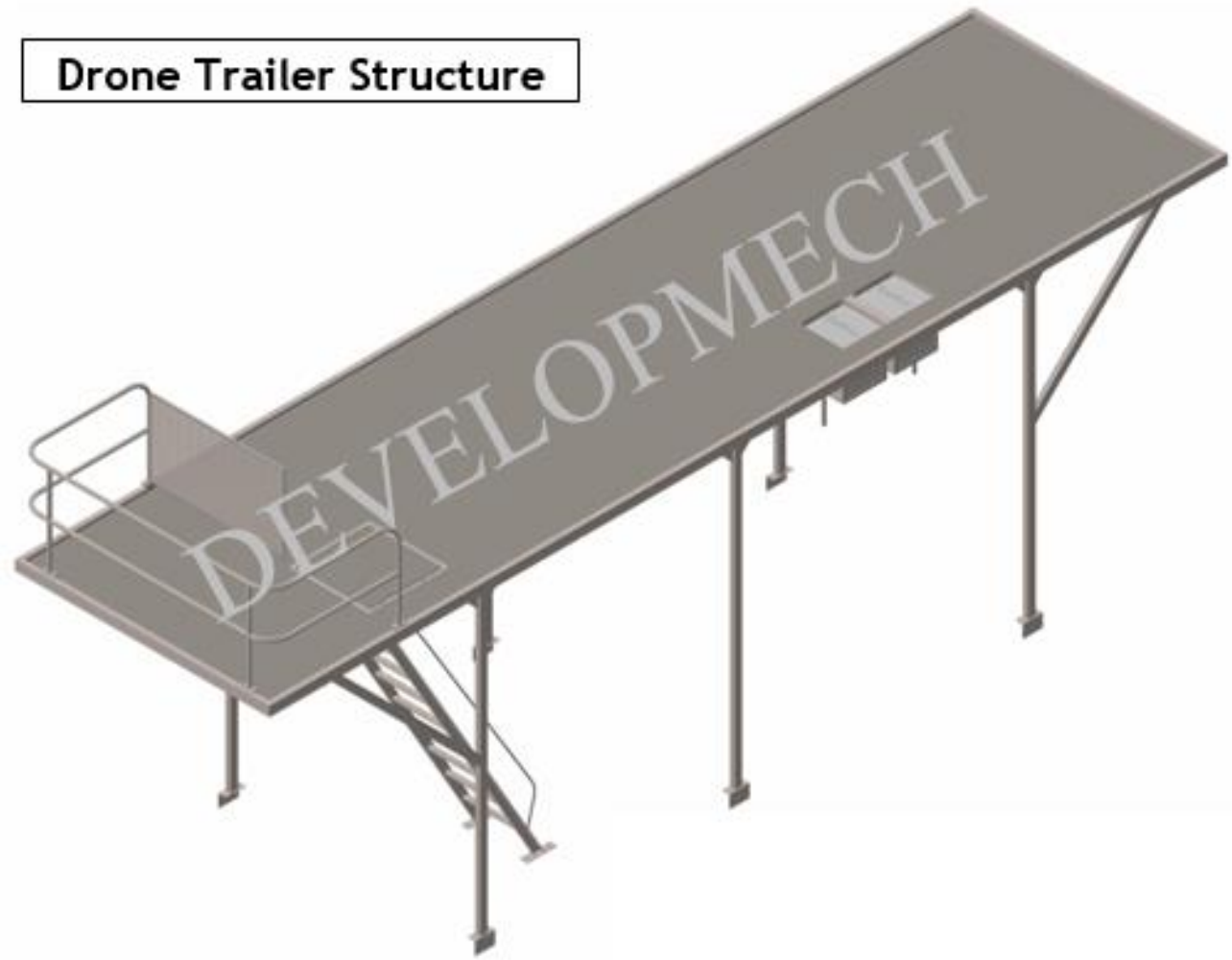
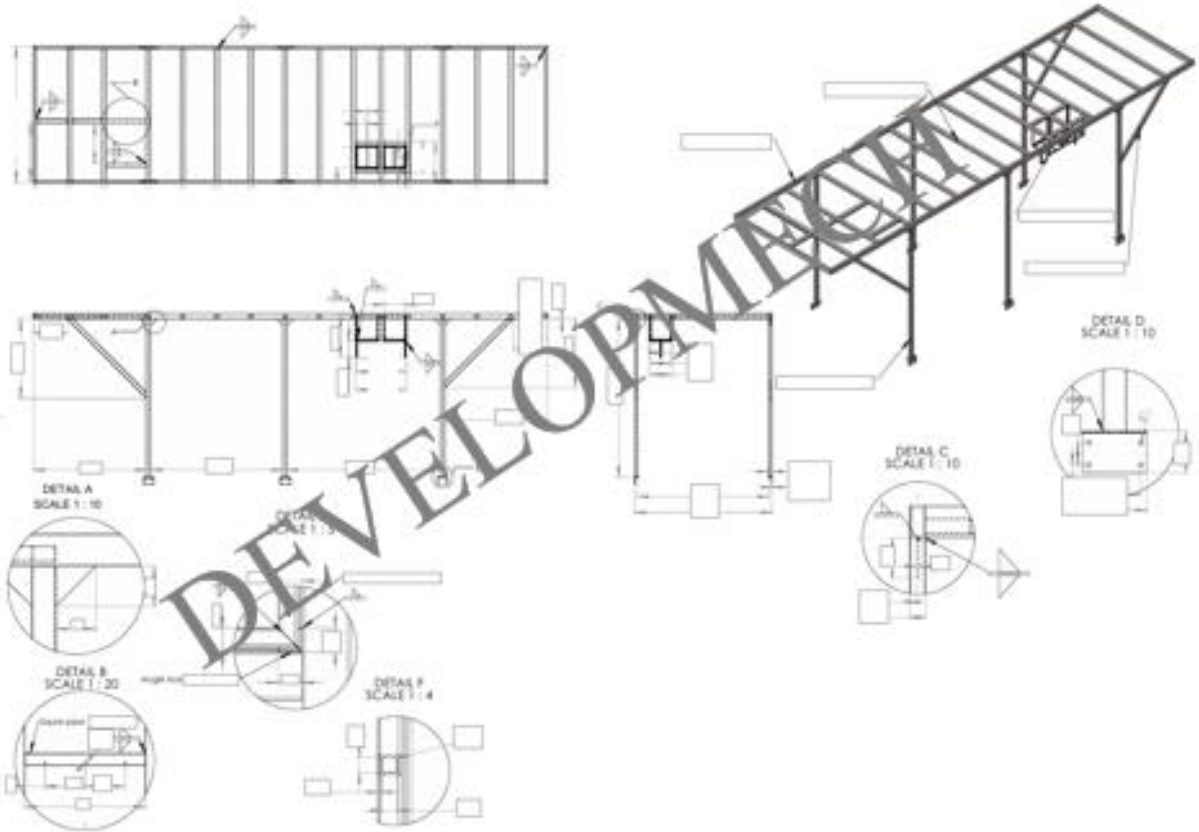
