

The logo for American Truck Simulator is centered at the top. It features the word "AMERICAN" in a gold, blocky font with a blue glow, set against a dark, ribbed background. Below it, the word "TRUCK" is written in a large, metallic, silver font with a blue glow, appearing to be on a truck's front grille. Underneath "TRUCK", the word "Simulator" is written in a cursive, gold font with a blue glow. The entire logo is framed by a metallic, gold-colored border with small lights along the top edge.

AMERICAN
TRUCK
Simulator

MAKING OF

FARM
MACHINERY

01

INTRODUCTION

You may remember the old games; you controlled an eight pixel tall figure and fought a villain who was a few pixels taller to try and save the world. As simple as these were, they were still able to successfully get you hooked on video games.

Many things have changed since then. We now have unbelievably high resolution and sophisticated game play, beautiful worlds almost indistinguishable from the world outside (if not better), and machines so real looking that you'd swear you could smell the oil, rubber, and exhaust. We have things that I would not have believe

possible years ago, but how have we managed to achieve them? How do game developers manage to put it all together to deliver a thrilling ride to the player?

We're glad that you're flipping through these pages with us to take a look under the hood and find out what it takes to produce a cargo DLC here at SCS Software. We hope you enjoy it, and we thank you for your support.

Stanislav Laurik
Concept Artist
DLC Art Supervision



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02

AGRICULTURE

Agriculture in the United States is the backbone of the country. Seemingly endless, vast fields of golden wheat, corn, and soybeans stretch to the horizon. It's an important part of the culture that has played a significant role in the country's history.

The fertile soils and rivers of the Central Valley, the Great Plains, and the Mississippi Delta represent the heart of America. There you'll find more than two million farms on nine hundred million acres. They provide sustenance for people across the continent every day.

Agriculture is an important industry that produces a vast amount of crops – crops that need to be transported to their destination. The relationship between trucks and agriculture is therefore very close and crucial.

Agronomy in the U.S.A. is highly mechanized. You will find a wide range of machines – from the old and traditional to the modern and high tech. Let's explore them in the following pages.



03 BRANDS

We have created two brands – Owl and Greenler – which are entirely fictional. However, we have put an emphasis on making them look realistic to make you believe that these machines can stand boldly in a field. Owl isn't brand new – pun intended – it has a long history in our games. Like other stable, long-standing brands, its visuals have evolved over the years.

The logo should be simple and balanced, but also unique and memorable. It usually occupies a small space, so it must be that much easier to recognize.

The color palette is quite simple and conservative. It must be bright and natural enough to make an impression, a statement, to convey emotion. The emotion we wanted to achieve here is common among the biggest players in agriculture. Green as a symbol of healthy, lush growth. Yellow, slightly on the red side, is a symbol of harvest. The moment of greatest excitement and busiest workload in a farmer's life. A palm full of yellow-gold wheat. Your hard work throughout the season has paid off.



Logos thumbnails



Owl final

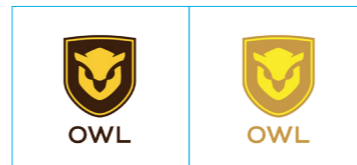


✓ picked variant



Owl and GL color schemes and branding concepts →

Owl logo variants



Greenler logos



✓ picked variant



04 THE PROCESS

Every model started as an idea. A little spark. An idea for a beautiful and modern agricultural machine. But as it happens, taking an idea from paper or from your head to real life is a long haul.

It begins with research – we try to collect hundreds of relevant references. Researchers go through the whole field. We choose the categories of machines we want to depict in our game. Then we start to visualize.

THUMBNAILS

In this case, we create imaginative machines. The same types you might see in real fields, but our own. Concept art takes its place here. The first step is to explore as many ideas as possible. Thumbnail sketches are just quick clusters of lines. Don't bother with perspective, don't be super precise, just capture the main features.

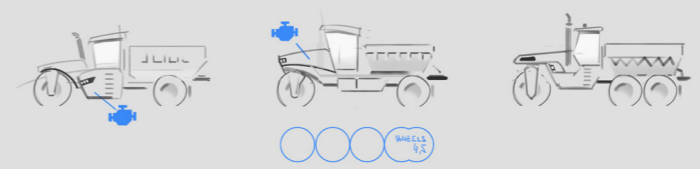
Try some different options; two axles, or three? Round tank, or something more rectangular? How can we integrate components into the body lines. Combine a dividing line here with some other feature there. Is this too much or too little? Does it work or not? Don't spend too much time on the details or you risk losing speed and energy, but you must do your best to create an appealing shape that is believable from a technical and functional point of view.



