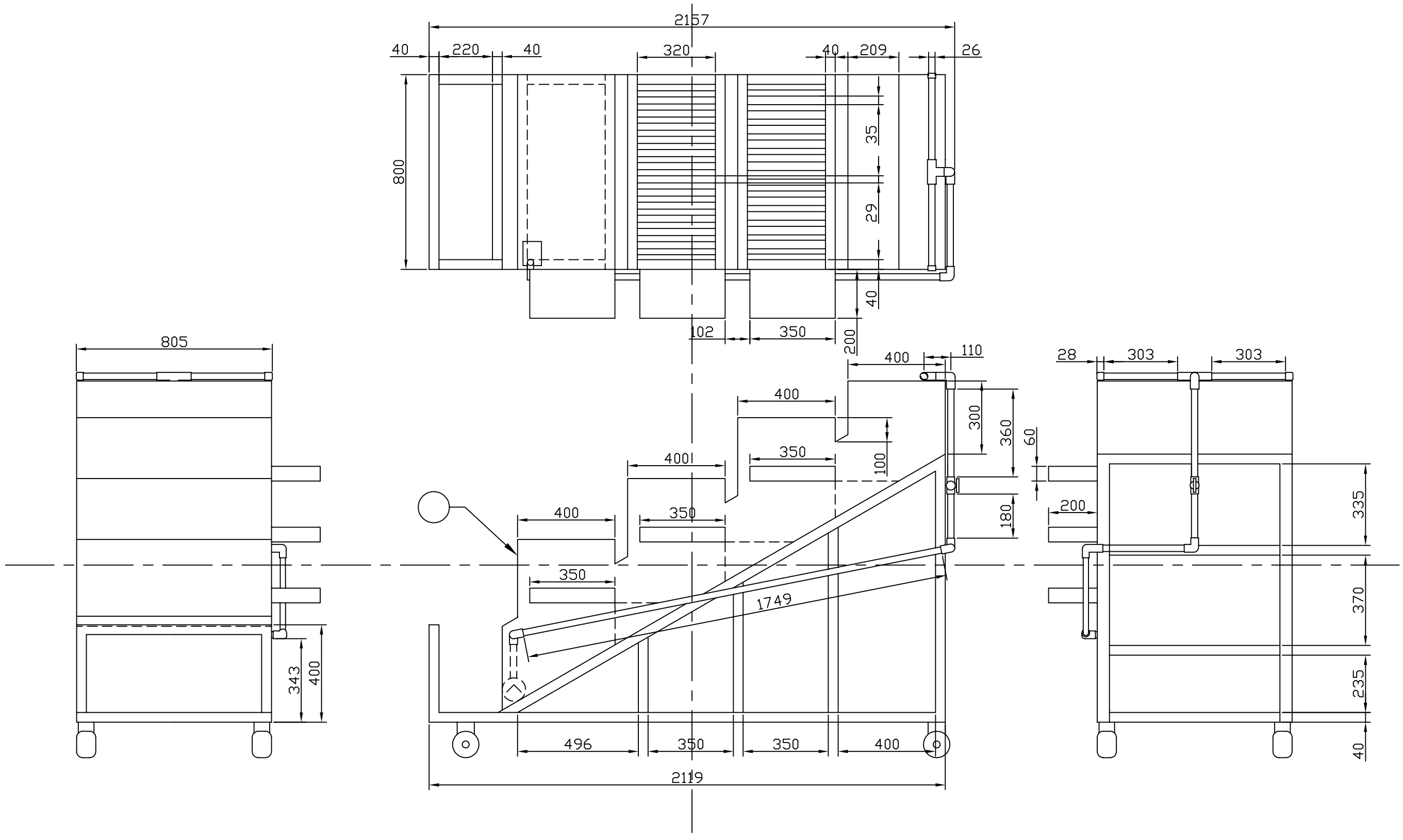
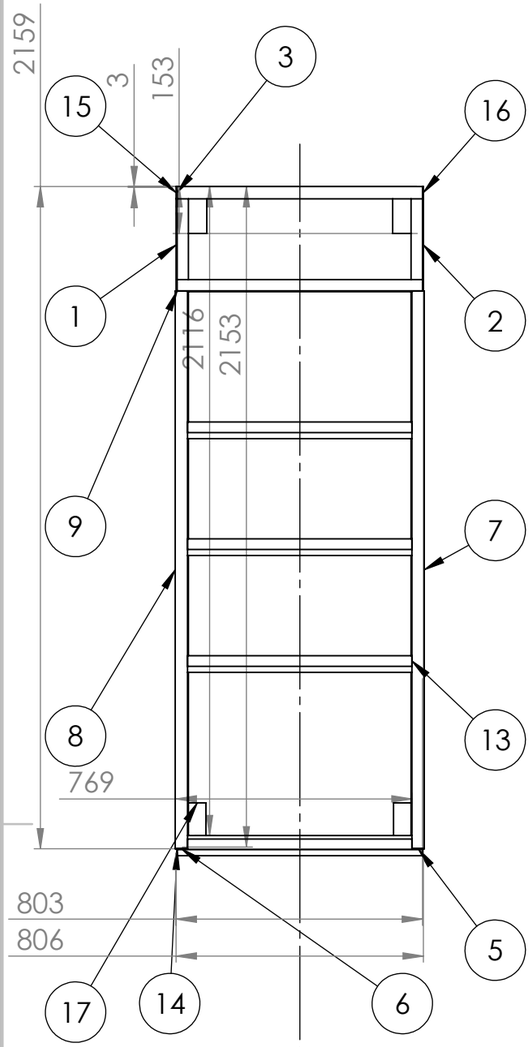
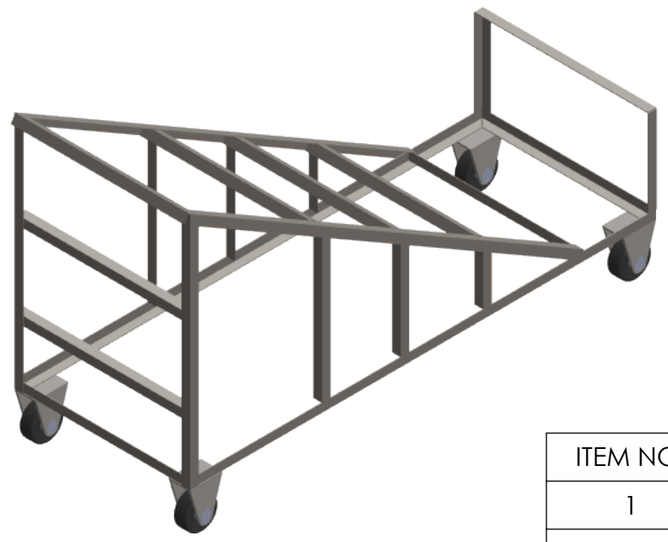
LAMPIRAN