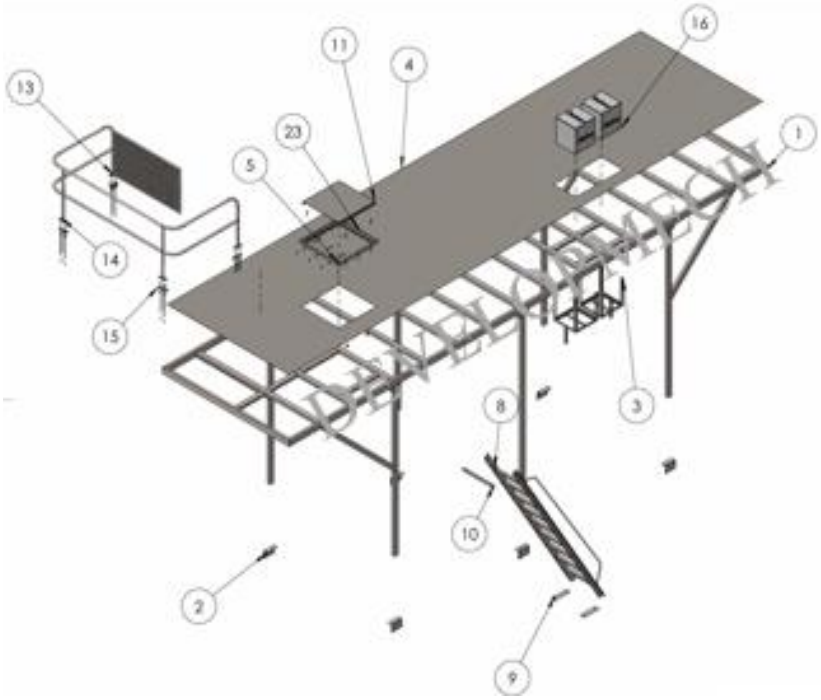
Drone Trailer Structure