Forage Harvester



Hay Baler



Fertilizer Spreader



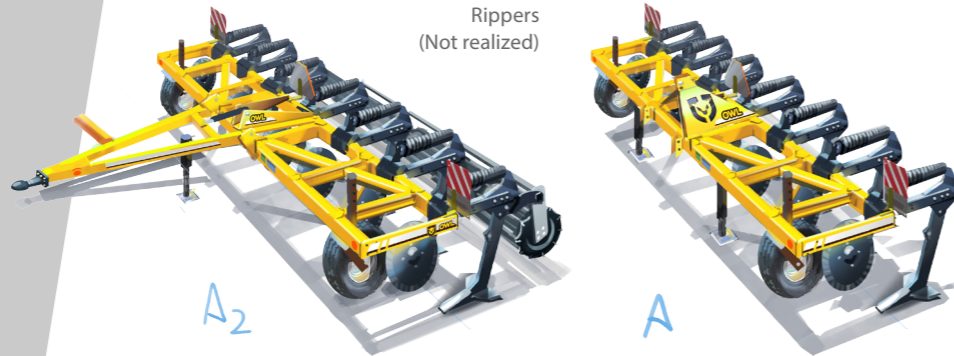
SKETCHES

After an initial exploration of ideas using thumbnails, I'm moving on to more elaborate sketches. Color and perspective come into play. It's still not polished or accurately rendered, but it's much more legible and serves as a better guide to the final selection.

The decision has been made. The most promising machine has been chosen. It is time to tighten the screws and refine it further.



Fertilizer Spreader



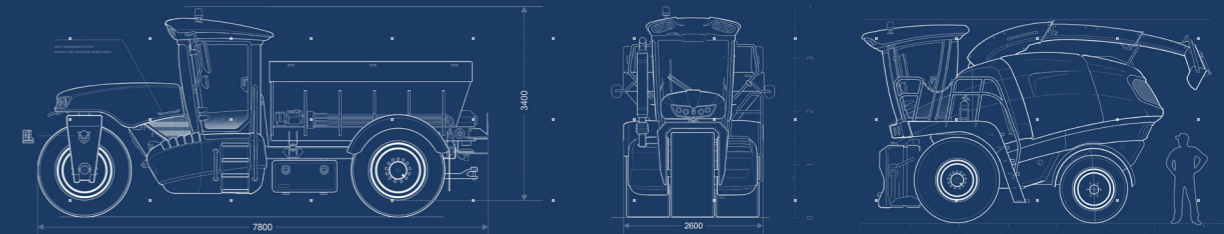
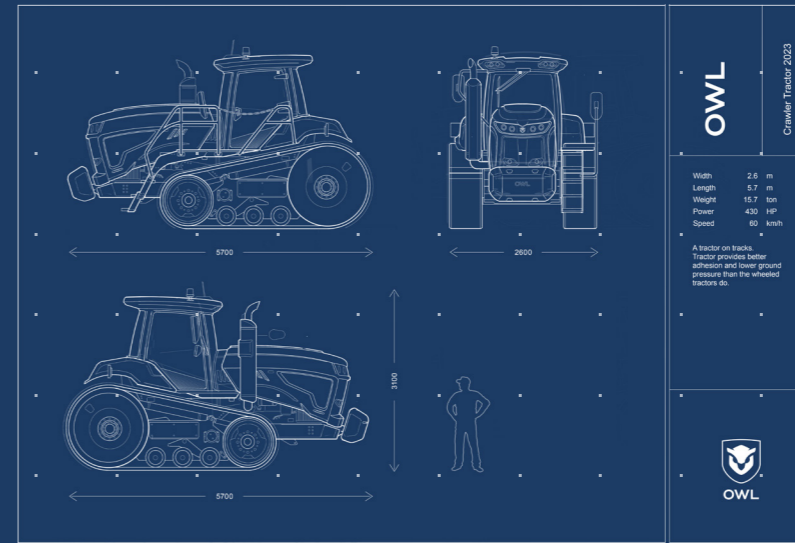
Rippers
(Not realized)



