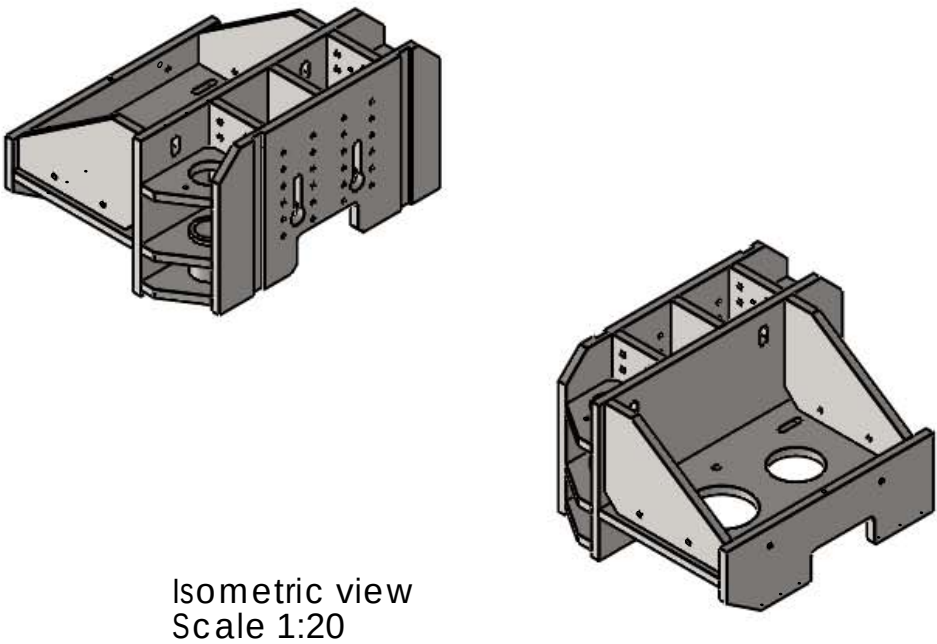
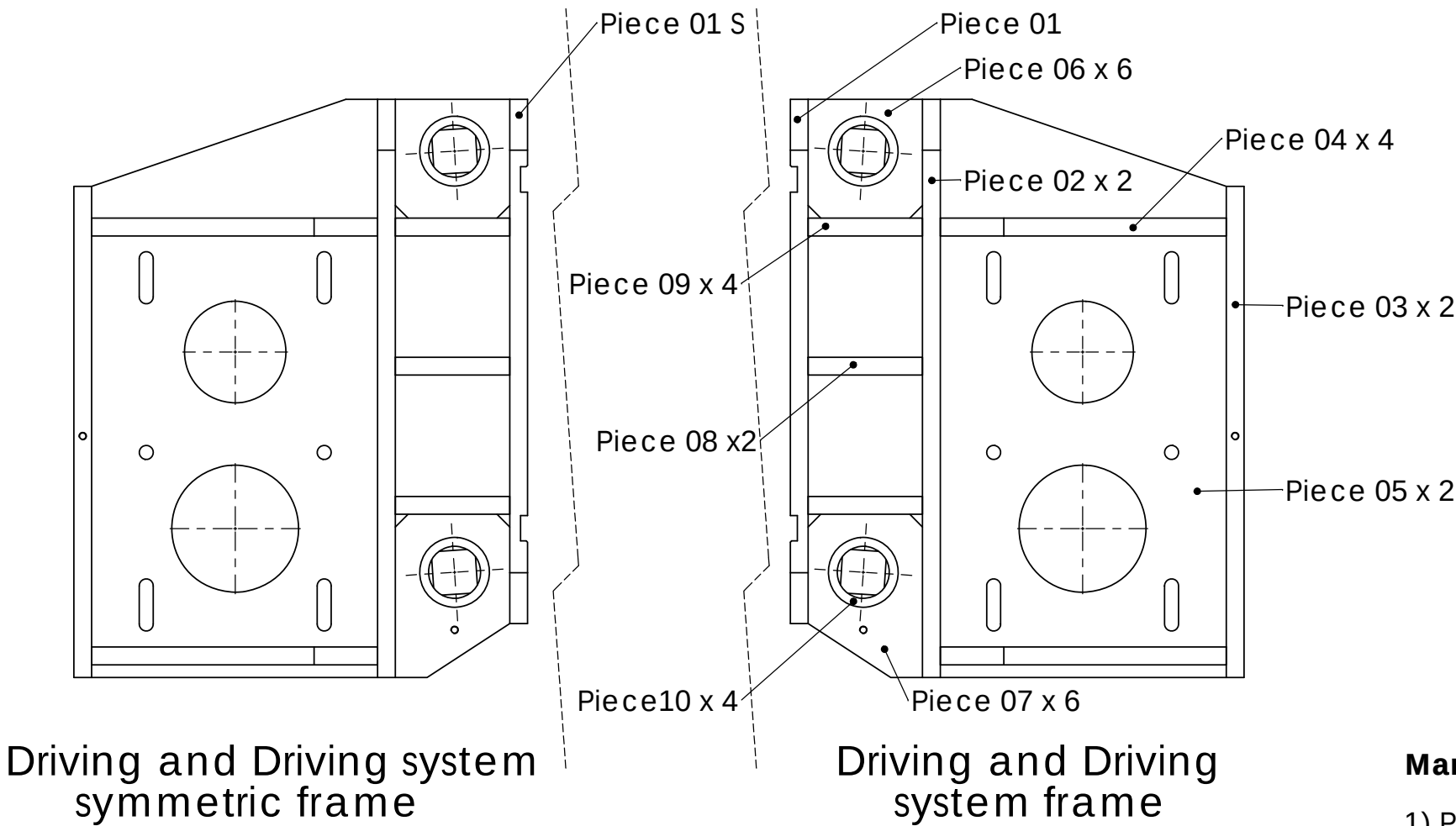




Manufacturing notes

- 1) Pre-machining to weld the pieces
- 2) Weld the part
- 3) Weld non-destructive testing
- 4) Stress-relief after welding
- 5) Shoot peening
- 6) Primed coating
- 7) Final machining

Welding

All the pieces are welded.

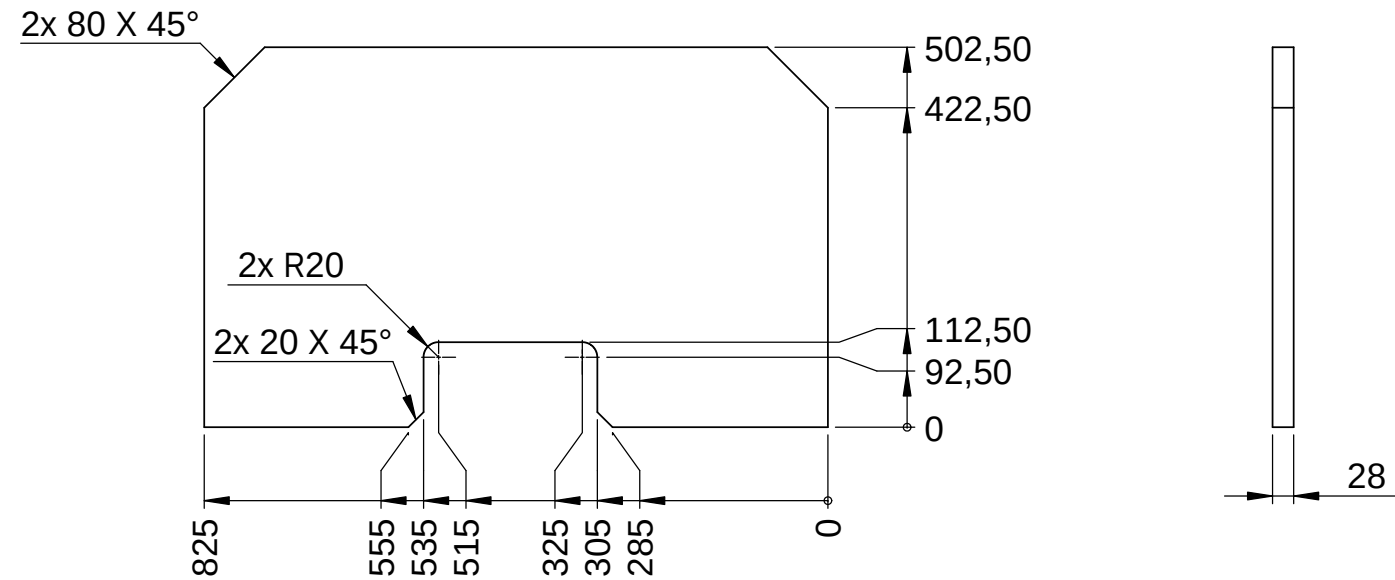
In general fillet welds,
Type: double tee joint / 10 mm

More details in the 3D file.

