

Forum:[Hack Forums](#)

Thread: [\[TuT\] Make a crystal in Cinema 4D \[TuT\]](#)

Sejskaler - July 21, 2013, 6:58 am

Tutorial written in the name of:

Hello.

So I have been in training with some Cinema 4D, and I would like to make a tutorial on a basic, which is how to create a crystal (which a glassy kind of look), it is really easy, so first of all, get your Cinema 4D loaded up, and let's begin!

I will make this a double-post, since I would not like to type everything again...

First of all, create a new file (ctrl + n), and make a capsule:

Spoiler [\(Click to View\)](#)

Now, for the capsule properties, under your attributes, change the rotation segments to around 6, the cap segments to 1, and radius and height as you wish, height segments are not needed to be changed, I use the radius 35 and height 238 cm in this tutorial, as shown here:

Spoiler [\(Click to View\)](#)

Now, delete the phong (press it and press backspace or delete):

Spoiler [\(Click to View\)](#)

We are now done modelling the basics:

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Okay, let's continue, press the capsule object, and hit "C" to make it editable:

Spoiler [\(Click to View\)](#)

Now, go to your left panel, press the "use polygon tool":

Spoiler [\(Click to View\)](#)

The lines should now be blue, so that means they are editable, or rather, that we can select them, so let's do so.

Take your live selection tool:

Spoiler [\(Click to View\)](#)

Change the settings of it as shown below:

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hold your mouse button and select all of the diamond:

Spoiler [\(Click to View\)](#)

Right click, and select the "knife tool" (or use the shortcut m, k, k):

Spoiler [\(Click to View\)](#)

Now, drag and slice the diamond a lot of places (remember to rotate and take all sides, and the bottom too, you do so by pressing the little circle in the right corner of your diamond display):

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Now, it didn't do anything, so what we want is to use these for randomizing, we do so by taking the randomizer, this is found under mograph - effector - random:

Spoiler [\(Click to View\)](#)

Okay, now drag and drop the random into the capsule:

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Spoiler [\(Click to View\)](#)

and under "Parameter" I used these:

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okay, so, it's looking quite like a crystal/diamond now:

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Now, go to the bottom of your screen, under materials, make a new material:

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double click it, and add "transparency" and "reflection":

Spoiler [\(Click to View\)](#)

Now, go to the transparency tab, and change the refraction to 2:

Spoiler [\(Click to View\)](#)

After that, go to reflection, and add a fresnel:

Spoiler [\(Click to View\)](#)

The texture is done, drag and drop it onto the crystal.
Now, let's make a lightroom, just a basic one.
Create a floor:

Spoiler [\(Click to View\)](#)

Place it underneath the crystal:

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Now, just make a basic material and apply it to the floor, follow the start of how we made the crystal material, just make a new material and apply it.

Now, create a light:

Spoiler [\(Click to View\)](#)

And put it above the crystal.

Now, go to render settings:

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Right click (or click effects) and add Ambient Occlusion and global illumination.
Let AO be, but change a couple of settings in GI:

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Now, here is the outcome:

Spoiler [\(Click to View\)](#)

If you wish, play with the settings, make another and better lightroom, here is an experiment I did by adding some caustics, and just playing around (this is the exact same crystal from this tutorial (same material etc.):

Spoiler [\(Click to View\)](#)

Since I will split this in a 2-3 part post, due to too many images, I will be answering questions on thread ;)

Hope you enjoyed this neet little tutorial

Regards
- Sejskaler

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?ZerØ - July 21, 2013, 8:22 am

Damn man, nice tut - detailed, and easy to follow :P

I'll post my result when it's finished rendering.

Ne?ro? - July 21, 2013, 10:03 am

This is honestly amazing! The final product is flawless.

Ryuuji Takasu - July 21, 2013, 11:00 am

The Refraction on the transparency channel should have been 1.2-1.5 these will give the most realistic look.

As for AO put maximum ray length to 200 not entirely sure any more what it did it had to do something with realism.

Edit: Also turning off specular will give it a more realistic look to or put it to metal but you will need to have the right settings for that it will give a more glossy look.

supernatural - July 21, 2013, 11:07 am

Very cool tutorial. Thanks for sharing that.

?ZerØ - July 21, 2013, 11:37 am

(Jul 21, 2013 11:00 AM)Ryuuji Takasu Wrote: [\[CITE\]](#) The Refraction on the transparency channel should have been 1.2-1.5 these will give the most realistic look.

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Edit: Also turning off specular will give it a more realistic look to or put it to metal but you will need to have the right settings for that it will give a more glossy look.

I agree with this. I never use specular, turned it off when I did this tutorial. I don't usually mess with the AO settings, but I'll give this a try to see how it looks :)

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?Cloud - July 21, 2013, 11:39 am

You should remove the spoilers so we don't have to click 200 times.

chrisman0091 - July 21, 2013, 11:40 am

(Jul 21, 2013 11:39 AM)Cl?ud Wrote: [\[CITE\]](#) You should remove the spoilers so we don't have to click 200 times.

