

잔디를 위하여

공사장

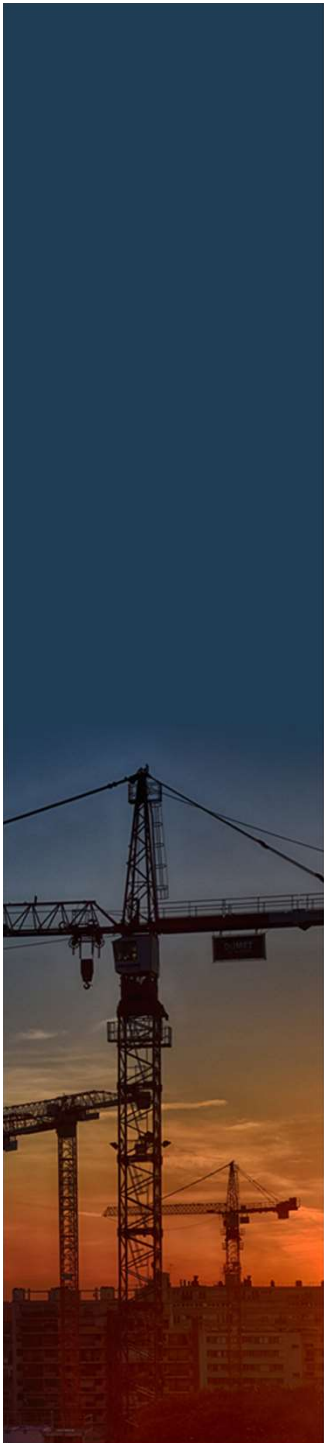
2016033572 문광일
2016033681 이경수

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2. 설계 과정
3. Assembly
4. DMU Kinematics
5. SIMULATION
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1. 주제 선정

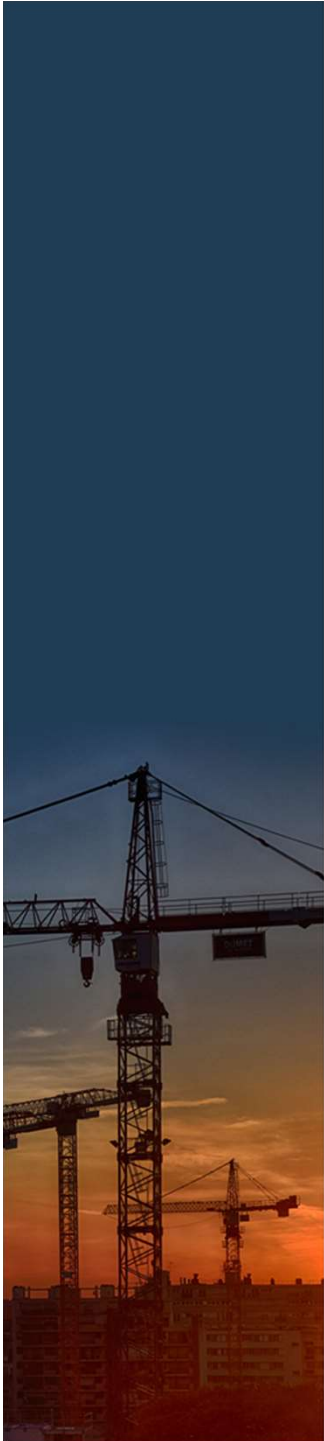


1. 주제 선정

1. 포크레인

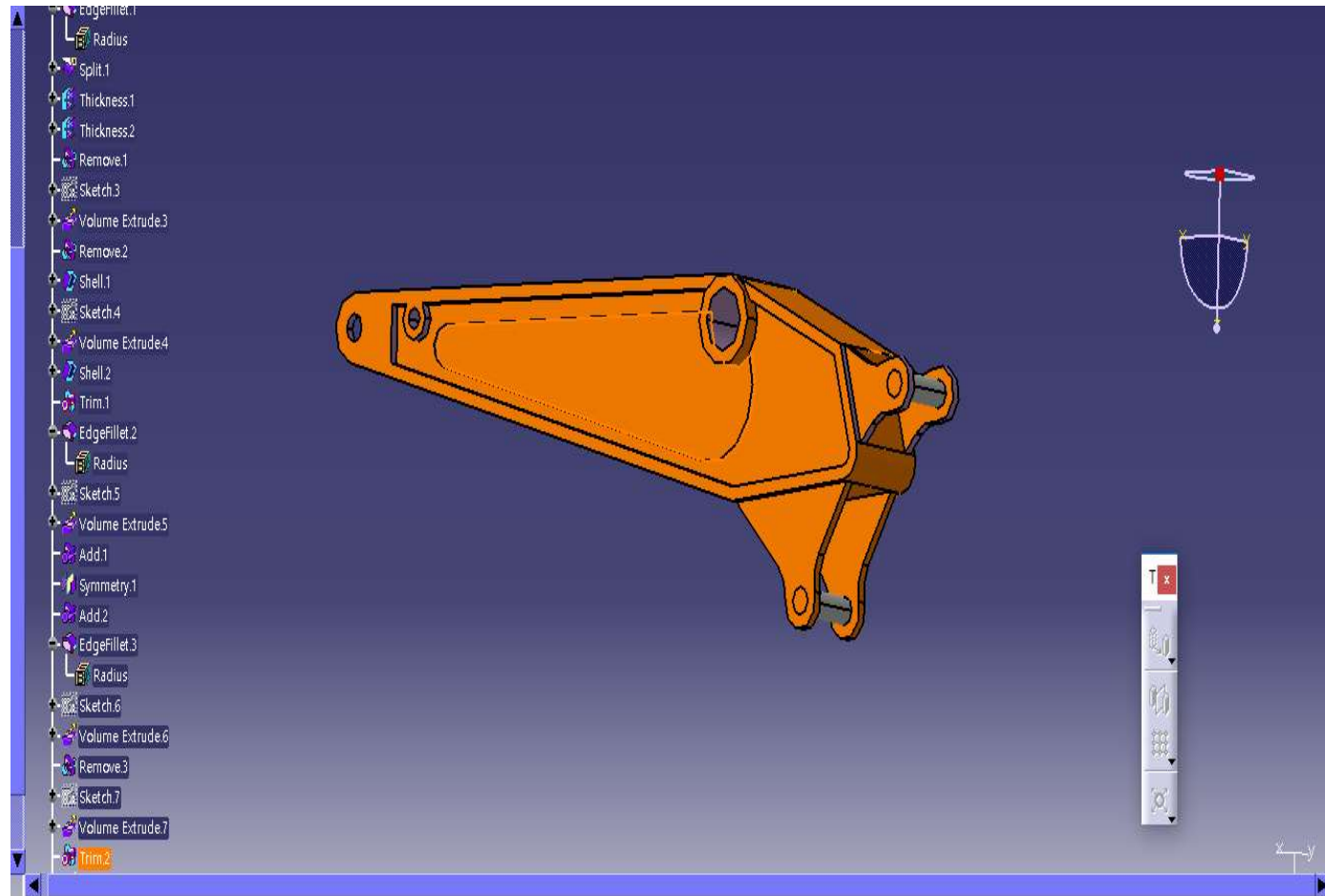
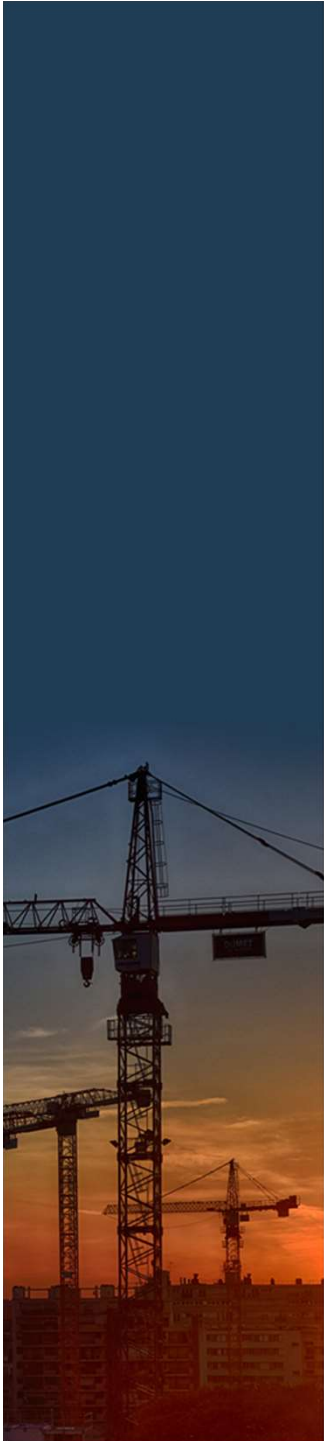
2. 불도저

3. 덤프 트럭(outsourcing)



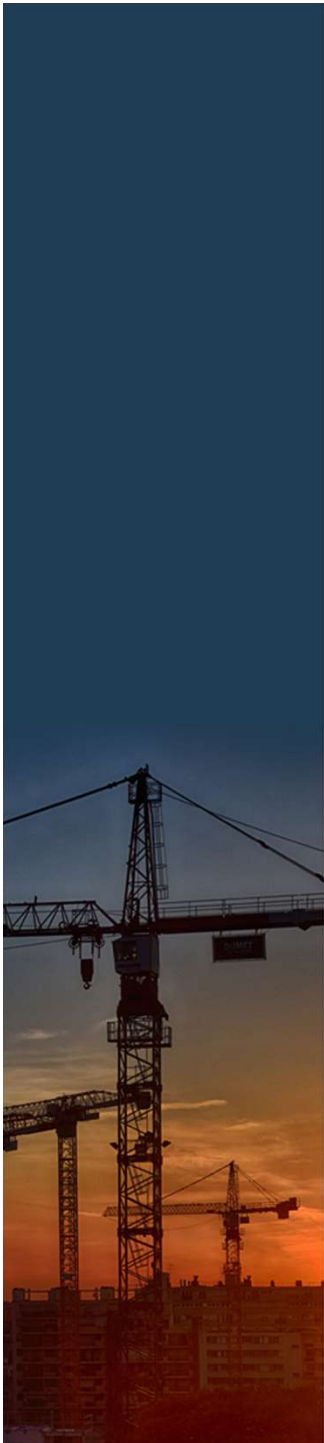
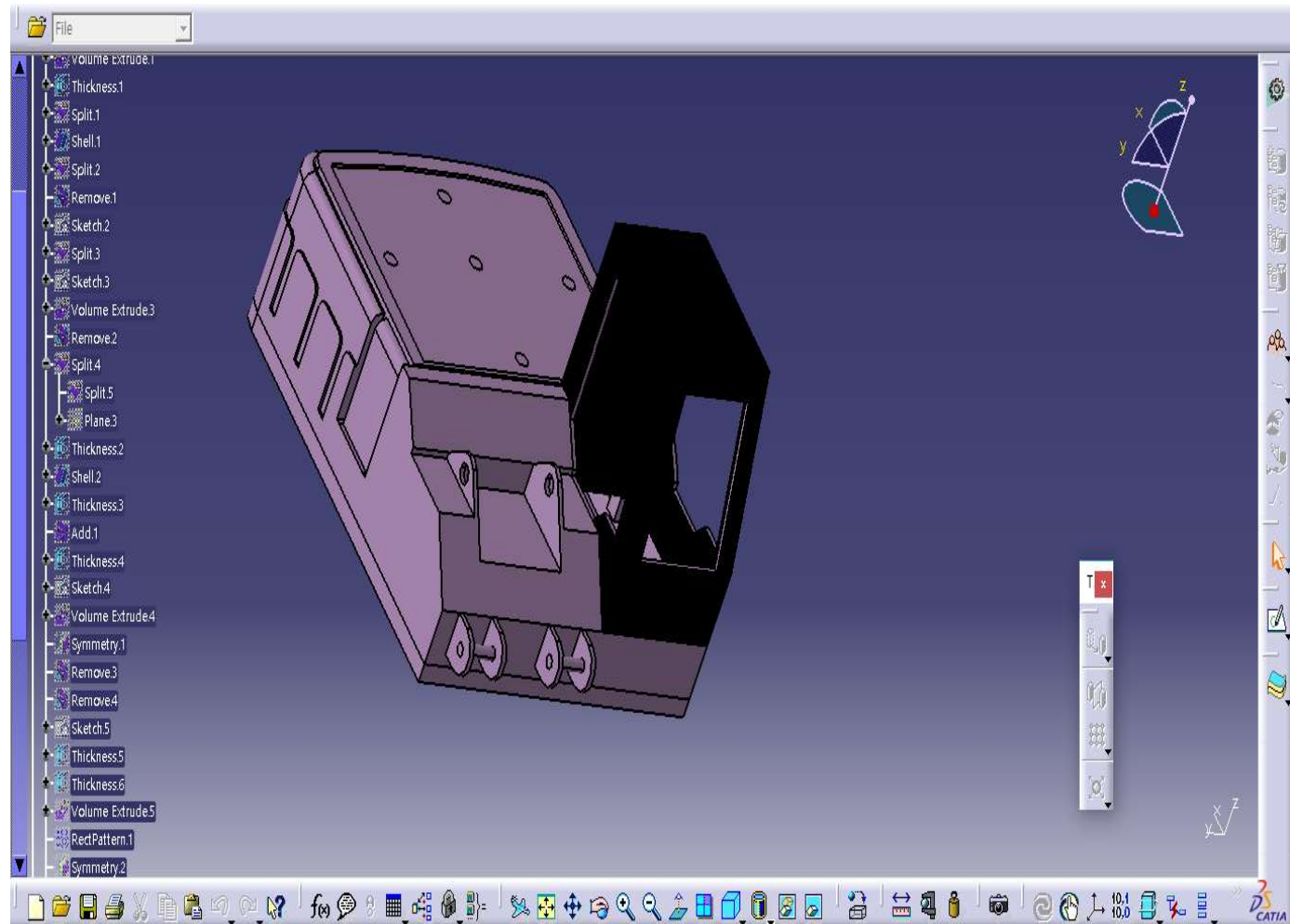
2.설계 과정

포크레인-ARM



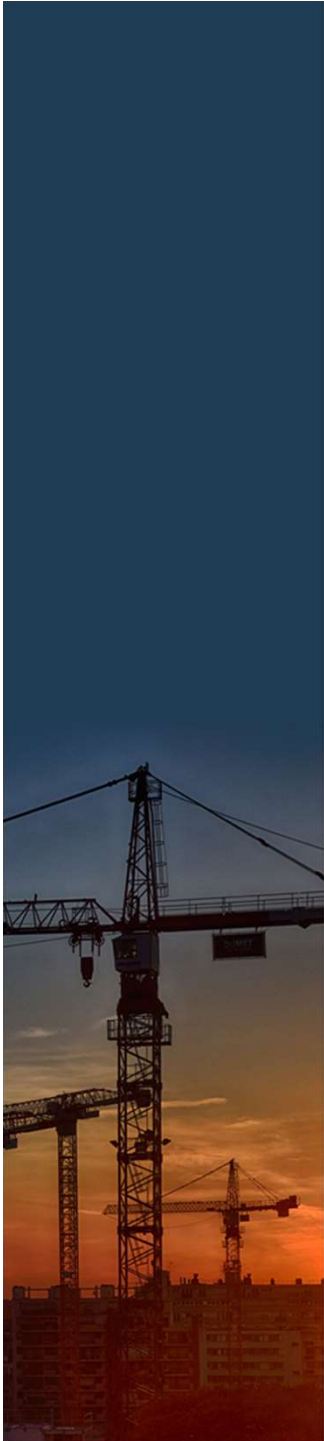
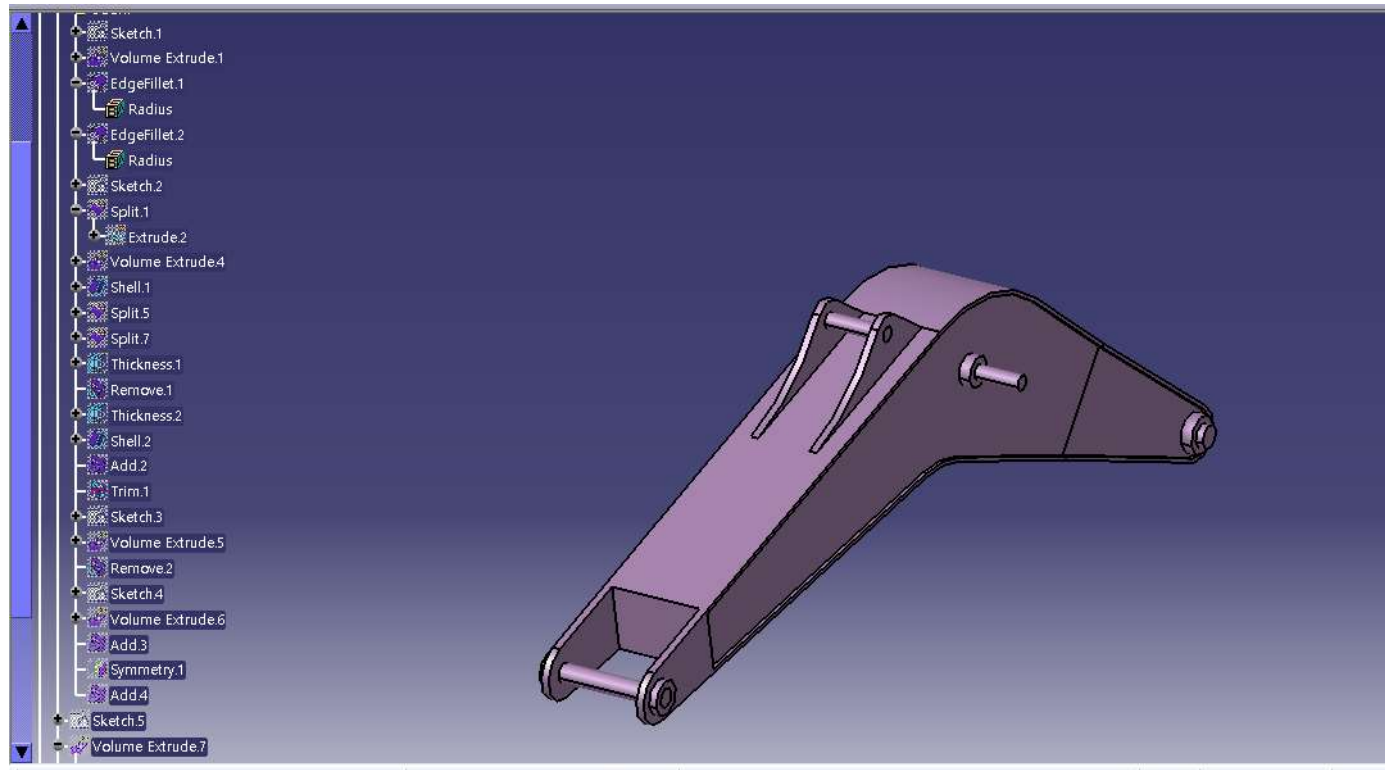
2.설계 과정

