

Update on AGDD description of platforms

Odd and Even sectors



Georgian Technical University

Niko Tsutskiridze

Responsible

Alexander Sharmazanashvili

Project overall parameters:

- Started: 5 June 2020
- Involved manpower: 1 FTE
- Number of Tasks executed: 26
- Working days spent: 55 days
- First results have been presented at Muon Software Meeting – 13 August, 2020
<https://indico.cern.ch/event/934877/>

Thank you Gevorg Akhperjanyan for giving us information about materials

Project Implementation workflow:

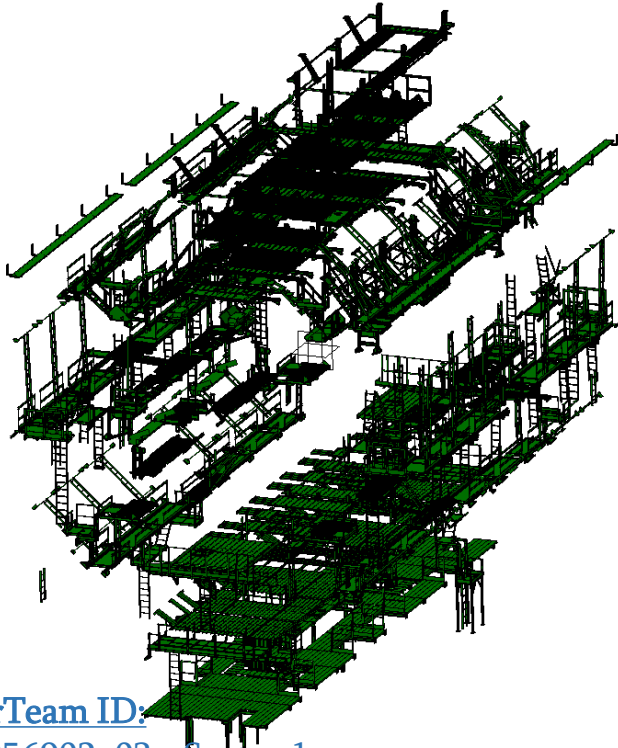
1. Compare Analyses
2. Simplification
3. Integration Conflict Checking
4. Preparation of AGDD/XML Description

Access Platforms – Compare/Simplification

Odd Sectors

Access Platforms - Odd Sectors

Detailed Model

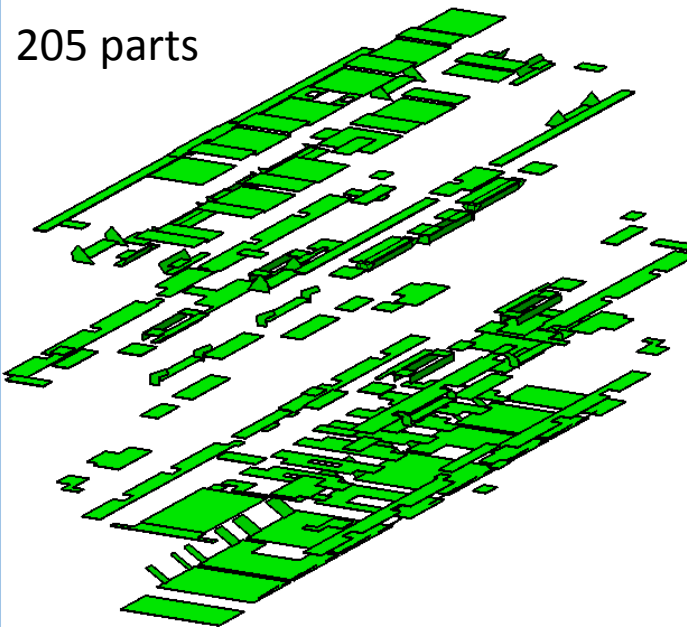


SmarTeam ID:

ST0056902_03 - Sector 1
ST0058051_01 - Sector 3
ST0064899_01 - Sector 5
ST0087222_01 - Sector 7
ST0088408_01 - Sector 9
ST0091493_03 - Sector 11
ST0094828_01 - Sector 13
ST0091486_03 - Sector 15

VS

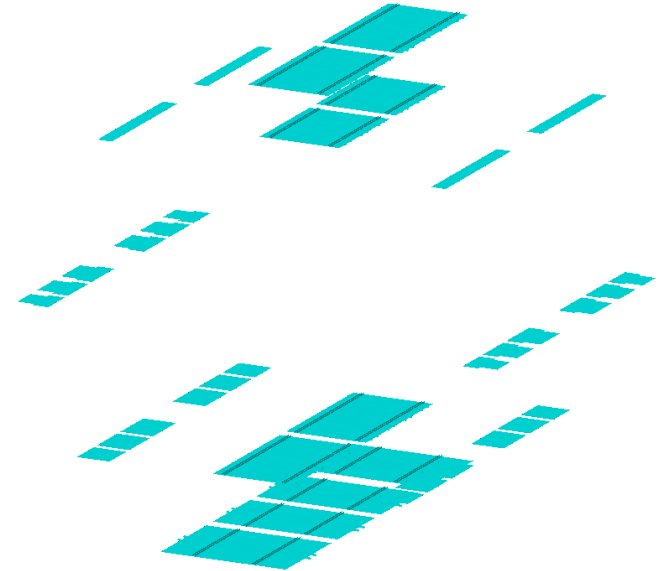
Simplified Model



205 parts

VS

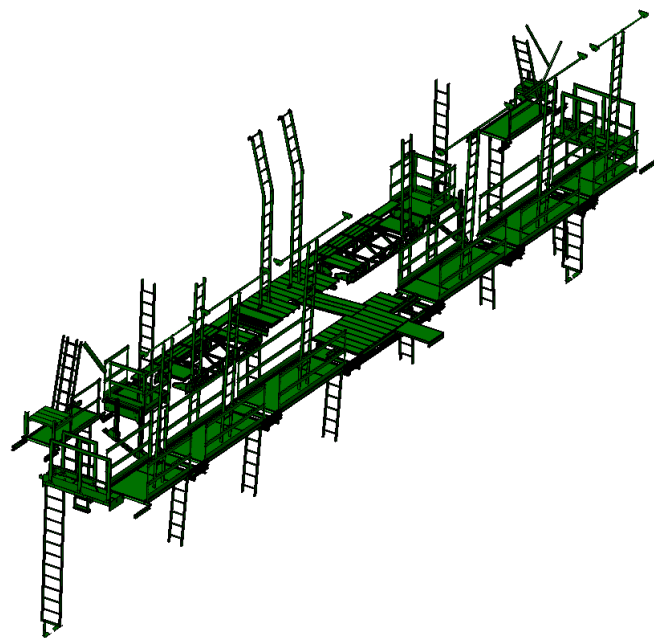
Existing Model



AGDD/XML:

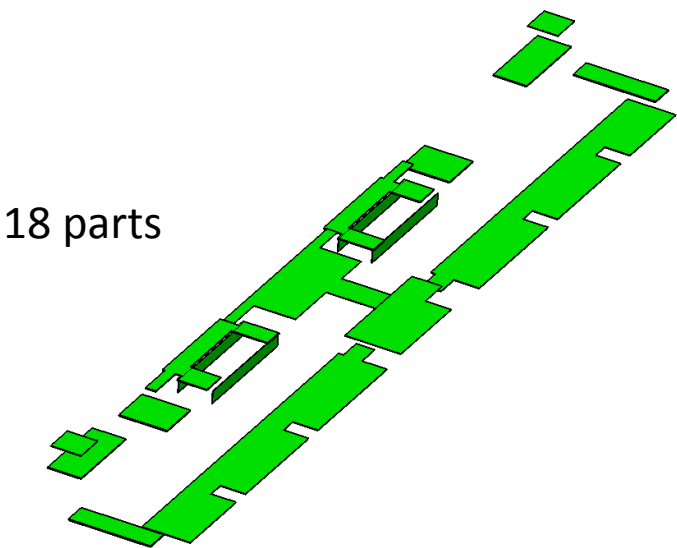
amdb_simrec.r.09.00.xml

Detailed Model



VS

Simplified Model



VS

Existing Model



Volume (m³)	0.6427
Mass (kg)	1'735
Material	Aluminum
Density (kg/m³)	2700

Diff: 0 Kg

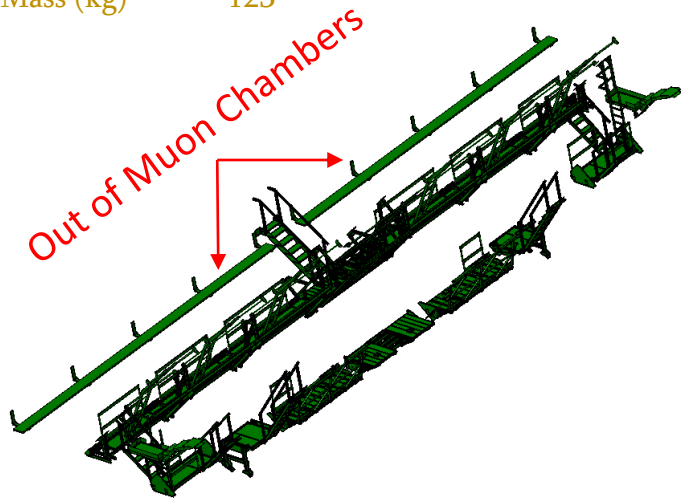
Volume (m³)	0.6427
Mass (kg)	1'735
Material	Aluminum
Density (kg/m³)	2700