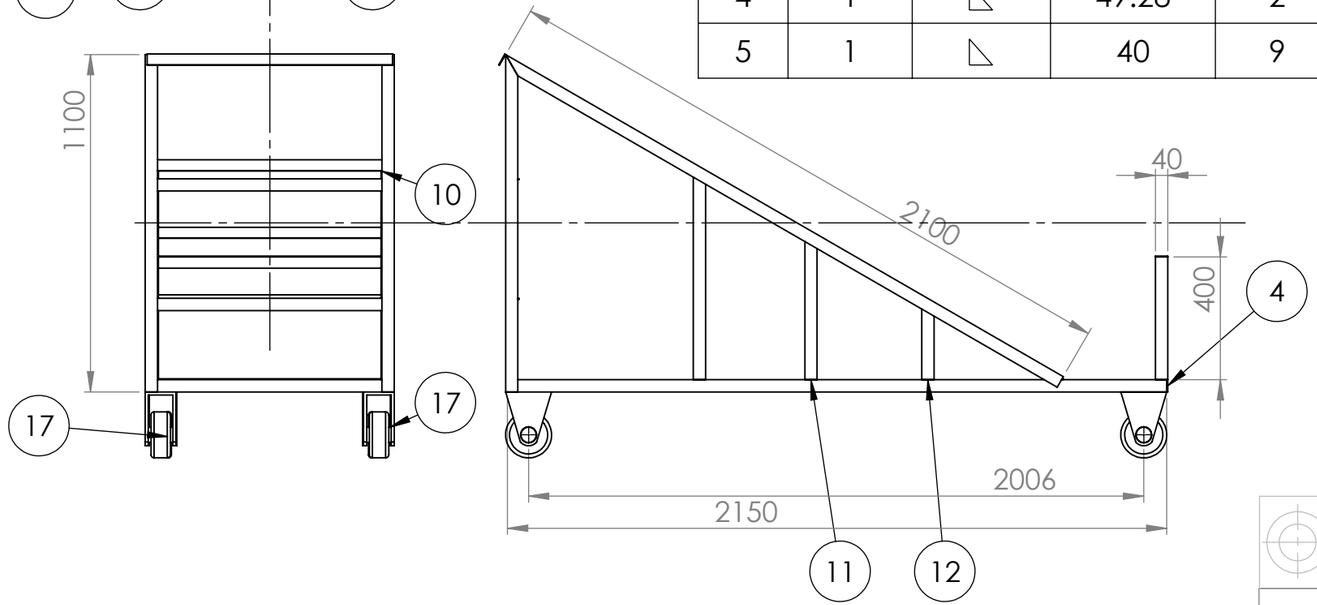
skala = 1:16	nama = Asep Firdaus	Peringatan :	
satuan = mm	no reg = 5353155246		
tanggal =	diperiksa =		
UNJ	Sortasi Ikan Lele	No. 3	A3





ITEM NO.	WELD SIZE	SYMBOL	WELD LENGTH	QTY.
1	1	◺	52.33	3
2	1	◺	89.33	1
3	1	◺	37	4
4	1	◺	49.28	2
5	1	◺	40	9

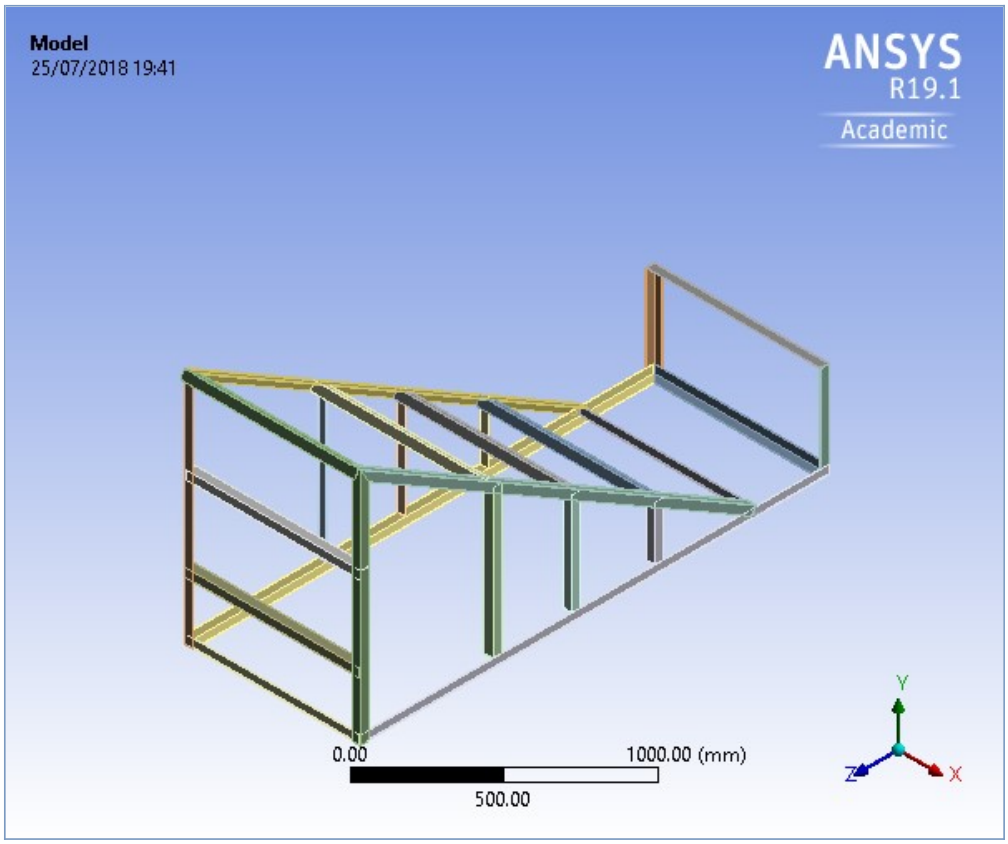
ITEM NO.	PART NUMBER	QTY.
1	2.15 a	1
2	2.15 b	1
3	0.8 a	2
4	0.8 b	1
5	1.1 a	1
6	1.1 b	1
7	2.1 a	1
8	2.1 b	1
9	0.8 atas	3
10	0.68	2
11	0.47	2
12	0.25	2
13	0.8 belakang atas 1	3
14	0.8 belakang atas	1
15	0.4 a	1
16	0.4 b	1
17	roda assem	4