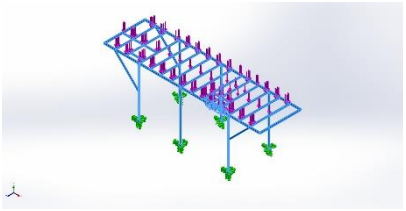




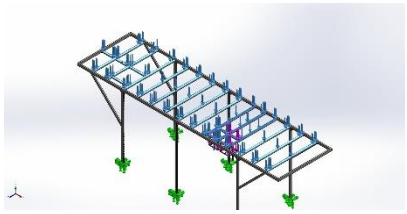
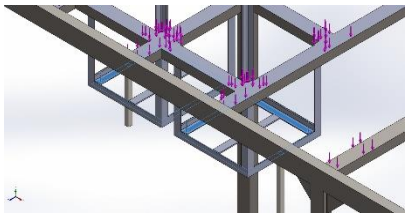


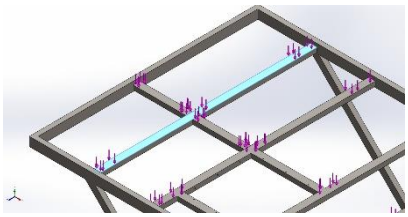
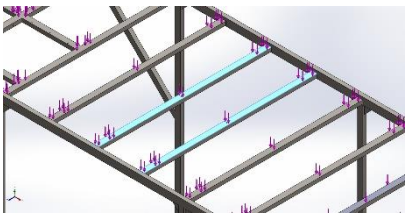
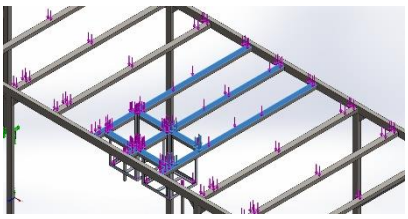
ITEM NO.	PART NUMBER	QTY.
1	drone trailer	
2	tube joint	
3	battrey frame	
4	trailer top sheet	
5	roof door	
6	hanging1	
7	B18.6.7M - M5 x 0.8 x 8 Type I Cross Recessed QHMS --8S	
8	stair	
9	stair bottem	
10	stair join top	
11	roof door sheet	
12	hanging 2	
13	grill frame	
14	grill joint	
15	grill joint bottem	
16	Battrey	
17	B18.2.3.2M - Formed hex screw, M10 x 1.5 x 25 --25CS	
18	B18.22M - Plain washer, 10 mm, regular	
19	B18.2.4.2M - Hex nut, Style 2, M10 x 1.5, with 16mm WAF --D-N	
20	B18.2.3.6M - Heavy hex bolt M12 x 1.75 x 110 --30S	
21	B18.22M - Plain washer, 12 mm, regular	
22	B18.2.4.6M - Heavy hex nut, M12 x 1.75 --W-S	
23	B18.2.3.5M - Hex bolt M10 x 1.5 x 70 --26S	