BLUEPRINTS

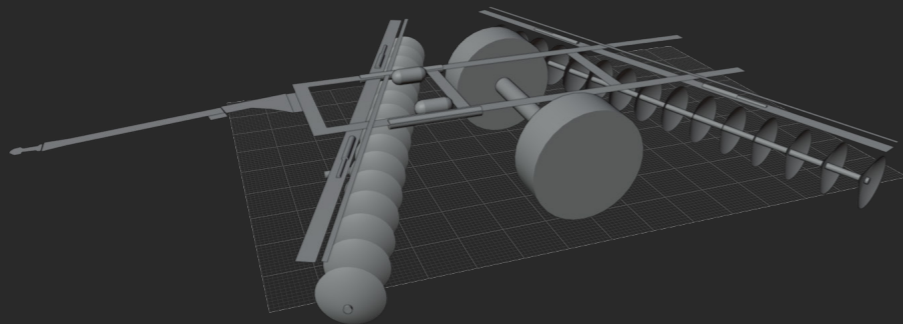
We will draw up a blueprint with the main dimensions and basic views. It must be accurate. We have to meet the transport specifications and customize the machine as cargo. All the proportions and details are worked out.

3D modelling is more time consuming than drawing. You have to deal with one extra dimension! That's why it's good to iterate more on paper than in the later stages where every change is more challenging.

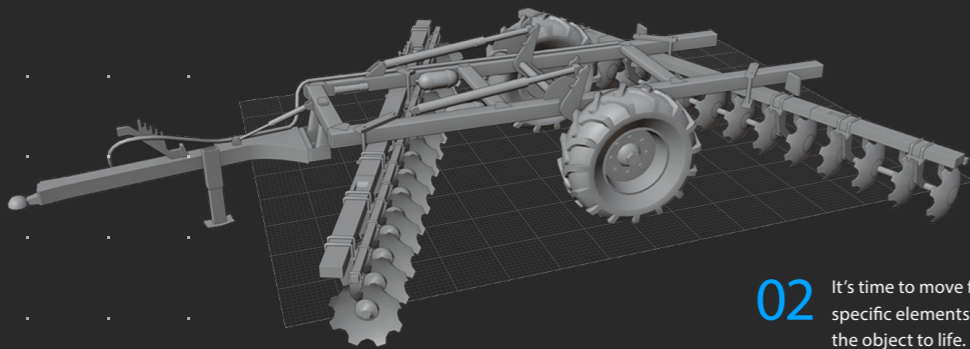


MODELLING

Until now, it was only on paper. Now, however, it is time to take our thoughts into the third dimension and to prove that the concepts are functional and look good from every angle. 3D is a completely different solution to the problem itself. You must be good at design and be able to handle all the technical requirements.

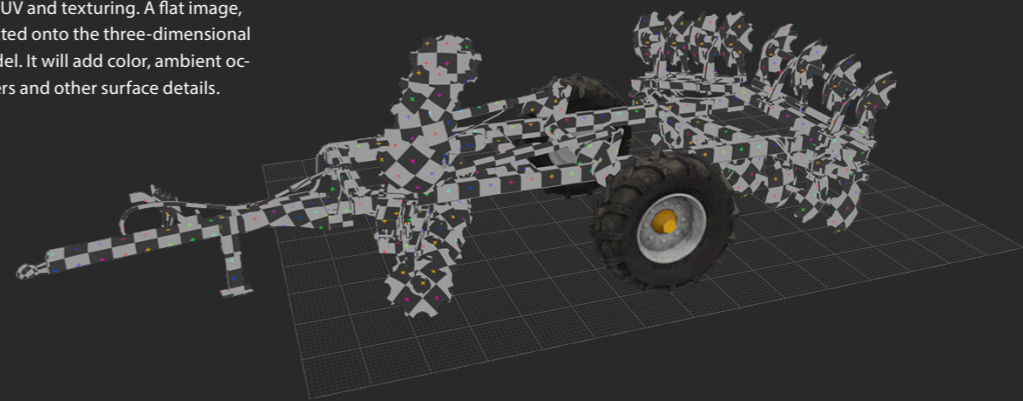


01 Each step in the workflow builds on the back of the previous ones. The first step is modelling the basic shape. You need to roughly represent the main forms with the correct proportions.