1.0	Minor modifications			RGG	26/10/15		
0.0	Initial issue			RGG	06/05/15		
Rev.	MODIFICATION			NAME	DATE		
Drawn:	Approved :	Project	Document type	Description			
RGG		CTA-LST	Part	Guiding and Driving Frames			
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number	
 Institut de Física d'Altes Energies (IFAE) Edifici Cn, Universitat Autònoma de Barcelona (UAB), E-08193 Bellaterra (Barcelona), Spain www.ifae.es rgarcia@ifae.es		Quantity	2	147.011.1160			
		Wght(kg)	864				
		RAL		 A3	Scale 1:10	All dimensions mm	Unless Otherwise State: General tol.: ISO 2768-mL Linear tol.: ISO 406 Form and position tol. : ISO 1101 Surface Finish:
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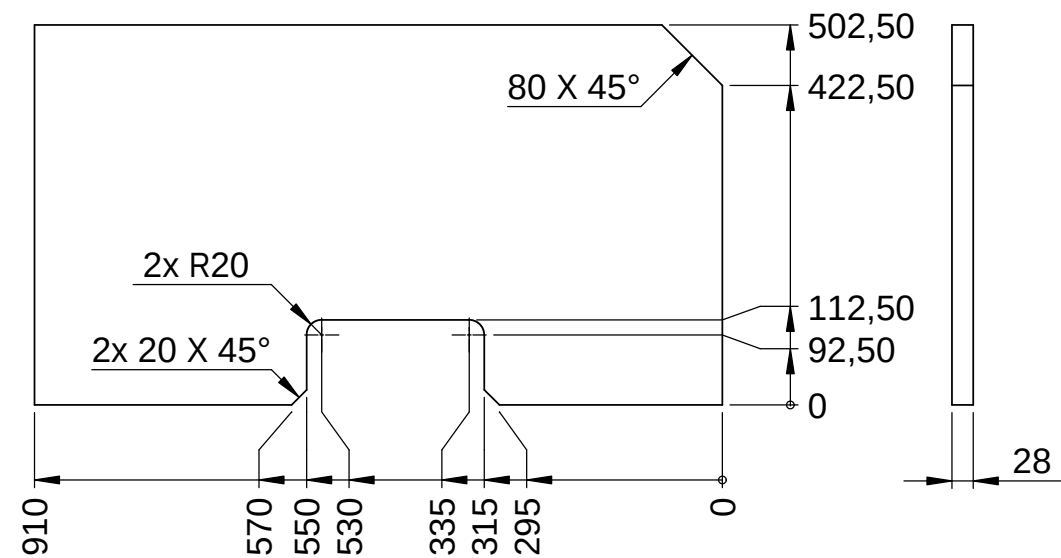
Piece 01

Unit/s: 2
Supply: 828 mm x 505 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 83,4 kg
Note: Before final machining Part 01 and Part 01 S are the same



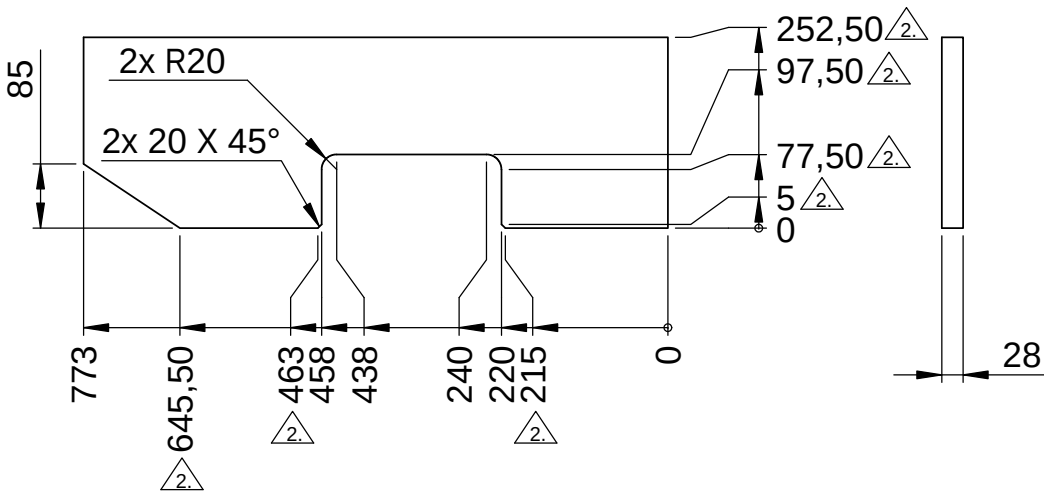
Part 02

Unit/s: 2
Supply: 913 mm x 505 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 93,3 kg



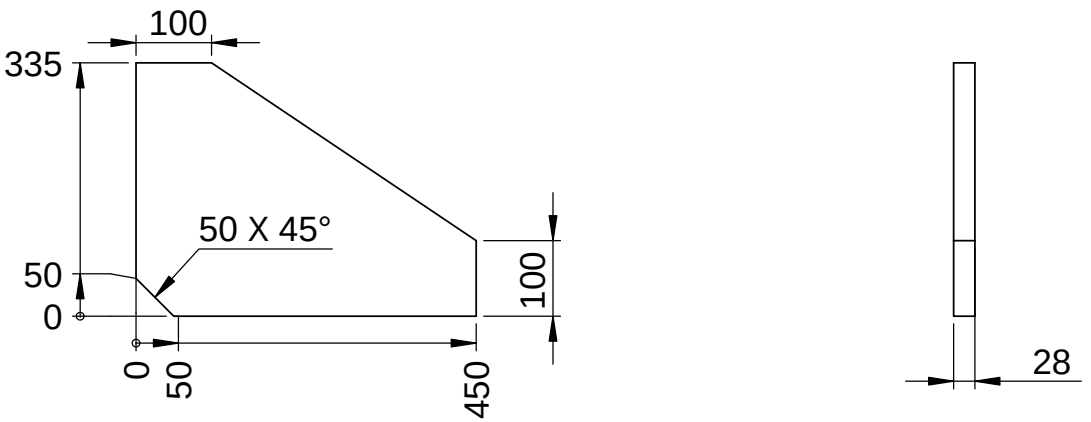
Part 03

Unit/s: 2
Supply: 777 mm x 271 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 37,6 kg