Material Properties

Model Reference	Properties	Components
	**Name:** AISI 1015 Steel, **Yield strength:** 3.25e+08 N/m^2 **Tensile strength:** 3.85e+08 N/m^2 **Elastic modulus:** 2.05e+11 N/m^2 **Poisson's ratio:** 0.29 **Mass density:** 7,870 kg/m^3 **Shear modulus:** 8e+10 N/m^2 **Thermal expansion:** 1.2e-05 /Kelvin	SolidBody 1(Cut-Extrude1)(structure 3)

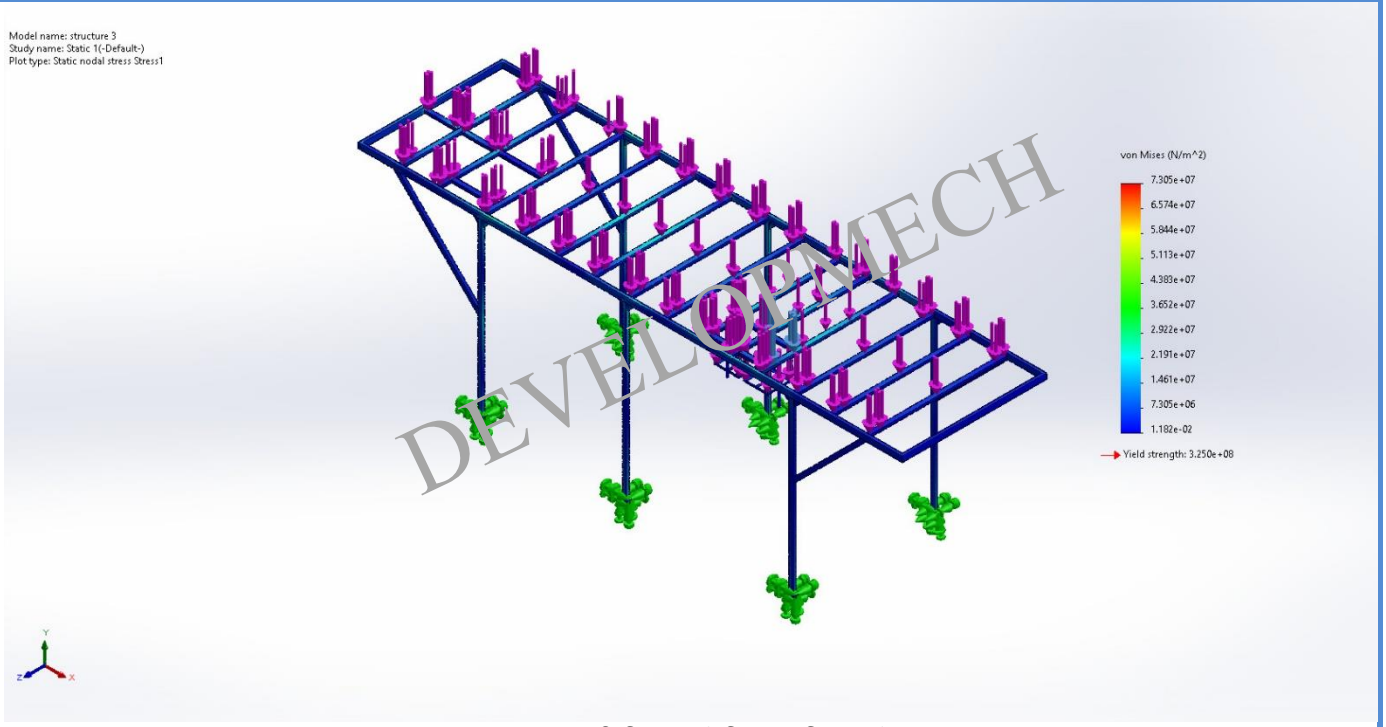
Loading Conditions

Load name	Load Image	Load Details
Force-1		**Entities:** 13 face(s) **Type:** Apply normal force **Value:**
Force-2		**Entities:** 2 face(s) **Type:** Apply normal force **Value:**