02 It's time to move further into detail. More specific elements are implemented to bring the object to life. Finally, the model is complete in its forms.

03 Let's dress up the grey forms in a nice coat. This is done by means of UV and texturing. A flat image, a texture, is projected onto the three-dimensional surface of the model. It will add color, ambient occlusion, dirt, stickers and other surface details.



04 The model's look is finished. The next stages include specific preparations for the game engine – definition files, placing the model on a trailer, proper securement with cargo straps and chains. Last but not least, the test reports are incorporated.

05

MACHINES



CRAWLER TRACTOR

The agricultural powerhouse. Crawlers have better traction and lower ground pressure than wheeled machines.

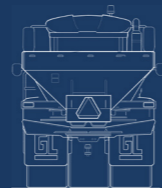
The development of this one was really fun. It's usually the flagship of the manufacturer, almost like a statement of strength with powerful and distinctive features. We also did a special U.S.A. edition of the Greenler version with eagle paint.

Engine	450 hp
Weight	15700 kg
Height	3.1 m
Length	5.7 m
Speed	60 k/h





FERTILIZER SPREADER



Rotary spreaders use a rotating base plate to spread the fertilizer from the hopper. Each pass spreads the granules over a wide area.

We have built a variant with the engine moved from its normal position to the side. This design is quite unusual to the eye of the beholder, but

it makes sense because this machine is three-wheeled. There just isn't enough room above the front axle.

Behind the cabin, an imaginary boundary line can be discerned. One half of the machine is designed with fancy curved lines in line with the company's design language. The other

is strictly utilitarian – the shapes are built solely to serve the purpose and function of the machine

Engine	280 hp
Capacity	6.5 m ³
Working Width	24 m
Weight	14500 kg



A



B



C



C2

HAY BALER

Simply a machine that bales hay or straw. Hay in, bales out. We pictured a tandem axle towed version for square bales 90×90 cm.

The pressing chamber is well hidden, but you can see the detailed pickup roller and bale ejector as they emerge from under the shiny body plates. With this machine, the feeding pasture can be delivered in a neat bundle!

Bale	90×90 cm
Power Required	120 hp
Width	2.7 m
Weight	7711 kg



A



B2



B





GRAIN TRAILER

Capacity	310 bushel
Width	2.5 m
Length	8.1 m

The grain trailer, also called the auger wagon is a towed trailer with a built-in conveyor system. We have modelled two variants, one with axles and one with tracks. Their shapes are simple and distinctly utilitarian in the form of an inverted prism. All the main edges face the conveyor's pick-up point.

A₂

✔ picked variant

B₂B₂

✔ picked variant

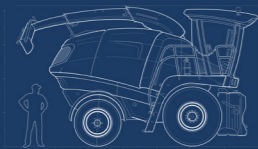
FORAGE HARVESTER

Engine	420 hp
Width	3.1 m
Height	4.2 m
Weight	13 698 kg

A machine that harvests forage for silage. The crops are chopped into small pieces and blown into a wagon

or onto another vehicle driving alongside. The fermented silage provides feed for hungry livestock.

It is an easily distinguishable machine in the field or on a trailer with its different sized wheels (or sometimes even tracks) and a curved, beetle-like appearance.



A₂



A₁

A_{1.1}



B

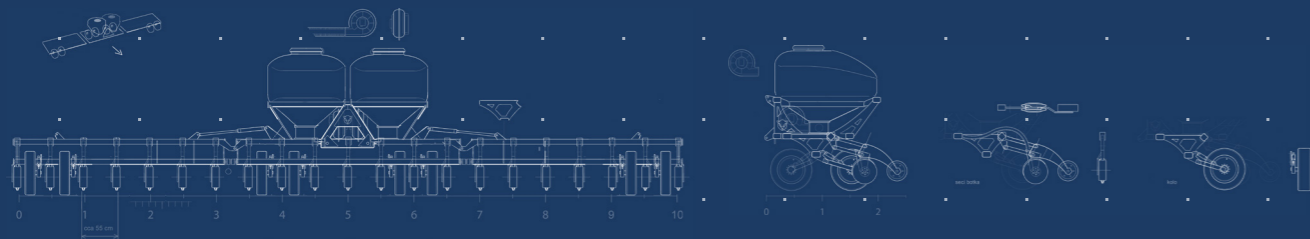
semi-track variants ↑↓



B₂



SEEDING UNIT

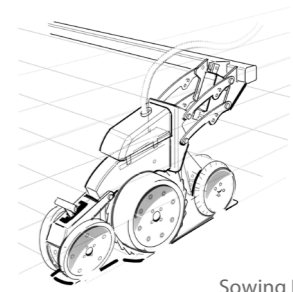


A seeding unit is a device used to plant crops, grass and apply fertilizer. We have modelled a semi-mounted configuration with 21 sowing boots.