I hate it when tutorials have a bunch of pictures NOT in spoilers because then I have to scroll forever just to get to the replys. Maybe put it all in one huge spoiler though.

Sejskaler - July 21, 2013, 11:40 am

(Jul 21, 2013 08:22 AM)?ZerØ Wrote: [\[CITE\]](#) Damn man, nice tut - detailed, and easy to follow :P

I'll post my result when it's finished rendering.

Haha, I can't wait too see it, especially if you experiment with it!

(Jul 21, 2013 10:03 AM)Ne?ro? Wrote: [\[CITE\]](#) This is honestly amazing! The final product is flawless.

Thank you, I am very glad you liked it, though nothing is flawless

(Jul 21, 2013 11:00 AM)Ryuuji Takasu Wrote: [\[CITE\]](#) The Refraction on the transparency channel should have been 1.2-1.5 these will give the most realistic look.

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Edit: Also turning off specular will give it a more realistic look to or put it to metal but you will need to

have the right settings for that it will give a more glossy look.
I will just copy/paste from skype:

hm, I disagree at the AO, the ray length is not needed in this composition, 100 should be a maximum, 93 is more than enough and useable for a standard pc.

For the spectacular, I forgot about it, but it actually can give som great effects if you change the color, it makes it look more vivid

(Jul 21, 2013 11:07 AM)supernatural Wrote: [\[CITE\]](#) Very cool tutorial. Thanks for sharing that.
No problem, I am glad you enjoyed!

(Jul 21, 2013 11:37 AM)?ZerØ Wrote: [\[CITE\]](#) I agree with this. I never use specular, turned it off when I did this tutorial. I don't usually mess with the AO settings, but I'll give this a try to see how it looks :)

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Haha, I see, well, then I can't wait to see how it will end up with these settings :D

(Jul 21, 2013 11:39 AM)Cl?ud Wrote: [\[CITE\]](#) You should remove the spoilers so we don't have to click 200 times.

No, it will seem messy, and take years to load, so I disagree there...

(Jul 21, 2013 11:40 AM)chrisman0091 Wrote: [\[CITE\]](#) I hate it when tutorials have a bunch of pictures NOT in spoilers because then I have to scroll forever just to get to the replys. Maybe put it all in one huge spoiler though.

Hm, once again, I think it looks better with a lot of spoilers, because then you can come back for just one step, and still be able to look around, it is instead of adding "chapters" or "parts"

Thanks for the suggestions though, I will look at it next time ;)

chrisman0091 - July 21, 2013, 11:47 am

(Jul 21, 2013 11:40 AM)Sejskaler Wrote: [\[CITE\]](#) Hm, once again, I think it looks better with a lot of spoilers, because then you can come back for just one step, and still be able to look around, it is instead of adding "chapters" or "parts"

Thanks for the suggestions though, I will look at it next time ;)Thats how I like it to, but was more of creating a compromise(:

OT: Great tutorial!

Sejskaler - July 21, 2013, 11:49 am

(Jul 21, 2013 11:47 AM)chrisman0091 Wrote: [\[CITE\]](#) Thats how I like it to, but was more of creating a compromise(:

OT: Great tutorial!

Haha, I see, well, it is a neat compromise :D

Anyways, thank you :3

?Cloud - July 21, 2013, 12:13 pm

Not sure about you but not everyone has slow internet and it loads instantly for me. Anyway thanks for the tutorial, shame I couldn't read it because I don't want to click so many damn spoilers.

Sejskaler - July 21, 2013, 12:14 pm

(Jul 21, 2013 12:13 PM)CI?ud Wrote: [\[CITE\]](#) Not sure about you but not everyone has slow internet and it loads instantly for me. Anyway thanks for the tutorial, shame I couldn't read it because I don't want to click so many damn spoilers.

Haha, well, I would load in an instant too, but i am thinking about those who have, at you it is just a question of being lazy ?

Anyways, yea, too bad, you can always come back and read it later if you get bored ;)

Kusoo - July 21, 2013, 1:07 pm

Amazing work men, nice tutorial ??

Sejskaler - July 21, 2013, 3:14 pm

(Jul 21, 2013 01:07 PM)Kusoo Wrote: [\[CITE\]](#) Amazing work men, nice tutorial ??

Thank you very much, I am indeed glad you like it :)

?A.J? - July 23, 2013, 5:56 am

Awesome tutorial mate.

Thank you very much.

?XilluX - July 23, 2013, 5:59 am

Oh man, what an amazing Tutorial :O Keep this up!

Vexane - July 26, 2013, 12:50 am

This is a sick tutorial! Never seen anything like it honestly, and I've been doing GFX for quite some time now! Thanks for the share OP!

abhishekbourai - July 26, 2013, 12:57 am

wow than u

i was expecting a vid tut but this very helpful as easy to use...

thank u..

Sejskaler - July 29, 2013, 7:40 am

Thank you very much everyone, I am glad that you like the tutorial :D

Oh, and abh;

I don't like to do video tutorials, I thought about it, but never seemed like it would be a good idea..