Diff: 1'664 Kg

Volume (m³)	0.0262
Mass (kg)	71
Material	Aluminum
Density (kg/m³)	2700

Detailed Model

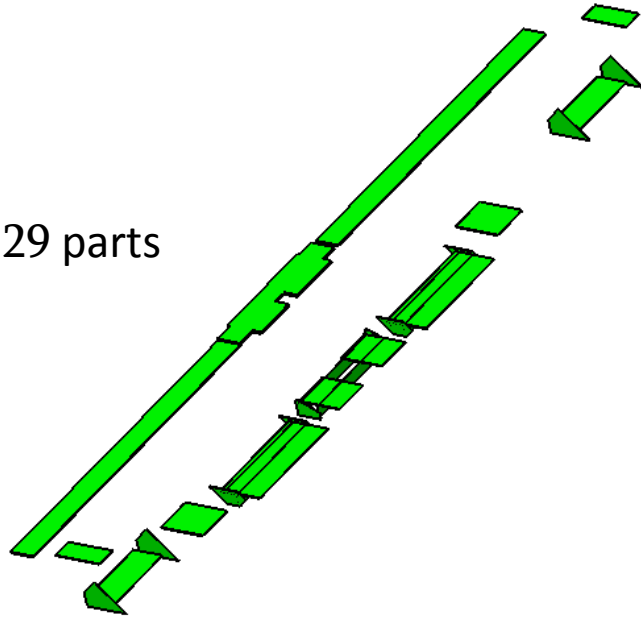
Volume (m³) - 0.0455
Mass (kg) - 123



Volume (m³)	0.8826
Mass (kg)	2383
Material	Aluminum
Density (kg/m³)	2700

Diff: 0 Kg

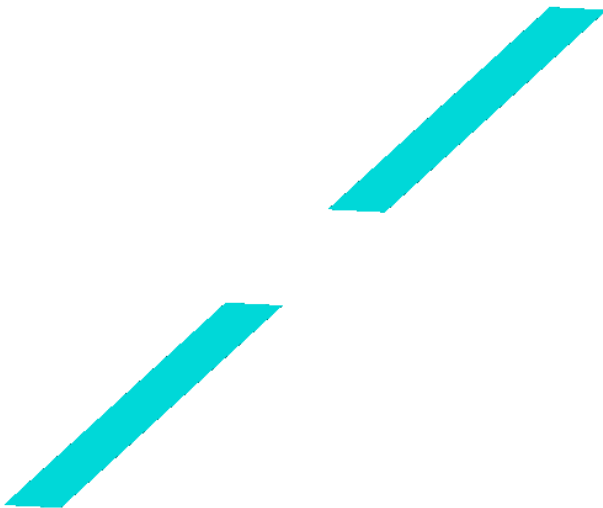
Simplified Model



Volume (m³)	0.8826
Mass (kg)	2383
Material	Aluminum
Density (kg/m³)	2700

Diff: 2'345 Kg

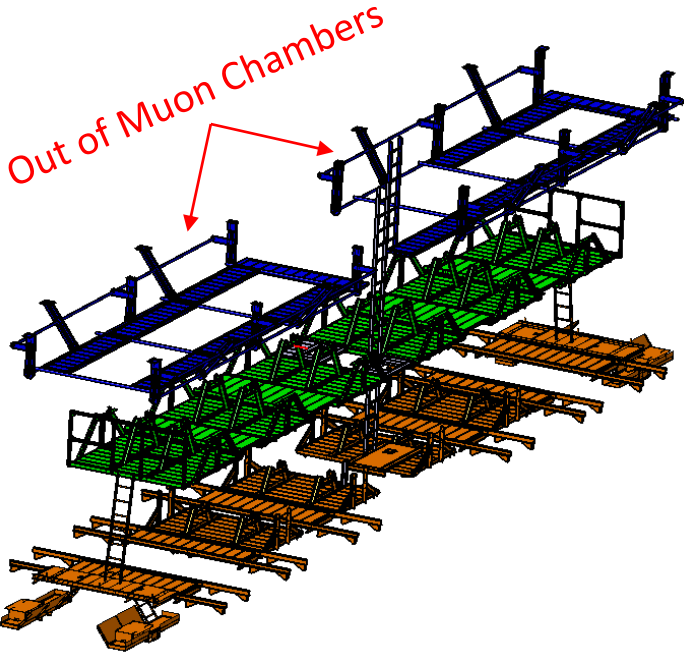
Existing Model



Volume (m³)	0.0139
Mass (kg)	38
Material	Aluminum
Density (kg/m³)	2700

Detailed Model

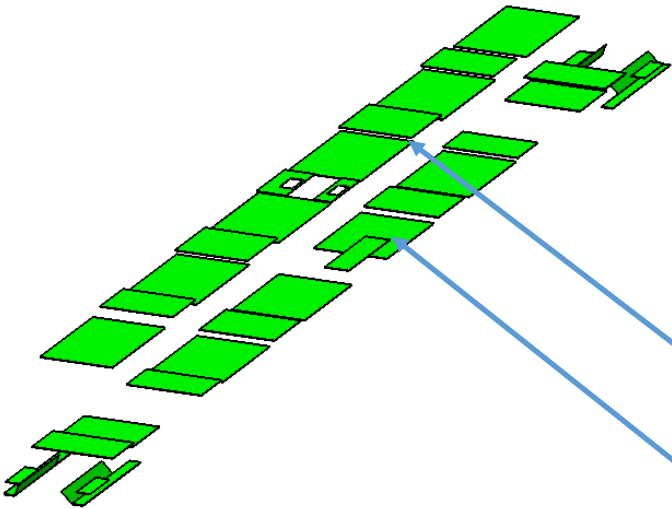
Volume (m³) - 0.3
Mass (kg) - 810



Volume (m³)	1.198
Mass (kg)	3'235
Material	Aluminum
Density (kg/m³)	2700

VS

Simplified Model

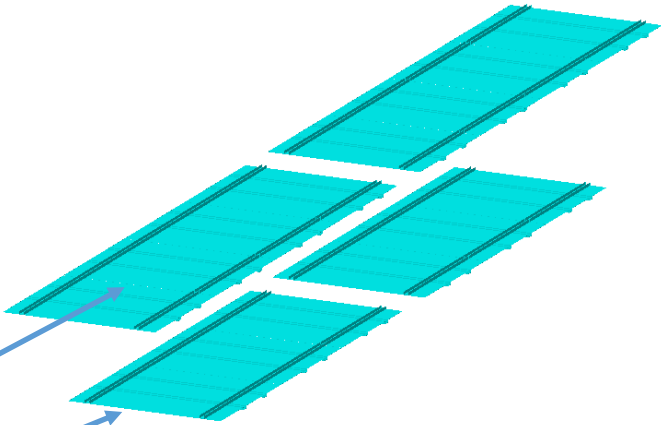


37 parts

Volume (m³)	1.198
Mass (kg)	3'235
Material	Aluminum
Density (kg/m³)	2700

VS

Existing Model



2nd floor

1st floor

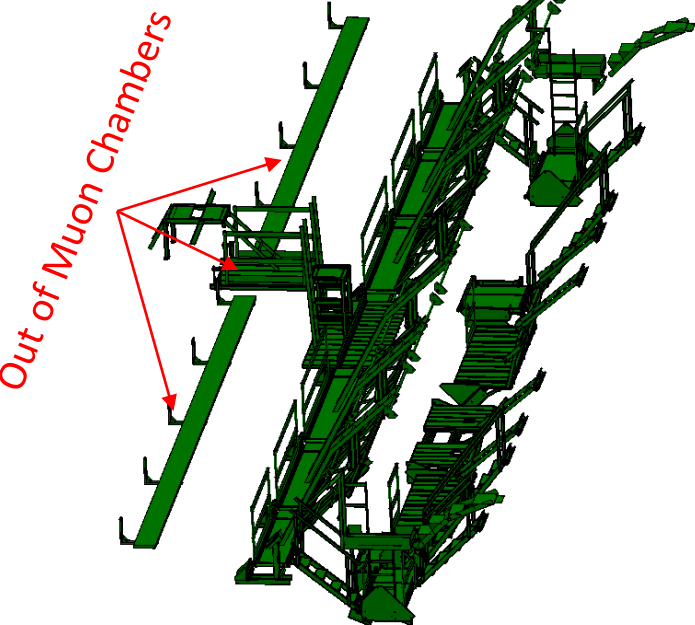
Volume (m³)	0.3526
Mass (kg)	952
Material	Aluminum
Density (kg/m³)	2700