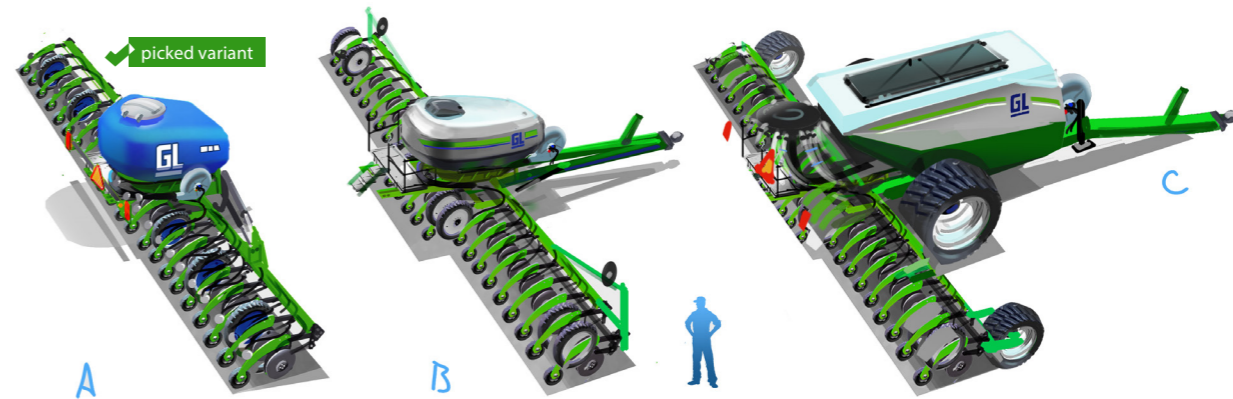
This one was challenging. We had to represent all the mechanisms and functional parts because these machines are usually very bare. All the

features are visible, nothing is hidden under the fancy bodywork. The utility vs. design appeal indicator leans heavily on the side of function.

Capacity	120 bushel
Working Width	10 m
Row Spacing	45—80 cm
Power Required	300 hp



Sowing Boot

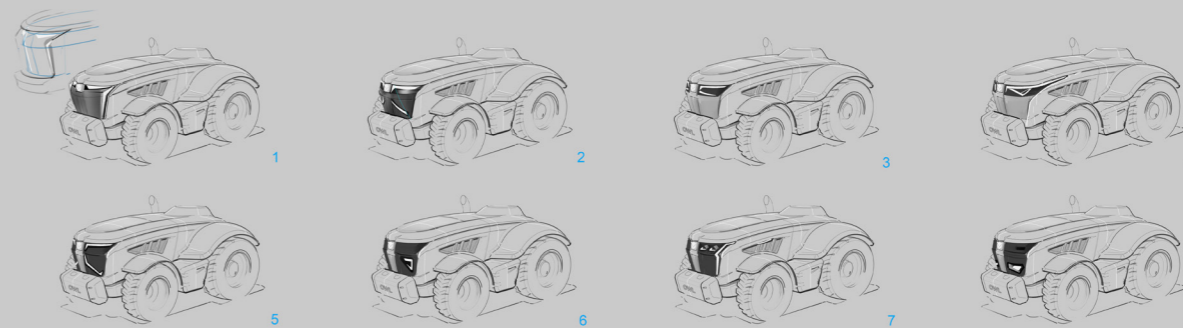
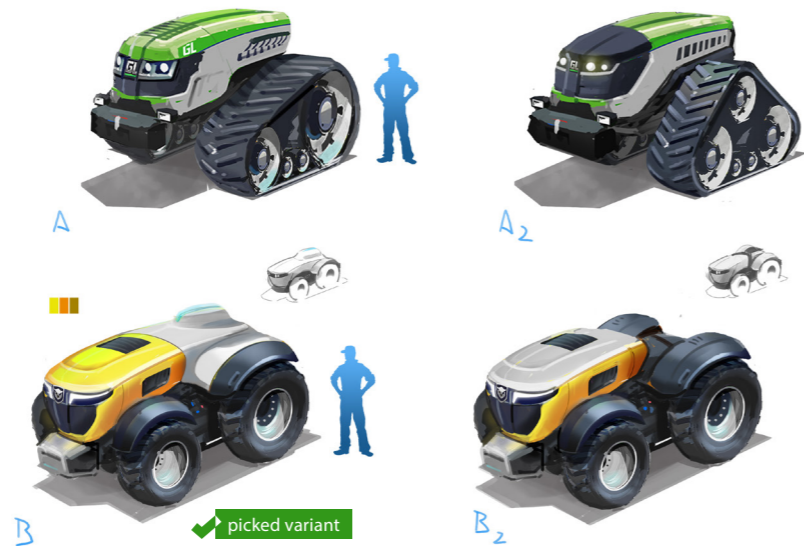