Part 04

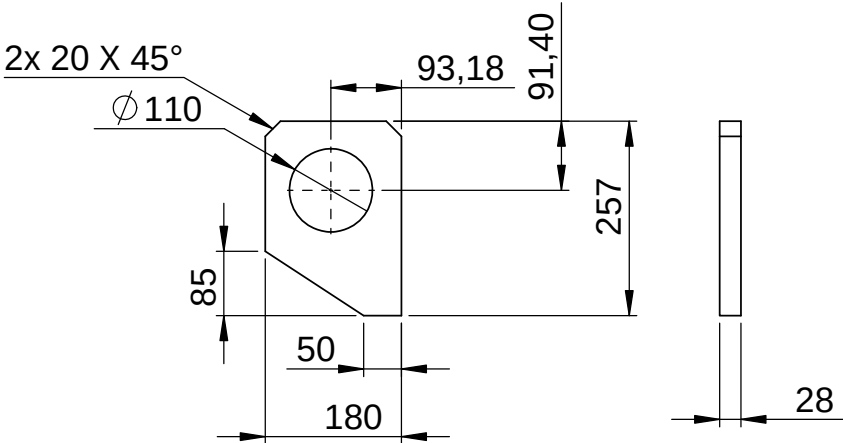
Unit/s: 4
Supply: 454 mm x 339 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 23,7 kg



2.0	Part 3 modification: lower side length reduction and 6 threaded holes added.			JMC	04/02/16
1.0	Minor modifications			RGG	26/10/15
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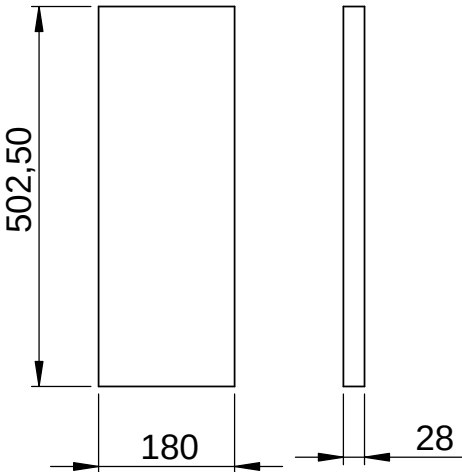
Piece 07

Unit/s: 6
Supply: 261 mm x184mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 6,7 kg



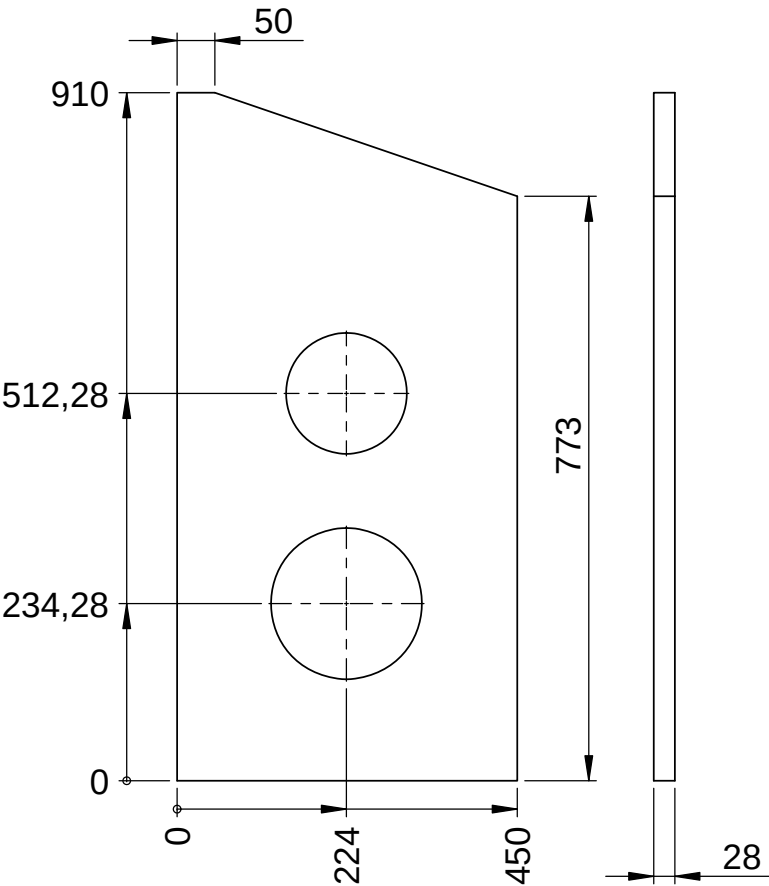
Piece 09

Unit/s: 4
Supply: 506 mm x 184 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 19,8 kg



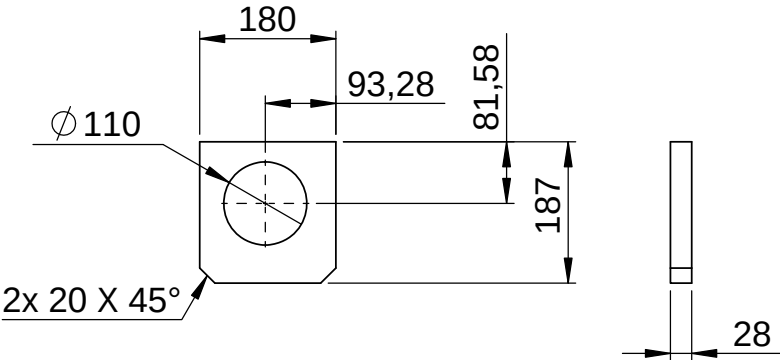
Piece 05

Unit/s: 2
Supply: 914 mm x 454 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 72,2 kg



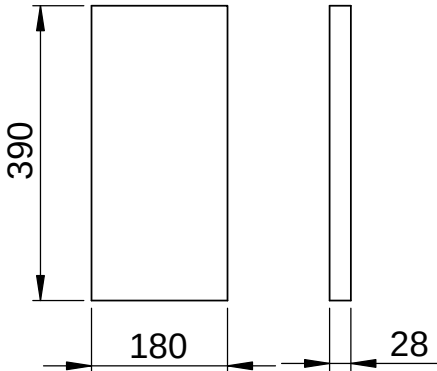
Piece 06

Unit/s: 6
Supply: 191 mm x 184 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 5,2 kg