Satuan : mm	Digambar : Asep Firdaus	
Skala : 1:20	No. Reg : 5353155246	
Tanggal: 6/6/2018	Dilihat : Drs. Sopiyan, M.Pd	
UNJ	Assembly	TA A3

Project

First Saved	Wednesday, July 25, 2018
Last Saved	Wednesday, July 25, 2018
Product Version	19.1 Release
Save Project Before Solution	No
Save Project After Solution	No



Contents

Units

TABLE 1

Unit System	Metric (mm, kg, N, s, mV, mA) Degrees rad/s Celsius
Angle	Degrees
Rotational Velocity	rad/s
Temperature	Celsius

Model (A4)

Geometry

TABLE 2
Model (A4) > Geometry

Object Name	*Geometry*
State	Fully Defined
Definition	
Source	E:\ASEP BACK UP\TA Asep\Rangka\Assem1.scdoc
Type	SpaceClaim
Length Unit	Meters
Element Control	Program Controlled
Display Style	Body Color
Bounding Box	
Length X	812. mm
Length Y	1101.5 mm
Length Z	2181.6 mm
Properties	
Volume	5.0768e+006 mm³
Mass	3.9599e-002 kg
Scale Factor Value	1.
Statistics	
Bodies	24
Active Bodies	24
Nodes	15154

Elements	3695
Mesh Metric	None
Update Options	
Assign Default Material	No
Basic Geometry Options	
Solid Bodies	Yes
Surface Bodies	Yes
Line Bodies	Yes
Parameters	Independent
Parameter Key	
Attributes	Yes
Attribute Key	
Named Selections	Yes
Named Selection Key	
Material Properties	Yes
Advanced Geometry Options	
Use Associativity	Yes
Coordinate Systems	Yes
Coordinate System Key	
Reader Mode Saves Updated File	No
Use Instances	Yes
Smart CAD Update	Yes
Compare Parts On Update	No
Analysis Type	3-D
Mixed Import Resolution	None
Decompose Disjoint Geometry	Yes
Enclosure and Symmetry Processing	Yes

TABLE 3
Model (A4) > Geometry > Parts

Object Name	*2.15 a\Solid1*	*2.15 b\Solid1*	*0.8 a\Solid1*	*0.8 a\Solid1*	*0.8 b\Solid1*	*1.1 a\Solid1*	*1.1 b\Solid1*	*2.1 a\Solid1*	*2.1 b\Solid1*	*0.8 atas\Solid1*	*0.8 atas\Solid1*
State	Meshed										
Graphics Properties											
Visible	Yes										
Transparency	1										
Definition											
Suppressed	No										
Stiffness Behavior	Flexible										
Coordinate System	Default Coordinate System										
Reference Temperature	By Environment										
Behavior	None										
Material											
Assignment	Structural Steel										
Nonlinear Effects	Yes										
Thermal Strain Effects	Yes										
Bounding Box											
Length X	40. mm		800. mm			40. mm				800. mm	
Length Y	40. mm					1100. mm		1084.6 mm		40. mm	
Length Z	2150. mm		40. mm					1838.7 mm		40. mm	
Properties											
Volume	4.9254e+005 mm³		1.8069e+005 mm³			2.4965e+005 mm³		4.8065e+005 mm³		1.848e+005 mm³	
Mass	3.8418e-003 kg		1.4094e-003 kg			1.9473e-003 kg		3.7491e-003 kg		1.4414e-003 kg	
Centroid X	789.1 mm	1573.2 mm	1181.1 mm			1575.9 mm	786.39 mm	1575.9 mm	786.31 mm	1181.1 mm	1178.1 mm
Centroid Y	1140.7 mm		1140.8 mm	1561.8 mm	1140.8 mm	1670.1 mm		1690.3 mm		1143.6 mm	1423.4 mm
Centroid Z	1633.9 mm		2701.2 mm	567.26 mm	566.67 mm	2704.1 mm		1802.9 mm		887.82 mm	2700.8 mm
Moment of Inertia Ip1	1457. kg·mm²	1456.3 kg·mm²	72.404 kg·mm²		72.148 kg·mm²	190.47 kg·mm²	190.11 kg·mm²	1353.8 kg·mm²	1354.5 kg·mm²	77.233 kg·mm²	

Moment of Inertia Ip2	1456.3 kg·mm²	1457. kg·mm²	0.43254 kg·mm²		0.59957 kg·mm²		1.1586 kg·mm²	0.44701 kg·mm²
Moment of Inertia Ip3	1.187 kg·mm²		72.148 kg·mm²	72.404 kg·mm²	190.11 kg·mm²	190.47 kg·mm²	1354.5 kg·mm²	1353.8 kg·mm²	76.967 kg·mm²
Statistics								
Nodes	576	575	366		727	659	899	992	891
Elements	225	224	141		117	130	180	162	168
Mesh Metric	None								
CAD Attributes								
PartTolerance:	0.00000001								
Color:175.159.143									

TABLE 4
Model (A4) > Geometry > Parts

Object Name	*0.8 atas\Solid1*	*0.68 \Solid1*	*0.68 \Solid1*	*0.47 \Solid1*	*0.47 \Solid1*	*0.25 \Solid1*	*0.25 \Solid1*	*0.8 belakang atas 1 \Solid1*	*0.8 belakang atas 1 \Solid1*	*0.8 belakang atas 1 \Solid1*	*0.8 belakang atas\Solid1*
State	Meshed										
Graphics Properties											
Visible	Yes										
Transparency	1										
Definition											
Suppressed	No										
Stiffness Behavior	Flexible										
Coordinate System	Default Coordinate System										
Reference Temperature	By Environment										
Behavior	None										
Material											
Assignment	Structural Steel										
Nonlinear Effects	Yes										
Thermal Strain Effects	Yes										
Bounding Box											
Length X	800. mm	40. mm						800. mm			
Length Y	40. mm	680. mm		470. mm		250. mm		54.641 mm			
Length Z	40. mm							54.641 mm			
Properties											
Volume	1.848e+005 mm³	1.5708e+005 mm³		1.0857e+005 mm³		57750 mm³		1.7664e+005 mm³			1.7725e+005 mm³
Mass	1.4414e-003 kg	1.2252e-003 kg		8.4685e-004 kg		4.5045e-004 kg		1.3778e-003 kg			1.3826e-003 kg
Centroid X	1184.1 mm	789.24 mm	1573. mm	789.24 mm	1573. mm	789.24 mm	1573. mm	1181.1 mm			
Centroid Y	1813.4 mm	1509.5 mm		1404.5 mm		1294.5 mm		1870.7 mm	1650.7 mm	1430.7 mm	2215.7 mm
Centroid Z	2700.8 mm	2091.6 mm		1727.9 mm		1346.9 mm		2116.5 mm	1735.4 mm	1354.4 mm	2714.1 mm
Moment of Inertia Ip1	77.233 kg·mm²	47.515 kg·mm²		15.799 kg·mm²		2.4575 kg·mm²		67.62 kg·mm²			68.322 kg·mm²
Moment of Inertia Ip2	0.44701 kg·mm²	0.37996 kg·mm²		0.26262 kg·mm²		0.13969 kg·mm²		0.42706 kg·mm²			0.42796 kg·mm²
Moment of Inertia Ip3	76.967 kg·mm²	47.289 kg·mm²		15.642 kg·mm²		2.3743 kg·mm²		67.875 kg·mm²			68.576 kg·mm²
Statistics											
Nodes	891	821		681		662		415			674
Elements	168	154		126		88		158			262
Mesh Metric	None										
CAD Attributes											
PartTolerance:	0.00000001										
Color:175.159.143											