Diff: 0 Kg

Diff: 2'283 Kg

Detailed Model

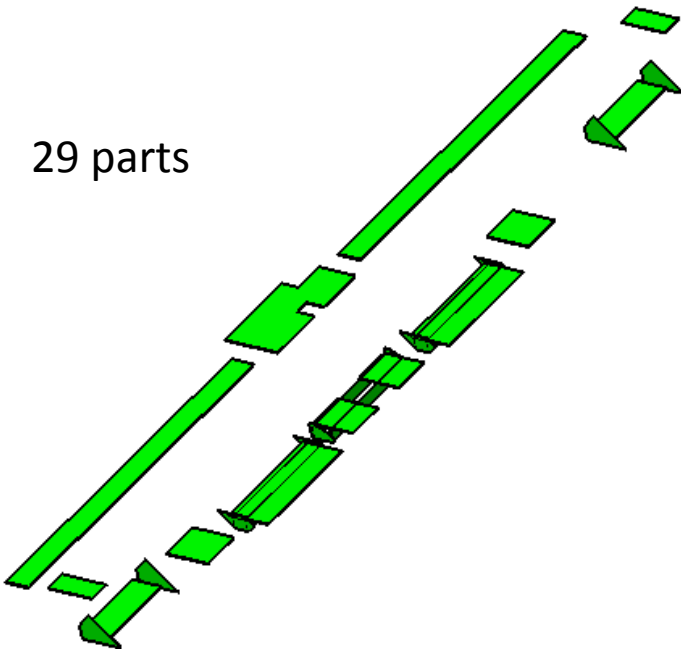
Volume (m³) - 0.1097
Mass (kg) - 296



Volume (m³)	0.787
Mass (kg)	2182
Material	Aluminum
Density (kg/m³)	2700

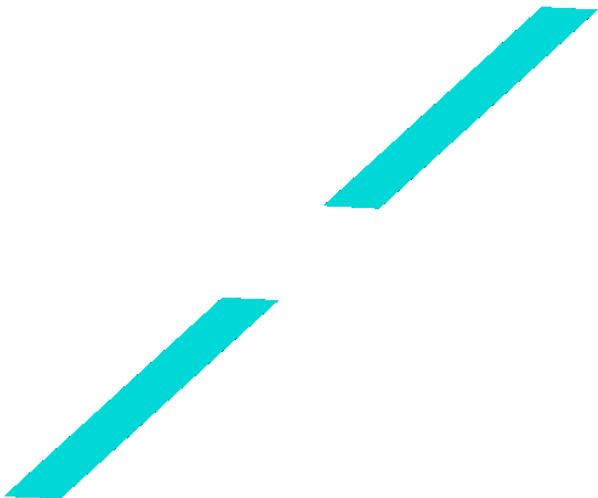
Simplified Model

29 parts



Volume (m³)	0.787
Mass (kg)	2182
Material	Aluminum
Density (kg/m³)	2700

Existing Model



Volume (m³)	0.0139
Mass (kg)	38
Material	Aluminum
Density (kg/m³)	2700

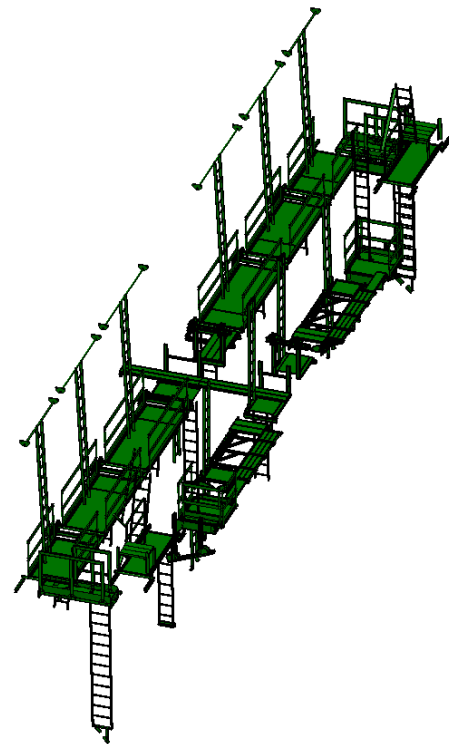
VS

VS

Diff: 0 Kg

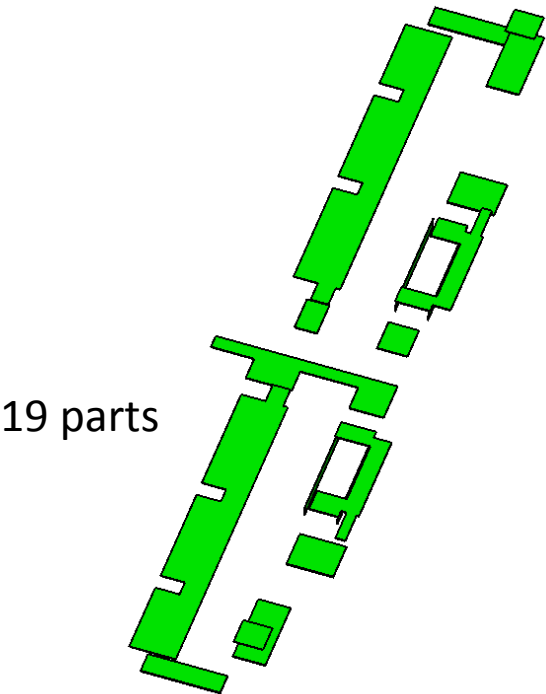
Diff: 2'144 Kg

Detailed Model



VS

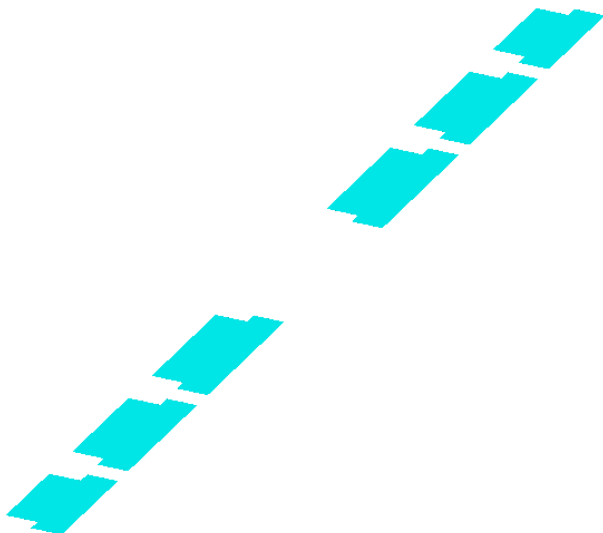
Simplified Model



19 parts

VS

Existing Model



Volume (m³)	0.6518
Mass (kg)	1'760
Material	Aluminum
Density (kg/m³)	2700

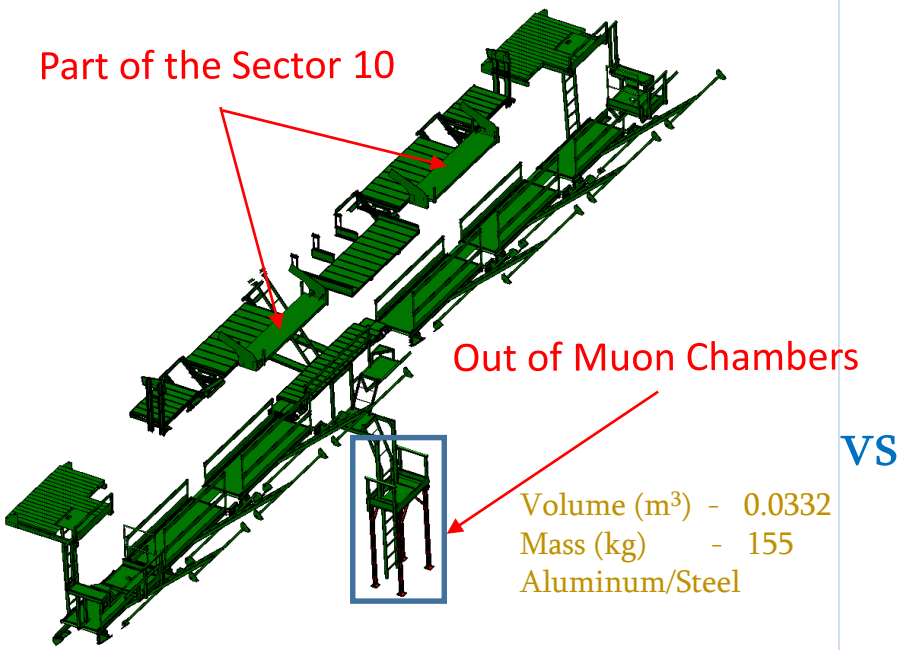
Diff: 0 Kg

Volume (m³)	0.6518
Mass (kg)	1'760
Material	Aluminum
Density (kg/m³)	2700

Diff: 1'689 Kg

Volume (m³)	0.0262
Mass (kg)	71
Material	Aluminum
Density (kg/m³)	2700

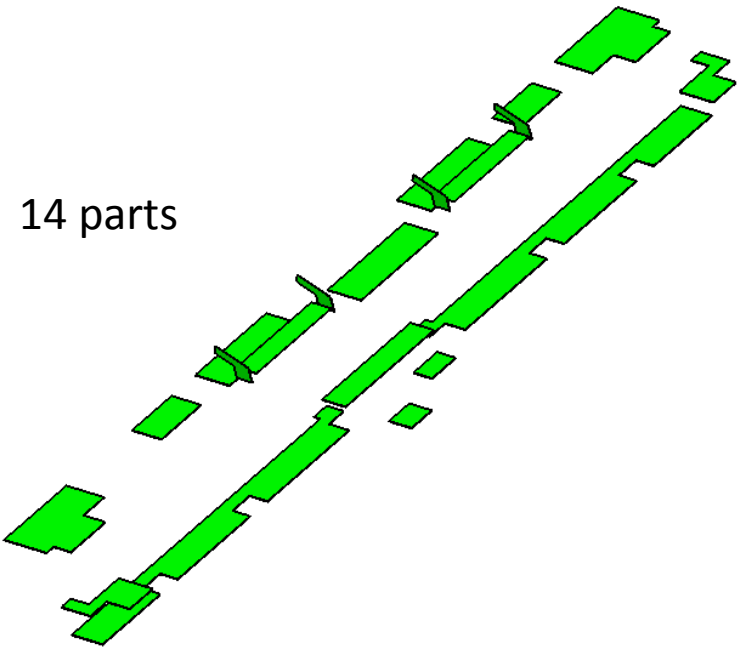
Detailed Model



Total Volume (m³)	0.5348
Total Mass (kg)	1'444
Material	Aluminum
Density (kg/m³)	2700

Diff: 0 Kg

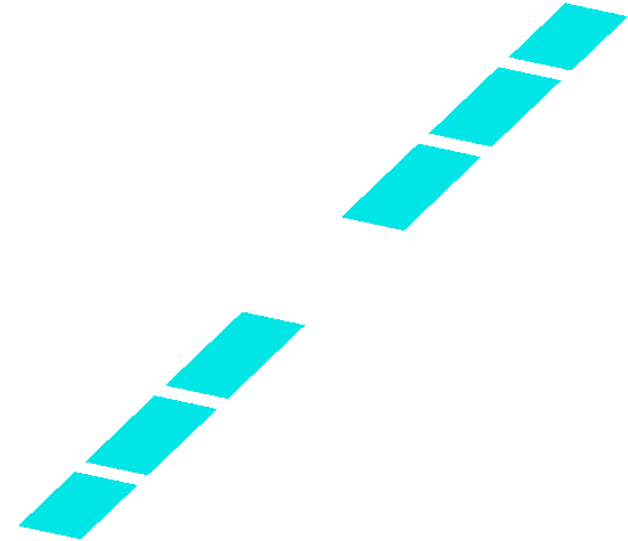
Simplified Model



Total Volume (m³)	0.5348
Total Mass (kg)	1'444
Material	Aluminum
Density (kg/m³)	2700

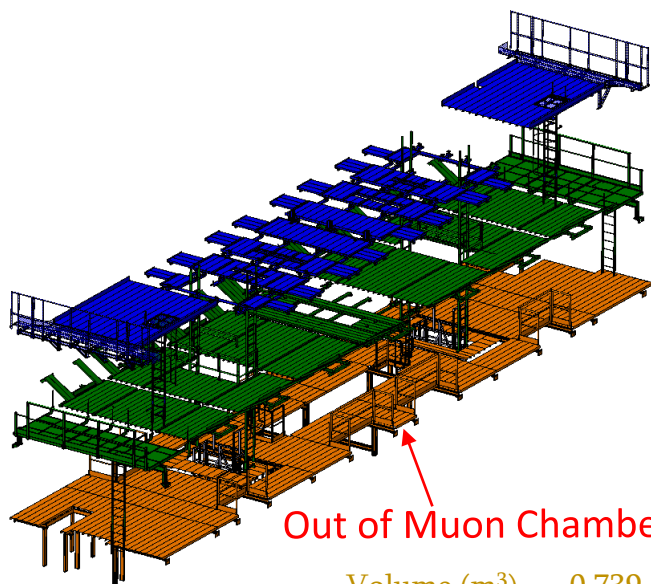
Diff: 1'366 kg

Existing Model



Volume (m³)	0.029
Mass (kg)	78
Material	Aluminum
Density (kg/m³)	2700

Detailed Model



Out of Muon Chambers

Volume (m³) - 0.739
Mass (kg) - 3'674
Aluminum/Steel

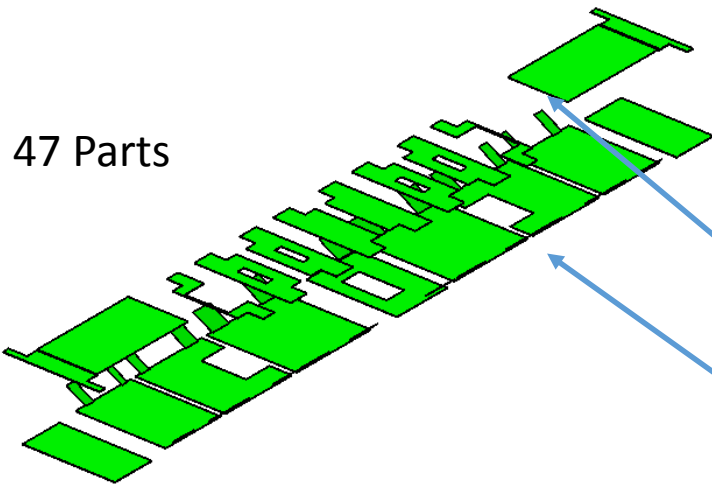
Volume (m³)	1.3889
Mass (kg)	3'750
Material	Aluminum
Density (kg/m³)	2700