포크레인- Upper Body



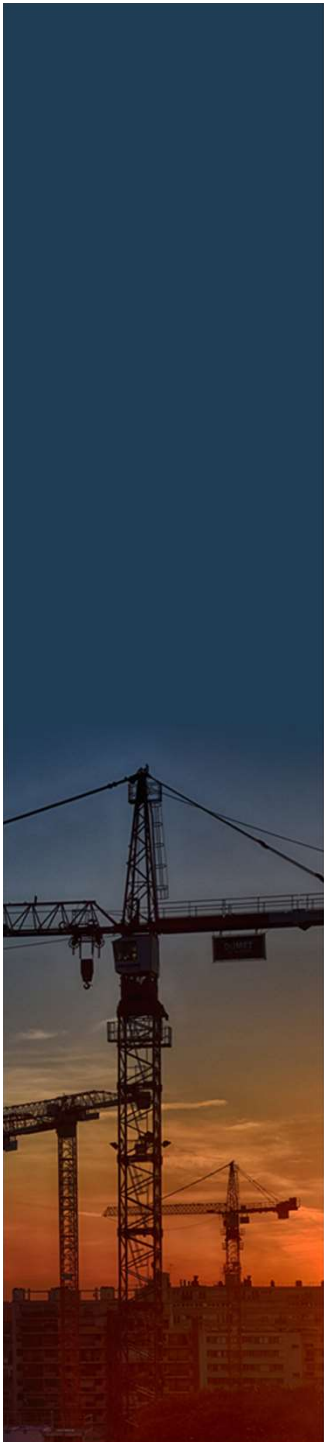
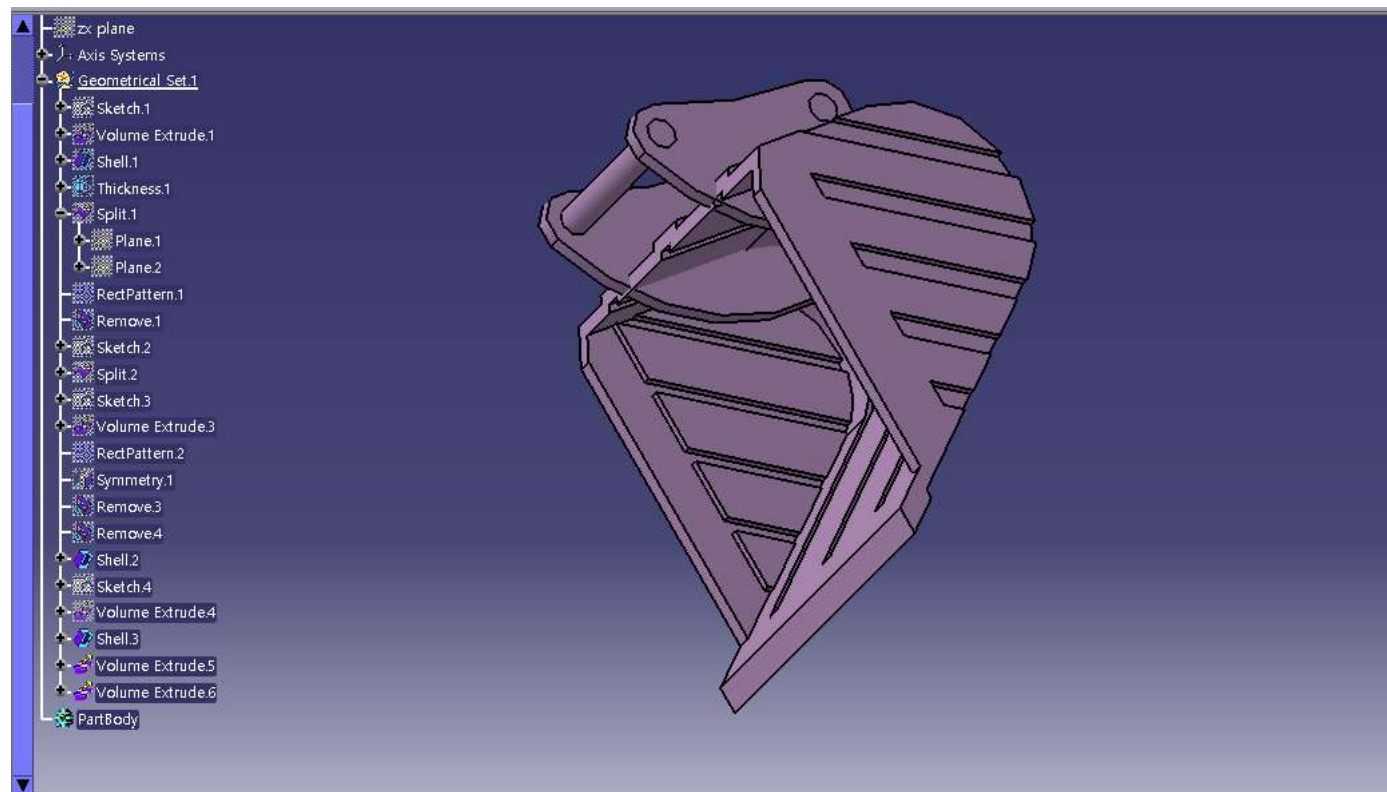
2. 설계과정

포크레인-Boom



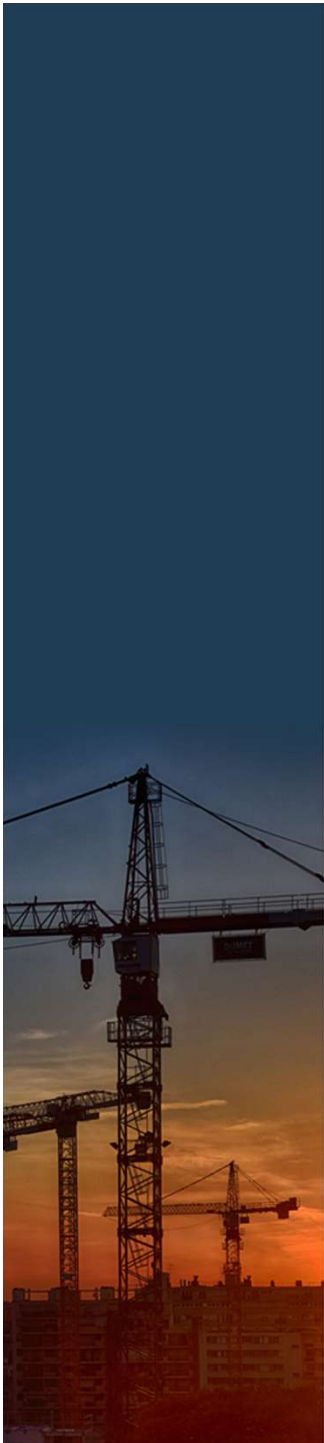
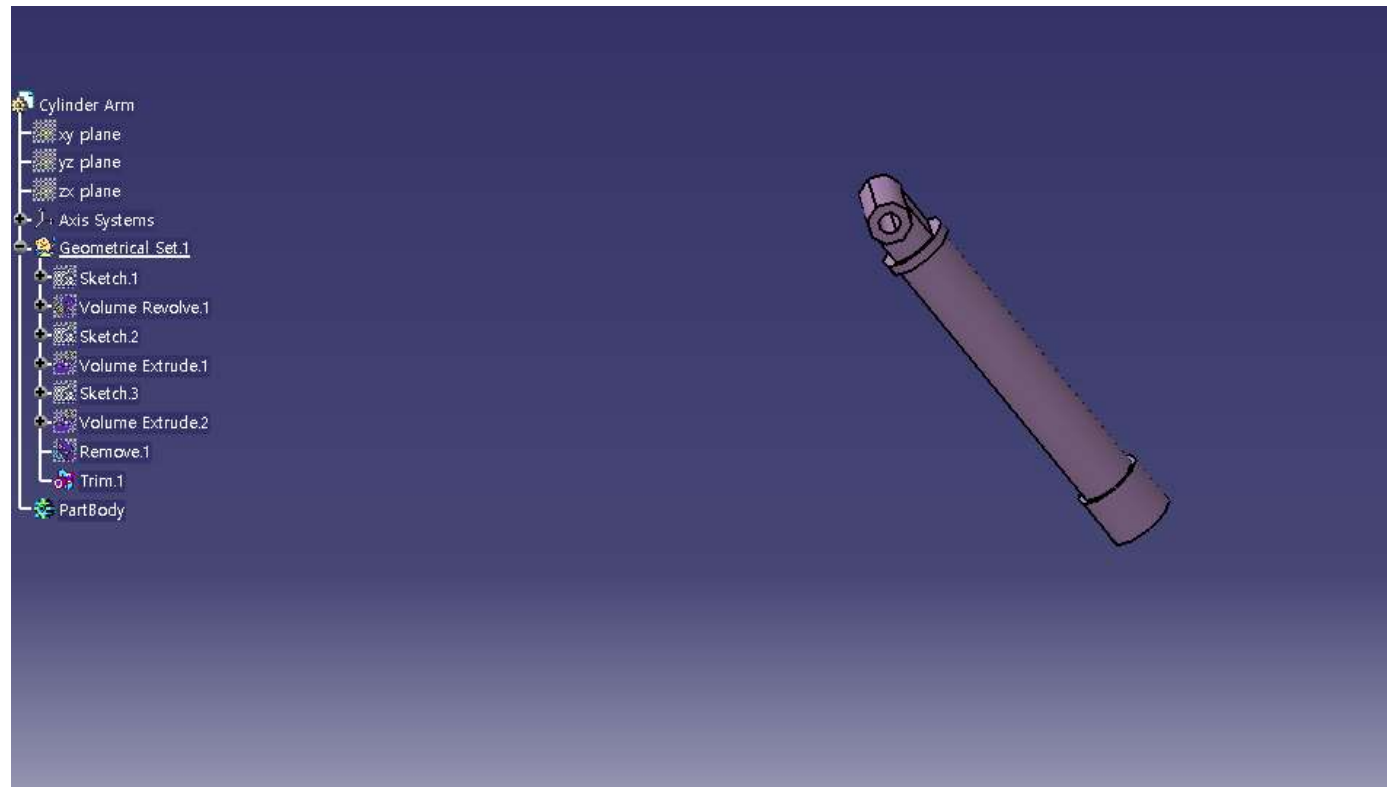
2. 설계과정

포크레인- Bucket



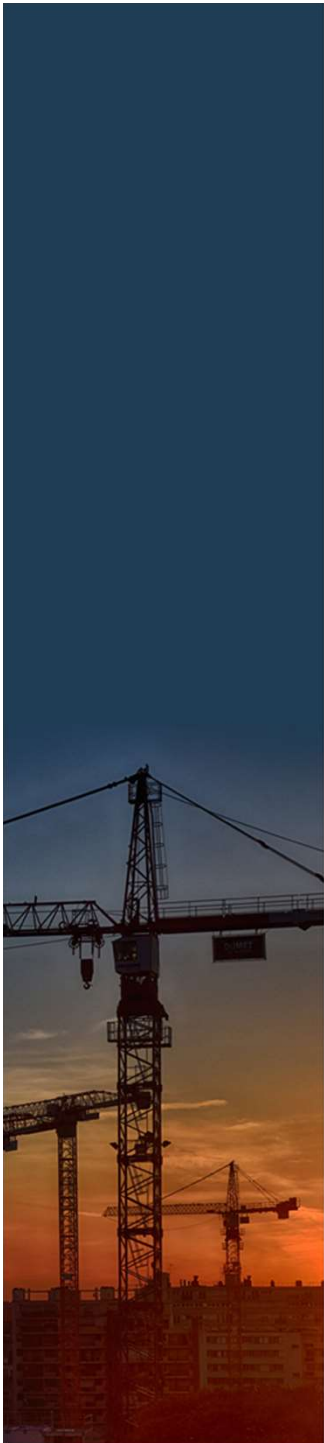
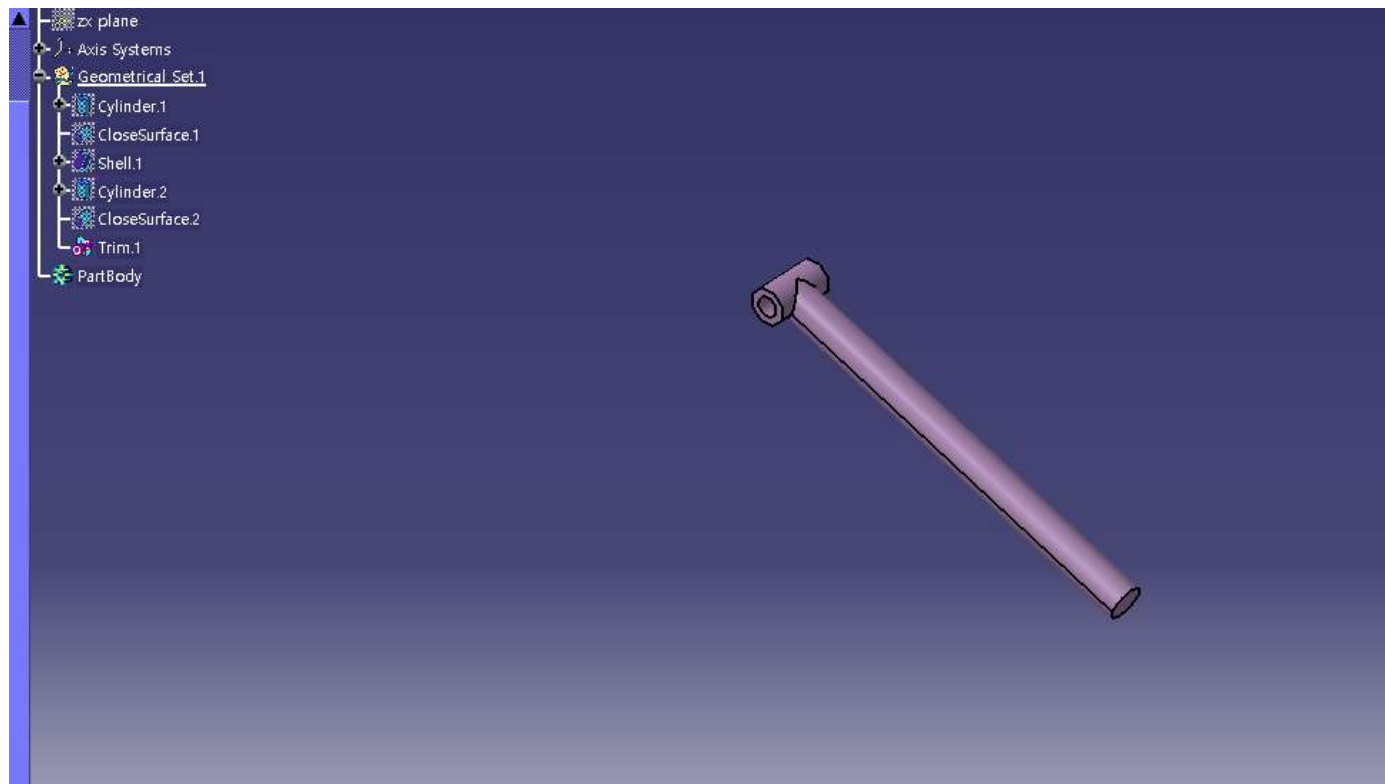
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포크레인-Cylinder Arm