TABLE 5
Model (A4) > Geometry > Parts

Object Name	*0.4 a\Solid1*	*0.4 b\Solid1*
State	Meshed	
Graphics Properties		
Visible	Yes	
Transparency	1	
Definition		
Suppressed	No	
Stiffness Behavior	Flexible	
Coordinate System	Default Coordinate System	
Reference Temperature	By Environment	
Behavior	None	
Material		
Assignment	Structural Steel	
Nonlinear Effects	Yes	
Thermal Strain Effects	Yes	
Bounding Box		
Length X	40. mm	
Length Y	400. mm	
Length Z	40. mm	
Properties		
Volume	90347 mm³	90346 mm³
Mass	7.047e-004 kg	
Centroid X	788.86 mm	1573.4 mm
Centroid Y	1365.3 mm	
Centroid Z	567.26 mm	
Moment of Inertia Ip1	9.076 kg·mm²	9.2036 kg·mm²
Moment of Inertia Ip2	0.21589 kg·mm²	
Moment of Inertia Ip3	9.2036 kg·mm²	9.076 kg·mm²
Statistics		
Nodes	354	
Elements	129	
Mesh Metric	None	
CAD Attributes		
PartTolerance:	0.00000001	
Color:175.159.143		

TABLE 6
Model (A4) > Construction Geometry

Object Name	*Construction Geometry*
State	Fully Defined
Display	
Show Mesh	No

TABLE 7
Model (A4) > Construction Geometry > Paths

Object Name	*Path*
State	Fully Defined
Definition	
Path Type	Two Points
Path Coordinate System	Global Coordinate System
Number of Sampling Points	47.
Suppressed	No
Start	
Coordinate System	Global Coordinate System
Start X Coordinate	1181.1 mm
Start Y Coordinate	1149.5 mm
Start Z Coordinate	2711.9 mm
Location	Defined
End	
Coordinate System	Global Coordinate System
End X Coordinate	1181.1 mm
End Y Coordinate	1149.5 mm
End Z Coordinate	555.93 mm
Location	Defined

Coordinate Systems

TABLE 8
Model (A4) > Coordinate Systems > Coordinate System

Object Name	*Global Coordinate System*
State	Fully Defined
Definition	
Type	Cartesian
Coordinate System ID	0.
Origin	
Origin X	0. mm
Origin Y	0. mm
Origin Z	0. mm
Directional Vectors	
X Axis Data	[1. 0. 0.]
Y Axis Data	[0. 1. 0.]
Z Axis Data	[0. 0. 1.]

Connections

TABLE 9
Model (A4) > Connections

Object Name	*Connections*
State	Fully Defined
Auto Detection	
Generate Automatic Connection On Refresh	Yes
Transparency	
Enabled	Yes

TABLE 10
Model (A4) > Connections > Contacts

Object Name	*Contacts*
State	Fully Defined
Definition	
Connection Type	Contact
Scope	
Scoping Method	Geometry Selection
Geometry	All Bodies
Auto Detection	
Tolerance Type	Slider
Tolerance Slider	0.
Tolerance Value	6.4382 mm
Use Range	No
Face/Face	Yes
Face Overlap Tolerance	Off
Cylindrical Faces	Include
Face/Edge	No
Edge/Edge	No
Priority	Include All
Group By	Bodies
Search Across	Bodies
Statistics	
Connections	46
Active Connections	46

TABLE 11
Model (A4) > Connections > Contacts > Contact Regions

Object Name	*Contact Region*	*Contact Region 2*	*Contact Region 3*	*Contact Region 4*	*Contact Region 5*	*Contact Region 6*	*Contact Region 7*	*Contact Region 8*	*Contact Region 9*	*Contact Region 10*	*Contact Region 11*
State	Fully Defined										
Scope											
Scoping Method	Geometry Selection										

Contact	1 Face		2 Faces	1 Face	2 Faces	1 Face					
Target	1 Face		2 Faces	1 Face	2 Faces	1 Face					
Contact Bodies	2.15 a\Solid1									2.15 b\Solid1	
Target Bodies	0.8 a\Solid1	0.8 b\Solid1	1.1 b\Solid1	2.1 b\Solid1	0.8 atas\Solid1	0.68 \Solid1	0.47 \Solid1	0.25 \Solid1	0.4 a\Solid1	0.8 a\Solid1	0.8 b\Solid1
Protected	No										
Definition											
Type	Bonded										
Scope Mode	Automatic										
Behavior	Program Controlled										
Trim Contact	Program Controlled										
Trim Tolerance	6.4382 mm										
Suppressed	No										
Advanced											
Formulation	Program Controlled										
Small Sliding	Program Controlled										
Detection Method	Program Controlled										
Penetration Tolerance	Program Controlled										
Elastic Slip Tolerance	Program Controlled										
Normal Stiffness	Program Controlled										
Update Stiffness	Program Controlled										
Pinball Region	Program Controlled										
Geometric Modification											
Contact Geometry Correction	None										
Target Geometry Correction	None										