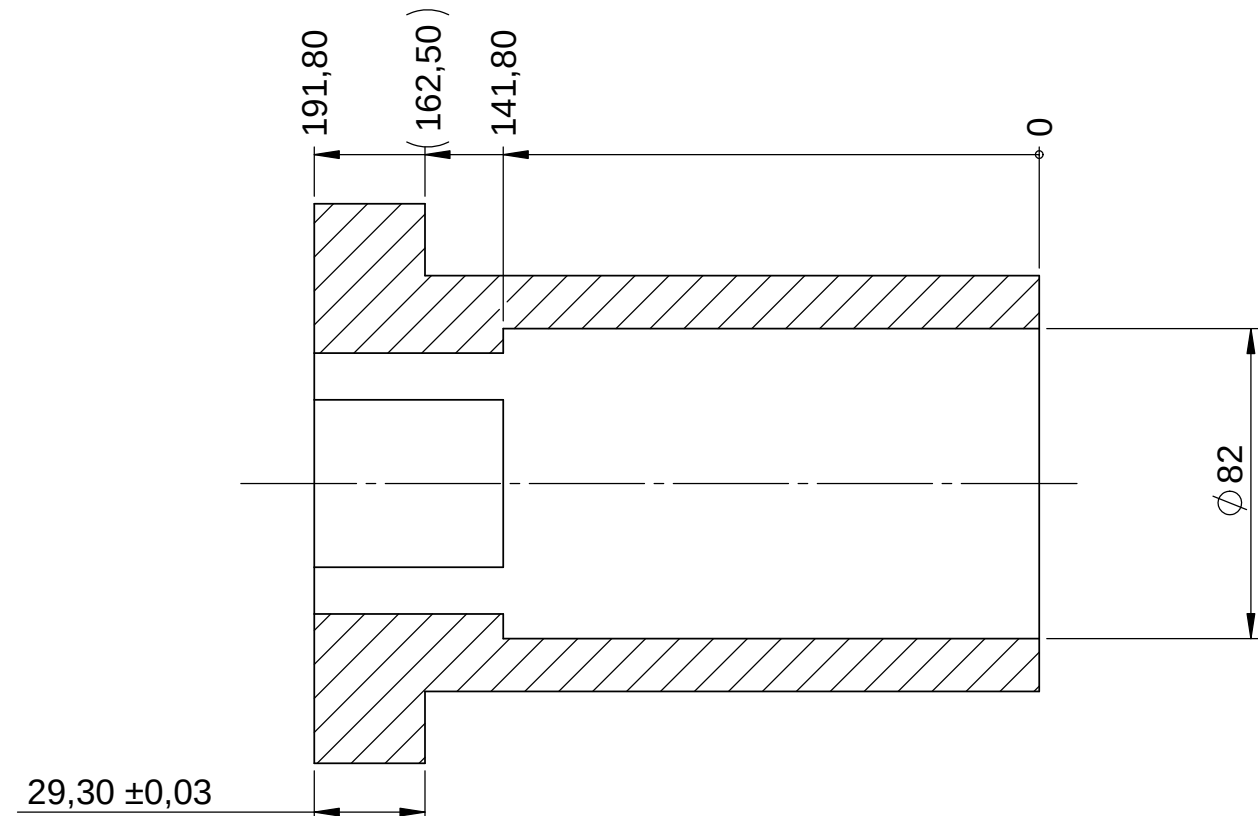


Piece 08

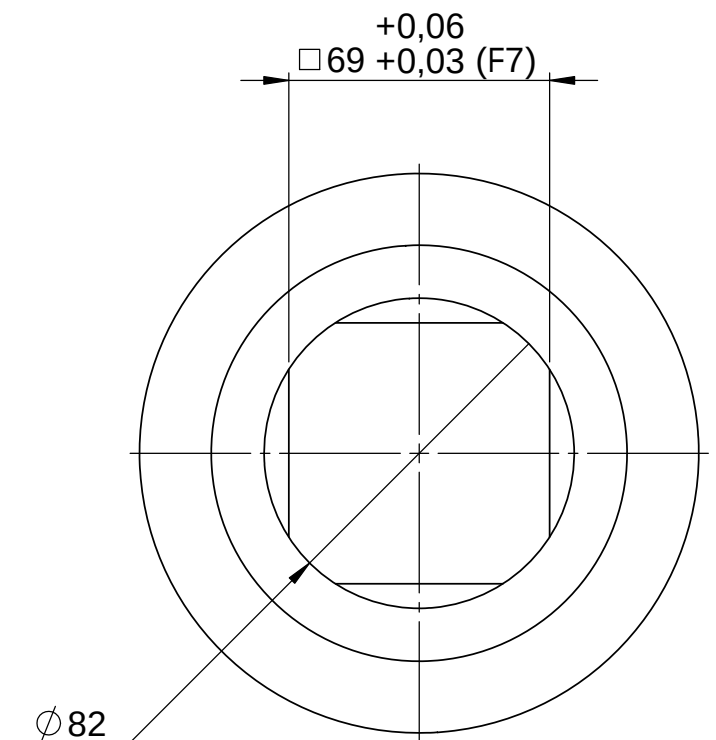
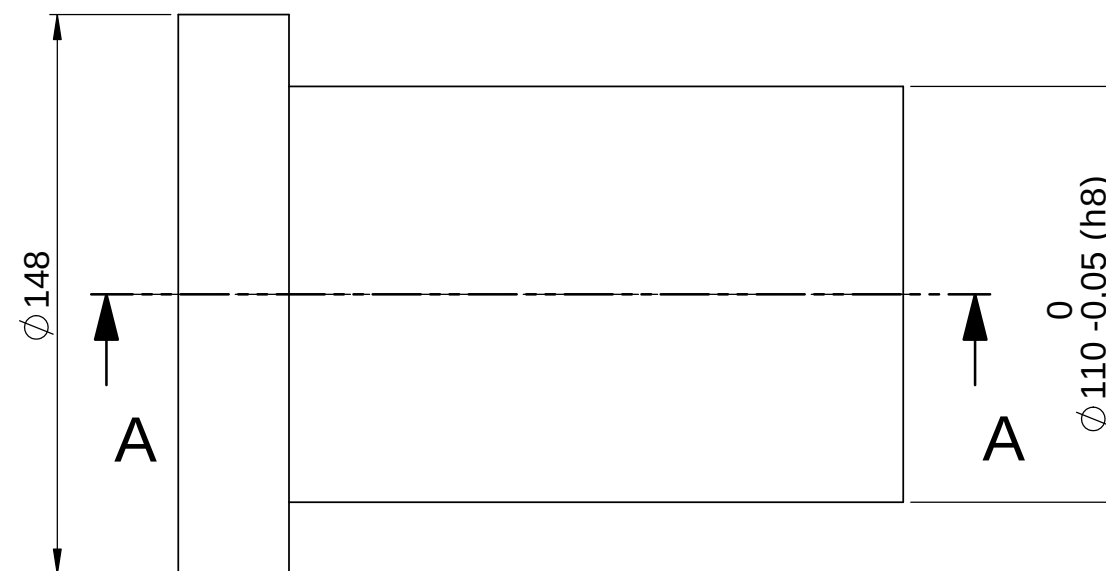
Unit/s: 2
Supply: 394 mm x 184 mm x 30 mm
Material: Steel EN 10025-2 --- S355J2+N
Mass: 15,3 kg



1.0	Minor modifications			RGG	26/10/15	
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				Quantity	2	147.011.1160
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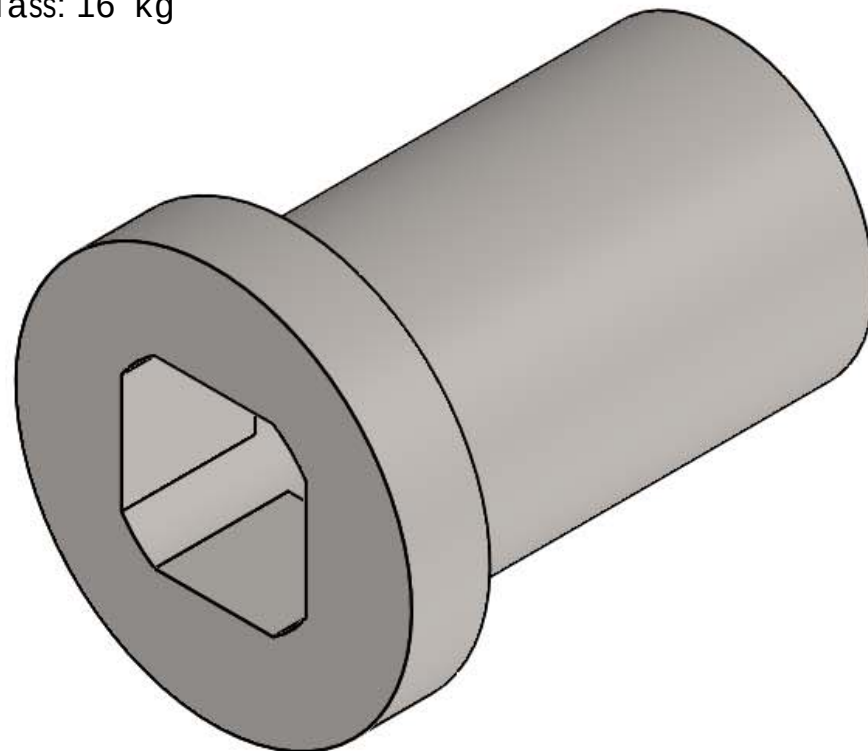


