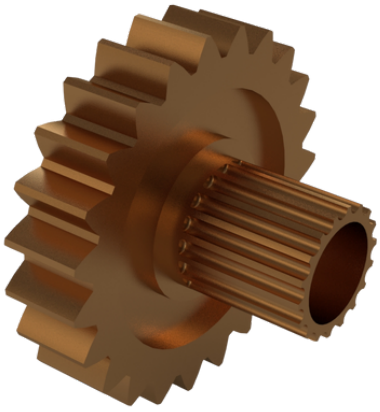
How?

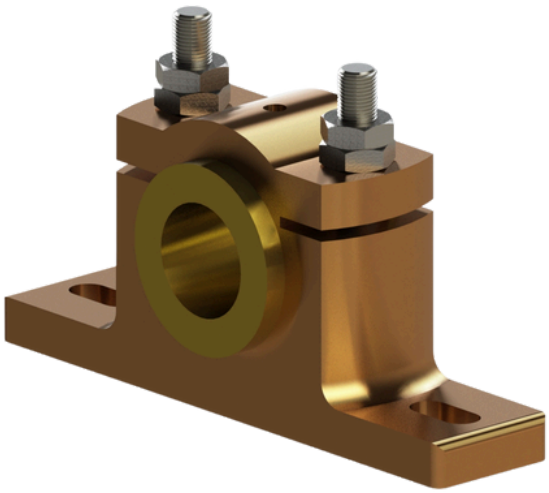
- Commands like Sketch and Extrude were used to create the basic shapes for both the dust bin and the 3D box. The Shell command was applied to hollow out the plastic components, while Fillet was used for smooth edges.

Results

- Functional and aesthetically designed models of a dust bin and a 3D box, both made of plastic, suitable for prototyping and manufacturing

SIMPLE GEAR AND BEARING HUB





What?

- A SolidWorks model of a simple gear and bearing hub made out of stainless steel

How?

- Commands like Sketch and Extrude were used to shape the gear and hub. Revolve was applied for the circular features, and Cut-Extrude was used for detailed cuts and holes. Fillet was used to smooth edges.

Results

- A precise and durable stainless steel gear and bearing hub, designed for functionality and ready for manufacturing.

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USB HUB 3D DESIGN

What?

- A plastic USB hub with 4 USB ports designed in SolidWorks through reverse engineering.

How?

- The design process involved using commands like Sketch and Extrude for the hub body, Shell for creating internal cavities, Cut-Extrude for the USB port openings, and Fillet for smooth edges.

Results

- A precisely modeled USB hub with accurate dimensions and ports, ready for prototyping and production.

USB PRENDRIVE

What?

- A metal body USB flash drive designed in SolidWorks.

How?

- Designed on **SolidWorks**
- The design was created using commands like Extrude for the main body, Fillet for smooth edges, Cut-Extrude for the USB connector slot, and Shell to hollow out the interior for electronic components.

Results

- A sleek and durable metal USB flash drive design with precise dimensions, ready for manufacturing.

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TIRE 3D SOLIDWORK DESIGN

What?

- The Tire 3D SolidWorks Design is a detailed model of a vehicle tire.

How?

- Created using SolidWorks for accurate representation and analysis of tire features and dimensions.

Results

- Provides a comprehensive design model for simulation and manufacturing, ensuring performance and fit accuracy.

WHEEL& RIM - 13X4.5 INCH

What?

- The 13x4.5 inch Wheel is a vehicle wheel designed for specific applications requiring this size.

How?

- Engineered in SolidWorks and produced with precision to ensure strength and proper fitment.

Results

- Delivers reliable performance and durability, meeting the requirements for safe and efficient vehicle operation.