VS

Diff: 0 Kg

Simplified Model

47 Parts



3rd floor

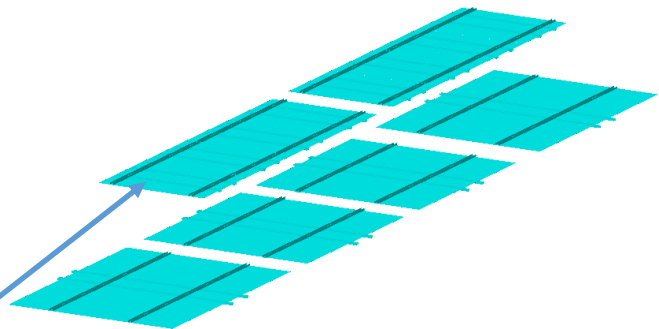
2nd floor

Volume (m³)	1.3889
Mass (kg)	3'750
Material	Aluminum
Density (kg/m³)	2700

VS

Diff: 2'457 Kg

Existing Model

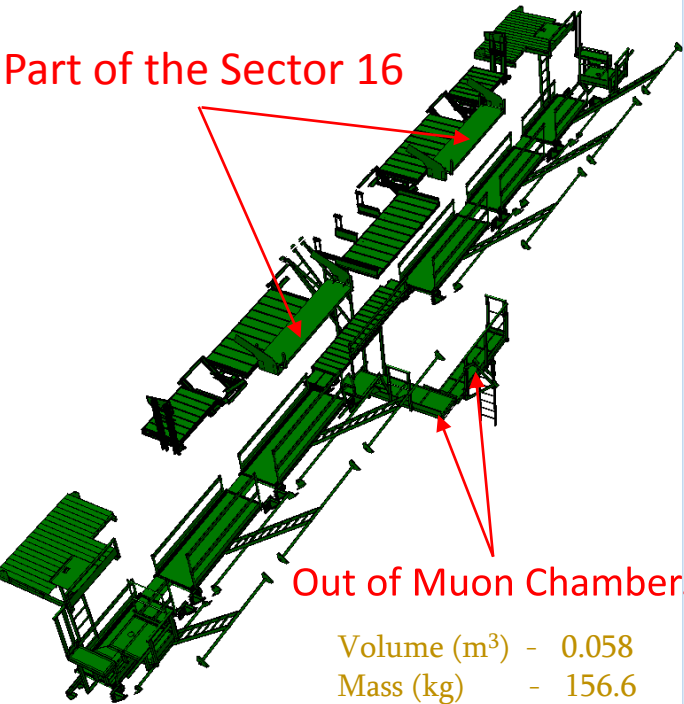


Volume (m³)	0.4788
Mass (kg)	1'293
Material	Aluminum
Density (kg/m³)	2700

Sector 15

Detailed Model

Part of the Sector 16



Out of Muon Chambers

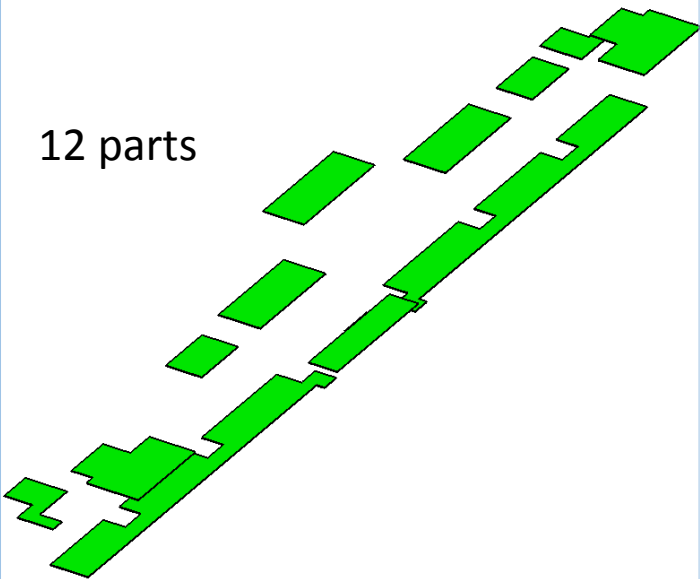
Volume (m³) - 0.058
Mass (kg) - 156.6

Volume (m³)	0.524
Mass (kg)	1'415
Material	Aluminum
Density (kg/m³)	2700

Diff: 0 Kg

Simplified Model

12 parts



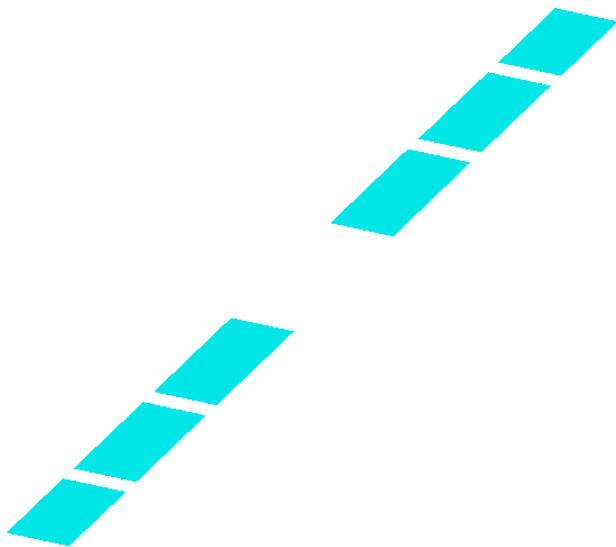
VS

Volume (m³)	0.524
Mass (kg)	1'415
Material	Aluminum
Density (kg/m³)	2700

Diff: 1'337 Kg

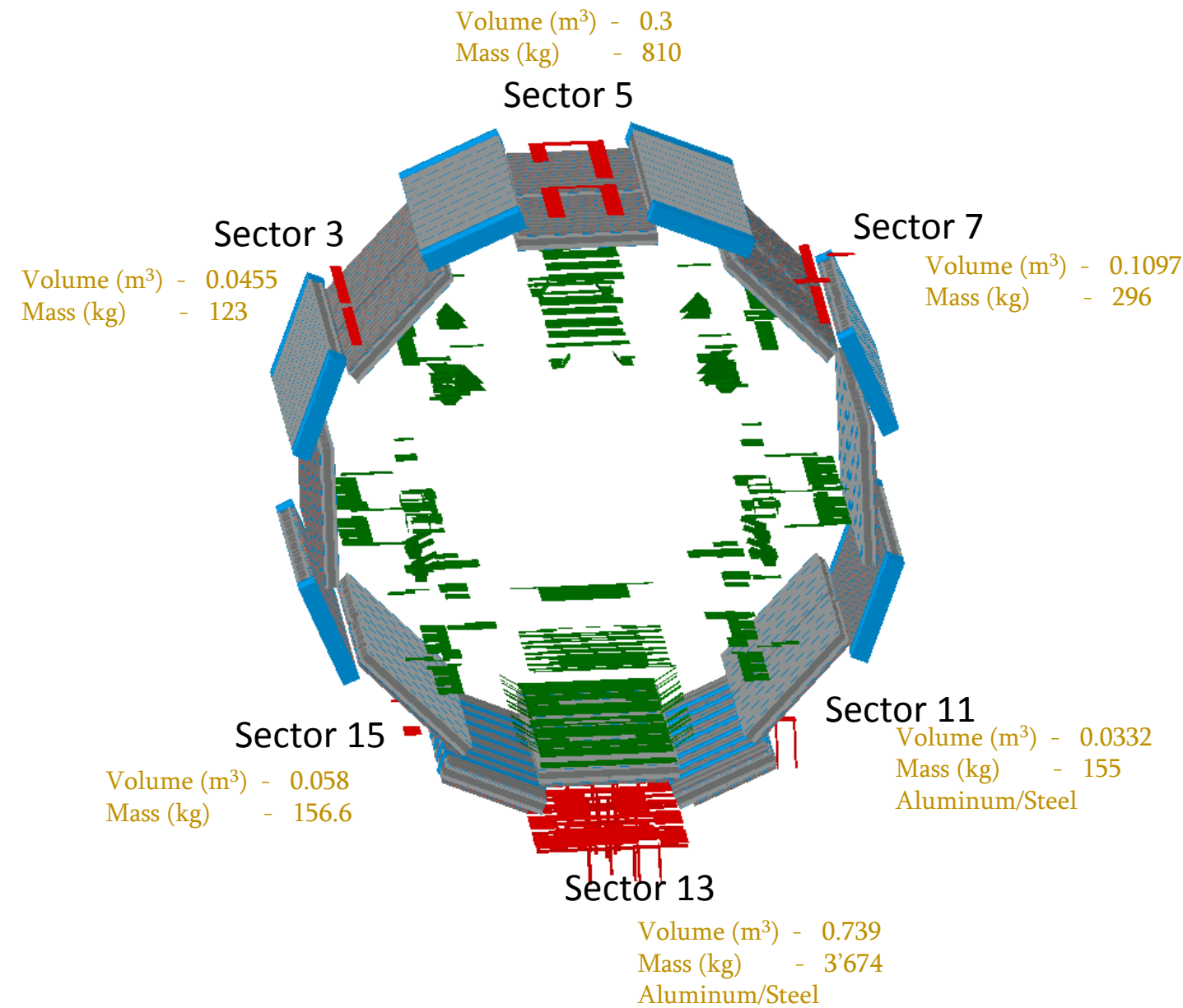
VS

Existing Model



Volume (m³)	0.029
Mass (kg)	78
Material	Aluminum
Density (kg/m³)	2700

Parts out of Muon Chambers



5'214.6 Kg is out of Muon Chambers

Access Platforms – Final Results

Odd Sectors

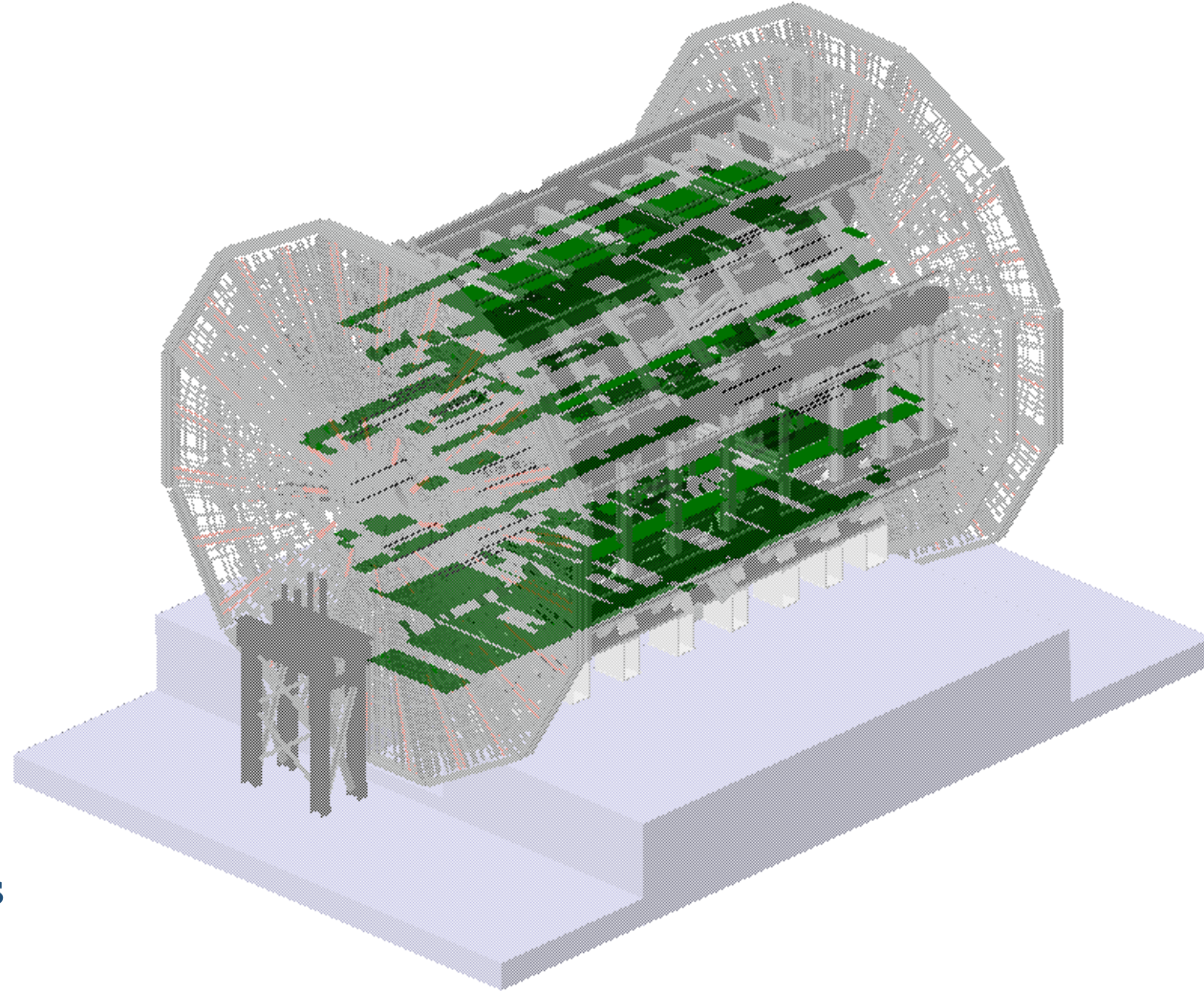
		Detailed Model		Simplified Model		Difference (Detailed vs Simplified)	Existing Model		Difference (Simplified vs Existing)	Difference (Simplified vs Existing)
#	Name	Volume (m³)	Weight (kg)	Volume (m³)	Weight (kg)	kg	Volume (m³)	Weight (kg)	kg	%
1	Sector 1	0.6427	1'735	0.6427	1'735	0	0.0262	70.8	1664	95.9
2	Sector 3	0.8826	2'383	0.8826	2'383	0	0.0139	37.6	2'345	98.4
3	Sector 5 (1 st Floor)	0.663	1'790	0.663	1'790	0	0.151	407.7	1'382	77.2
	Sector 5 (2 nd Floor)	0.535	1'444	0.535	1'444	0	0.2015	544	900	62.3
4	Sector 7	0.787	2182	0.787	2182	0	0.0139	37.6	2'144	98.3
5	Sector 9	0.6518	1'760	0.6518	1'760	0	0.0262	70.8	1689	96
6	Sector 11	0.5348	1'444	0.5348	1'444	0	0.029	78.4	1'366	94.6
7	Sector 13 (2 nd Floor)	0.829	2'238	0.829	2'238	0	0.2773	748.7	1'489	66.5
	Sector 13 (3 rd Floor)	0.5597	1'511	0.5597	1'511	0	0.2015	544	967	64
8	Sector 15	0.524	1'415	0.524	1'415	0	0.029	78.4	1'337	94.5
		6.61	17'902	6.61	17'902	0	0.97	2'618	15'283	85.4