TABLE 12
Model (A4) > Connections > Contacts > Contact Regions

Object Name	*Contact Region 12*	*Contact Region 13*	*Contact Region 14*	*Contact Region 15*	*Contact Region 16*	*Contact Region 17*	*Contact Region 18*	*Contact Region 19*	*Contact Region 20*	*Contact Region 21*	*Contact Region 22*
State	Fully Defined										
Scope											
Scoping Method	Geometry Selection										
Contact	2 Faces	1 Face	2 Faces	1 Face				2 Faces		1 Face	
Target	2 Faces	1 Face	2 Faces	1 Face				2 Faces		1 Face	
Contact Bodies	2.15 b\Solid1							0.8 a\Solid1			
Target Bodies	1.1 a\Solid1	2.1 a\Solid1	0.8 atas\Solid1	0.68 \Solid1	0.47 \Solid1	0.25 \Solid1	0.4 b\Solid1	1.1 a\Solid1	1.1 b\Solid1	0.4 a\Solid1	0.4 b\Solid1
Protected	No										
Definition											
Type	Bonded										
Scope Mode	Automatic										
Behavior	Program Controlled										
Trim Contact	Program Controlled										
Trim Tolerance	6.4382 mm										
Suppressed	No										
Advanced											
Formulation	Program Controlled										
Small Sliding	Program Controlled										
Detection											

Method	Program Controlled
Penetration Tolerance	Program Controlled
Elastic Slip Tolerance	Program Controlled
Normal Stiffness	Program Controlled
Update Stiffness	Program Controlled
Pinball Region	Program Controlled
Geometric Modification	
Contact Geometry Correction	None
Target Geometry Correction	None

TABLE 13
Model (A4) > Connections > Contacts > Contact Regions

Object Name	*Contact Region 23*	*Contact Region 24*	*Contact Region 25*	*Contact Region 26*	*Contact Region 27*	*Contact Region 28*	*Contact Region 29*	*Contact Region 30*	*Contact Region 31*	*Contact Region 32*	*Contact Region 33*
State	Fully Defined										
Scope											
Scoping Method	Geometry Selection										
Contact	1 Face			2 Faces		1 Face	2 Faces			1 Face	
Target	1 Face			2 Faces		1 Face	2 Faces			1 Face	
Contact Bodies	0.8 b\Solid1		1.1 a\Solid1				1.1 b\Solid1				2.1 a\Solid1
Target Bodies	0.4 a\Solid1	0.4 b\Solid1	2.1 a\Solid1	0.8 atas\Solid1		0.8 belakang atas\Solid1	2.1 b\Solid1	0.8 atas\Solid1		0.8 belakang atas\Solid1	0.68 \Solid1
Protected	No										
Definition											
Type	Bonded										
Scope Mode	Automatic										
Behavior	Program Controlled										
Trim Contact	Program Controlled										
Trim Tolerance	6.4382 mm										
Suppressed	No										
Advanced											
Formulation	Program Controlled										
Small Sliding	Program Controlled										
Detection Method	Program Controlled										
Penetration Tolerance	Program Controlled										
Elastic Slip Tolerance	Program Controlled										
Normal Stiffness	Program Controlled										
Update Stiffness	Program Controlled										
Pinball Region	Program Controlled										
Geometric Modification											
Contact Geometry Correction	None										
Target Geometry Correction	None										

TABLE 14
Model (A4) > Connections > Contacts > Contact Regions

Object Name	*Contact Region 34*	*Contact Region 35*	*Contact Region 36*	*Contact Region 37*	*Contact Region 38*	*Contact Region 39*	*Contact Region 40*	*Contact Region 41*	*Contact Region 42*	*Contact Region 43*	*Contact Region 44*
State	Fully Defined										
Scope											
Scoping Method	Geometry Selection										
Contact	1 Face		3 Faces			1 Face				3 Faces	
Target	1 Face		3 Faces			1 Face				3 Faces	
Contact Bodies	2.1 a\Solid1						2.1 b\Solid1				
Target Bodies	0.47 \Solid1	0.25 \Solid1	0.8 belakang atas 1\Solid1			0.8 belakang atas\Solid1	0.68 \Solid1	0.47 \Solid1	0.25 \Solid1	0.8 belakang atas 1 \Solid1	
Protected	No										
Definition											
Type	Bonded										
Scope Mode	Automatic										
Behavior	Program Controlled										
Trim Contact	Program Controlled										
Trim Tolerance	6.4382 mm										
Suppressed	No										
Advanced											
Formulation	Program Controlled										
Small Sliding	Program Controlled										
Detection Method	Program Controlled										
Penetration Tolerance	Program Controlled										
Elastic Slip Tolerance	Program Controlled										
Normal Stiffness	Program Controlled										
Update Stiffness	Program Controlled										
Pinball Region	Program Controlled										
Geometric Modification											
Contact Geometry Correction	None										
Target Geometry Correction	None										

TABLE 15
Model (A4) > Connections > Contacts > Contact Regions

Object Name	*Contact Region 45*	*Contact Region 46*
State	Fully Defined	
Scope		
Scoping Method	Geometry Selection	
Contact	3 Faces	1 Face
Target	3 Faces	1 Face
Contact Bodies	2.1 b\Solid1	
Target Bodies	0.8 belakang atas 1\Solid1	0.8 belakang atas\Solid1
Protected	No	
Definition		
Type	Bonded	
Scope Mode	Automatic	
Behavior	Program Controlled	
Trim Contact	Program Controlled	
Trim Tolerance	6.4382 mm	
Suppressed	No	

Advanced	
Formulation	Program Controlled
Small Sliding	Program Controlled
Detection Method	Program Controlled
Penetration Tolerance	Program Controlled
Elastic Slip Tolerance	Program Controlled
Normal Stiffness	Program Controlled
Update Stiffness	Program Controlled
Pinball Region	Program Controlled
Geometric Modification	
Contact Geometry Correction	None
Target Geometry Correction	None

Mesh

TABLE 16
Model (A4) > Mesh

Object Name	*Mesh*
State	Solved
Display	
Display Style	Body Color
Defaults	
Physics Preference	Mechanical
Element Order	Program Controlled
Element Size	Default
Sizing	
Use Adaptive Sizing	Yes
Resolution	Default (2)
Mesh Defeaturing	Yes
Defeature Size	25. mm
Transition	Fast
Span Angle Center	Coarse
Initial Size Seed	Assembly
Bounding Box Diagonal	2575.3 mm
Average Surface Area	16187 mm²
Minimum Edge Length	3.0 mm
Quality	
Check Mesh Quality	Yes, Errors
Error Limits	Standard Mechanical
Target Quality	Default (0.050000)
Smoothing	Medium
Mesh Metric	None
Inflation	
Use Automatic Inflation	None
Inflation Option	Smooth Transition
Transition Ratio	0.272
Maximum Layers	5
Growth Rate	1.2
Inflation Algorithm	Pre
View Advanced Options	No
Advanced	
Number of CPUs for Parallel Part Meshing	Program Controlled
Straight Sided Elements	No
Number of Retries	Default (4)
Rigid Body Behavior	Dimensionally Reduced
Triangle Surface Mesher	Program Controlled
Topology Checking	Yes
Pinch Tolerance	Please Define
Generate Pinch on Refresh	No
Statistics	
Nodes	15154
Elements	3695