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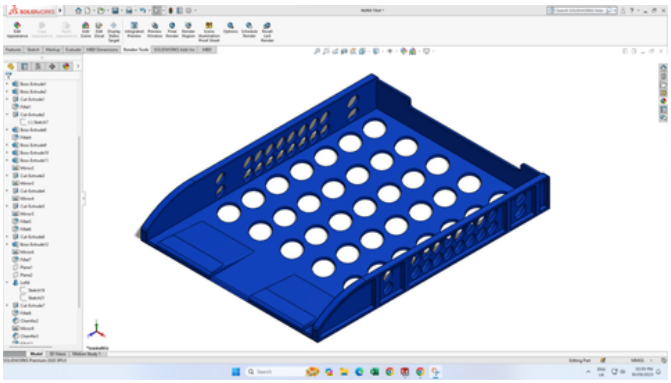
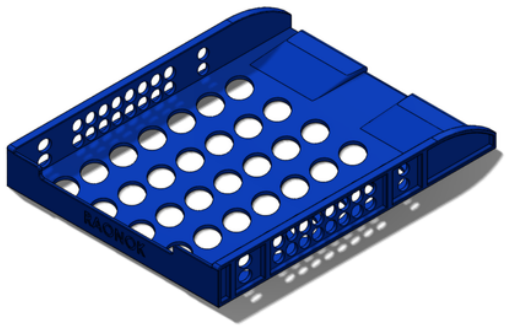
PLASTIC PAPER TRAY





What?

- A plastic paper tray used for organizing documents, with custom dimensions and a stackable, slotted design for ease of use.

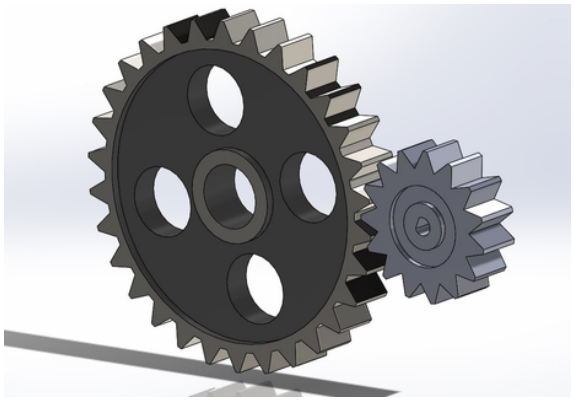
How?

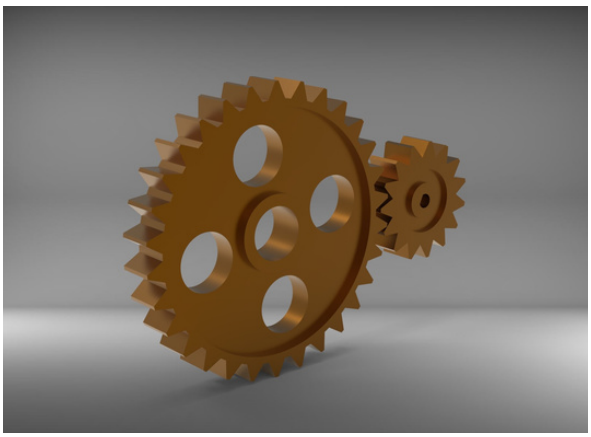
- Designed to fit common paper sizes, ensuring durability with a 3D-printable plastic material while focusing on functionality.

Results

- The tray efficiently organizes papers, fits the required size, and offers long-lasting durability.

3D PRINTABLE SPUR GEAR SET





What?

- A 3D printable spur gear set designed for mechanical systems, with varying gear sizes for different torque and speed requirements.

How?

- Spur Gear Set 3D designed by Solidworks 2020.Motion study applied.

Results

- Delivers reliable performance and durability, meeting the requirements for safe and efficient vehicle operation.

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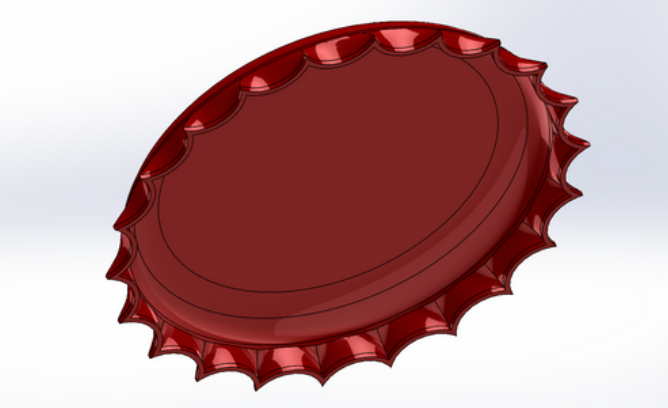
COCA COLA CAP 3D



What?