Δ15.3 tons / 85.4%

Access Platforms – Integration Conflict Checking

Odd Sectors



There are No Integration Conflicts

Access Platforms – Preparation of AGDD/XML description

Odd Sectors

Preparation Of AGDD/XML Description

New AGDD/XML Description consists
511 Lines

```

<!-- ***** vouss_platforms ***** -->
<gvxy name="vouss_platf01_Sec1_Plate1" material="Aluminium" dz="23." >
  <gvxy_point X_Y="5355.55; -5521.8"/>
  <gvxy_point X_Y="5355.55; -4675."/>
  <gvxy_point X_Y="5297.; -4675."/>
  <gvxy_point X_Y="5297.; -2221."/>
  <gvxy_point X_Y="5728.; -2221."/>
  <gvxy_point X_Y="5728.; -2025."/>
  <gvxy_point X_Y="6568.5; -2025."/>
  <gvxy_point X_Y="6568.5; -2505."/>
  <gvxy_point X_Y="5715.5; -2505."/>
  <gvxy_point X_Y="5715.5; -4272.5"/>
  <gvxy_point X_Y="6431.; -4272.5"/>
  <gvxy_point X_Y="6431.; -4872.5"/>
  <gvxy_point X_Y="5731.; -4872.5"/>
  <gvxy_point X_Y="5731.; -4675."/>
  <gvxy_point X_Y="5595.55; -4675."/>
  <gvxy_point X_Y="5595.5; -5521.8"/>
</gvxy>

<box name="vouss_platf01_Sec1_Plate2" material="Aluminium" X_Y_Z="7.; 300.; 2800." />
<box name="vouss_plate02_Sec1" material="Aluminium" X_Y_Z="1120.; 30.; 1000." />
<box name="vouss_plate03_Sec1" material="Aluminium" X_Y_Z="780.; 24.2; 1910." />
<box name="vouss_plate04_Sec1" material="Aluminium" X_Y_Z="706.5; 10.6; 720." />

<composition name="vouss_platf01_Sec1_SideA" >
  <posXYZ volume="vouss_platf01_Sec1_Plate1" X_Y_Z="0.; -1143.7; 0." rot="-90. ; 0. ; 0." />
  <posXYZ volume="vouss_platf01_Sec1_Plate2" X_Y_Z="6542.5; -1305.22; 3425." rot="0. ; 0. ; 0." />
  <posXYZ volume="vouss_platf01_Sec1_Plate2" X_Y_Z="5756.; -1305.22; 3425." rot="0. ; 0. ; 0." />
  <posXYZ volume="vouss_plate02_Sec1" X_Y_Z="5867.6; -1300.83; 6056.8" rot="0. ; 0. ; 0." />
  <posXYZ volume="vouss_plate03_Sec1" X_Y_Z="6123.; -478.1; 9552.5" rot="0. ; 0. ; 0." />
  <posXYZ volume="vouss_plate04_Sec1" X_Y_Z="6155.75; 94.; 10224.8" rot="0. ; 0. ; 0." />
</composition>

<composition name="vouss_platf01_Sec1_SideC" >
  <posXYZ volume="vouss_platf01_Sec1_Plate1" X_Y_Z="0.; -1143.7; 0." rot="90. ; 0. ; 0." />
  <posXYZ volume="vouss_platf01_Sec1_Plate2" X_Y_Z="6542.5; -1305.22; -3425." rot="0. ; 0. ; 0." />
  <posXYZ volume="vouss_platf01_Sec1_Plate2" X_Y_Z="5756.; -1305.22; -3425." rot="0. ; 0. ; 0." />
  <posXYZ volume="vouss_plate02_Sec1" X_Y_Z="5867.6; -1300.83; -6056.8" rot="0. ; 0. ; 0." />
  <posXYZ volume="vouss_plate03_Sec1" X_Y_Z="6123.; -478.1; -9552.5" rot="0. ; 0. ; 0." />
  <posXYZ volume="vouss_plate04_Sec1" X_Y_Z="6155.75; 94.; -10224.8" rot="0. ; 0. ; 0." />
</composition>
<!-- ***** End vouss_platforms ***** -->

```

Integration of new AGDD/XML Description into the “amdb_simrec.r.09.00.xml”

In order to add new description in the “amdb_simrec.r.09.00.xml” file, 3 steps are required:

Step 1. Delete old AGDD/XML description in the „amdb_simrec.r.09.00.xml“ file from line 12170 to 12538

Step 2. Copy/Paste our new AGDD/XML Description

```
12170 <section name      = "AccessPlatforms"
12171         version      = "7.0"
12172         date          = "21 Mar 2005"
12173         author        = "Laurent Chevalier, Daniel Pomarede"
12174         top_volume    = "MBAP_AccessPlatform">
12175
12191 <!-- Platform dimensions -->
12192 <var name="MBAP_P12s1dz1" value="3000." />
12193 <var name="MBAP_P12s1dz2" value="2500." />
12194 <var name="MBAP_P23s1dz1" value="2700." />
12195 <var name="MBAP_P23s1dz2" value="2200." />
12196 <var name="MBAP_P34s1dz1" value="2200." />
12197 <var name="MBAP_P34s1dz2" value="1700." />
12198
12199 <var name="MBAP_P14s3dz" value="8600." />
12200 <var name="MBAP_P14s3dx" value=" 540." />
12201
12202 <var name="MBAP_PLAs1dx1" value="1225." />
12203 <var name="MBAP_PLAs1dx2" value=" 600." />
12204 <var name="MBAP_PFLhe" value=" 1.5" />
12205
12516 <posXYZ volume="MBAP_PlatformFloor12s11s15" X_Y_Z="-MBAP_Ps11posx;MBAP_Ps11posy; MBAP_P12posz" rot="90.;270.;0."/>
12517 <posXYZ volume="MBAP_PlatformFloor23s11s15" X_Y_Z="-MBAP_Ps11posx;MBAP_Ps11posy; MBAP_P23posz" rot="90.;270.;0."/>
12518 <posXYZ volume="MBAP_PlatformFloor34s11s15" X_Y_Z="-MBAP_Ps11posx;MBAP_Ps11posy; MBAP_P34posz" rot="90.;270.;0."/>
12519
12520 <posXYZ volume="MBAP_PlatformFloor12s11s15" X_Y_Z="-MBAP_Ps11posx;MBAP_Ps11posy;-MBAP_P12posz" rot="90.;270.;0."/>
12521 <posXYZ volume="MBAP_PlatformFloor23s11s15" X_Y_Z="-MBAP_Ps11posx;MBAP_Ps11posy;-MBAP_P23posz" rot="90.;270.;0."/>
12522 <posXYZ volume="MBAP_PlatformFloor34s11s15" X_Y_Z="-MBAP_Ps11posx;MBAP_Ps11posy;-MBAP_P34posz" rot="90.;270.;0."/>
12523
12524 <!-- sector 3 & 7 -->
12525 <posXYZ volume="MBAP_AccessPlatform14s3s7_zplusS" />
12526 <posXYZ volume="MBAP_AccessPlatform14s3s7Sym_zplusS" />
12527 <posXYZ volume="MBAP_AccessPlatform14s3s7_zminusS" />
12528 <posXYZ volume="MBAP_AccessPlatform14s3s7Sym_zminusS" />
12529
12530
12531 <!-- Access Platform Sector 13 Bottom Level -->
12532 <posXYZ volume="MBAP_Sector13S" />
12533 <posXYZ volume="MBAP_Sector13_MediumS" />
12534 <!-- Access Platform Sector 05 Top Level -->
12535 <posXYZ volume="MBAP_Sector05S" />
12536 <posXYZ volume="MBAP_Sector05_MediumS" />
12537
12538 </composition>
```

```
16202 <section name      = "ATLAS"
16203         version      = "7.0"
16204         date          = "22 November 2008"
16205         author        = "Laurent"
16206         top_volume    = "All">
16207
16208 <composition name="Magnets">
16209     <posXYZ volume="ECT_Toroids" X_Y_Z="0.;0.;0."/>
16210     <posXYZ volume="BAR_Toroid" X_Y_Z="0.;0.;0."/>
16211     <posXYZ volume="Solenoid" X_Y_Z="0.;0.;0."/>
16212 </composition>
16213
16214 <composition name="Service">
16215     <posXYZ volume="servicesAtZ0" X_Y_Z="0.;0.;0."/>
16216     <posXYZ volume="pp2" X_Y_Z="0.;0.;0."/>
16217     <posXYZ volume="MBAP_AccessPlatform" X_Y_Z="0.;0.;0."/>
16218     <posXYZ volume="RUN2_Services" X_Y_Z="0.;0.;0."/>
16219 </composition>
```

Step 3. Replace

```
16217 <posXYZ volume="MBAP_AccessPlatform" X_Y_Z="0.;0.;0."/>
```

With

```
<posXYZ volume="MBAP_AccessPlatform_OddSectors" />
```

Project Implementation workflow:

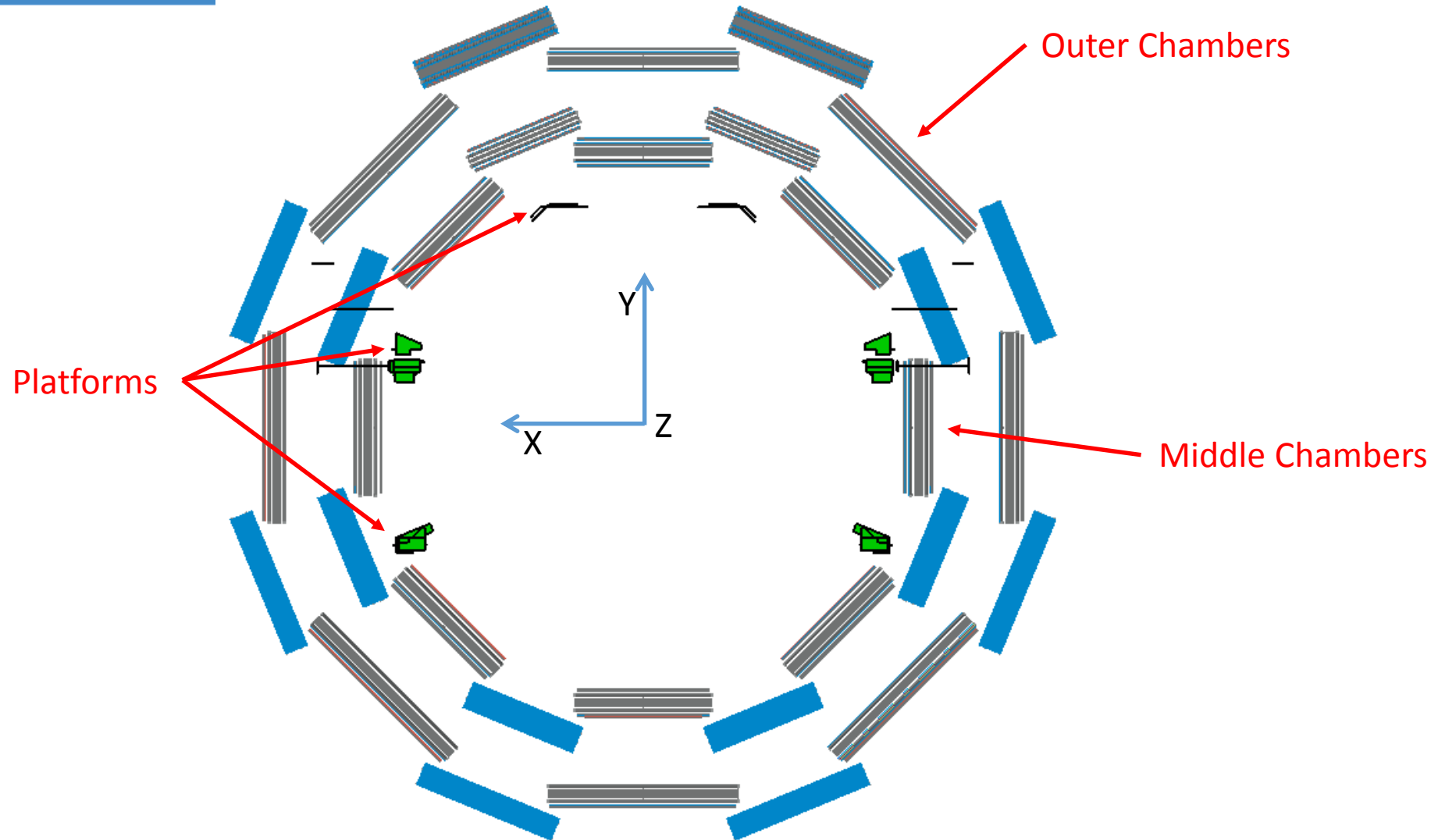
- ~~1. Compare Analyses~~
Volume/Mass Analyses
2. Simplification
3. Integration Conflict Checking
4. Preparation of AGDD/XML Description