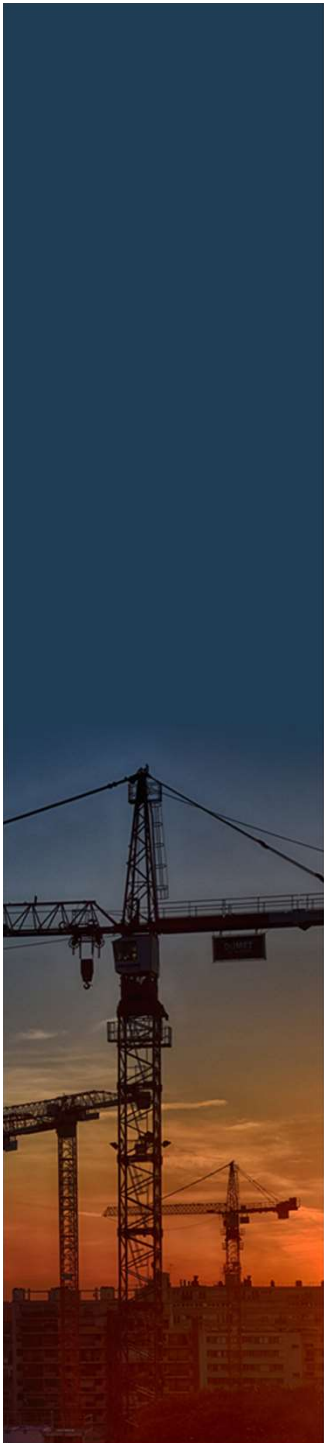
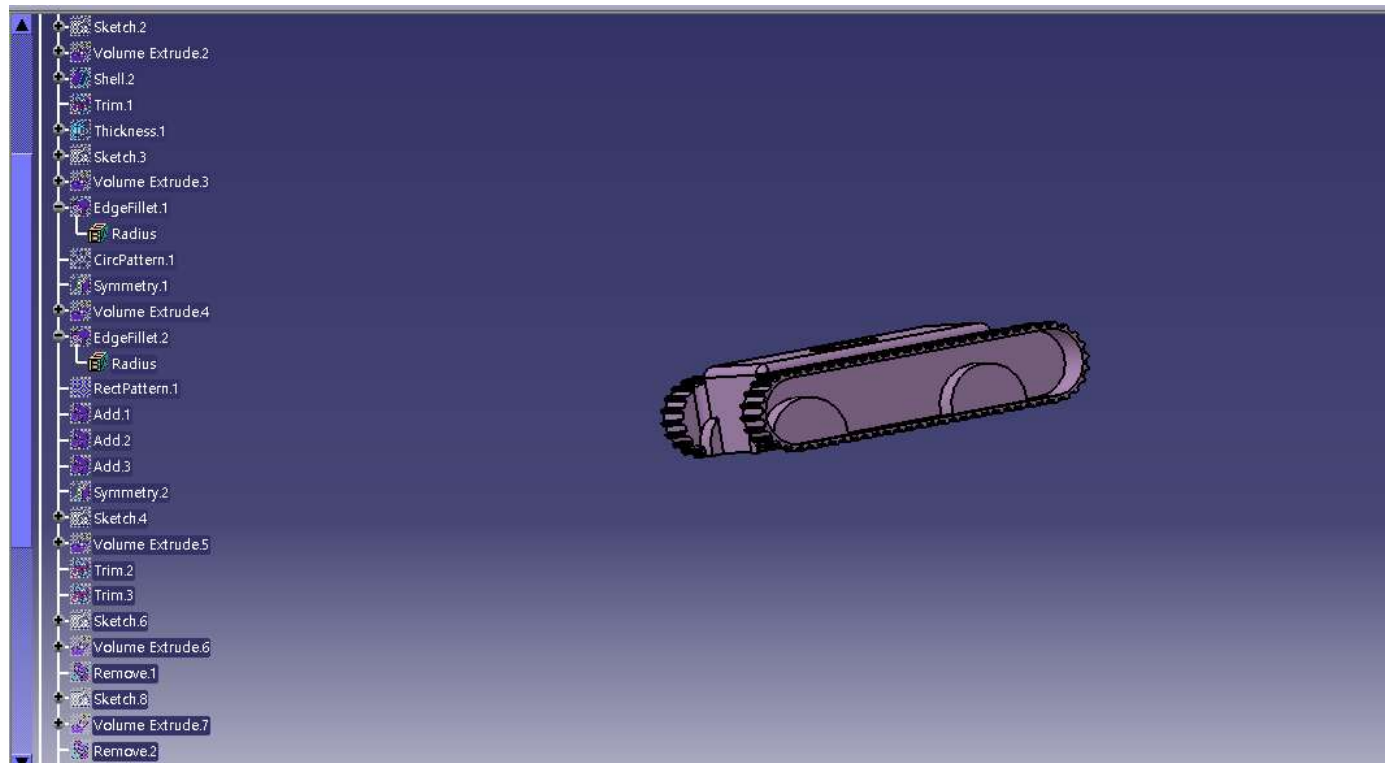
2. 설계 과정

포크레인-Cylinder Boom



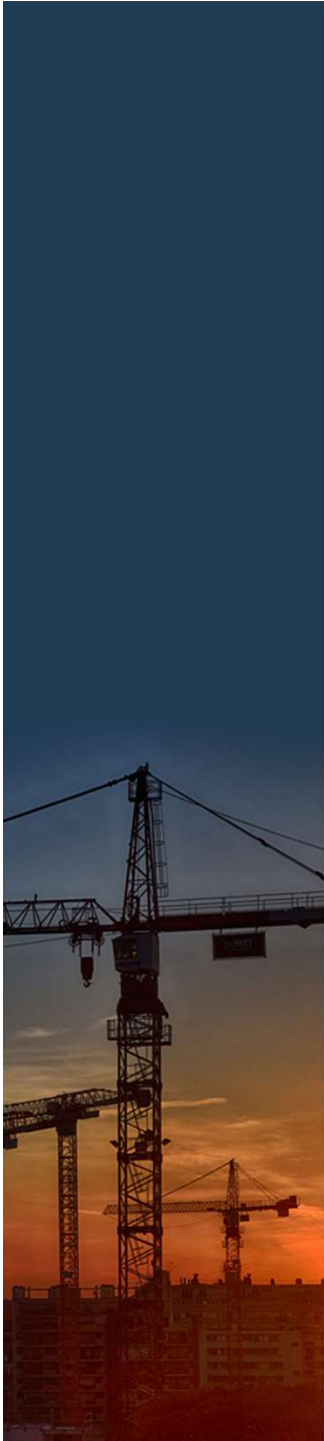
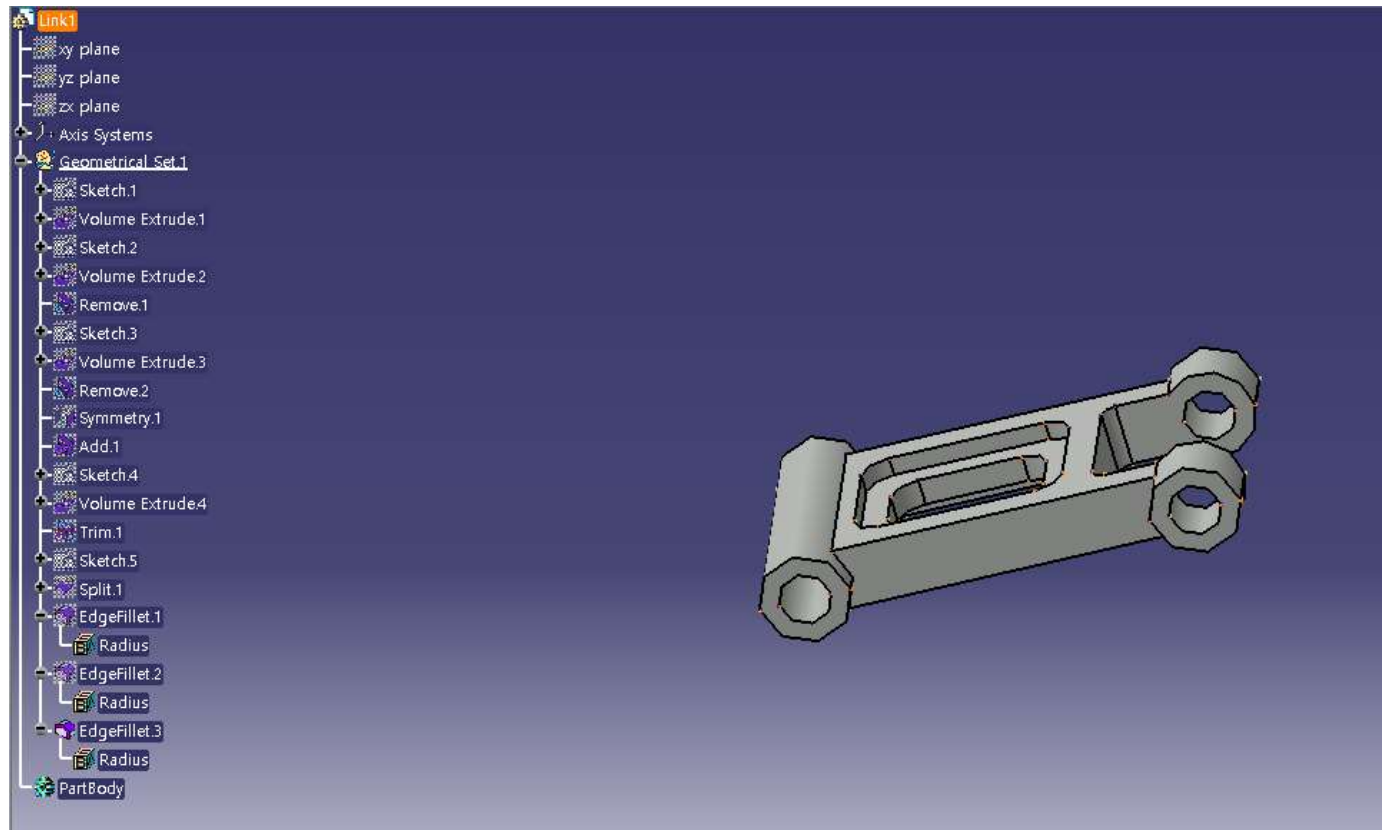
2. 설계 과정

포크레인-Under Body



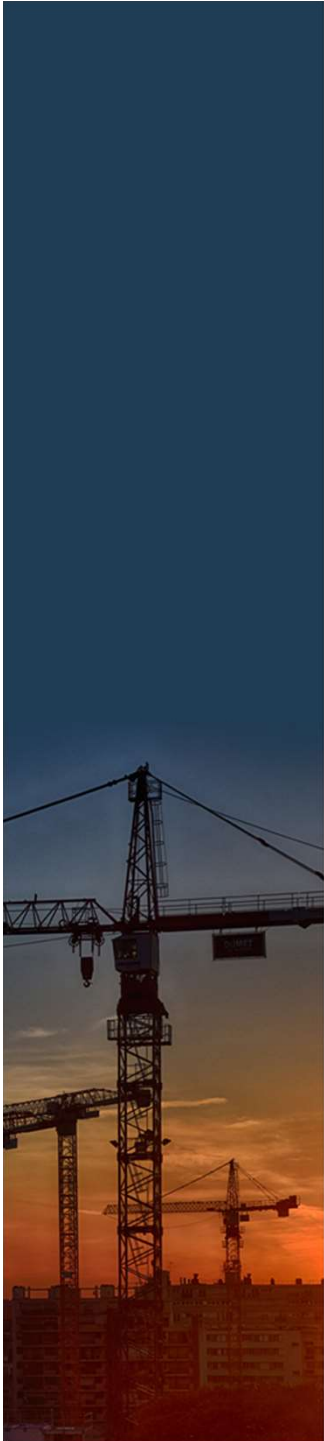
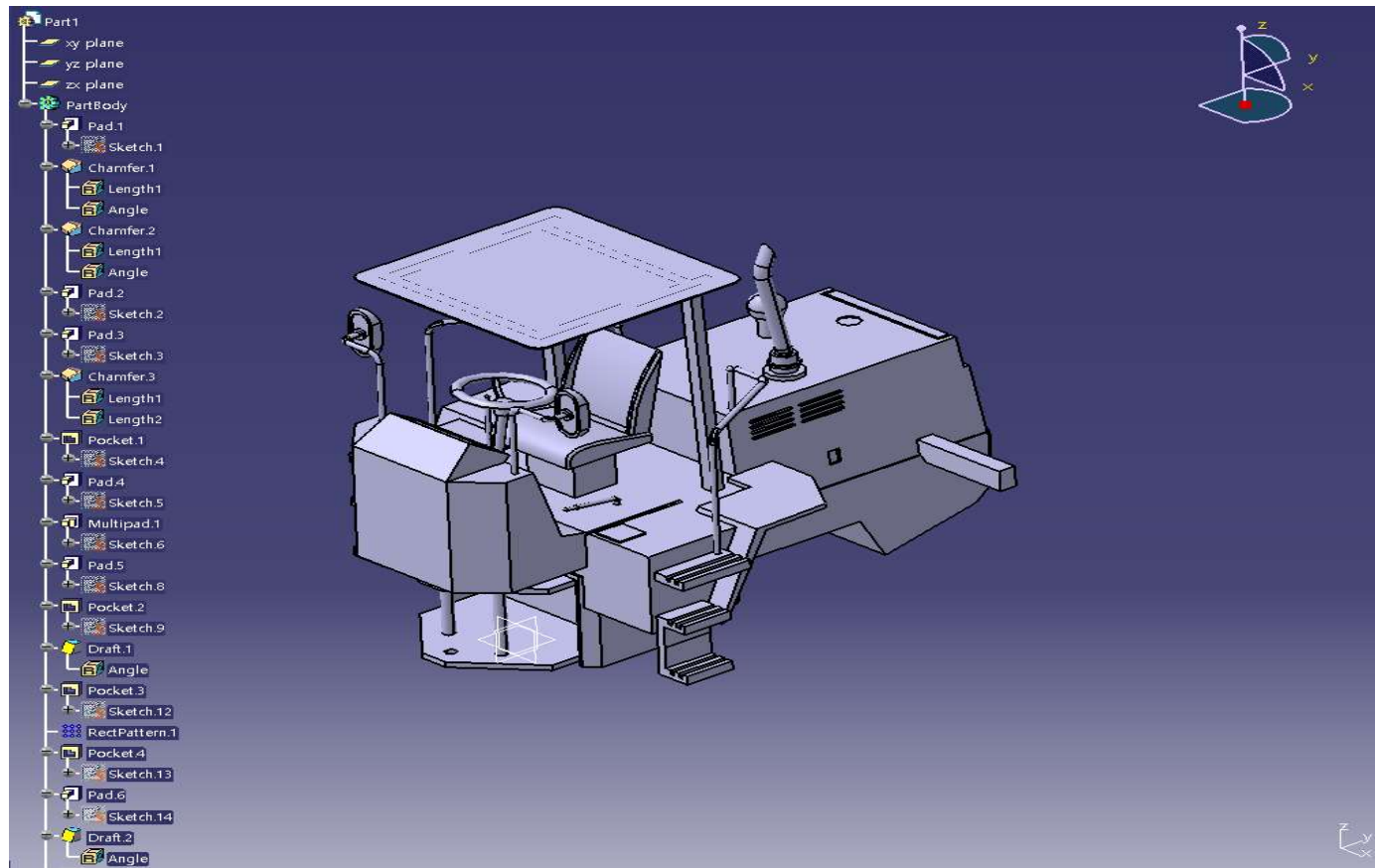
2.설계 과정

포크레인-link



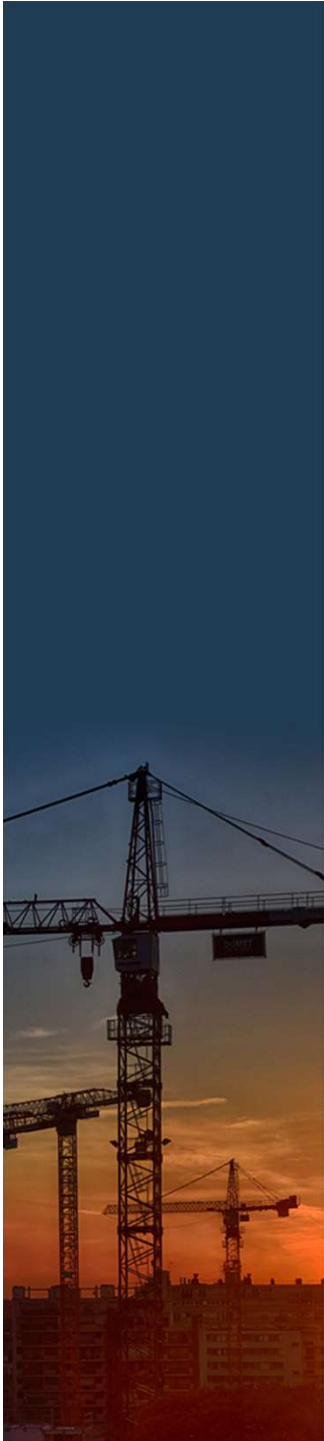
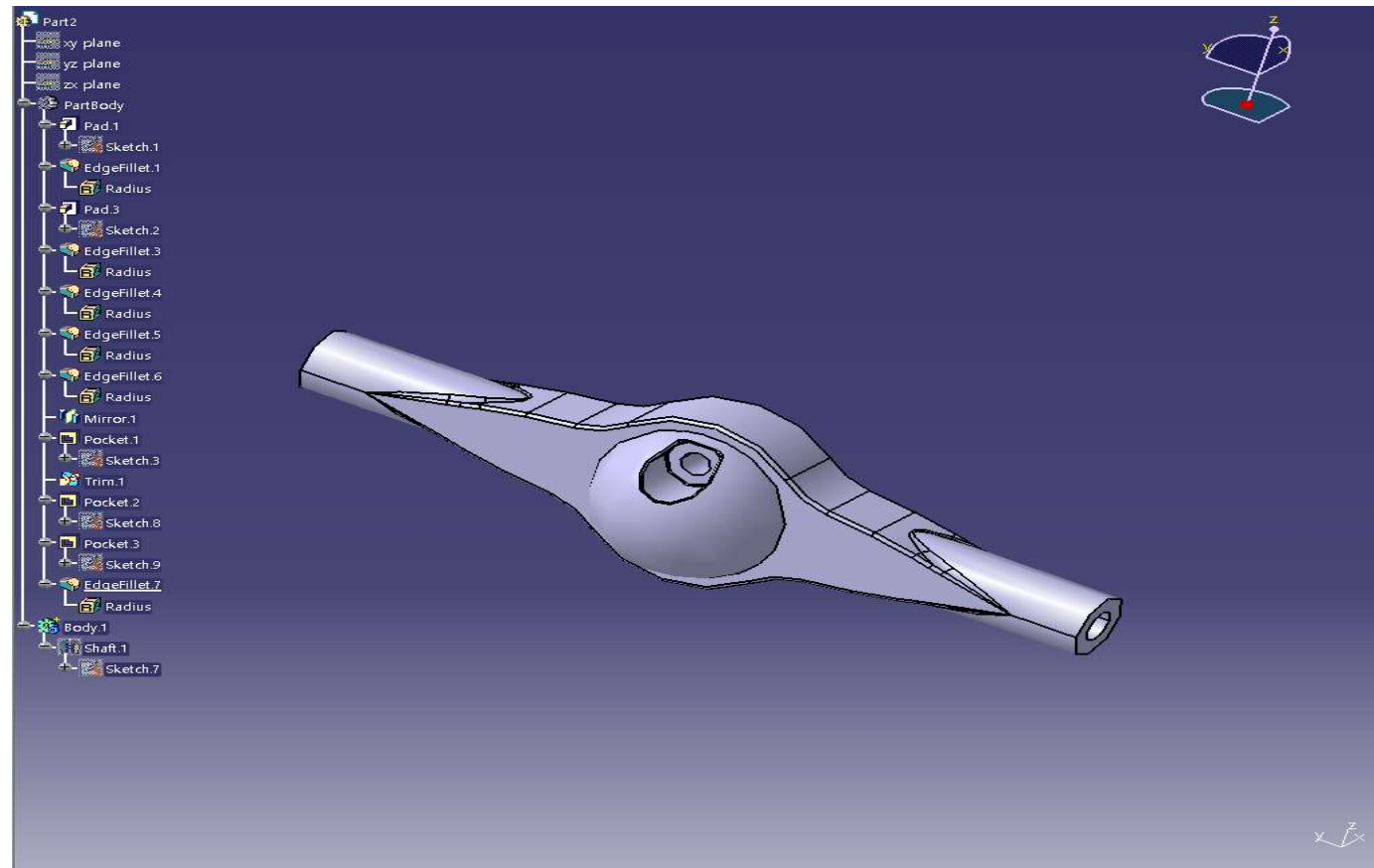
2.설계 과정