- A 3D model of a Coca-Cola bottle cap designed for accurate fit on standard bottles, featuring iconic branding details.

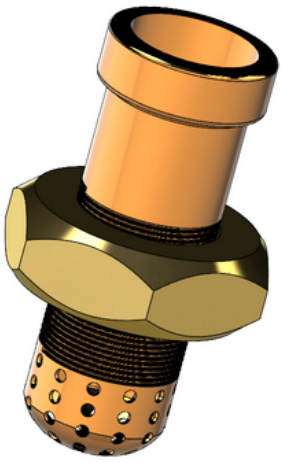
How?

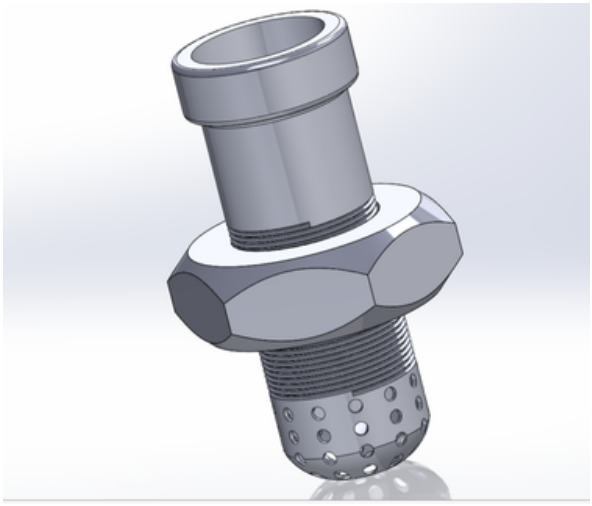
- Modeled with precise thread patterns to fit bottle necks, ensuring proper sealing and including branded surface texture for realism.

Results

- The cap fits perfectly, replicates the iconic Coca-Cola look, and is functional for use in both display and practical applications.

HIGH VELOCITY SPRAY NOZZLE





What?

- A high-velocity spray nozzle designed to control and direct fluid flow at high speeds for efficient spray distribution.

How?

- Modeled with precision channels and exit angles to optimize fluid velocity, ensuring efficient spraying patterns suitable for 3D printing.

Results

- The nozzle provides consistent, high-speed spray with accurate flow control, functioning effectively in high-pressure environments.
-

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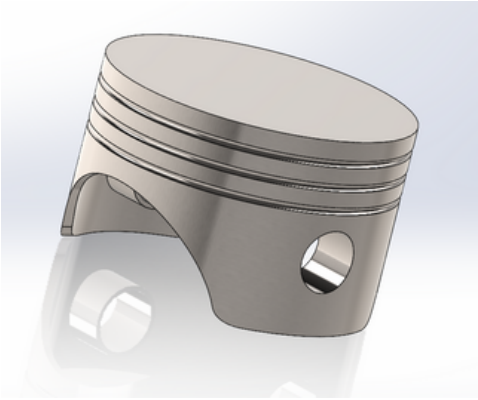
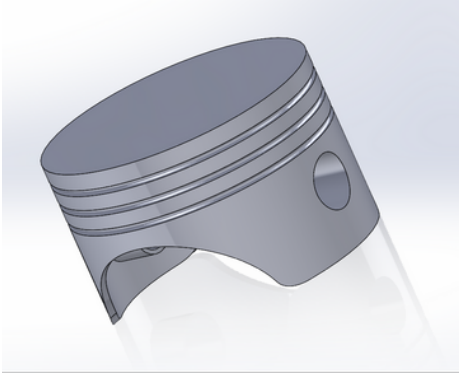
ENGINE PISTON HEAD





What?

- A 3D model of an engine piston head designed for internal combustion engines, optimizing compression and power delivery.

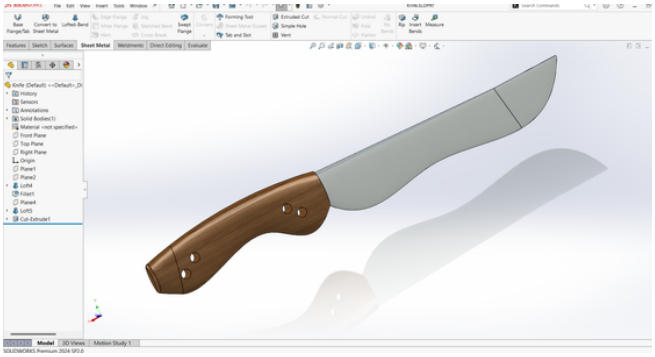
How?