Cross section A-A

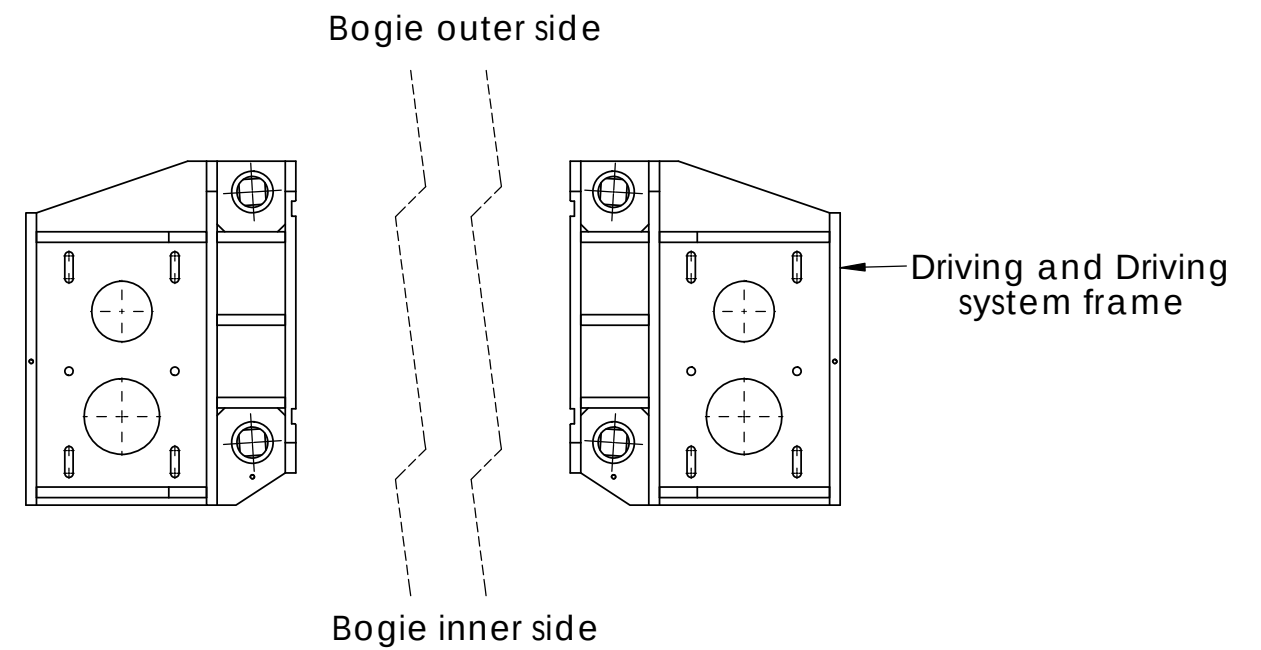
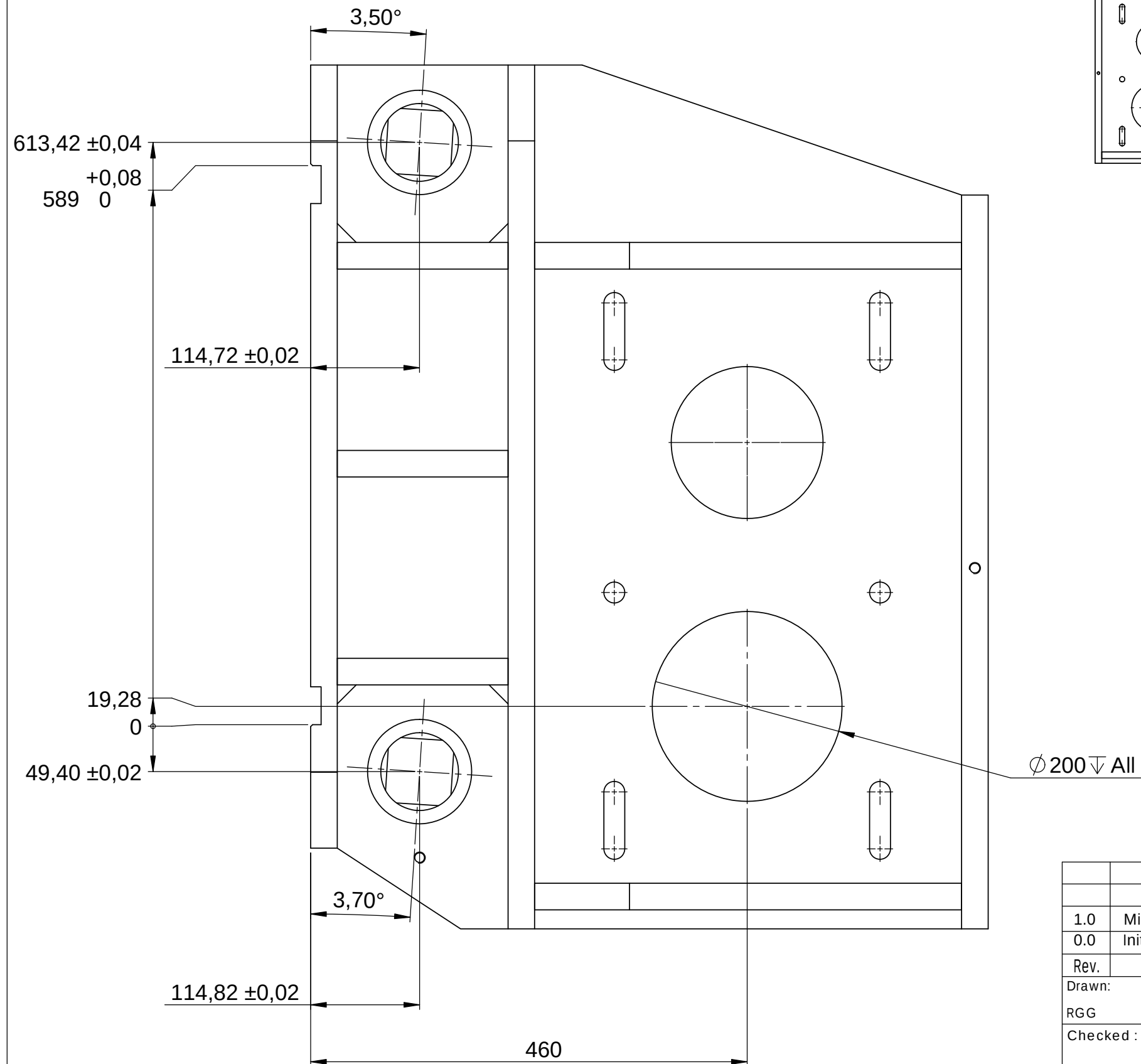