불도저 Rear Body



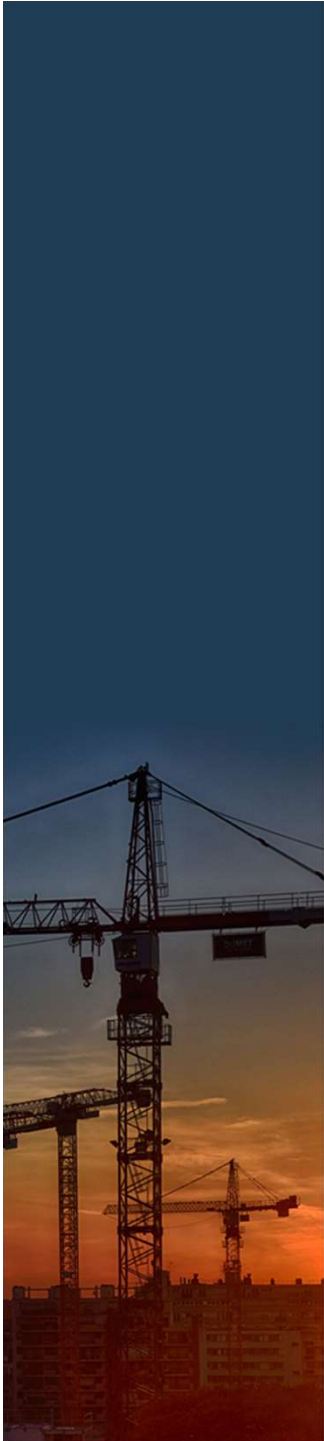
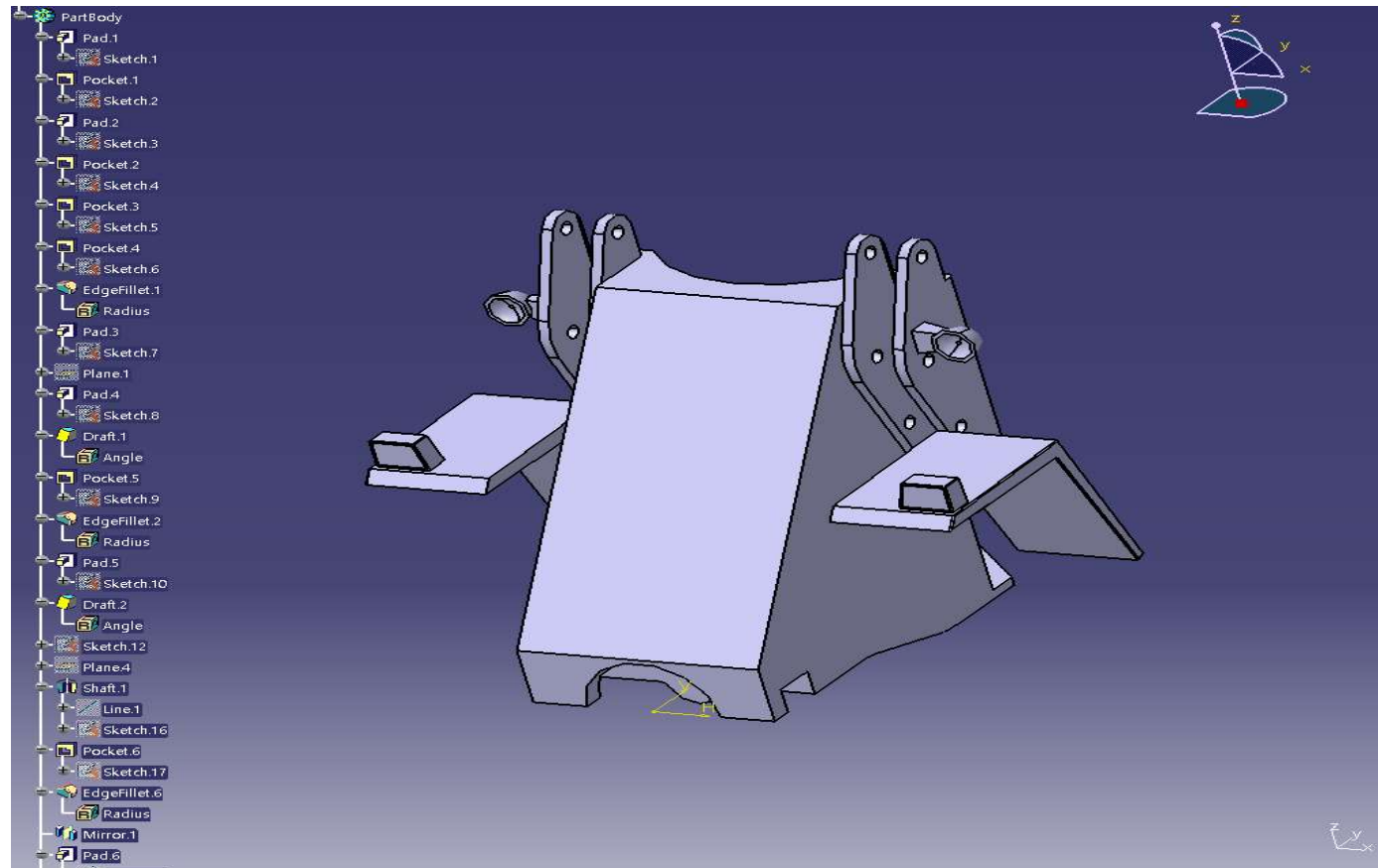
2.설계 과정

불도저 Differential



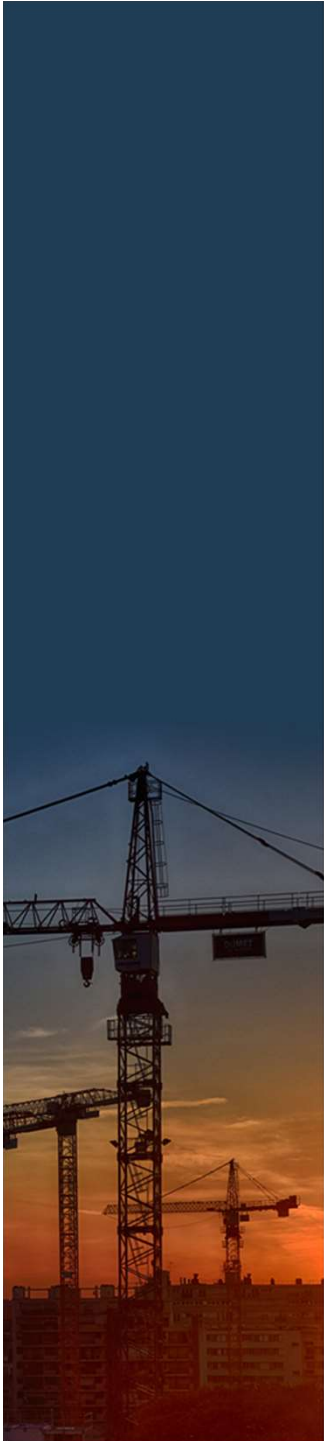
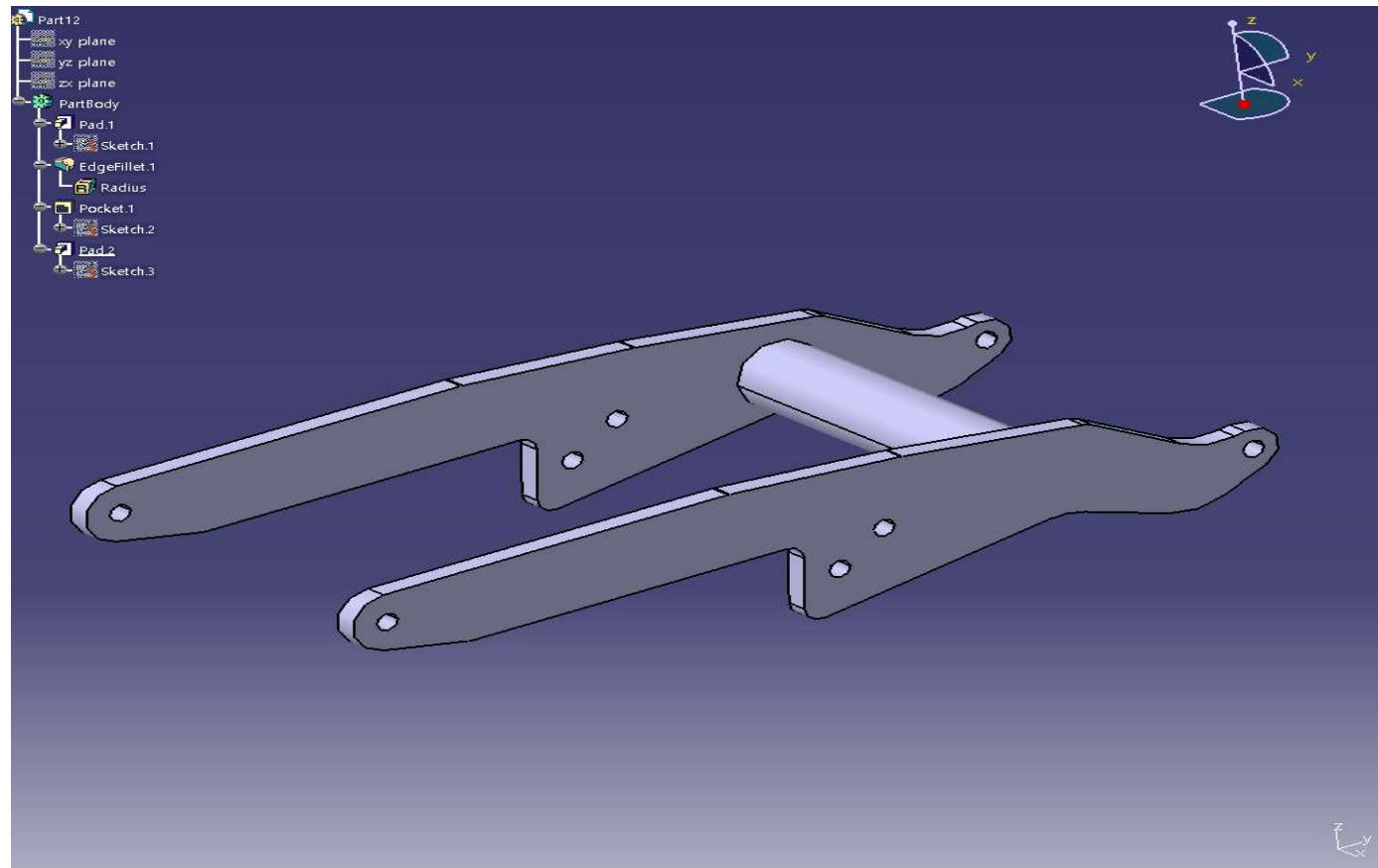
2.설계 과정

불도저 Front Body



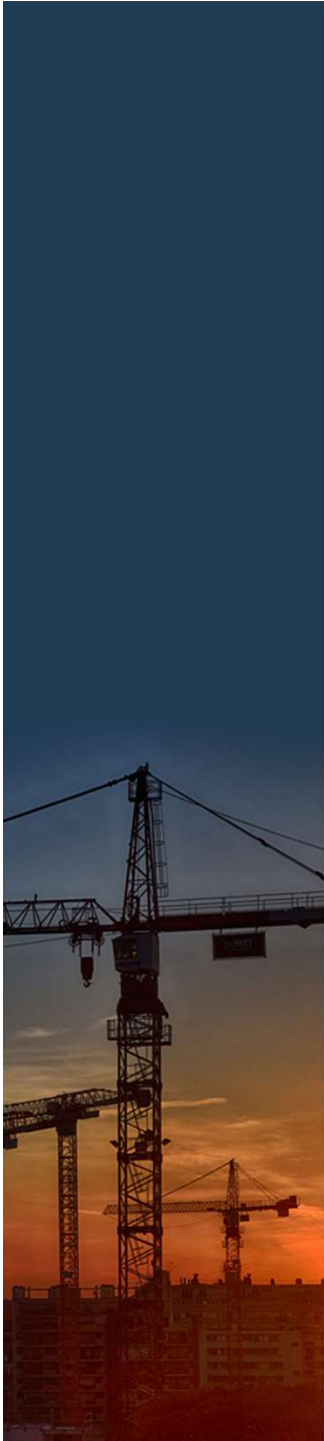
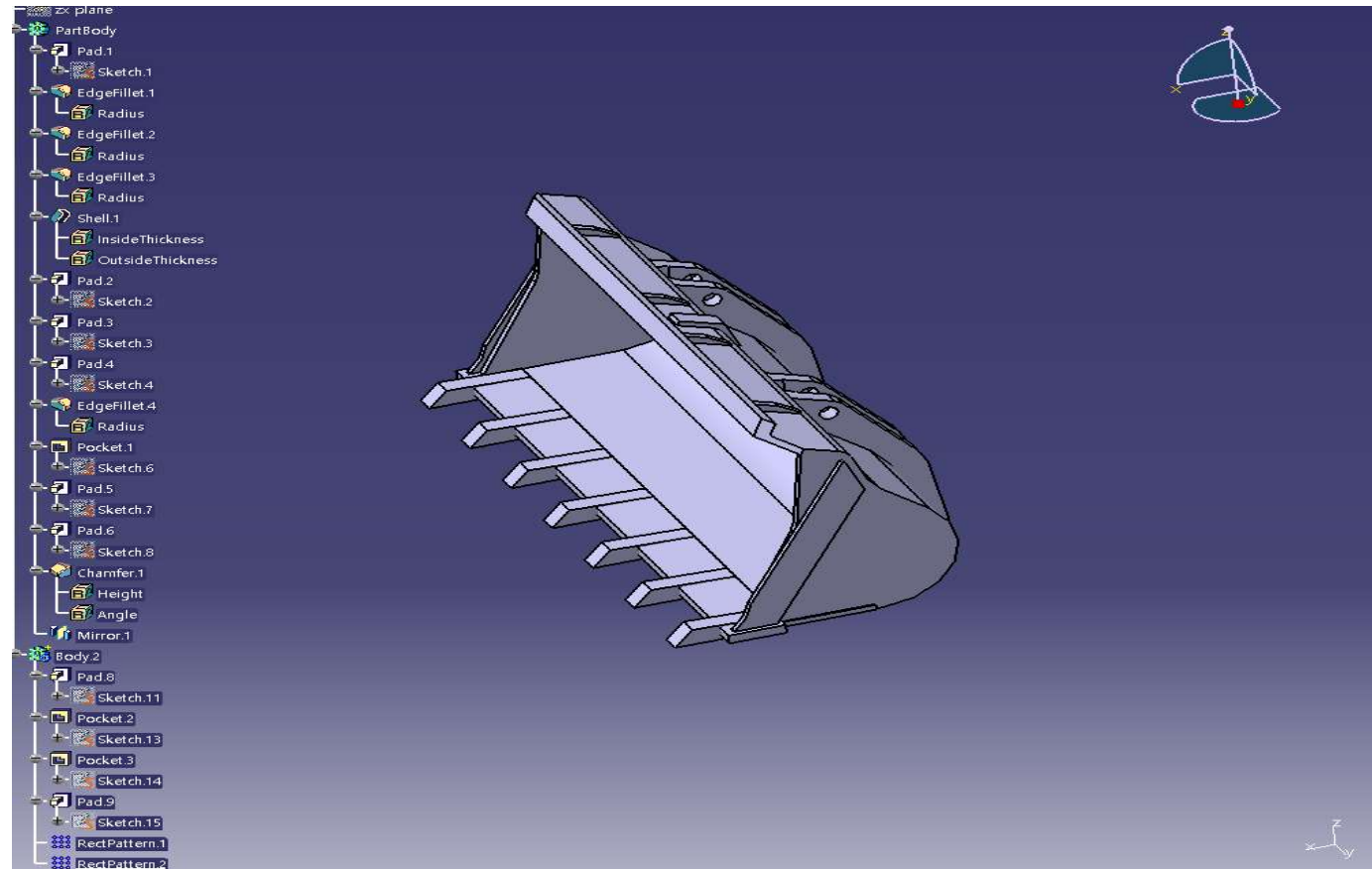
2.설계 과정