Static Structural (A5)

TABLE 17
Model (A4) > Analysis

Object Name	*Static Structural (A5)*
State	Solved
Definition	
Physics Type	Structural
Analysis Type	Static Structural
Solver Target	Mechanical APDL
Options	
Environment Temperature	28. °C
Generate Input Only	No

TABLE 18
Model (A4) > Static Structural (A5) > Analysis Settings

Object Name	*Analysis Settings*
State	Fully Defined
Step Controls	
Number Of Steps	1.
Current Step Number	1.
Step End Time	1. s
Auto Time Stepping	Program Controlled
Solver Controls	
Solver Type	Program Controlled
Weak Springs	Off
Solver Pivot Checking	Program Controlled
Large Deflection	Off
Inertia Relief	Off
Rotordynamics Controls	
Coriolis Effect	Off
Restart Controls	
Generate Restart Points	Program Controlled
Retain Files After Full Solve	No
Combine Restart Files	Program Controlled
Nonlinear Controls	
Newton-Raphson Option	Program Controlled
Force Convergence	Program Controlled
Moment Convergence	Program Controlled
Displacement Convergence	Program Controlled
Rotation Convergence	Program Controlled
Line Search	Program Controlled
Stabilization	Off
Output Controls	
Stress	Yes
Strain	Yes
Nodal Forces	No
Contact Miscellaneous	No
General Miscellaneous	No
Store Results At	All Time Points
Analysis Data Management	
Solver Files Directory	E:\ASEP BACK UP\TA Asep\analisis rangka_files\dp0\SYS\MECH\
Future Analysis	None
Scratch Solver Files Directory	
Save MAPDL db	No
Contact Summary	Program Controlled
Delete Unneeded Files	Yes
Nonlinear Solution	No
Solver Units	Active System
Solver Unit System	nmm

TABLE 19
Model (A4) > Static Structural (A5) > Loads

Object Name	*Fixed Support*	*Displacement*	*Force*
State	Fully Defined		
Scope			
Scoping Method	Geometry Selection		
Geometry	4 Faces	1 Face	6 Faces
Definition			
Type	Fixed Support	Displacement	Force
Suppressed	No		
Define By		Components	Vector
Coordinate System		Global Coordinate System	
X Component		0. mm (ramped)	
Y Component		0. mm (ramped)	
Z Component		0. mm (ramped)	
Magnitude			500. N (ramped)
Direction			Defined

FIGURE 1
Model (A4) > Static Structural (A5) > Displacement

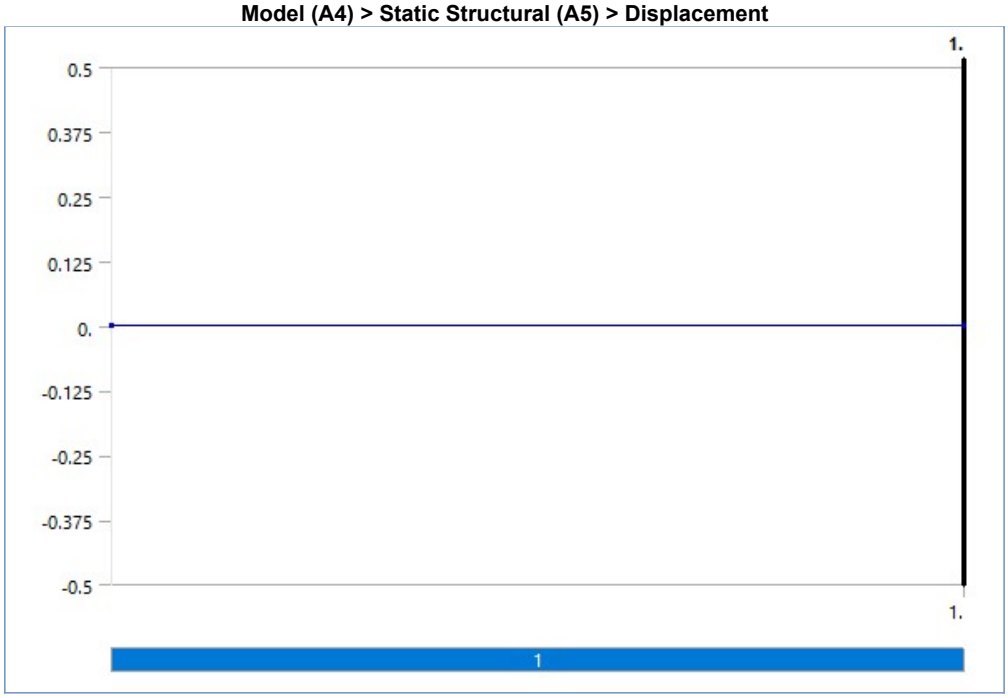
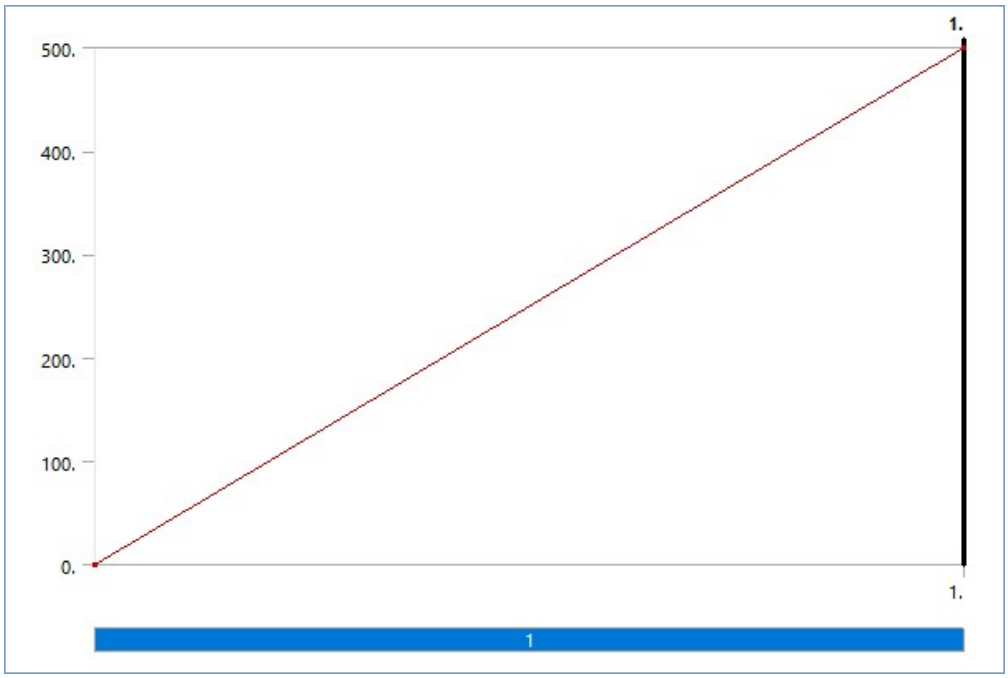