Access Platforms – Volume/Mass Analyses and Simplification

Even Sectors

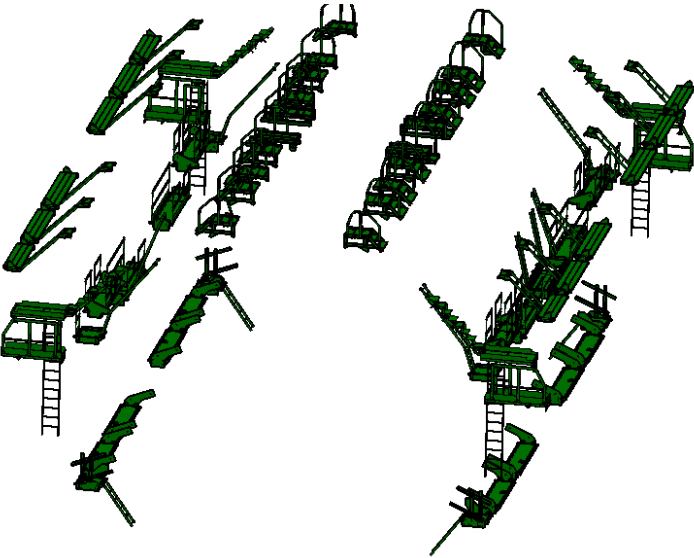
Location of Access Platforms

Even Sectors



Access Platforms

Detailed Model



SmarTeam ID:

ST0056947_01 - Sector 2

ST0064918_01 - Sector 4

ST0064923_01 - Sector 6

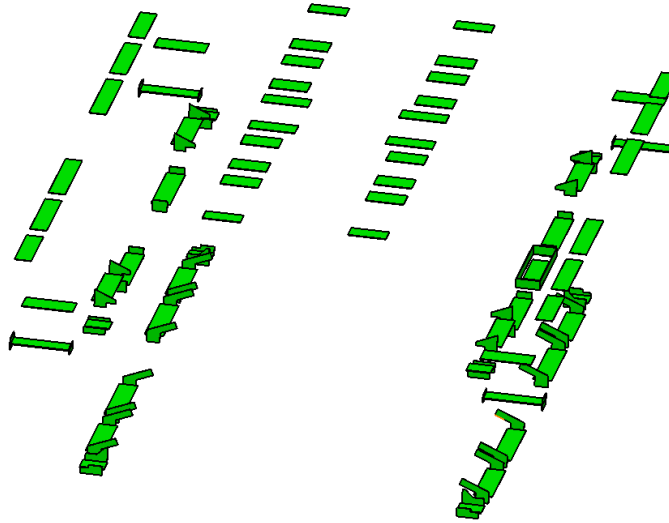
ST0087902_01 - Sector 8

ST0091503_01 - Sector 10

ST0091479_03 - Sector 16

Simplified Model

122 Parts



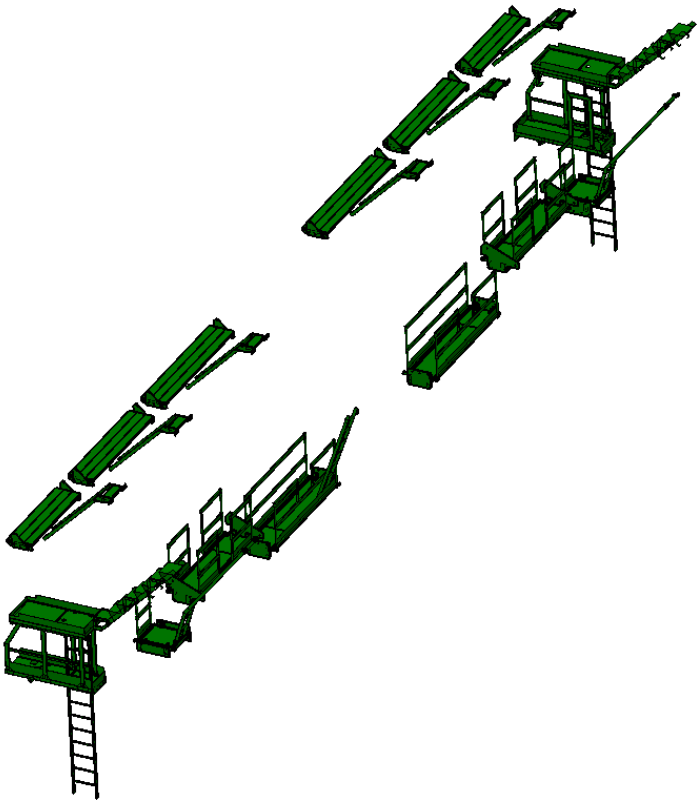
VS

VS

Existing Model

Does not exist

Detailed Model

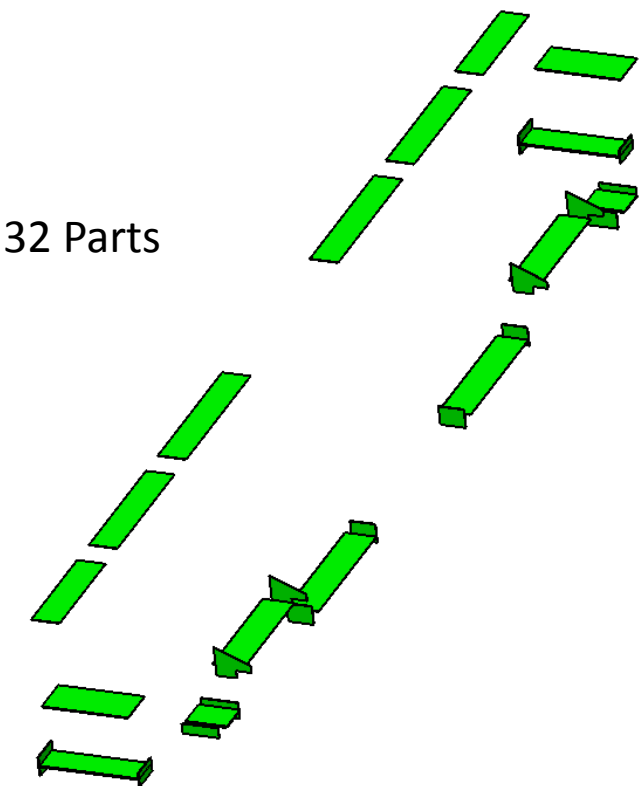


Volume (m³)	0.3591
Mass (kg)	970
Material	Aluminum
Density (kg/m³)	2700

VS

Diff: 0 Kg

Simplified Model



Volume (m³)	0.3591
Mass (kg)	970
Material	Aluminum
Density (kg/m³)	2700

VS

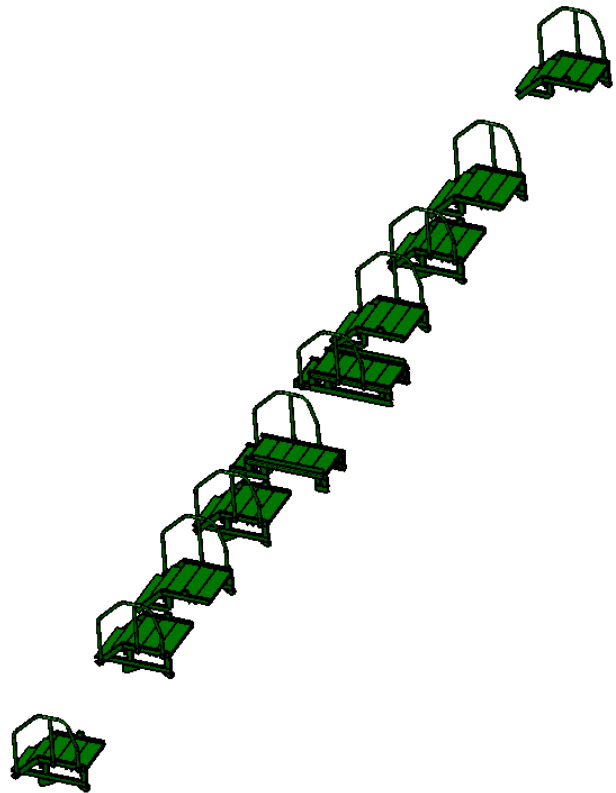
Diff: 970 Kg

Existing Model

Does not exist

Volume (m³)	
Mass (kg)	
Material	
Density (kg/m³)	24

Detailed Model

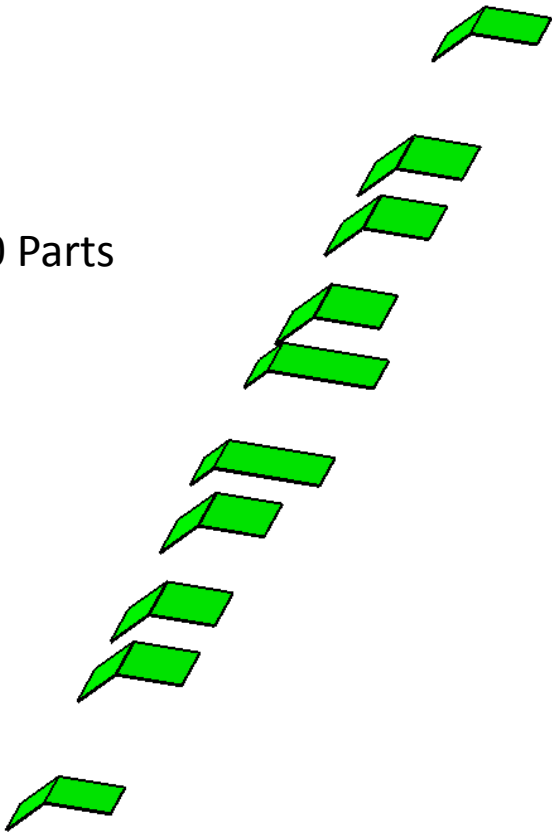


Volume (m³)	0.1463
Mass (kg)	395
Material	Aluminum
Density (kg/m³)	2700

VS

Simplified Model

10 Parts



Volume (m³)	0.1463
Mass (kg)	395
Material	Aluminum
Density (kg/m³)	2700

VS

Existing Model

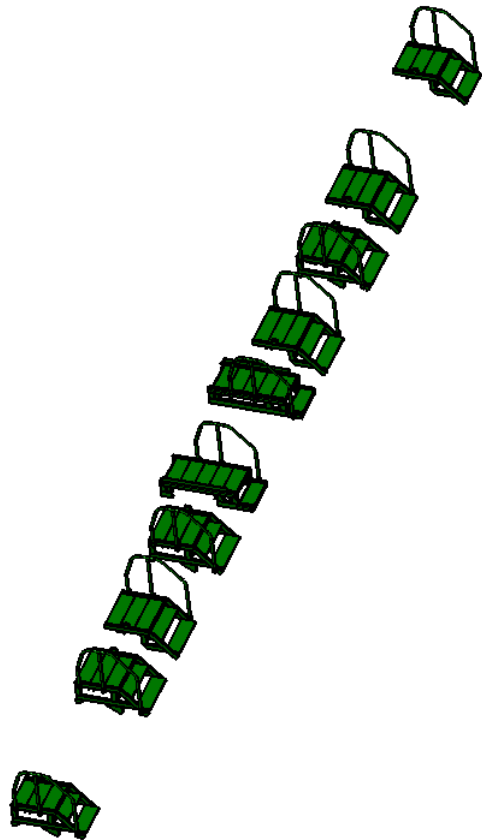
Does not exist

Volume (m³)	
Mass (kg)	
Material	
Density (kg/m³)	25

Diff: 0 Kg

Diff: 395 Kg

Detailed Model



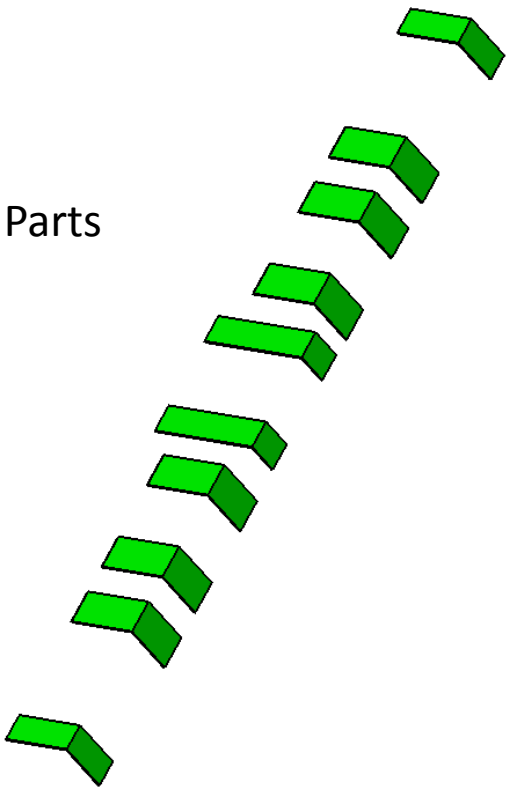
Volume (m³)	0.1463
Mass (kg)	395
Material	Aluminum
Density (kg/m³)	2700

VS

Diff: 0 Kg

Simplified Model

10 Parts



Volume (m³)	0.1463
Mass (kg)	395
Material	Aluminum
Density (kg/m³)	2700

VS

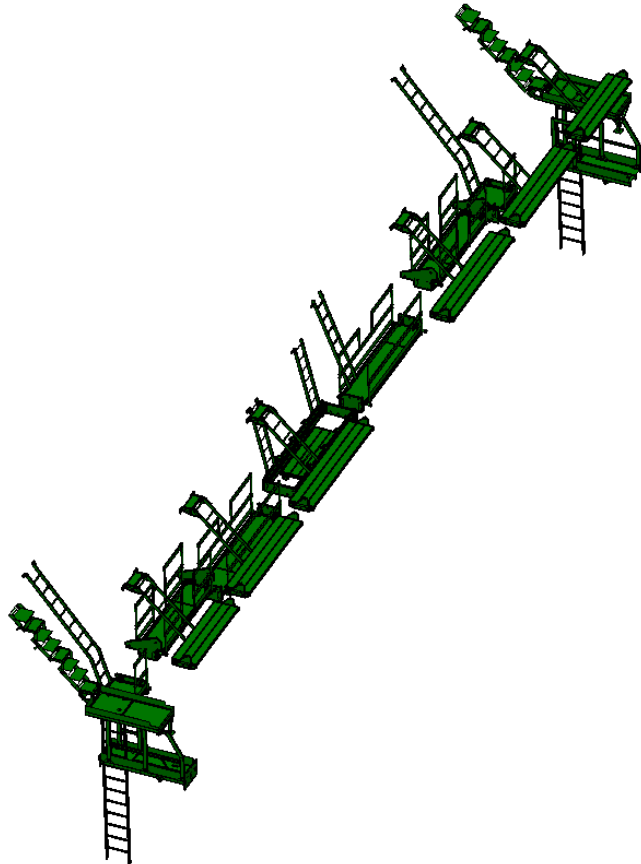
Diff: 395 Kg

Existing Model

Does not exist

Volume (m³)	
Mass (kg)	
Material	
Density (kg/m³)	26

Detailed Model



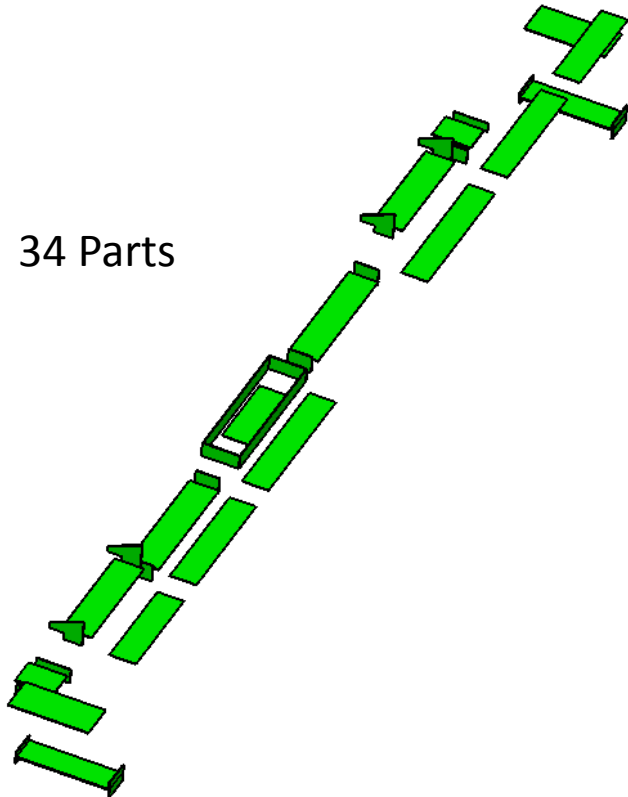
Volume (m³)	0.4057
Mass (kg)	1095
Material	Aluminum
Density (kg/m³)	2700

VS

Diff: 0 Kg

Simplified Model

34 Parts



Volume (m³)	0.4057
Mass (kg)	1095
Material	Aluminum
Density (kg/m³)	2700

VS

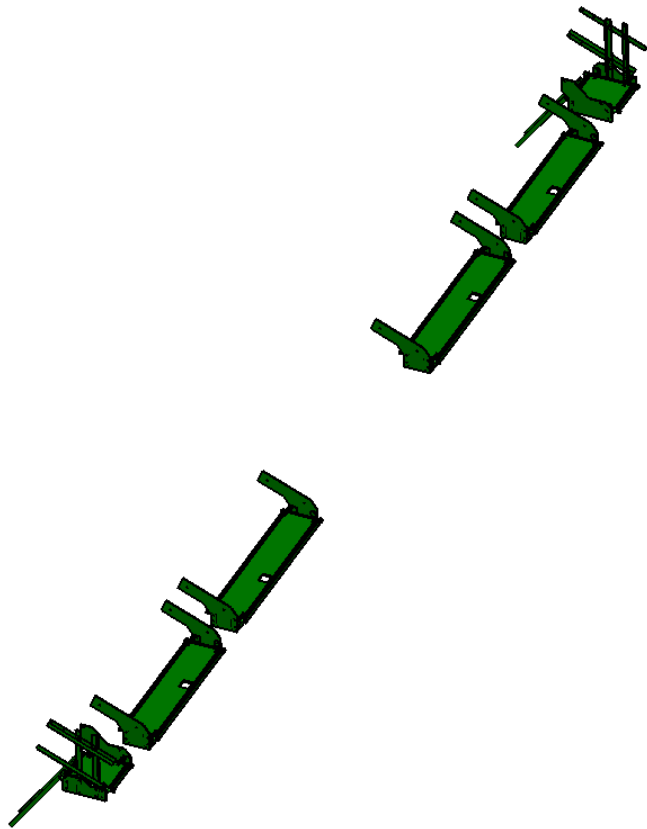
Diff: 1095 Kg

Existing Model

Does not exist

Volume (m³)	
Mass (kg)	
Material	
Density (kg/m³)	27

Detailed Model



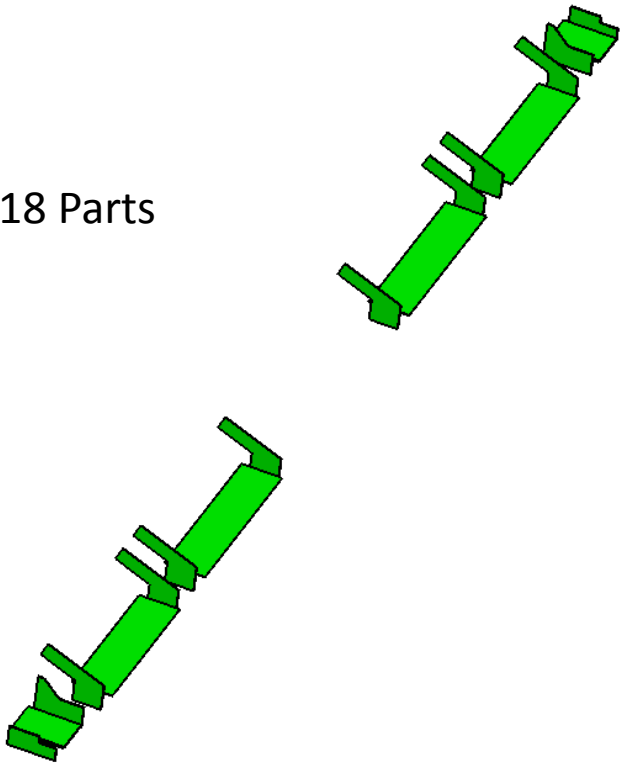
Volume (m³)	0.1373
Mass (kg)	370
Material	Aluminum
Density (kg/m³)	2700

VS

Diff: 0 Kg

Simplified Model

18 Parts



Volume (m³)	0.1373
Mass (kg)	370
Material	Aluminum
Density (kg/m³)	2700

VS

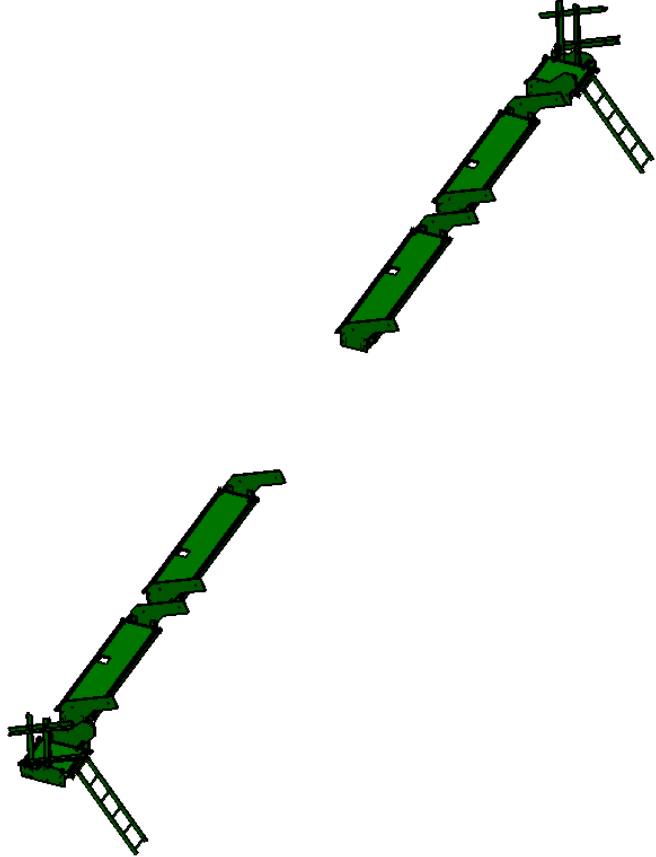
Diff: 370 Kg

Existing Model

Does not exist

Volume (m³)	
Mass (kg)	
Material	
Density (kg/m³)	