불도저 Boom



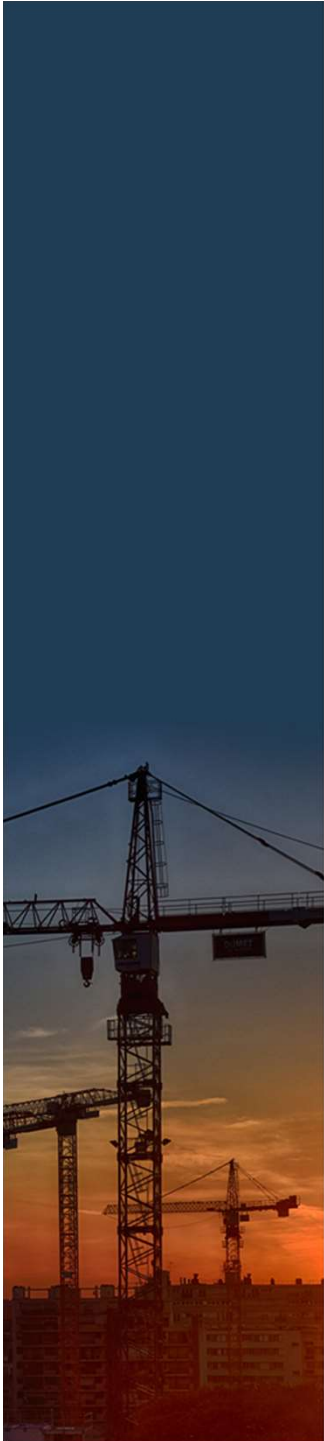
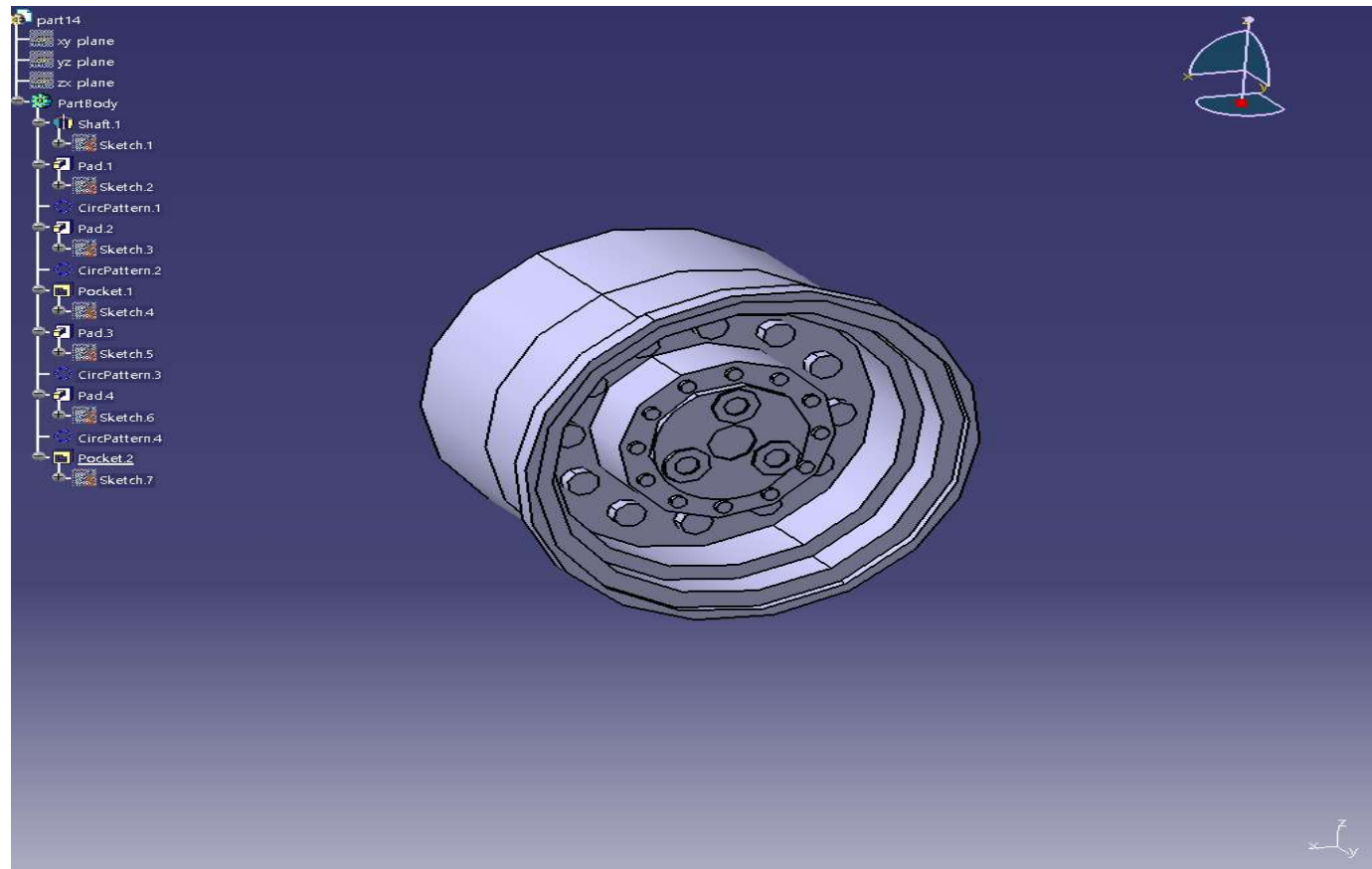
2.설계 과정

불도저 Bucket



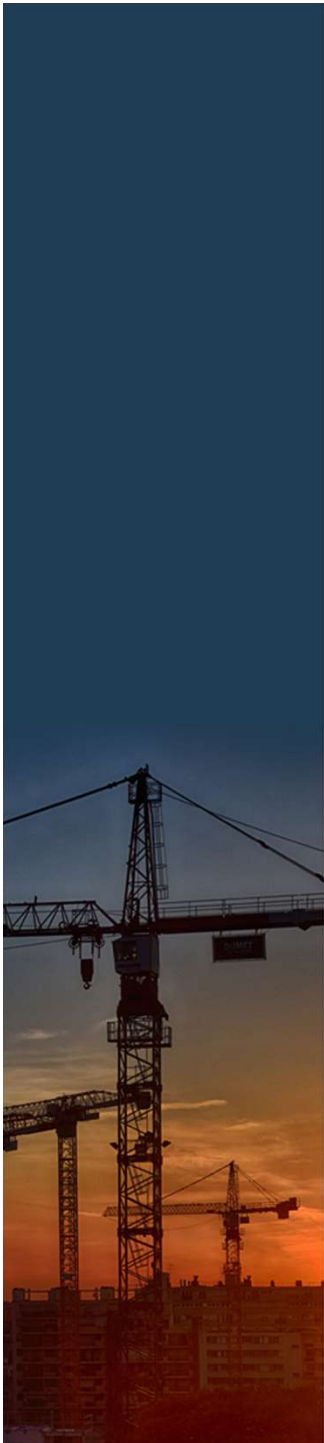
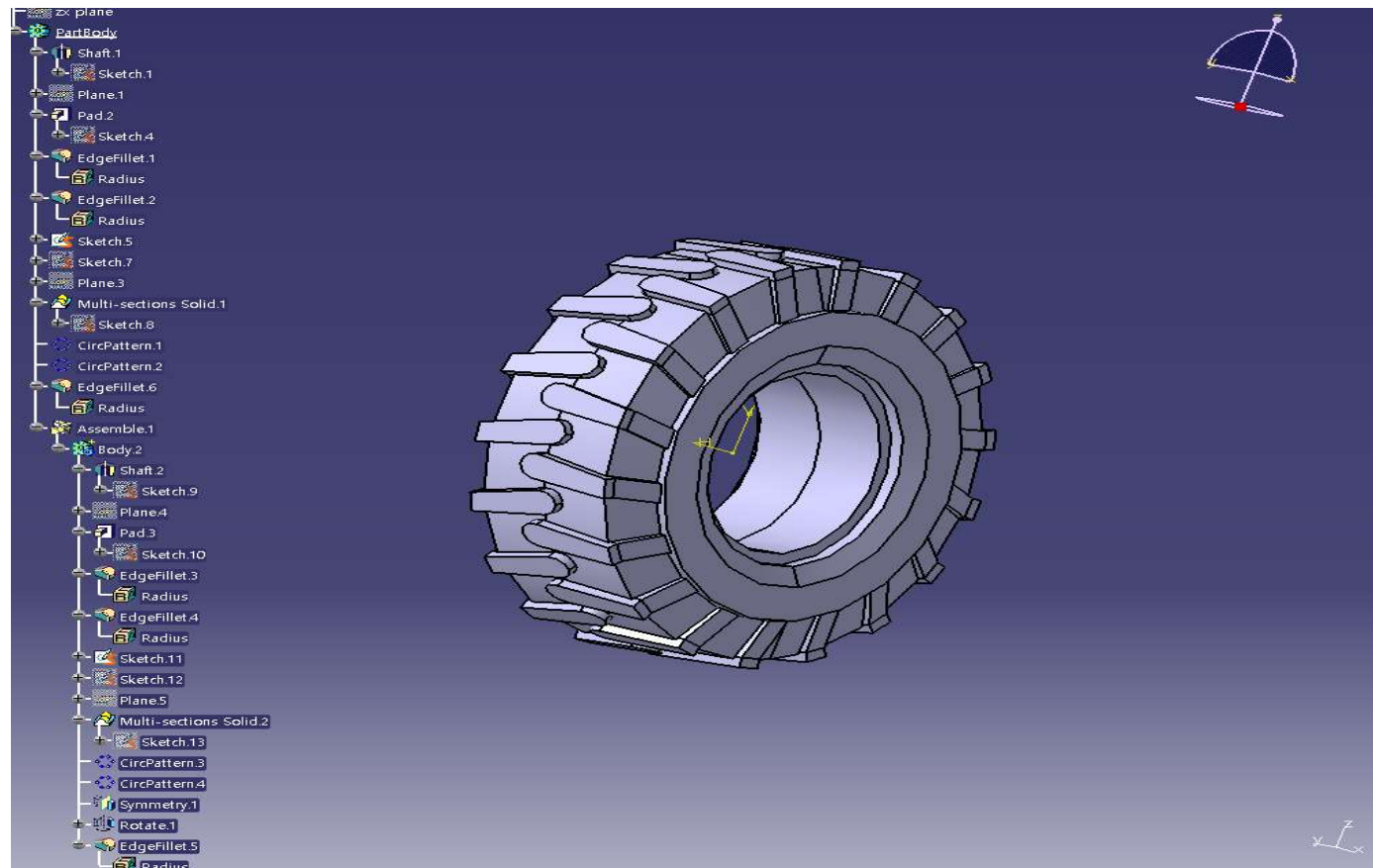
2.설계 과정

불도저 Rim



2.설계 과정

불도저 Tire

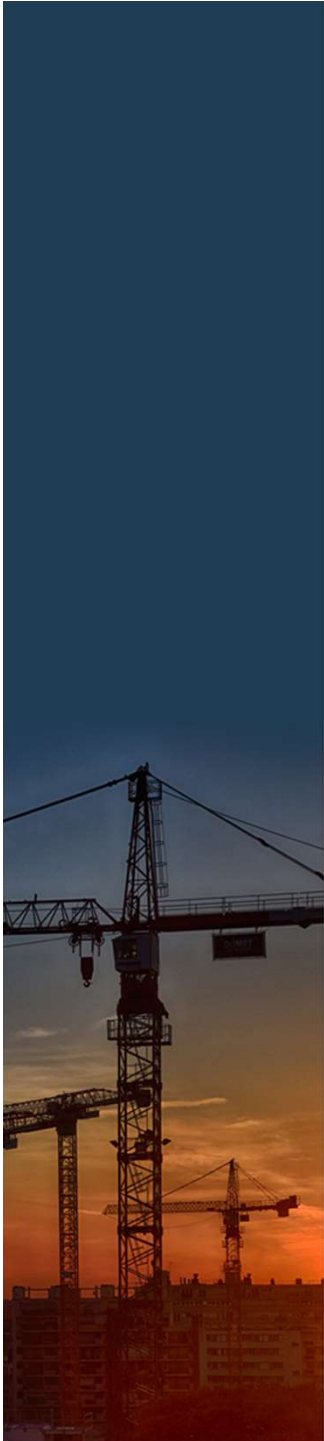
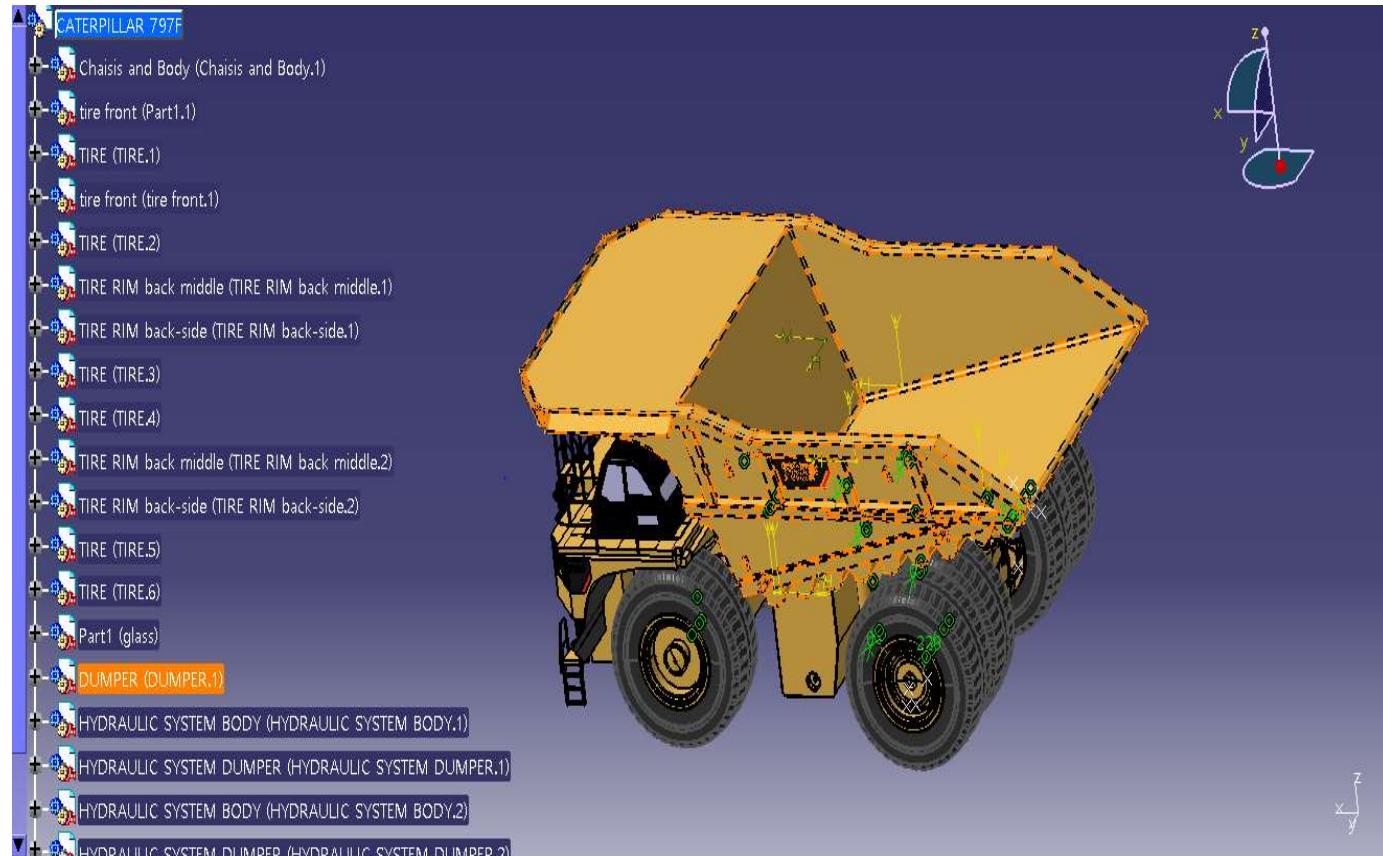