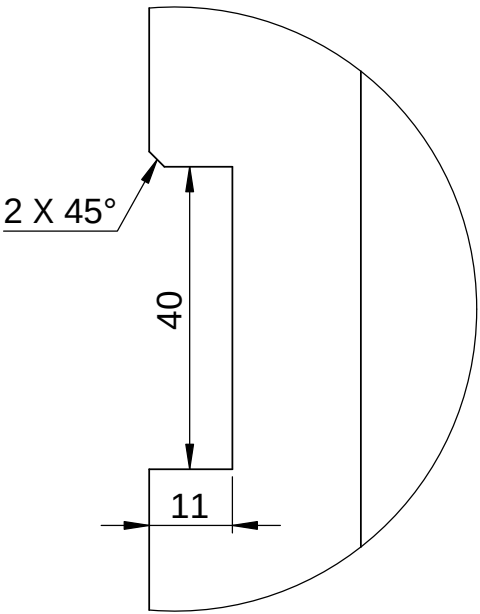
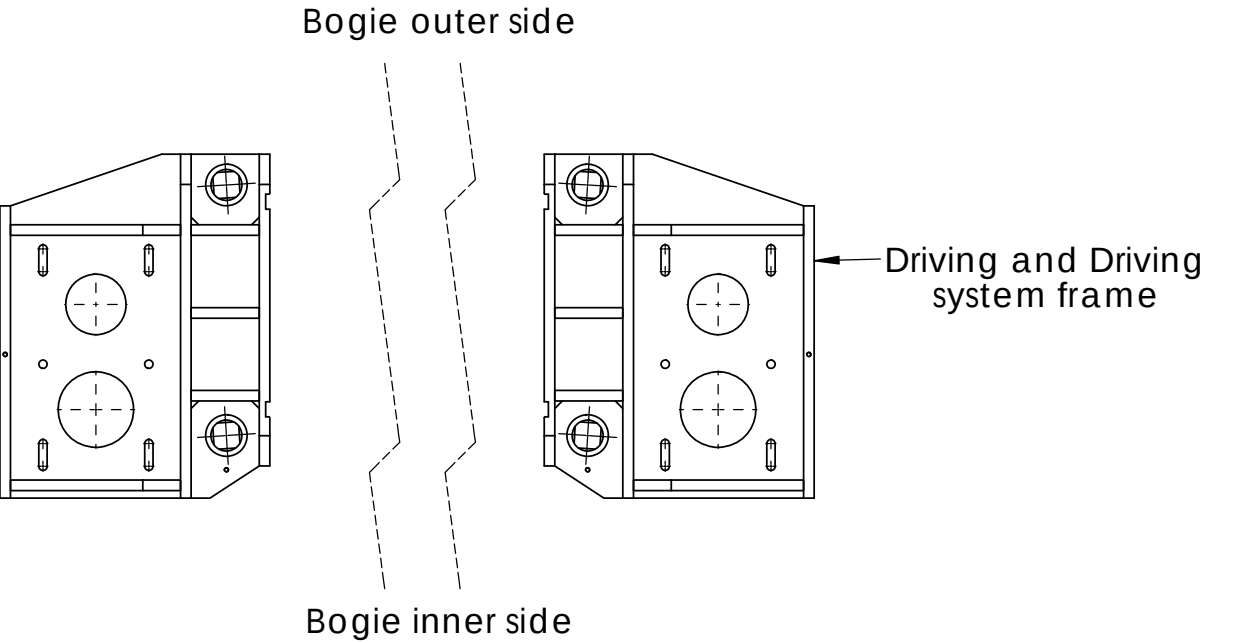
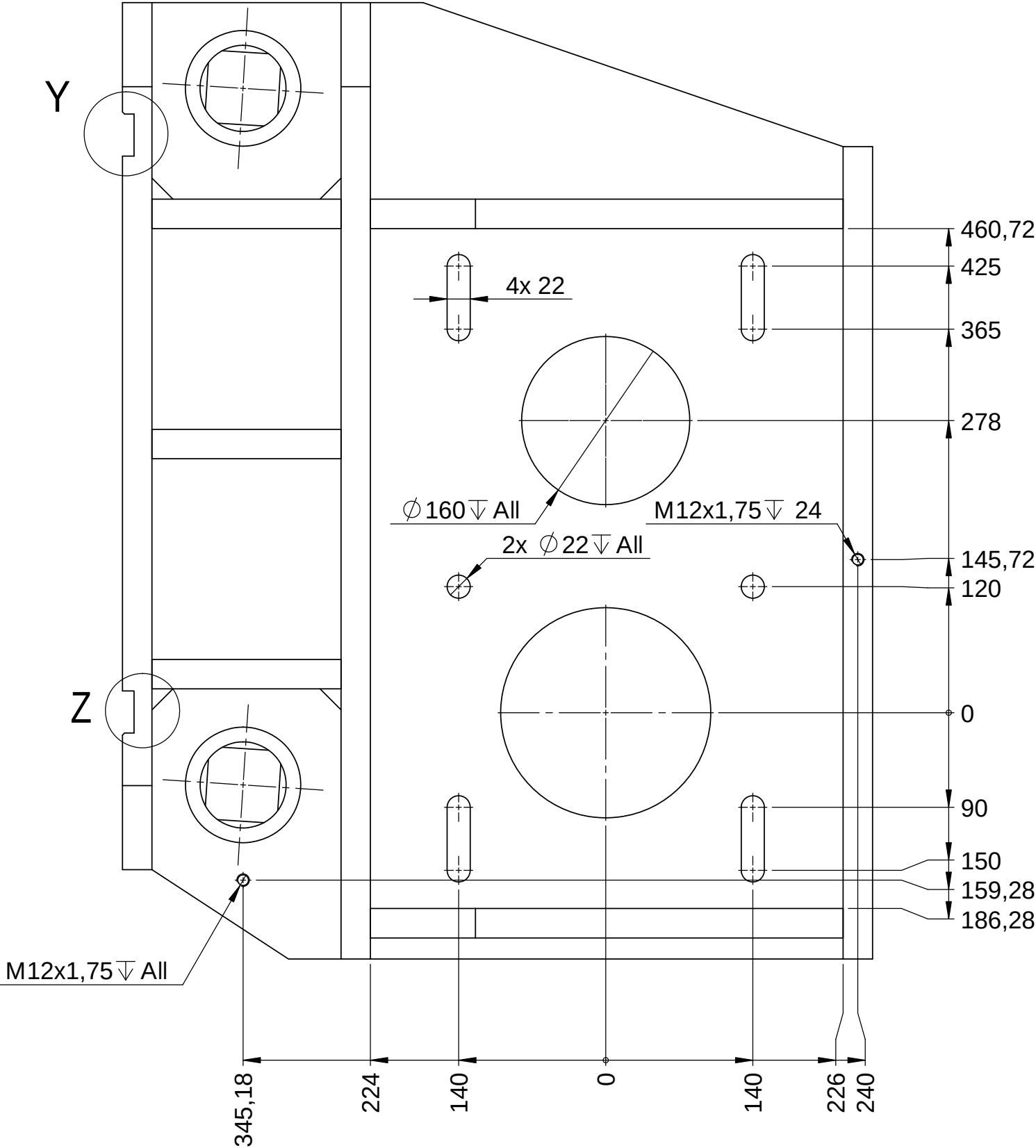
Piece 10

Unit/s: 4
Supply: $\varnothing$ 150 mm x 196 mm
Material: Steel EN 10025-3 --- S355N
Mass: 16 kg