Detailed Model

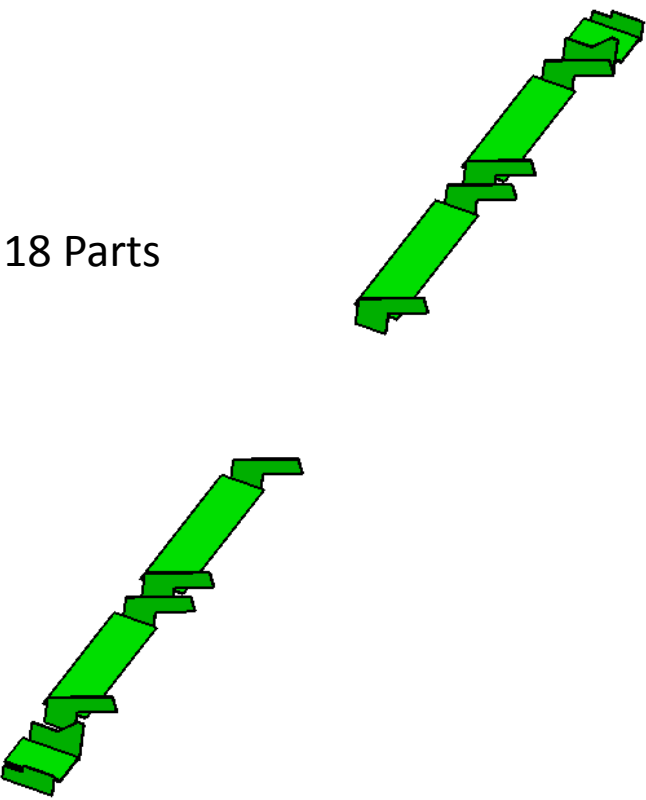


Volume (m³)	0.1373
Mass (kg)	370
Material	Aluminum
Density (kg/m³)	2700

VS

Diff: 0 Kg

Simplified Model



Volume (m³)	0.1373
Mass (kg)	370
Material	Aluminum
Density (kg/m³)	2700

VS

Diff: 370 Kg

Existing Model

Does not exist

Volume (m³)	
Mass (kg)	
Material	
Density (kg/m³)	29

Access Platforms – Final Results

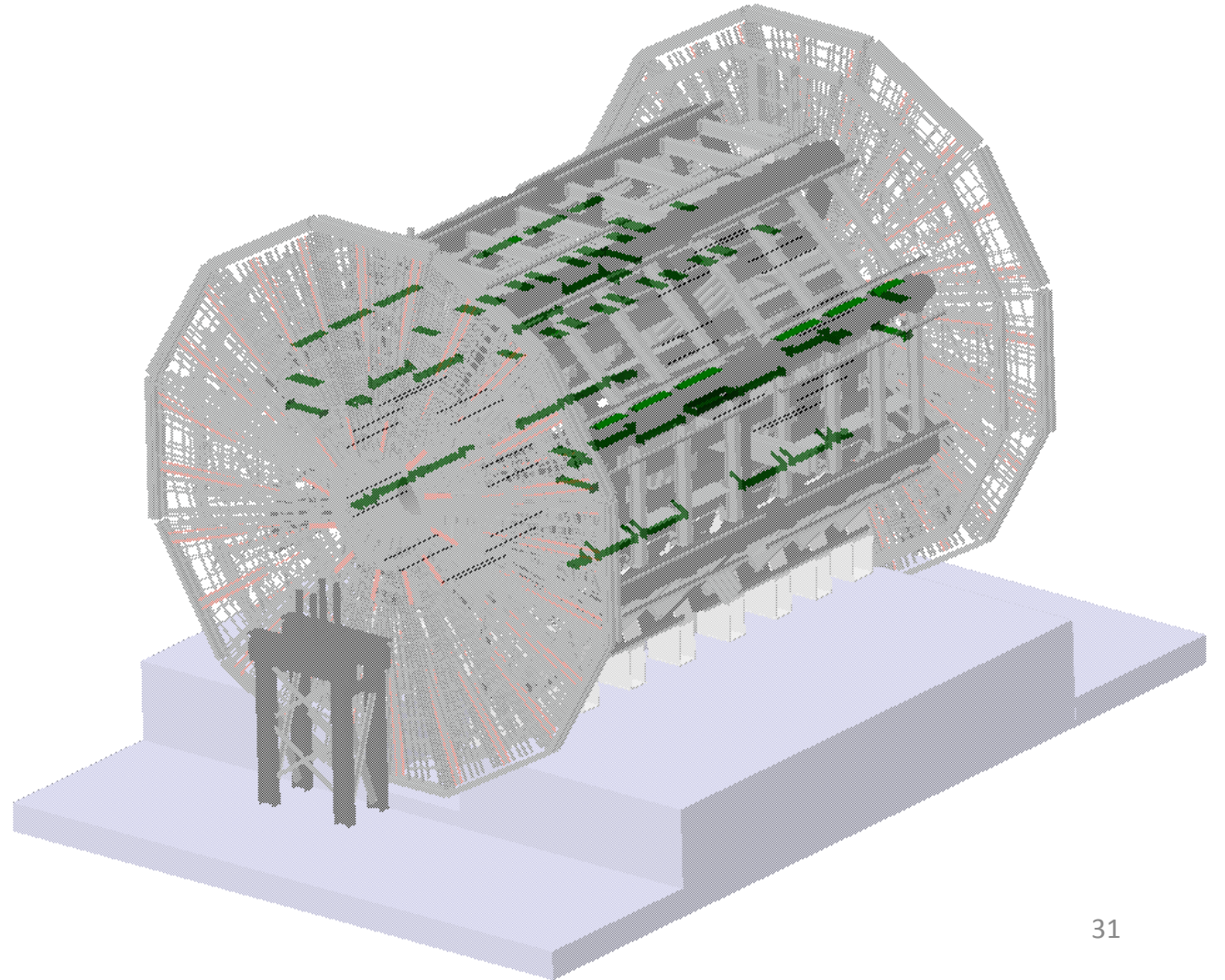
Even Sectors

		Detailed Model		Simplified Model		Difference (Detailed vs Simplified)	Existing Model		Difference (Simplified vs Existing)	Difference (Simplified vs Existing)
#	Name	Volume (m³)	Weight (kg)	Volume (m³)	Weight (kg)	kg	Volume (m³)	Weight (kg)	Kg	%
1	Sector 2	0.3591	970	0.3591	970	0	-	-	970	100
2	Sector 4	0.1463	395	0.1463	395	0	-	-	395	100
3	Sector 6	0.1463	395	0.1463	395	0	-	-	395	100
	Sector 8	0.4057	1'095	0.4057	1'095	0	-	-	1'095	100
4	Sector 10	0.1373	370	0.1373	370	0	-	-	370	100
5	Sector 16	0.1373	370	0.1373	370	0	-	-	370	100
		1.332	3'595	1.332	3'595	0	-	-	3'595	100



Access Platforms – Integration Conflict Checking

Even Sectors



There are No Integration Conflicts

Access Platforms – Preparation of AGDD/XML description

Even Sectors

Preparation Of AGDD/XML Description

New AGDD/XML Description consists
166 Lines

```
><gvxy name="vouss_platf_03sec10_16_Side2" material="Aluminium" dz="15.">
  <gvxy_point X_Y="5650.8; -139.85"/>
  <gvxy_point X_Y="5650.8; 160.15"/>
  <gvxy_point X_Y="6090.8; 160.15"/>
  <gvxy_point X_Y="6090.8; 60.15"/>
  <gvxy_point X_Y="6350.8; 60.15"/>
  <gvxy_point X_Y="6350.8; -139.85"/>
</gvxy>

><composition name="vouss_platf_03sec10_16" >
  <posXYZ volume="vouss_platf_03sec10_16_Box1" X_Y_Z="6011.; -3036.5; 8980." />
  <posXYZ volume="vouss_platf_03sec10_16_Side1" X_Y_Z="0.; -3036.5; 8542.5" />
  <posXYZ volume="vouss_platf_03sec10_16_Side2" X_Y_Z="0.; -3036.5; 9419.5" />
  <posXYZ volume="vouss_platf_03sec10_16_Box1" X_Y_Z="6011.; -3036.5; -8980." />
  <posXYZ volume="vouss_platf_03sec10_16_Side1" X_Y_Z="0.; -3036.5; -8542.5" />
  <posXYZ volume="vouss_platf_03sec10_16_Side2" X_Y_Z="0.; -3036.5; -9419.5" />
</composition>

><composition name="Platforms_Sector10_16" >
  <posXYZ volume="vouss_platf_01sec10_16" X_Y_Z="0.; -3057.; 3425." />
  <posXYZ volume="vouss_platf_01sec10_16" X_Y_Z="0.; -3057.; -3425." />
  <posXYZ volume="vouss_platf_02sec10_16" X_Y_Z="0.; -3056.92; 6696.38" />
  <posXYZ volume="vouss_platf_02sec10_16" X_Y_Z="0.; -3056.92; -6696.38" />
  <posXYZ volume="vouss_platf_03sec10_16" X_Y_Z="0.; 0.; 0." />
</composition>

<!--===== End Access Platforms - Sector 10 / 16 =====>
```

Integration of new AGDD/XML Description into the “amdb_simrec.r.09.00.xml”

In order to add new description in the “**amdb_simrec.r.09.00.xml**” file, 2 steps are required:

Step 1. Copy/Paste our new AGDD/XML Description anywhere in the „amdb_simrec.r.09.00.xml“ file

Step 2. Add

`<posXYZ volume="MBAP_AccessPlatform_EvenSectors" />`

In “Service” Section

```
16202 <section name      = "ATLAS"
16203         version    = "7.0"
16204         date        = "22 November 2008"
16205         author      = "Laurent"
16206         top_volume  = "All">
16207
16208   <composition name="Magnets">
16209     <posXYZ volume="ECT_Toroids"      X_Y_Z="0.;0.;0."/>
16210     <posXYZ volume="BAR_Toroid"      X_Y_Z="0.;0.;0."/>
16211     <posXYZ volume="Solenoid"       X_Y_Z="0.;0.;0."/>
16212   </composition>
16213
16214   <composition name="Service">
16215     <posXYZ volume="servicesAtZ0"    X_Y_Z="0.;0.;0."/>
16216     <posXYZ volume="pp2"            X_Y_Z="0.;0.;0."/>
16217     <posXYZ volume="MBAP_AccessPlatform" X_Y_Z="0.;0.;0."/>
16218     <posXYZ volume="RUN2_Services"  X_Y_Z="0.;0.;0."/>
16219   </composition>
```

Results on GitLab

2nd-push atlas-g4-xml / Access Platforms / +

History Find file Web IDE 05907583 Clone

 3D file of Platforms (Odd Sectors)
Niko Tsutskiridze authored 5 days ago

Name	Last commit	Last update
..		
Even Sectors	3D file of Platforms (Even Sectors)	5 days ago
Odd Sectors	3D file of Platforms (Odd Sectors)	5 days ago

1_Compare+Simplification.pdf

2_Codding_and_integration.pdf

3_Integration_Conflict_Checking.pdf

Platforms-OddSectors.wrl

Platforms_OddSector.xml

1.Compare+Simplificatio.pdf

2_Codding_and_integration.pdf

3_Integration_Conflict_Checking.pdf

Platforms-EvenSectors.wrl

Platforms_EvenSectors.xml

Thank you for your attention!
მადლობა ყურადღებისათვის!

niko.tsutskiridze@cern.ch