2. 설계 과정

덤프트럭 - outsourcing

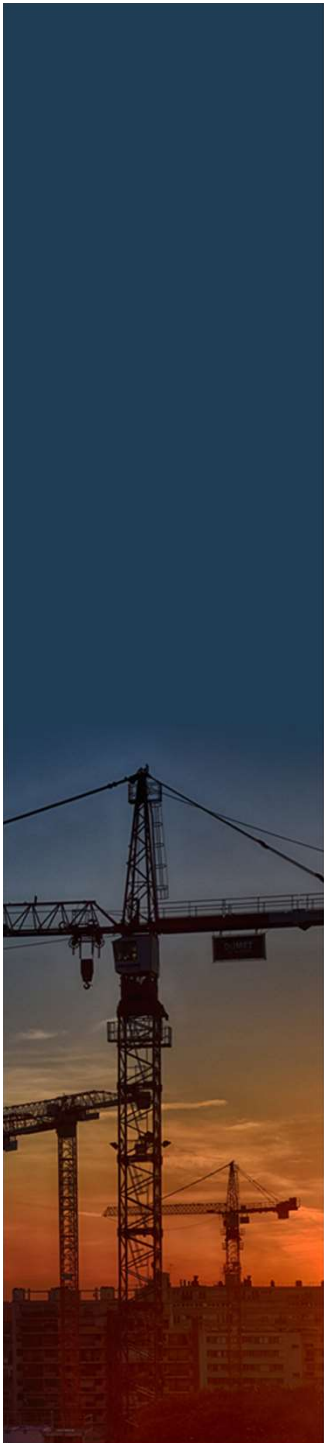
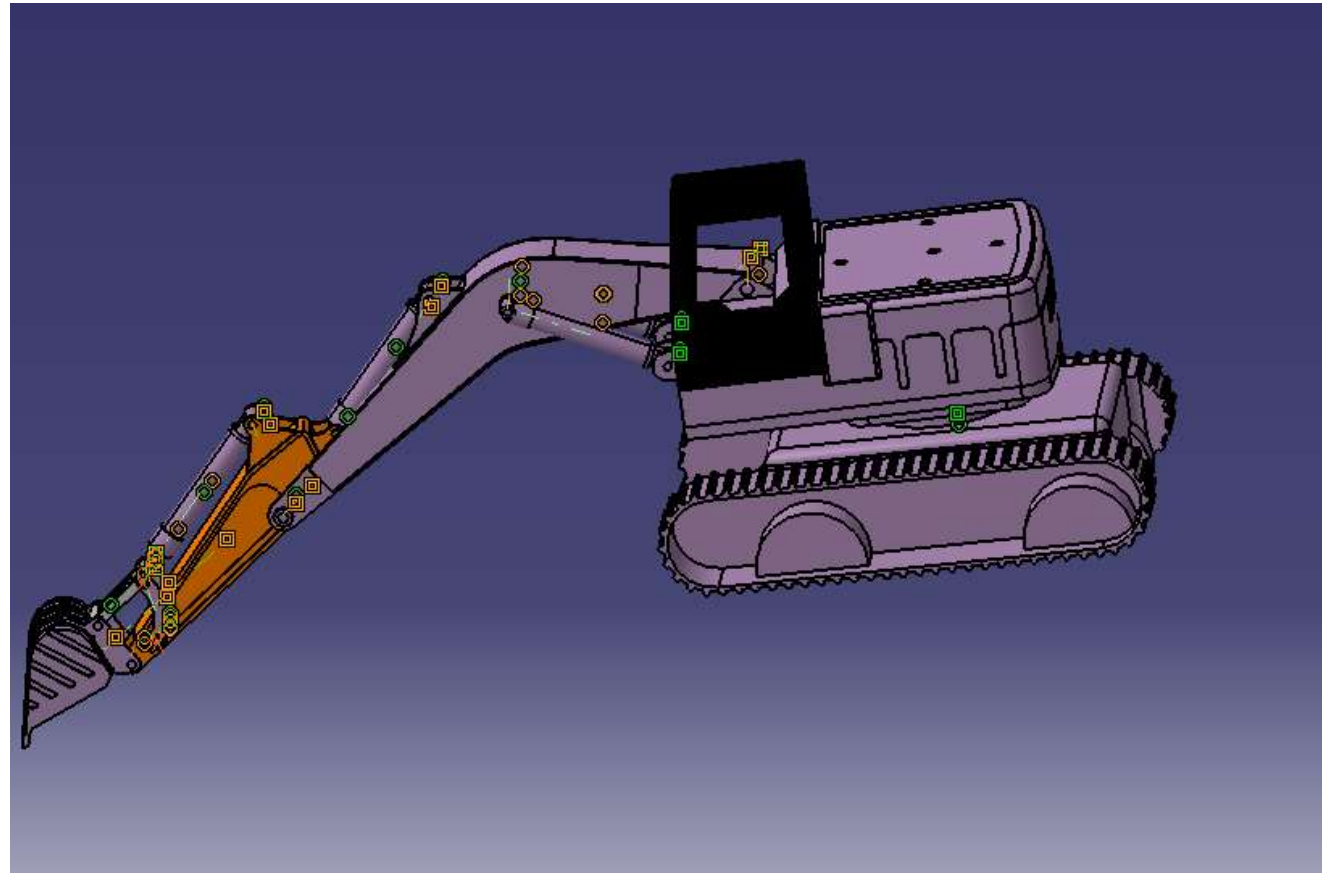
출처

<https://grabcad.com/library/caterpillar-797f-2>



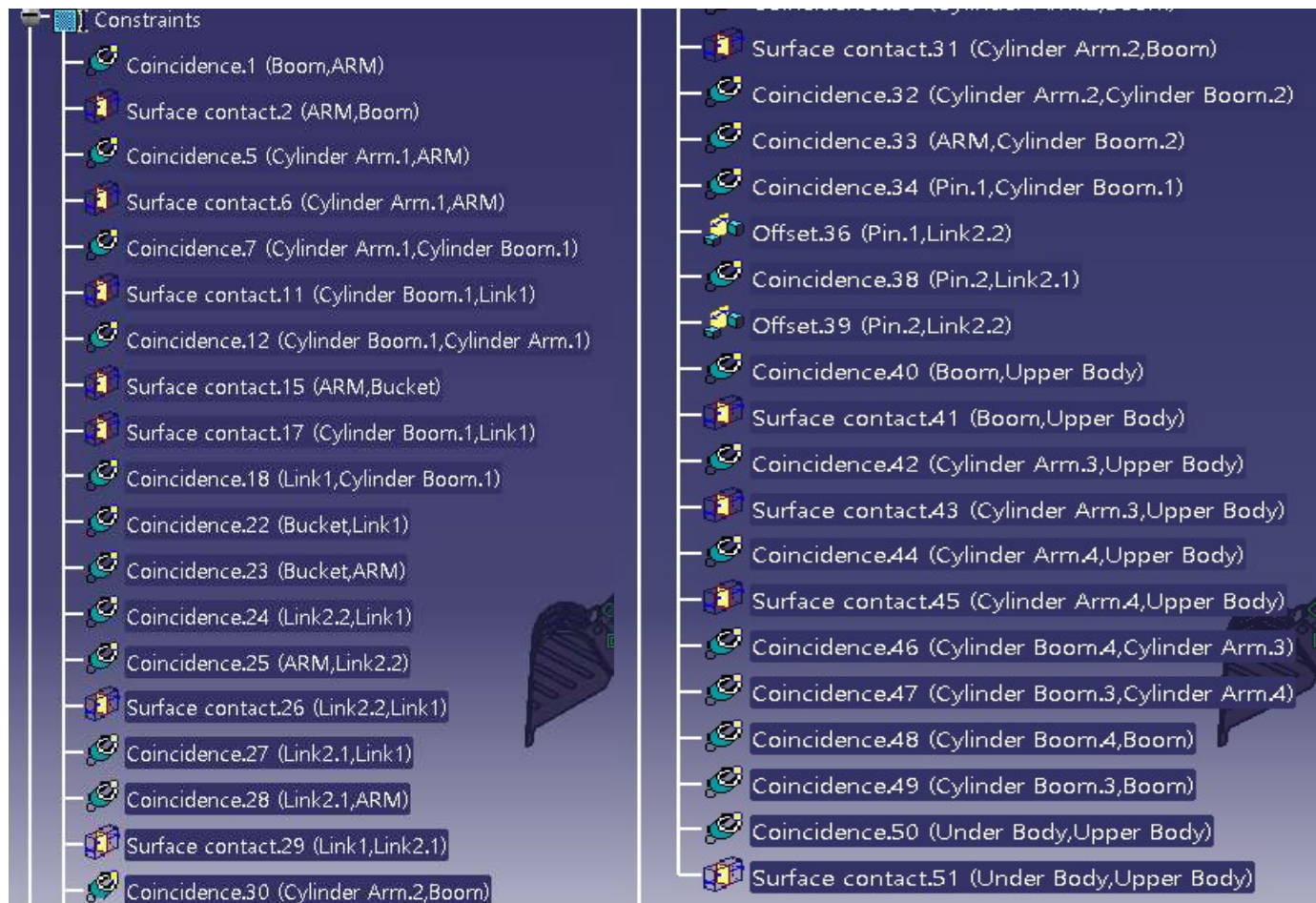
3.ASSEMBLY

포크레인



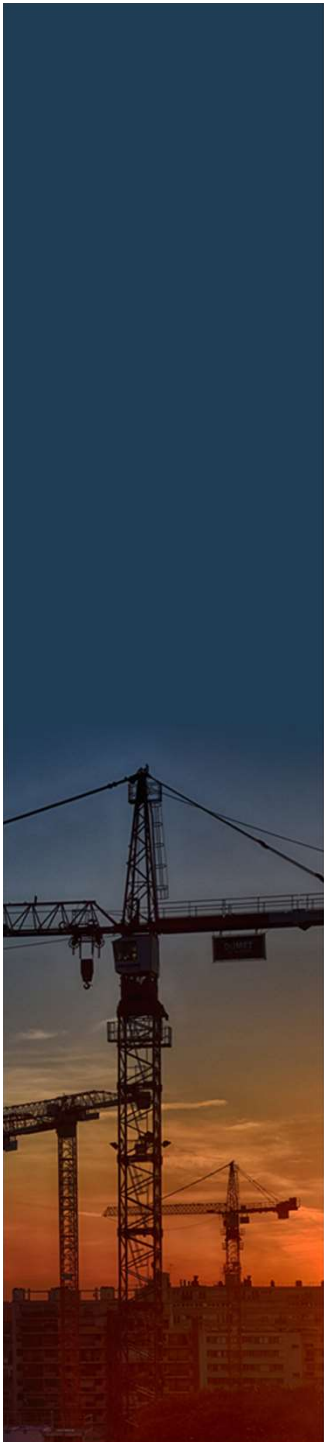
3.ASSEMBLY

포크레인-constraints



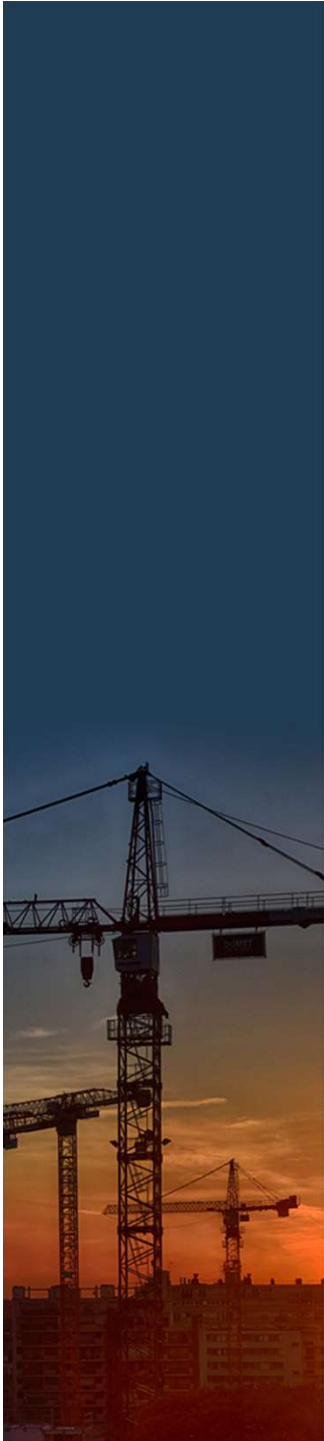
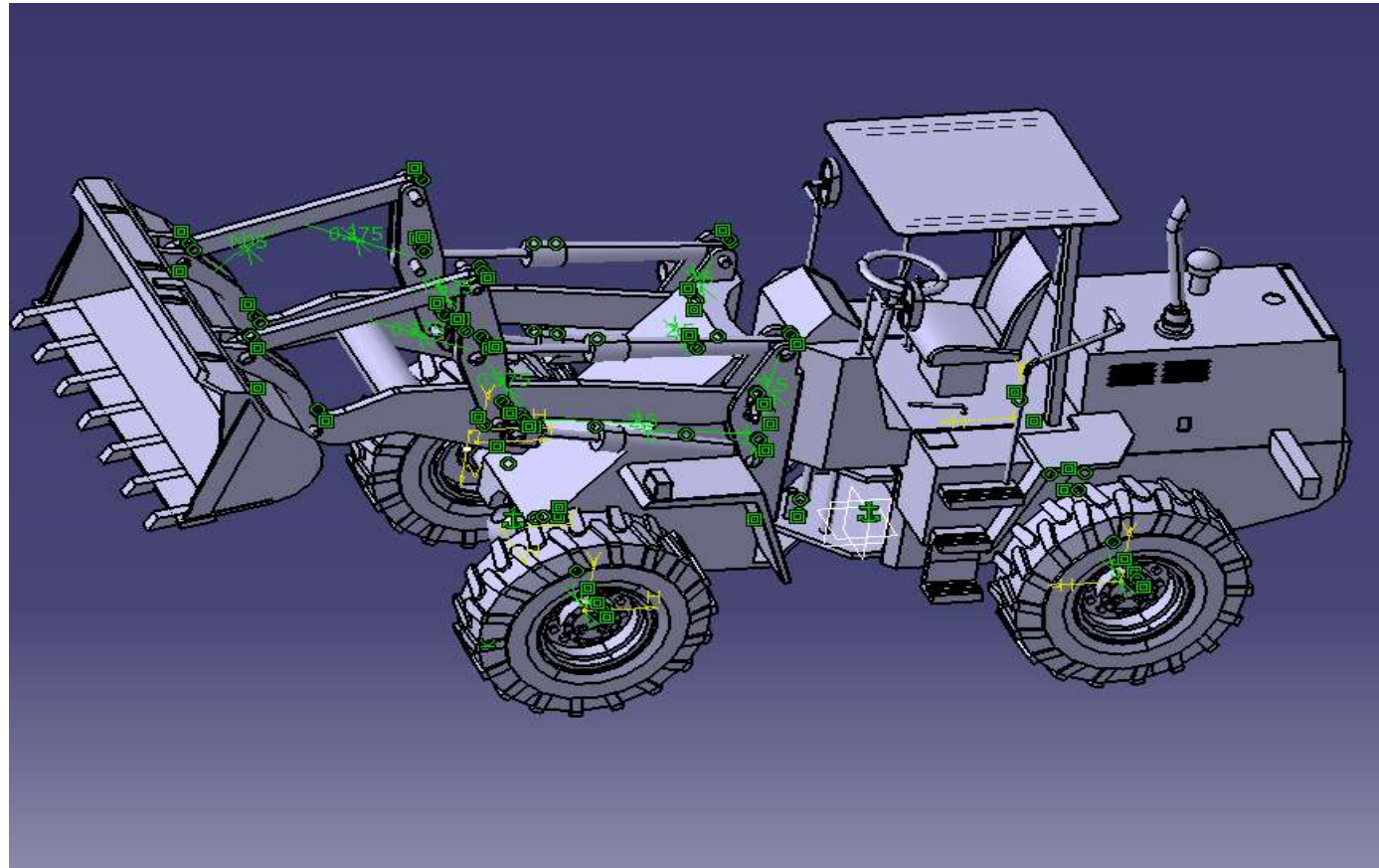
Constraints

- Coincidence.1 (Boom,ARM)
- Surface contact.2 (ARM,Boom)
- Coincidence.5 (Cylinder Arm.1,ARM)
- Surface contact.6 (Cylinder Arm.1,ARM)
- Coincidence.7 (Cylinder Arm.1,Cylinder Boom.1)
- Surface contact.11 (Cylinder Boom.1,Link1)
- Coincidence.12 (Cylinder Boom.1,Cylinder Arm.1)
- Surface contact.15 (ARM,Bucket)
- Surface contact.17 (Cylinder Boom.1,Link1)
- Coincidence.18 (Link1,Cylinder Boom.1)
- Coincidence.22 (Bucket,Link1)
- Coincidence.23 (Bucket,ARM)
- Coincidence.24 (Link2.2,Link1)
- Coincidence.25 (ARM,Link2.2)
- Surface contact.26 (Link2.2,Link1)
- Coincidence.27 (Link2.1,Link1)
- Coincidence.28 (Link2.1,ARM)
- Surface contact.29 (Link1,Link2.1)
- Coincidence.30 (Cylinder Arm.2,Boom)
- Surface contact.31 (Cylinder Arm.2,Boom)
- Coincidence.32 (Cylinder Arm.2,Cylinder Boom.2)
- Coincidence.33 (ARM,Cylinder Boom.2)
- Coincidence.34 (Pin.1,Cylinder Boom.1)
- Offset.36 (Pin.1,Link2.2)
- Coincidence.38 (Pin.2,Link2.1)
- Offset.39 (Pin.2,Link2.2)
- Coincidence.40 (Boom,Upper Body)
- Surface contact.41 (Boom,Upper Body)
- Coincidence.42 (Cylinder Arm.3,Upper Body)
- Surface contact.43 (Cylinder Arm.3,Upper Body)
- Coincidence.44 (Cylinder Arm.4,Upper Body)
- Surface contact.45 (Cylinder Arm.4,Upper Body)
- Coincidence.46 (Cylinder Boom.4,Cylinder Arm.3)
- Coincidence.47 (Cylinder Boom.3,Cylinder Arm.4)
- Coincidence.48 (Cylinder Boom.4,Boom)
- Coincidence.49 (Cylinder Boom.3,Boom)
- Coincidence.50 (Under Body,Upper Body)
- Surface contact.51 (Under Body,Upper Body)