FIGURE 2
Model (A4) > Static Structural (A5) > Force



Solution (A6)

TABLE 20
Model (A4) > Static Structural (A5) > Solution

Object Name	*Solution (A6)*
State	Solved
Adaptive Mesh Refinement	
Max Refinement Loops	3.
Refinement Depth	2.
Information	
Status	Done
MAPDL Elapsed Time	6. s
MAPDL Memory Used	302. MB
MAPDL Result File Size	5.3125 MB
Post Processing	
Beam Section Results	No
On Demand Stress/Strain	No

TABLE 21
Model (A4) > Static Structural (A5) > Solution (A6) > Solution Information

Object Name	*Solution Information*
State	Solved
Solution Information	
Solution Output	Solver Output
Newton-Raphson Residuals	0
Identify Element Violations	0
Update Interval	2.5 s
Display Points	All
FE Connection Visibility	
Activate Visibility	Yes
Display	All FE Connectors
Draw Connections Attached To	All Nodes
Line Color	Connection Type
Visible on Results	No
Line Thickness	Single
Display Type	Lines

TABLE 22
Model (A4) > Static Structural (A5) > Solution (A6) > Results

Object Name	*Directional Deformation*	*Equivalent Stress*	*Normal Stress*
State	Solved		
Scope			
Scoping Method	Geometry Selection		
Geometry	All Bodies		
Definition			
Type	Directional Deformation	Equivalent (von-Mises) Stress	Normal Stress
Orientation	Y Axis		Y Axis
By	Time		
Display Time	Last		
Coordinate System	Global Coordinate System		Global Coordinate System
Calculate Time History	Yes		
Identifier			
Suppressed	No		
Results			
Minimum	-7.7495e-002 mm	2.0167e-013 MPa	-3.2724 MPa
Maximum	6.028e-003 mm	7.3601 MPa	2.8897 MPa
Average	-3.3463e-003 mm	0.43462 MPa	-9.9317e-002 MPa
Minimum Occurs On	0.8 belakang atas 1\Solid1	0.8 a\Solid1	1.1 a\Solid1
Maximum Occurs On	0.8 belakang atas\Solid1	0.8 belakang atas 1\Solid1	2.1 b\Solid1
Information			
Time	1. s		
Load Step	1		
Substep	1		
Iteration Number	1		
Integration Point Results			
Display Option		Averaged	
Average Across Bodies		No	

FIGURE 3
Model (A4) > Static Structural (A5) > Solution (A6) > Directional Deformation

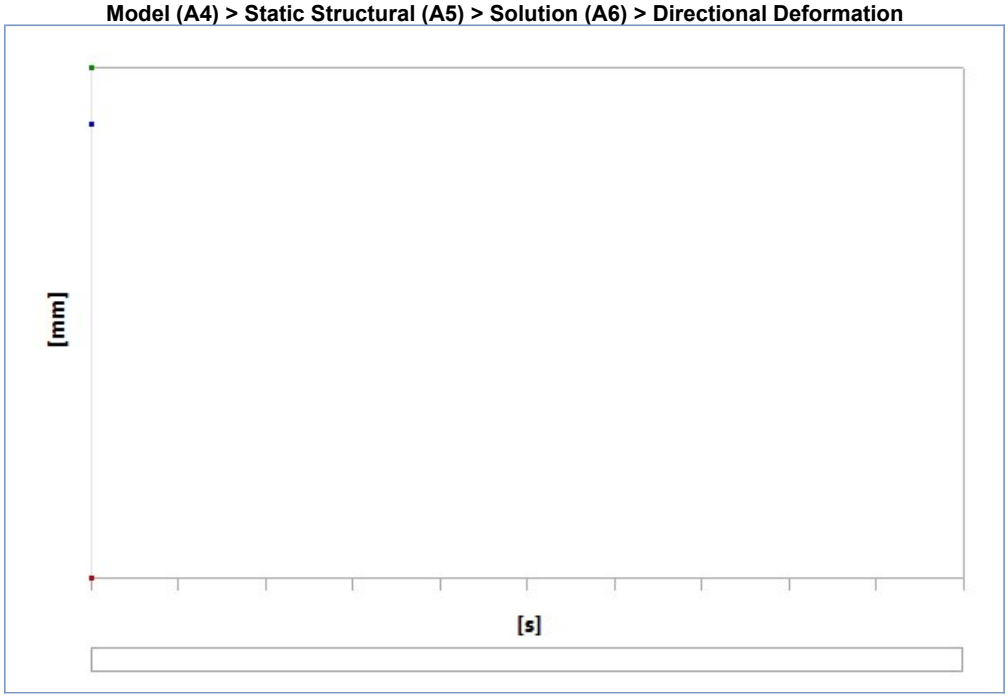


TABLE 23
Model (A4) > Static Structural (A5) > Solution (A6) > Directional Deformation

Time [s]	Minimum [mm]	Maximum [mm]	Average [mm]
1.	-7.7495e-002	6.028e-003	-3.3463e-003