DRIVERLESS TRACTOR

Engine	450 hp
Length	5.2 m
Height	2.2 m
Weight	17500 kg

The future is here – or is it? A driverless tractor operates without a human inside the machine. We distinguish between fully autonomous technology and supervised autonomy. This idea appeared as early as 1940, but the concept has naturally evolved over the last few years.

We really liked the development. These futuristic machines are a bit controversial but very prominent. Its look of a classic tractor, but without a cab, is almost disturbing.



Lights Iterations

SPRAYER

Engine	250 hp
Working Width	22 m
Capacity	716 gallon
Weight	15 059 kg

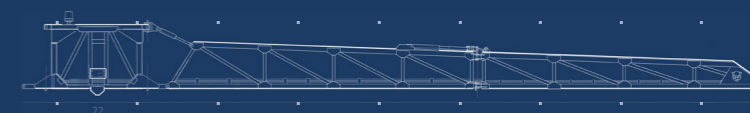
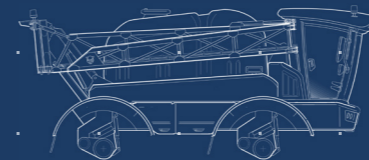
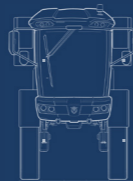
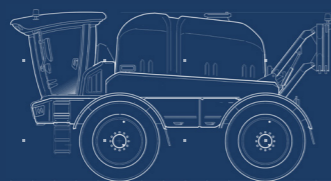
The self-propelled sprayer is used to spray water, weed killers and other liquid materials.

This machine is equipped with a folding boom that can cover 22 metres of field in one pass. The sprayer is carried by a special chassis with high ground clearance and adjustable axle wheel track spacing. It is necessary to set the correct spacing depending on the crop rows to avoid damage.