- Modeled with precise dimensions, including grooves for rings, to ensure proper sealing and efficient heat management during operation.

Results

- The piston head delivers optimal engine performance, ensuring durability, smooth operation, and effective combustion.

3D KNIFE DESIGN



What?

- A 3D knife design, featuring a sharp blade and ergonomic handle, optimized for aesthetics and functionality.

How?

- Modeled with precise blade geometry for cutting efficiency, and a handle designed for comfortable grip and balance during use.

Results

- The knife combines sharpness and comfort, delivering a functional tool with an appealing, sleek design.

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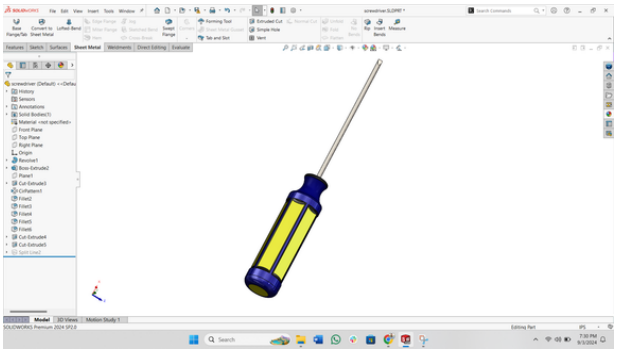
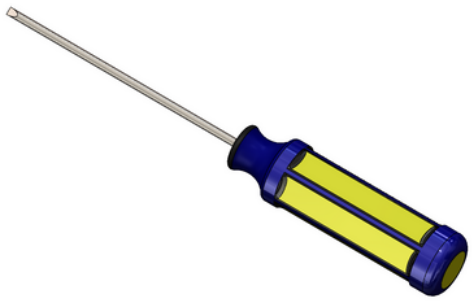
SCREWDRIVER 3D DESIGN





What?

- A 3D design of a screwdriver featuring a standard blade and ergonomic handle for ease of use and grip.

How?

- Modeled with precise dimensions for the blade tip to fit various screw types, ensuring durability and comfort in handling.

Results

- The screwdriver design provides reliable performance, effective torque application, and user-friendly handling.

GLASS & BOTTLE DESIGN

What?

- A 3D design of a glass and bottle set, created for aesthetic appeal and functionality in beverage storage and serving

How?

- Modeled with precise dimensions and curves to ensure ergonomic handling and optimal liquid capacity, using materials suitable for 3D printing.

Results

- The glass and bottle design offers a visually appealing and functional solution for beverage presentation and use.

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DROPER 3D DESIGN

What?

- A 3D design of a dropper for precise liquid dispensing, suitable for pharmaceuticals, essential oils, or laboratory use.

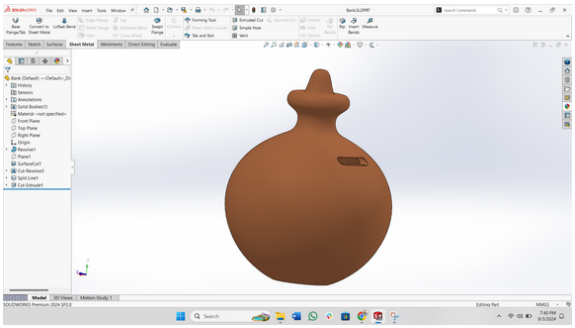
How?

- Modeled with an elongated shaft and bulb for optimal suction, ensuring accurate and controlled liquid transfer.

Results

- The dropper design provides reliable performance, enabling precise dosing and easy handling for various applications.

COIN BANK DESIGN



What?

- A 3D design of a coin bank featuring a secure slot for coin insertion and an accessible compartment for easy coin retrieval.

How?

- Modeled with a durable structure and creative aesthetics, incorporating a fun theme or shape to encourage saving.

Results

- The coin bank design effectively promotes savings while providing a functional and engaging way to store coins.