FIGURE 4
Model (A4) > Static Structural (A5) > Solution (A6) > Equivalent Stress

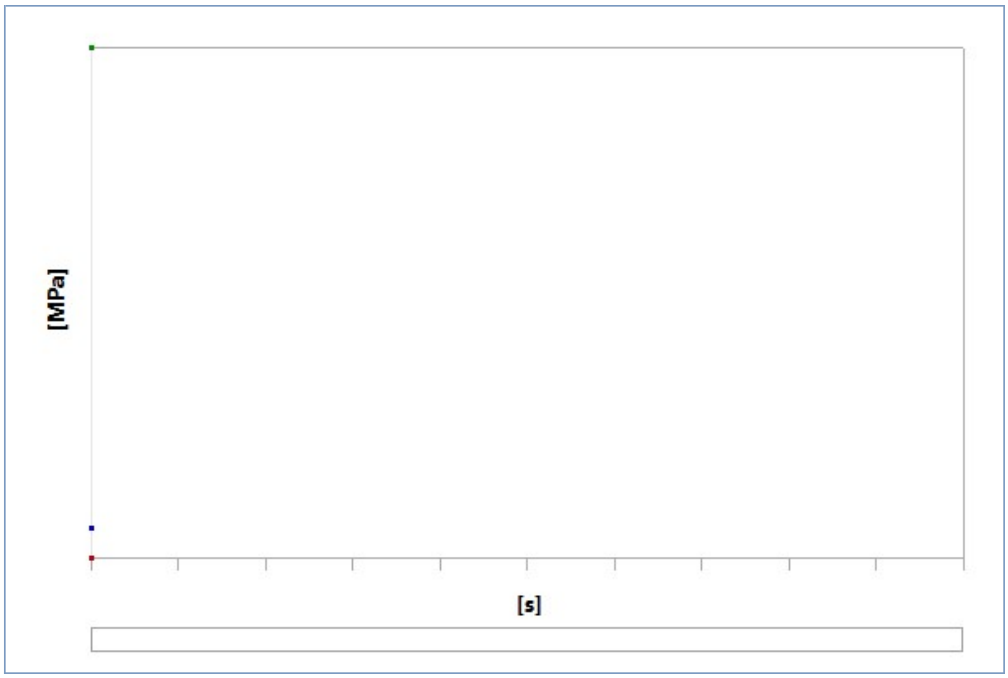


TABLE 24
Model (A4) > Static Structural (A5) > Solution (A6) > Equivalent Stress

Time [s]	Minimum [MPa]	Maximum [MPa]	Average [MPa]
1.	2.0167e-013	7.3601	0.43462

FIGURE 5
Model (A4) > Static Structural (A5) > Solution (A6) > Normal Stress

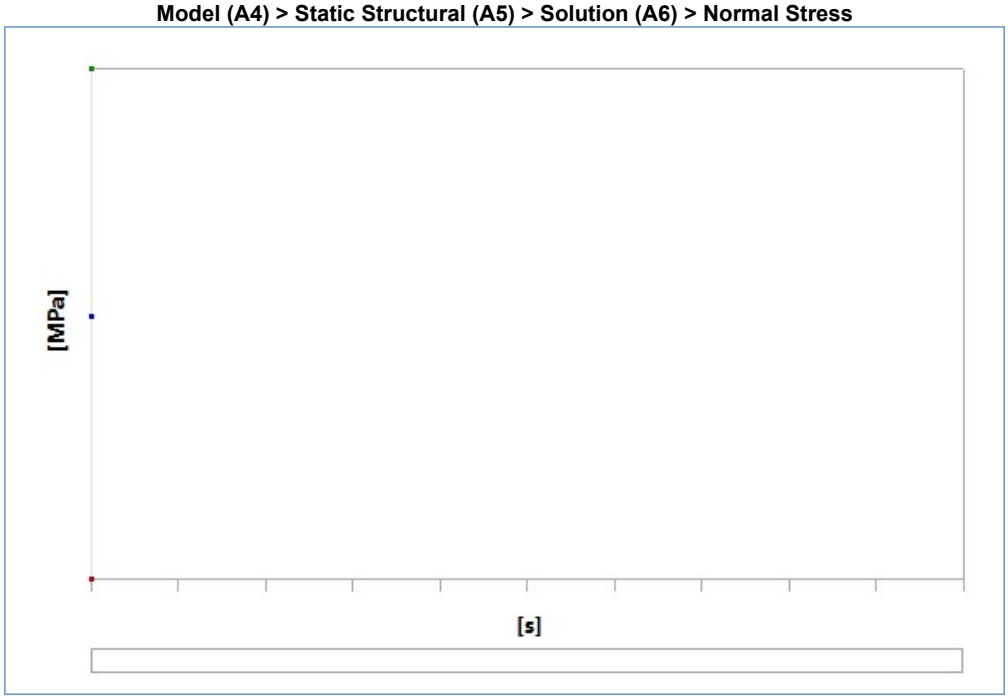


TABLE 25
Model (A4) > Static Structural (A5) > Solution (A6) > Normal Stress

Time [s]	Minimum [MPa]	Maximum [MPa]	Average [MPa]
1.	-3.2724	2.8897	-9.9317e-002

Material Data

Structural Steel

TABLE 26
Structural Steel > Constants

Density	7.8e-009 kg mm^-3
Isotropic Secant Coefficient of Thermal Expansion	1.2e-005 C^-1
Specific Heat Constant Pressure	4.34e+005 mJ kg^-1 C^-1
Isotropic Thermal Conductivity	6.05e-002 W mm^-1 C^-1
Isotropic Resistivity	1.7e-004 ohm mm

TABLE 27
Structural Steel > Color

Red	Green	Blue
132	139	179

TABLE 28
Structural Steel > Compressive Ultimate Strength

Compressive Ultimate Strength MPa
0

TABLE 29
Structural Steel > Compressive Yield Strength

Compressive Yield Strength MPa
250

TABLE 30
Structural Steel > Tensile Yield Strength

Tensile Yield Strength MPa
250

TABLE 31
Structural Steel > Tensile Ultimate Strength

Tensile Ultimate Strength MPa
460

TABLE 32
Structural Steel > Isotropic Secant Coefficient of Thermal Expansion

Zero-Thermal-Strain Reference Temperature C
22

TABLE 33
Structural Steel > S-N Curve

Alternating Stress MPa	Cycles	Mean Stress MPa
3999	10	0
2827	20	0
1896	50	0
1413	100	0
1069	200	0
441	2000	0
262	10000	0
214	20000	0
138	1.e+005	0
114	2.e+005	0
86.2	1.e+006	0

TABLE 34
Structural Steel > Strain-Life Parameters

Strength Coefficient MPa	Strength Exponent	Ductility Coefficient	Ductility Exponent	Cyclic Strength Coefficient MPa	Cyclic Strain Hardening Exponent
920	-0.106	0.213	-0.47	1000	0.2

TABLE 35
Structural Steel > Isotropic Elasticity

Young's Modulus MPa	Poisson's Ratio	Bulk Modulus MPa	Shear Modulus MPa	Temperature C
2.e+005	0.3	1.6667e+005	76923	

TABLE 36
Structural Steel > Isotropic Relative Permeability

Relative Permeability
10000