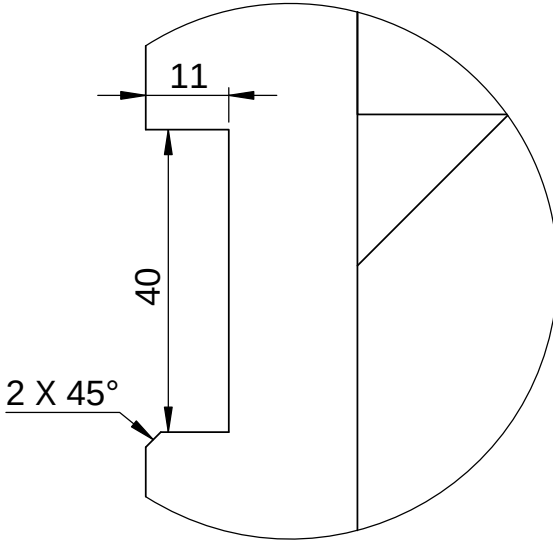


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Rev.	MODIFICATION				NAME	DATE	
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Checked :	Authorized :	CTA-LST	Part	Guiding and Driving Frames			
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		 A3	Scale 1:2				
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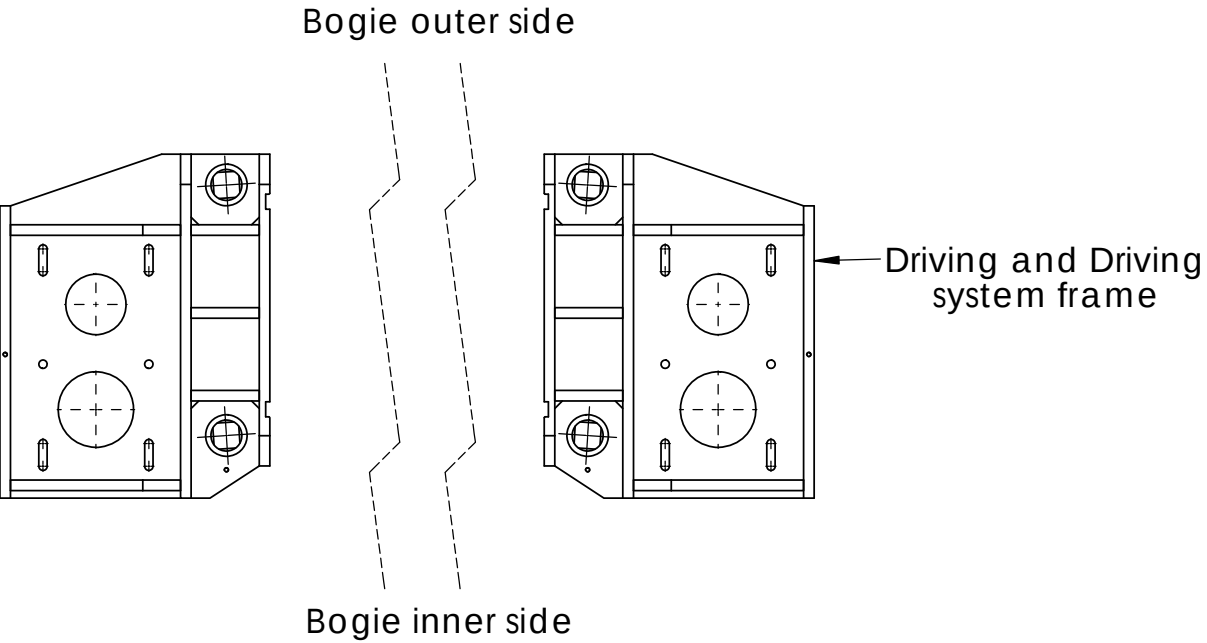
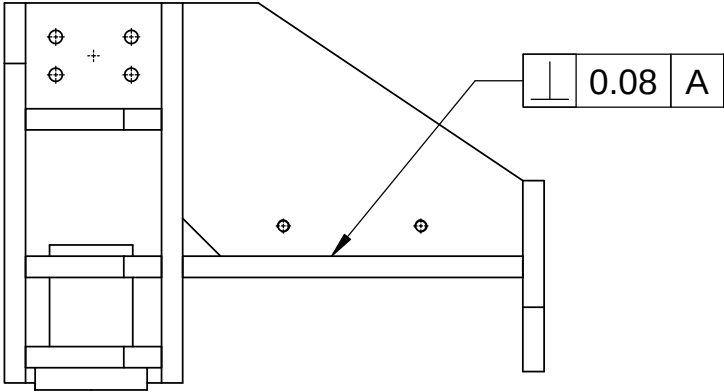
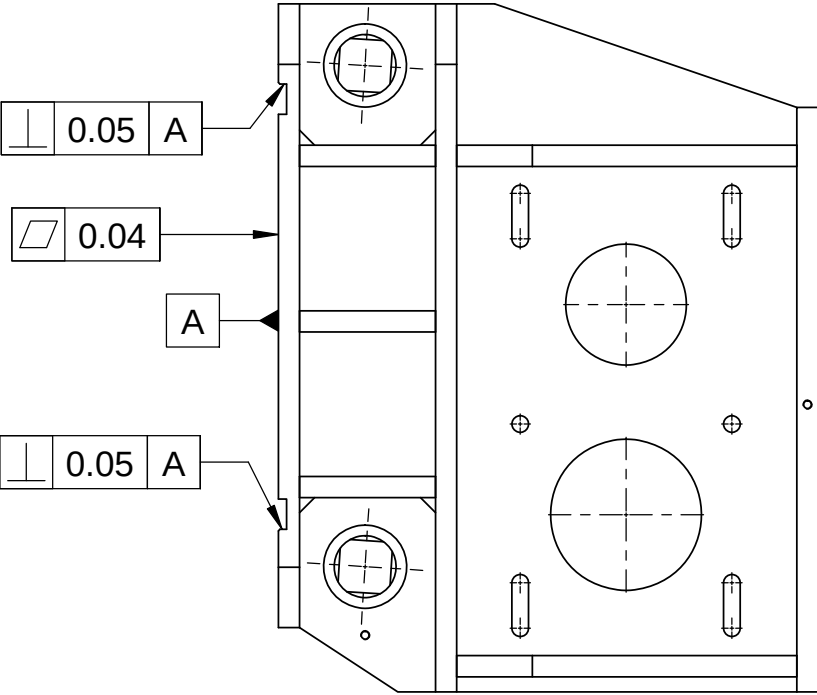