Force-3		**Entities:** 1 face(s) **Type:** Apply normal force **Value:**
Force-4		**Entities:** 2 face(s) **Type:** Apply normal force **Value:**
Force-5		**Entities:** 1 face(s) **Type:** Apply normal force **Value:**

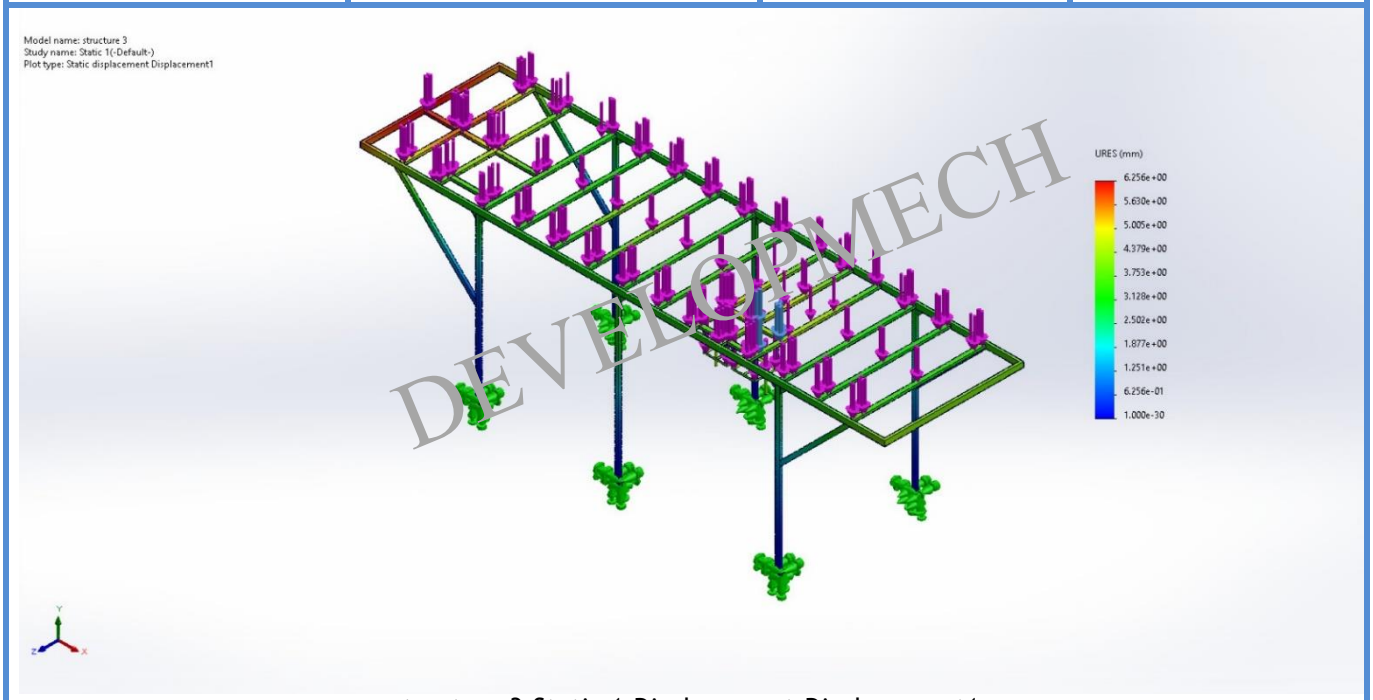
Study Results

Name	Type	Min	Max
Stress1	VON: von Mises Stress	1.182e-02N/m^2 Node: 5310445	7.305e+07N/m^2 Node: 2132606