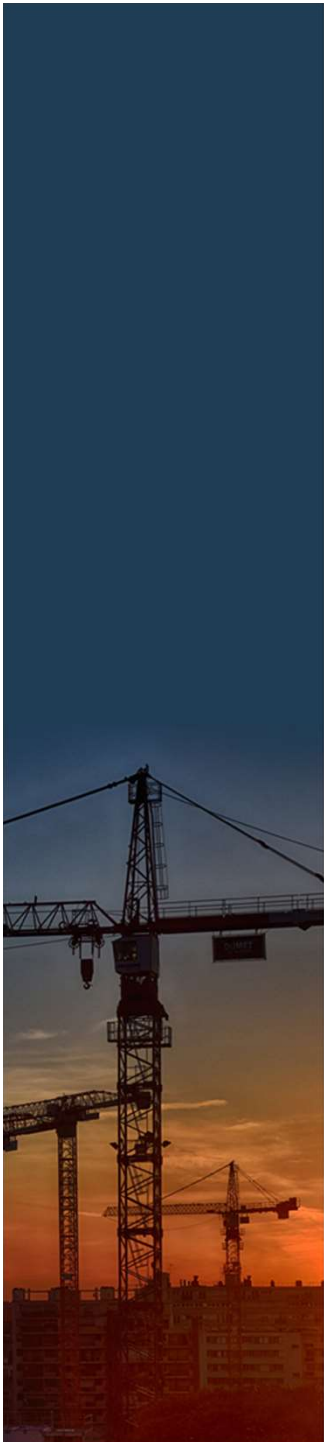
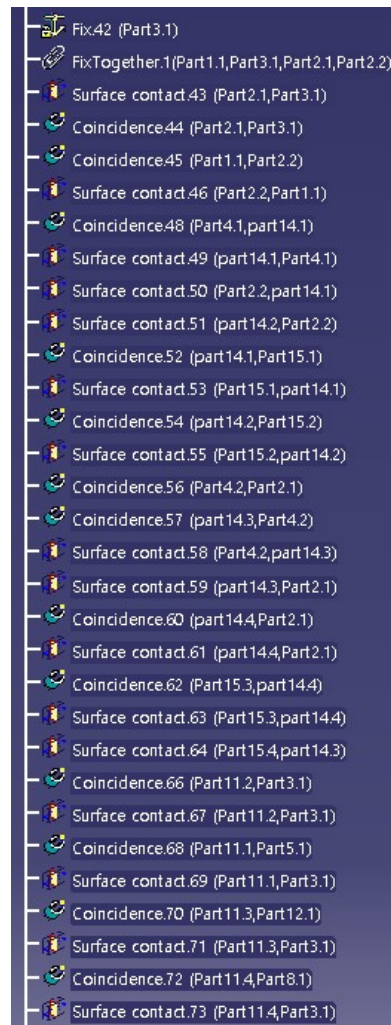
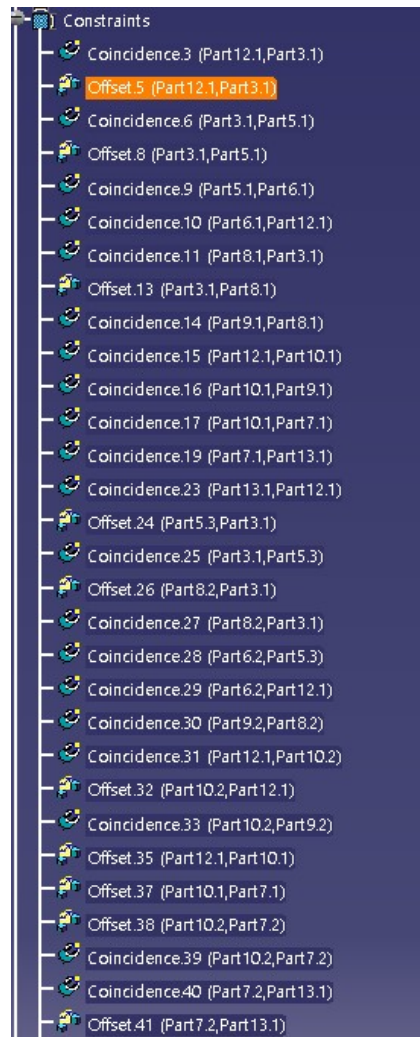
3.ASSEMBLY

불도저



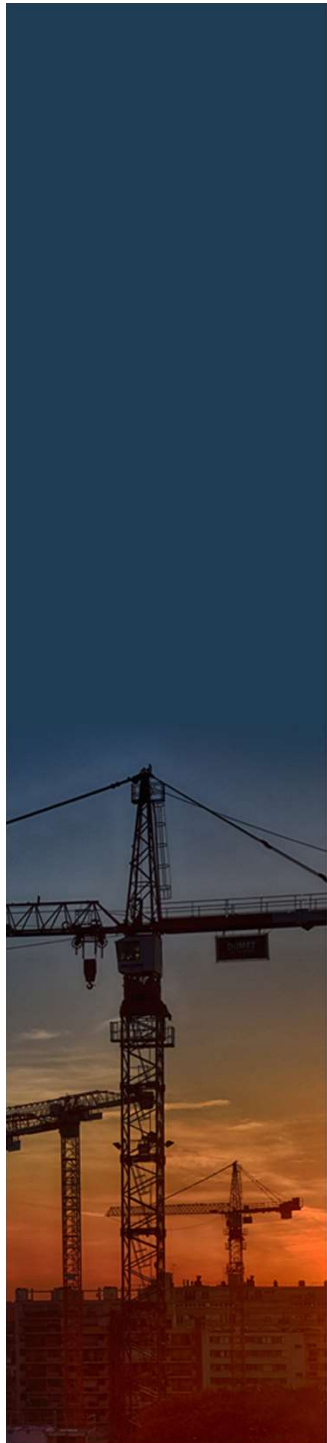
3.ASSEMBLY

볼도저-constraints



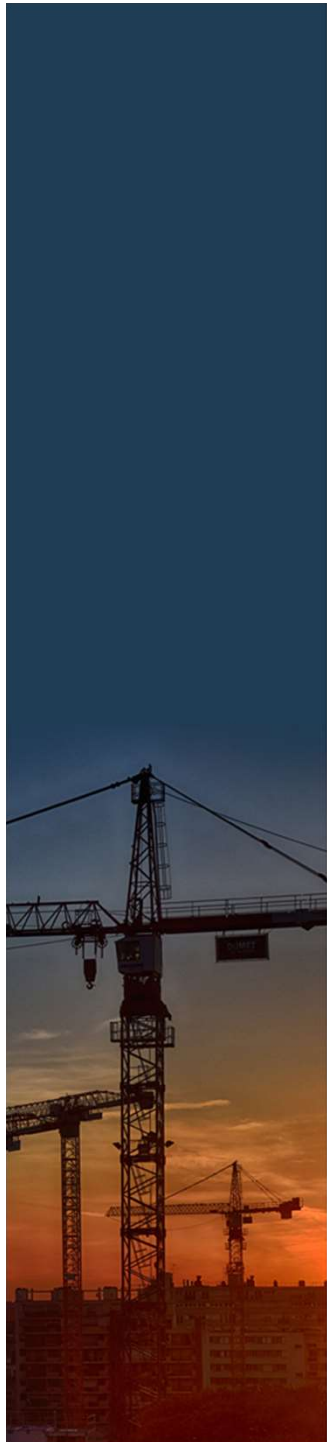
4.DMU KINEMATICS

포크레인



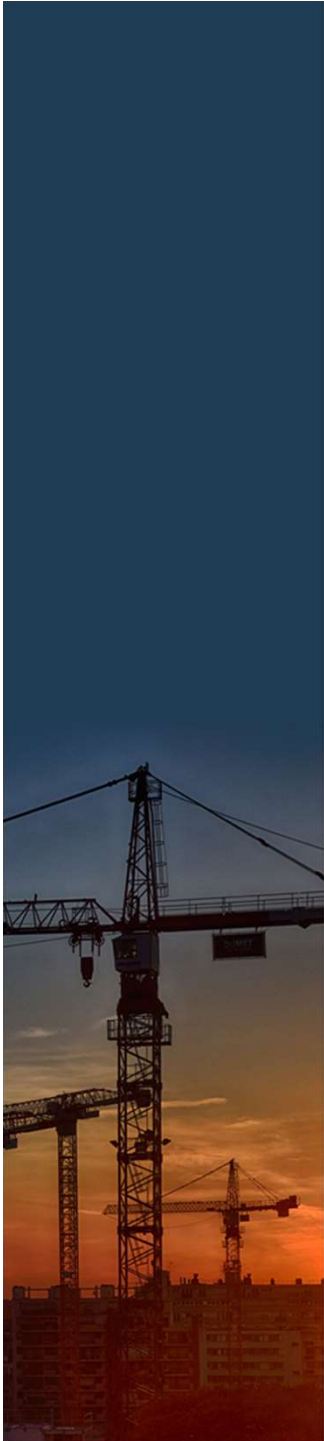
4.DMU KINEMATICS

포크레인



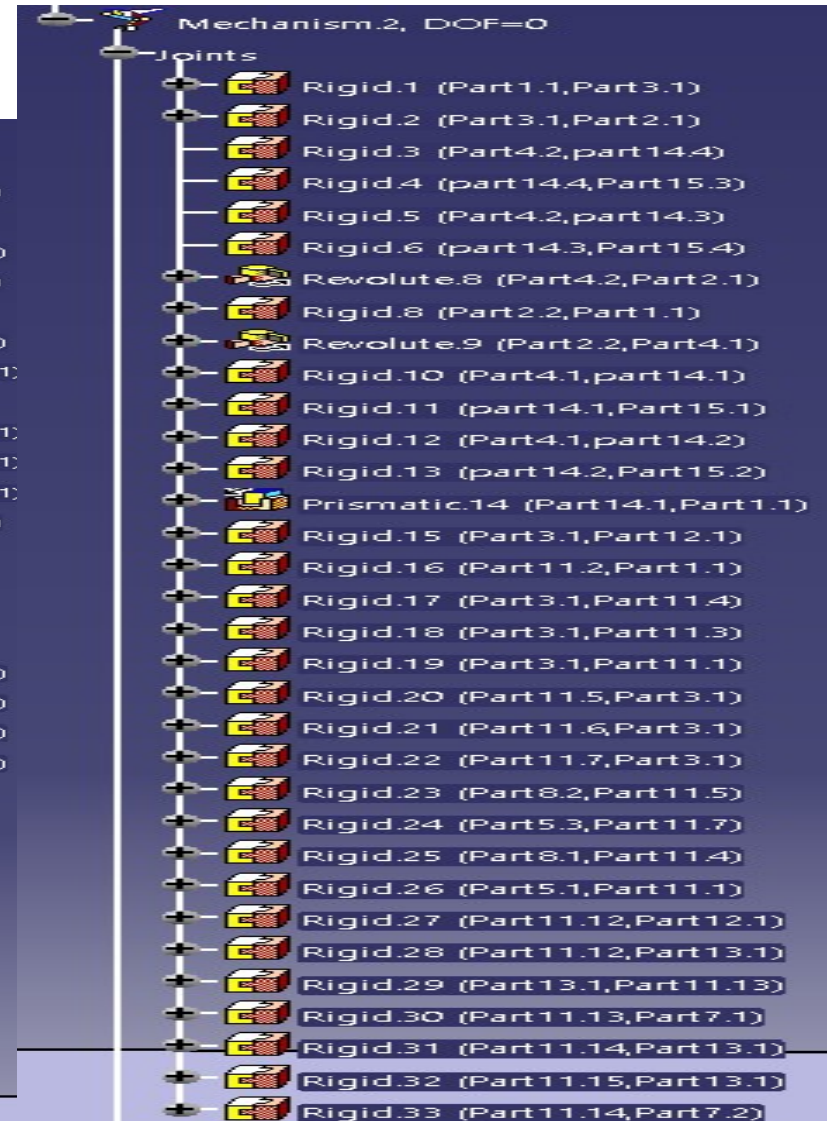
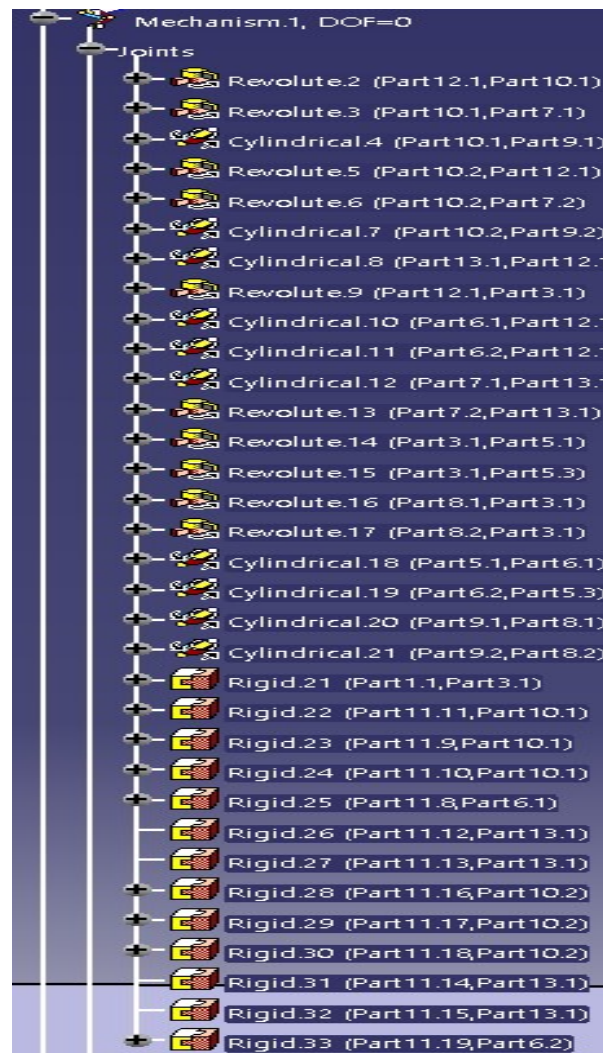
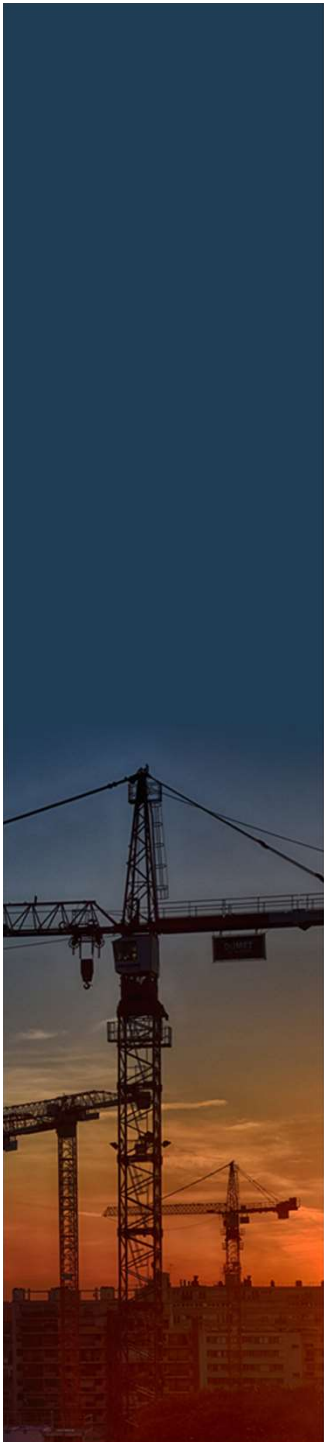
4. DMU KINEMATICS

불도저



4.DMU KINEMATICS

볼도저



5.SIMULATION

<https://youtu.be/8UoNsb6CVko>

YouTube KR

검색



CAD 프로젝트

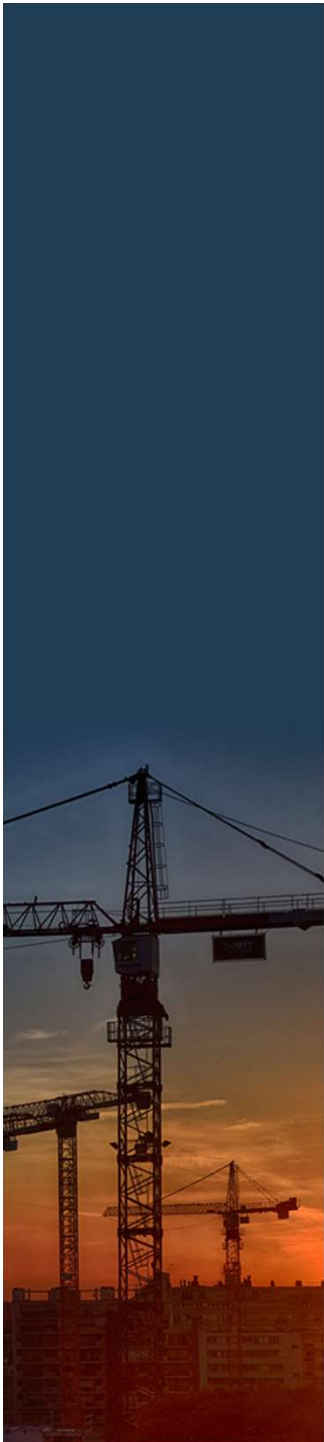
조회수 없음

0 0 공유 저장 ...