✔ picked variant

✔ picked variant



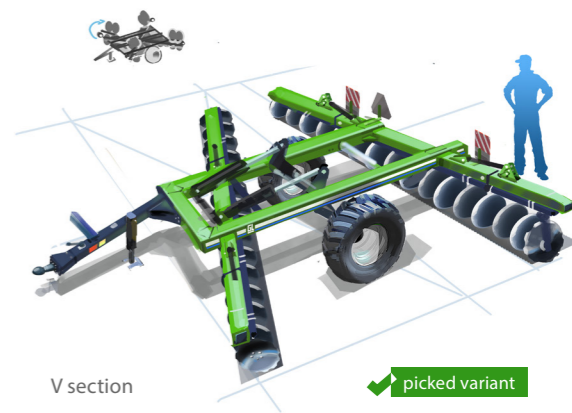
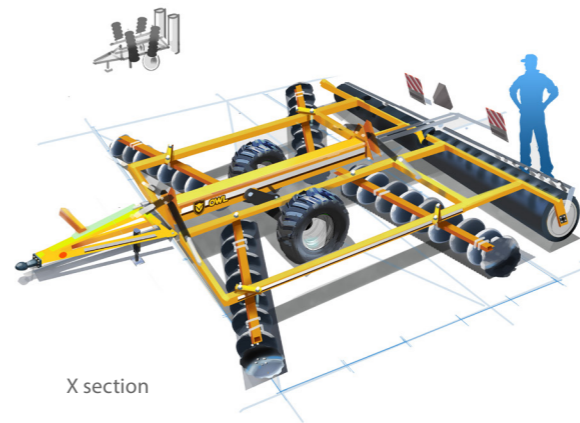
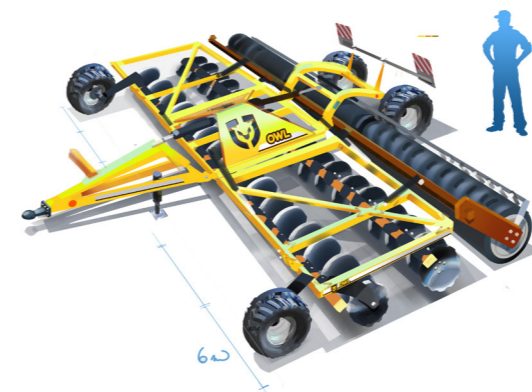
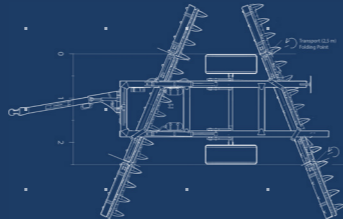
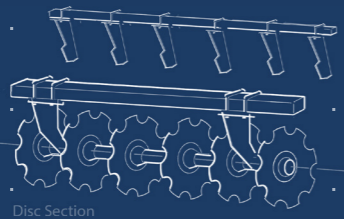
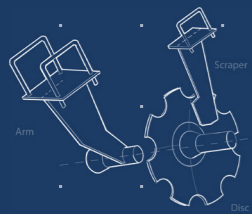


Working Width	6 m
Required Power	180 hp
Discs	30
Weight	5896 kg

A disc harrow is an agricultural implement used to cultivate the land on which crops are to be planted. Unlike the plough, it has relatively shallow penetration into the soil.

After considering more European-type options. We have produced an asymmetrical V-shaped design with folding frames.

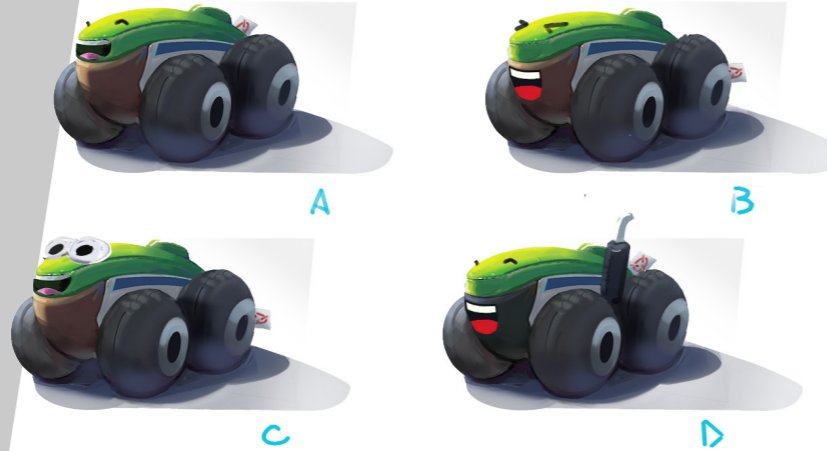
DISC HARROWS



06 TOYS

Designing and modelling toys was a welcome change after the heavy, cramped and precise machines. Toys are fun, who doesn't love a cute scarecrow with a bobbing head on the dashboard?

Stuffed Autonomous Tractor →



Plastic Harvester Toy



Lunch Kit



Scarecrow Bobblehead



08

PEOPLE

What is company without its people? We are lucky to have a bunch of great gaming enthusiasts here at SCS Software. There are many projects in development, but let's stick to the Farm Machinery DLC and the people behind it.

It begins with the Research and Concept Art departments. Both of them are part of the pre-production phase. They bring the first ideas and visualizations. 3D designers put all the vertices in the right places.

Then come the programmers, the modern-day wizards, who make it all work. Management and the producers oversee the process.

Marketing presents it in the best light. And, there are, of course, the testers. They make sure everything is of good quality and ready for release.

And last, but not least, our lovely players. Thank you, and remember to keep the shiny side up, and the dirty side on that fertile farm soil!

Research
and Vehicles
DLC's teams





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