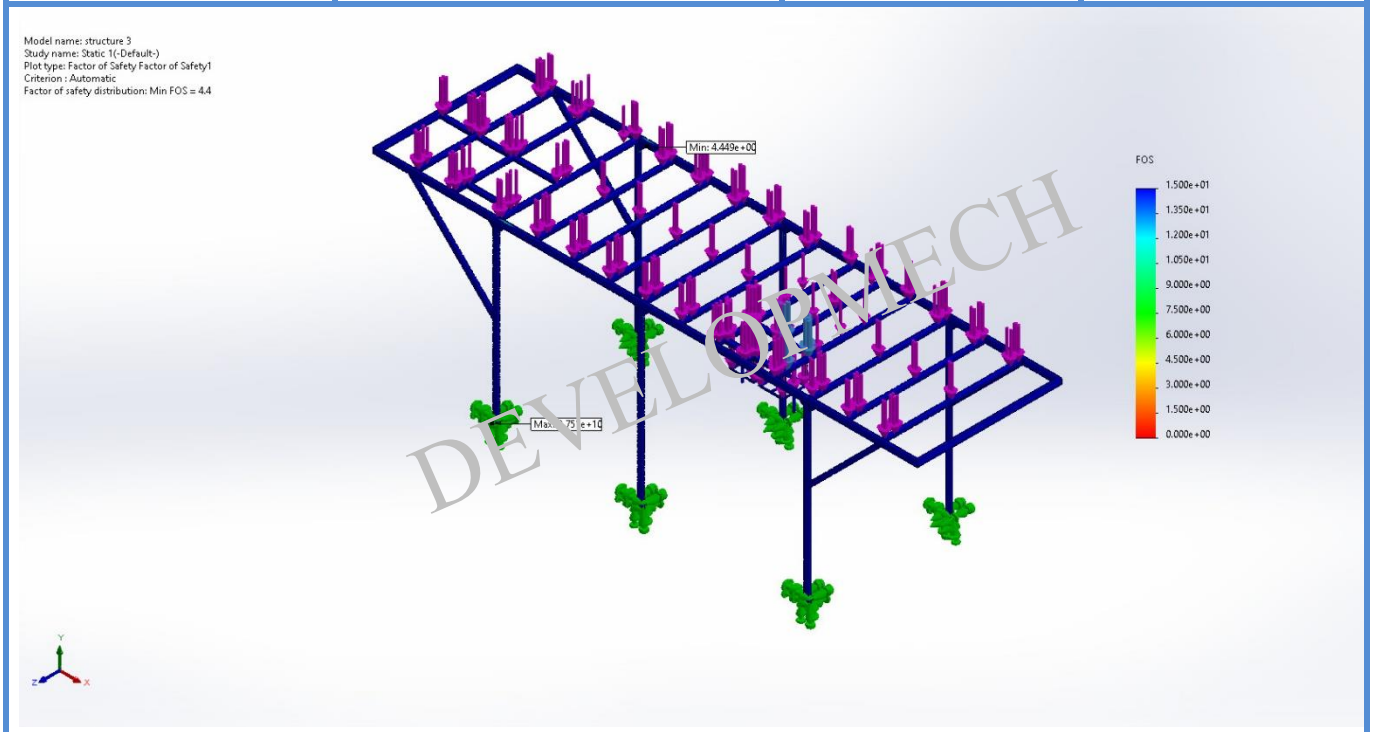
structure 3-Static 1-Stress-Stress1

Name	Type	Min	Max
Displacement1	URES: Resultant Displacement	0.000e+00mm Node: 229	6.256e+00mm Node: 218294



structure 3-Static 1-Displacement-Displacement1

Name	Type	Min	Max
Factor of Safety	Automatic	4.449e+00 Node: 2132606	2.751e+10 Node: 5310445



structure 3-Static 1-Factor of Safety-Factor of Safety1