과인 문광일

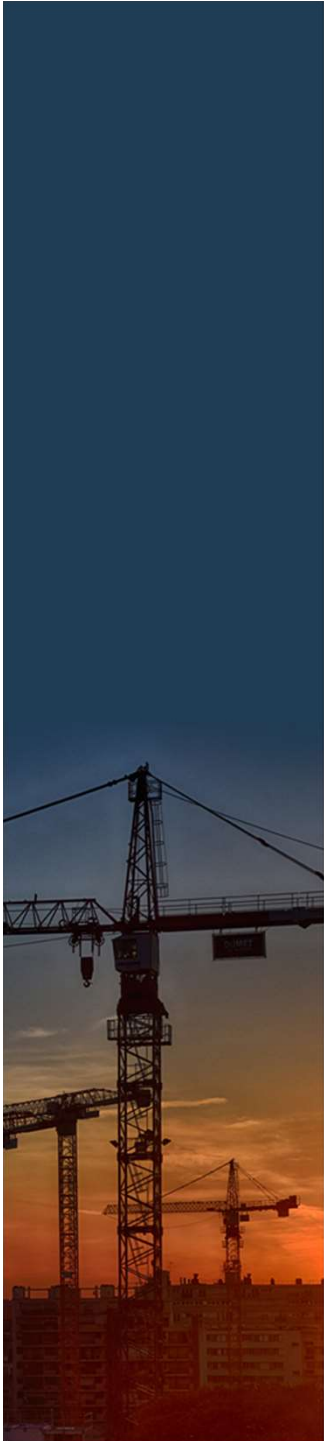
분석

동영상 소개



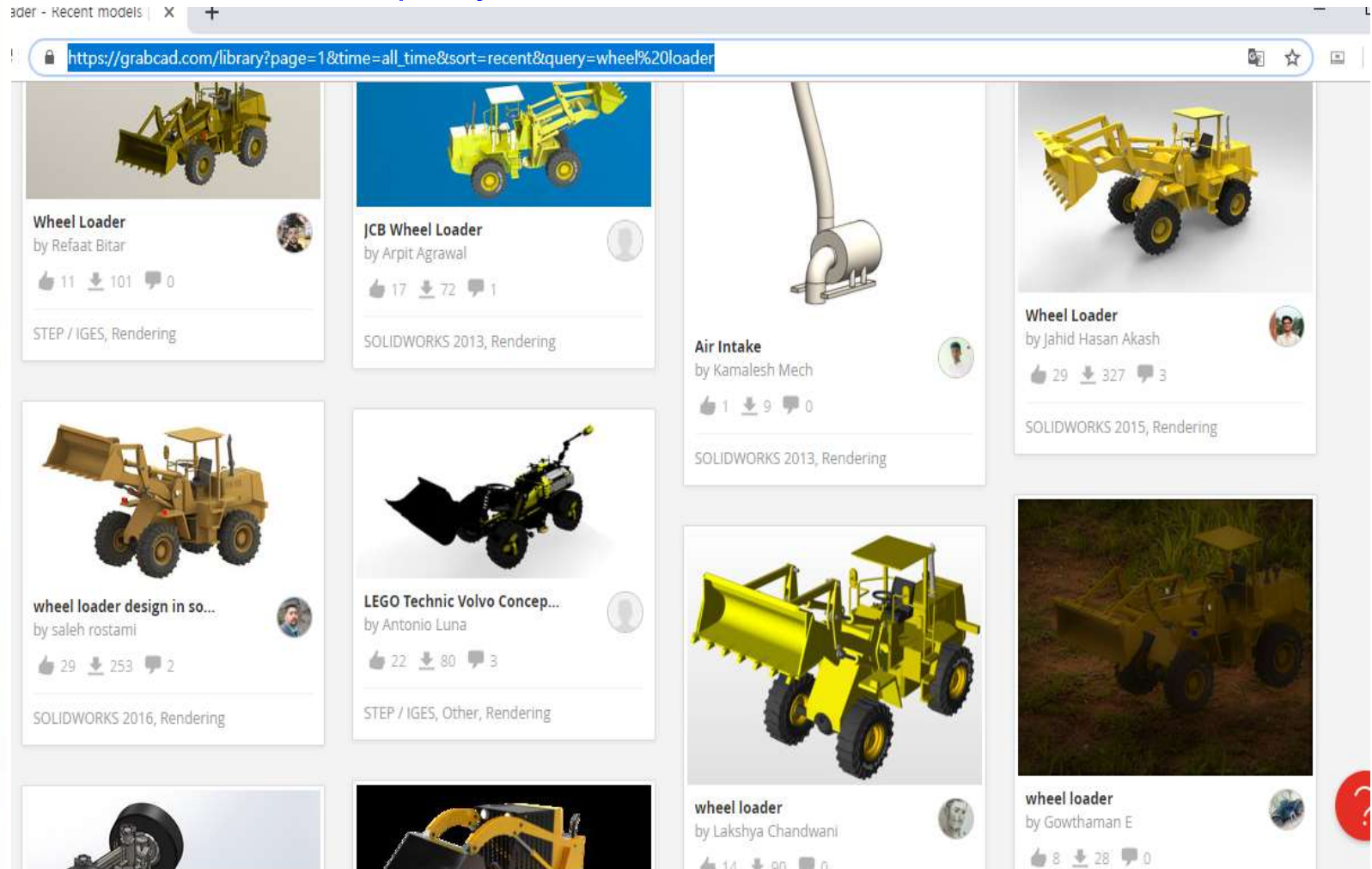
6. 제작 시 어려웠던 점

1. Outsourcing
2. DMU KINEMATICS-assembly
3. Simulation



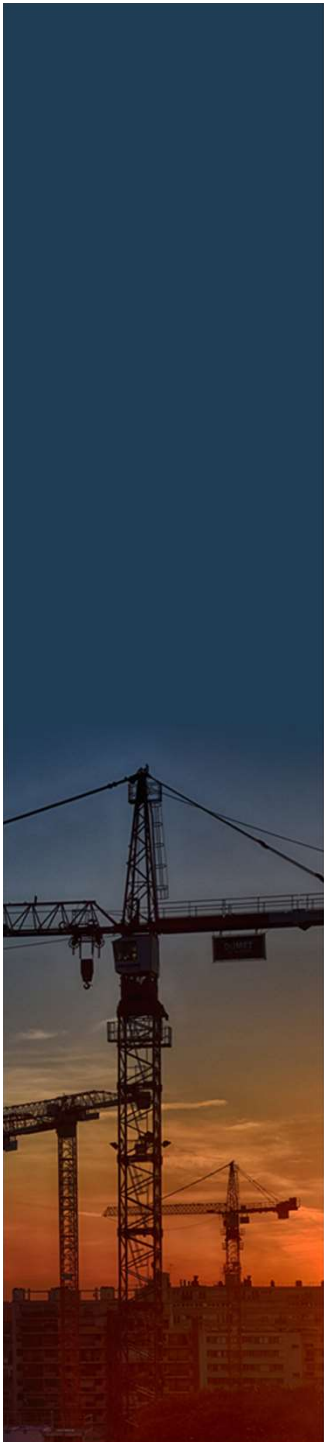
참고자료

https://grabcad.com/library?page=1&time=all_time&sort=recent&query=wheel%20loader



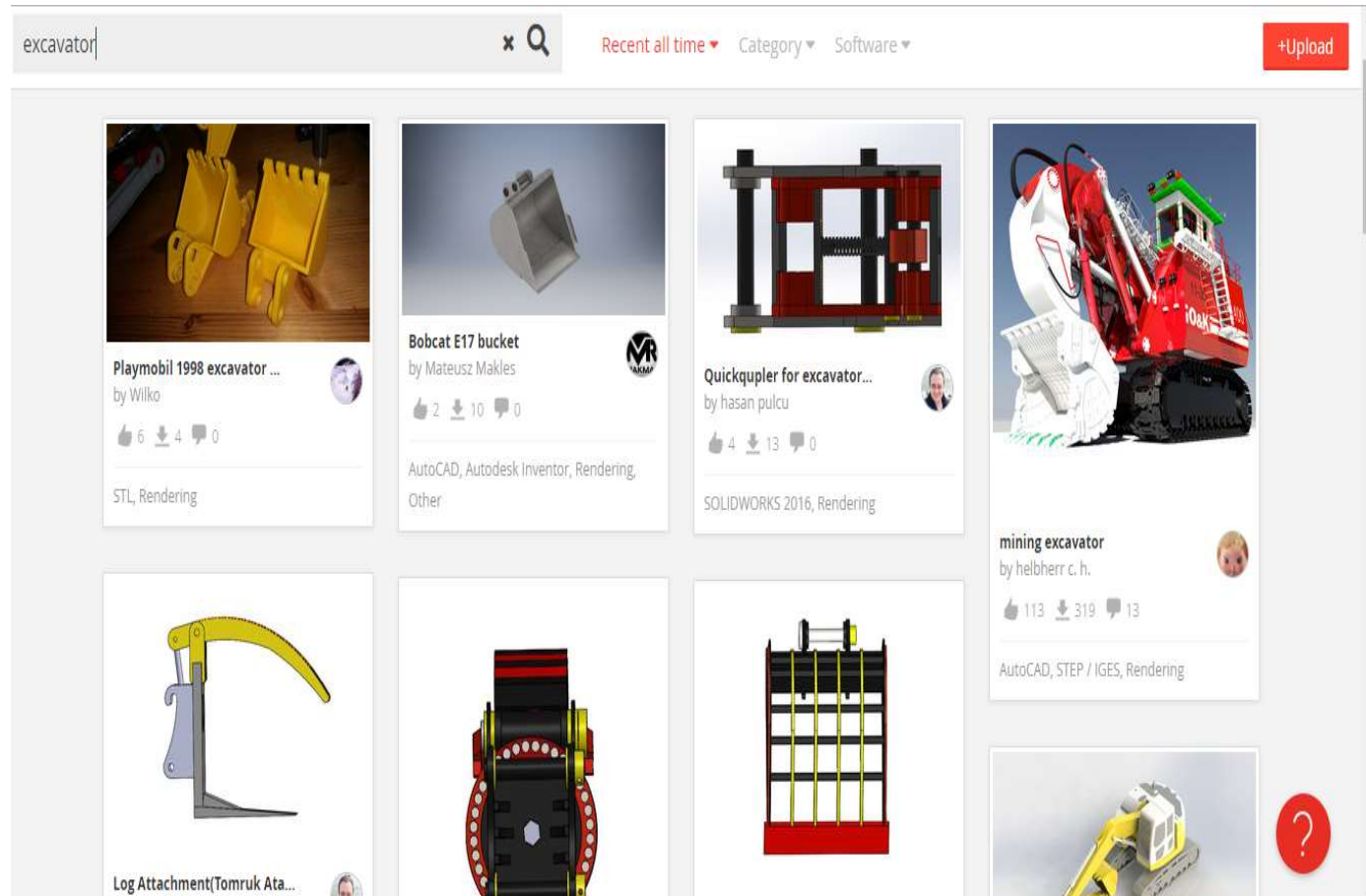
The screenshot displays a web browser window with the URL https://grabcad.com/library?page=1&time=all_time&sort=recent&query=wheel%20loader. The page features a grid of 3D model listings for wheel loaders. Each listing includes a thumbnail image, the model name, the creator's name, and engagement statistics (likes, downloads, comments). The models are rendered in various styles, including solid colors and detailed textures.

Model Name	Creator	Software / Format	Likes	Downloads	Comments
Wheel Loader	Refaat Bitar	STEP / IGES, Rendering	11	101	0
JCB Wheel Loader	Arpit Agrawal	SOLIDWORKS 2013, Rendering	17	72	1
Air Intake	Kamalesh Mech	SOLIDWORKS 2013, Rendering	1	9	0
Wheel Loader	Jahid Hasan Akash	SOLIDWORKS 2015, Rendering	29	327	3
wheel loader design in so...	saleh rostami	SOLIDWORKS 2016, Rendering	29	253	2
LEGO Technic Volvo Concep...	Antonio Luna	STEP / IGES, Other, Rendering	22	80	3
wheel loader	Lakshya Chandwani		14	90	0
wheel loader	Gowthaman E		8	28	0



참고자료

https://grabcad.com/library?page=1&time=all_time&sort=recent&query=excavator

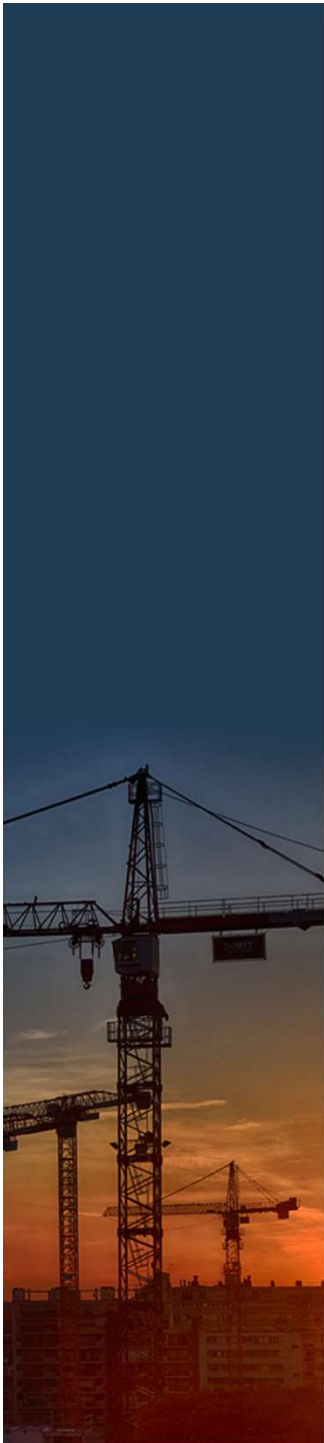


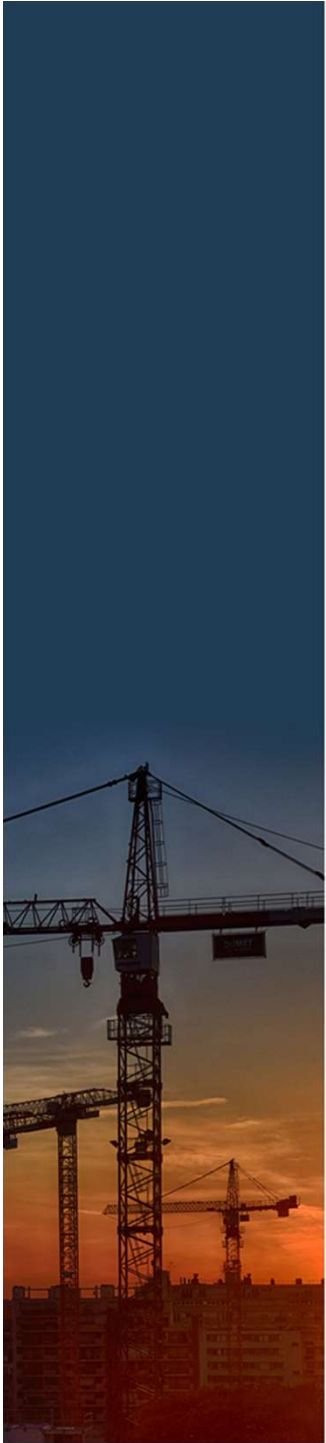
The screenshot shows the GrabCAD library search results for the query 'excavator'. The search bar at the top contains the text 'excavator' and a search icon. To the right of the search bar, there are filters for 'Recent all time', 'Category', and 'Software'. A red '+Upload' button is located in the top right corner.

The search results are displayed in a grid of seven items:

- Playmobil 1998 excavator ...** by Wilko. Includes a photo of yellow plastic parts. Stats: 6 likes, 4 downloads, 0 comments. File format: STL, Rendering.
- Bobcat E17 bucket** by Mateusz Makles. Includes a 3D rendering of a bucket. Stats: 2 likes, 10 downloads, 0 comments. File format: AutoCAD, Autodesk Inventor, Rendering, Other.
- Quickqupler for excavator...** by hasan pulcu. Includes a 3D rendering of a red and black frame. Stats: 4 likes, 13 downloads, 0 comments. File format: SOLIDWORKS 2016, Rendering.
- mining excavator** by helbherr c. h. Includes a large 3D rendering of a red and white mining excavator. Stats: 113 likes, 319 downloads, 13 comments. File format: AutoCAD, STEP / IGES, Rendering.
- Log Attachment(Tomruk Ata...** Includes a 3D rendering of a yellow and grey attachment. Stats: 0 likes, 0 downloads, 0 comments.
- Excavator chassis** Includes a 3D rendering of a black and red chassis. Stats: 0 likes, 0 downloads, 0 comments.
- Excavator frame** Includes a 3D rendering of a black and red frame. Stats: 0 likes, 0 downloads, 0 comments.

A red question mark icon is visible in the bottom right corner of the search results area.





감사합니다