Detail Y
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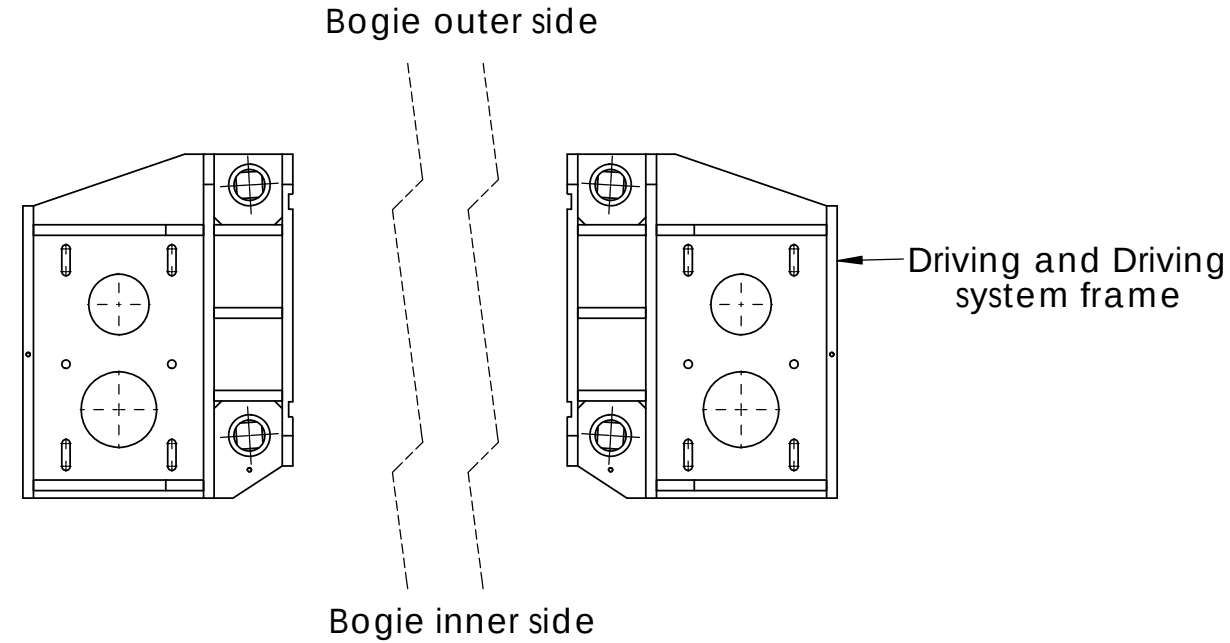
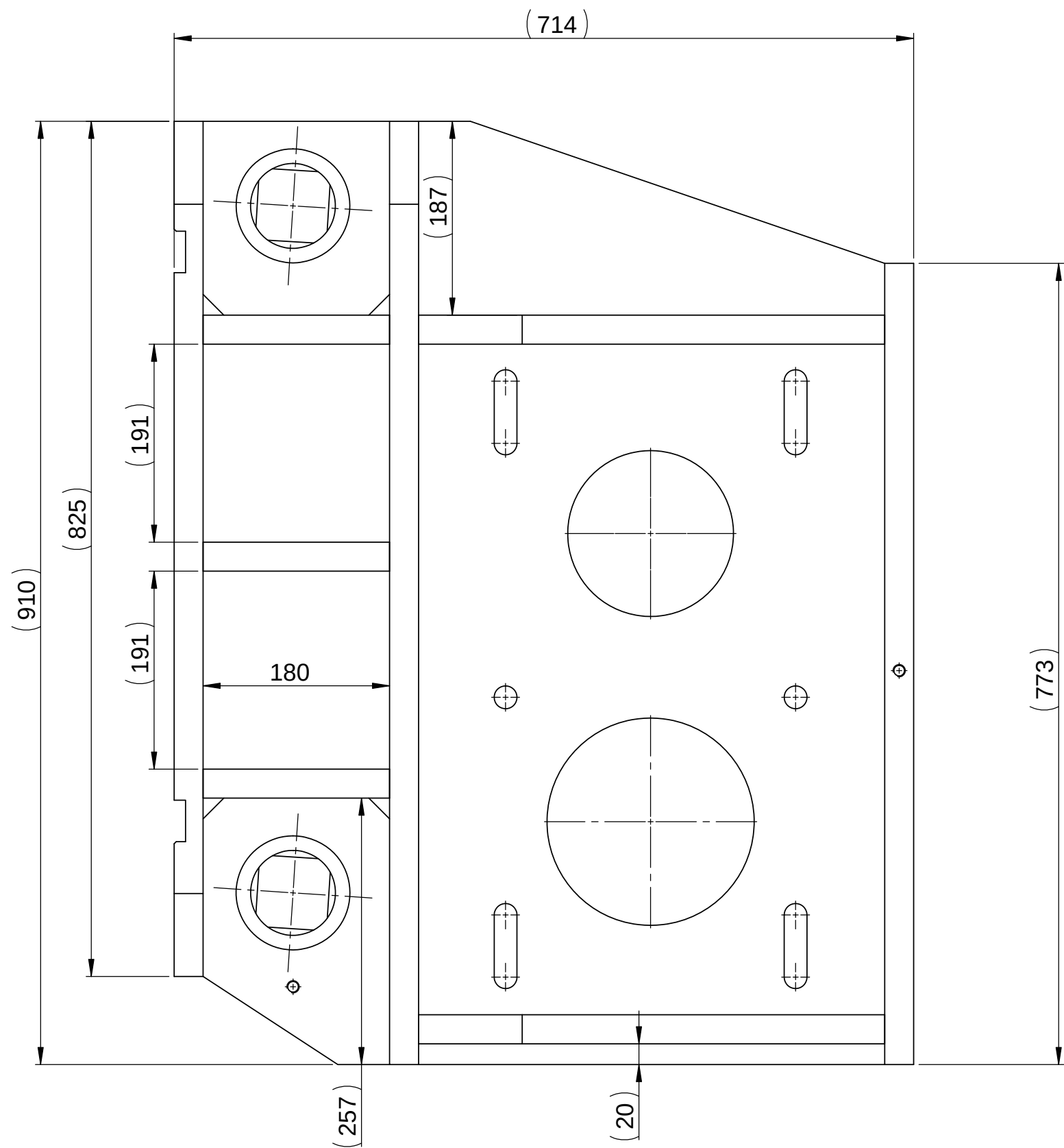


Detail Z
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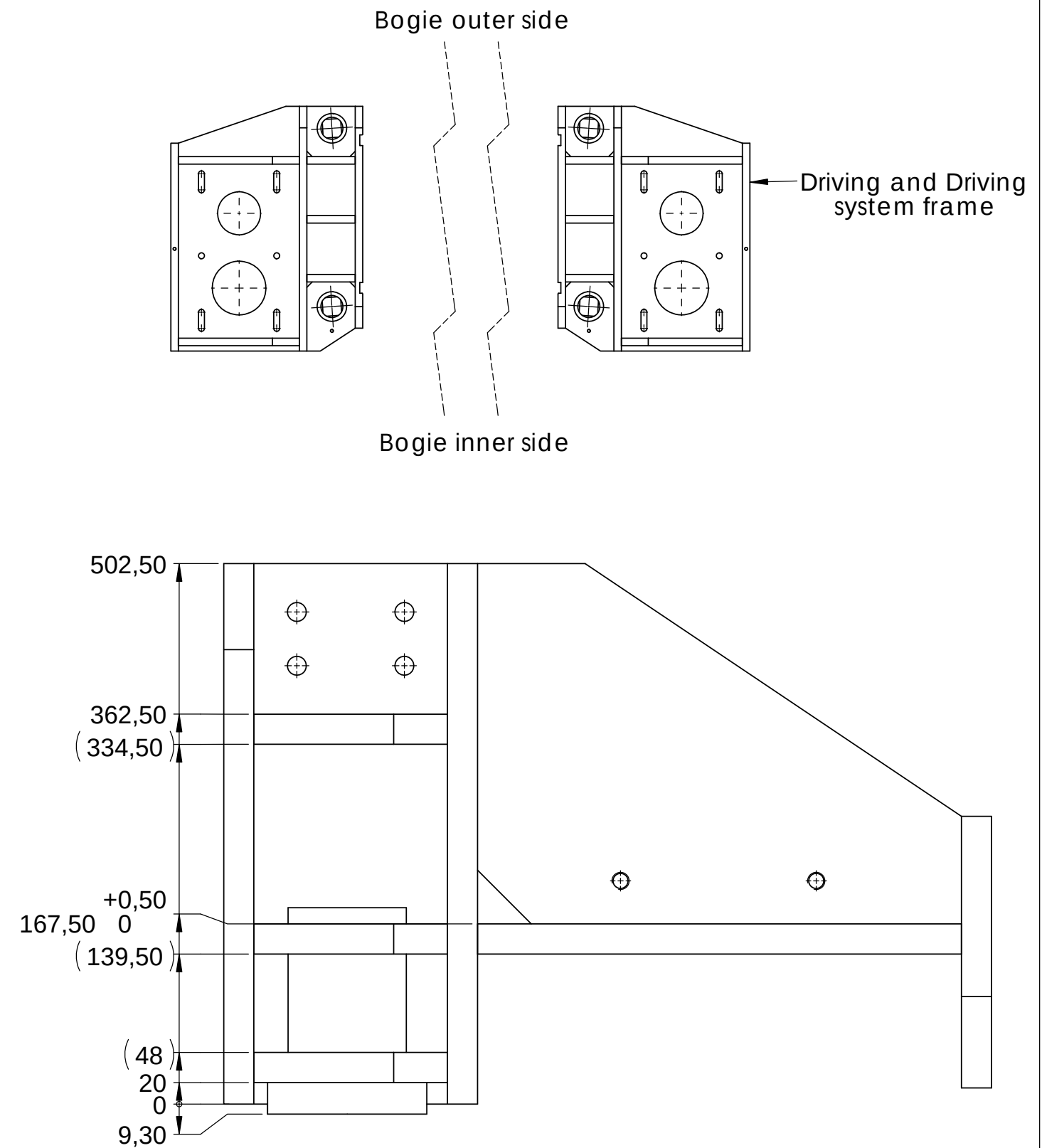
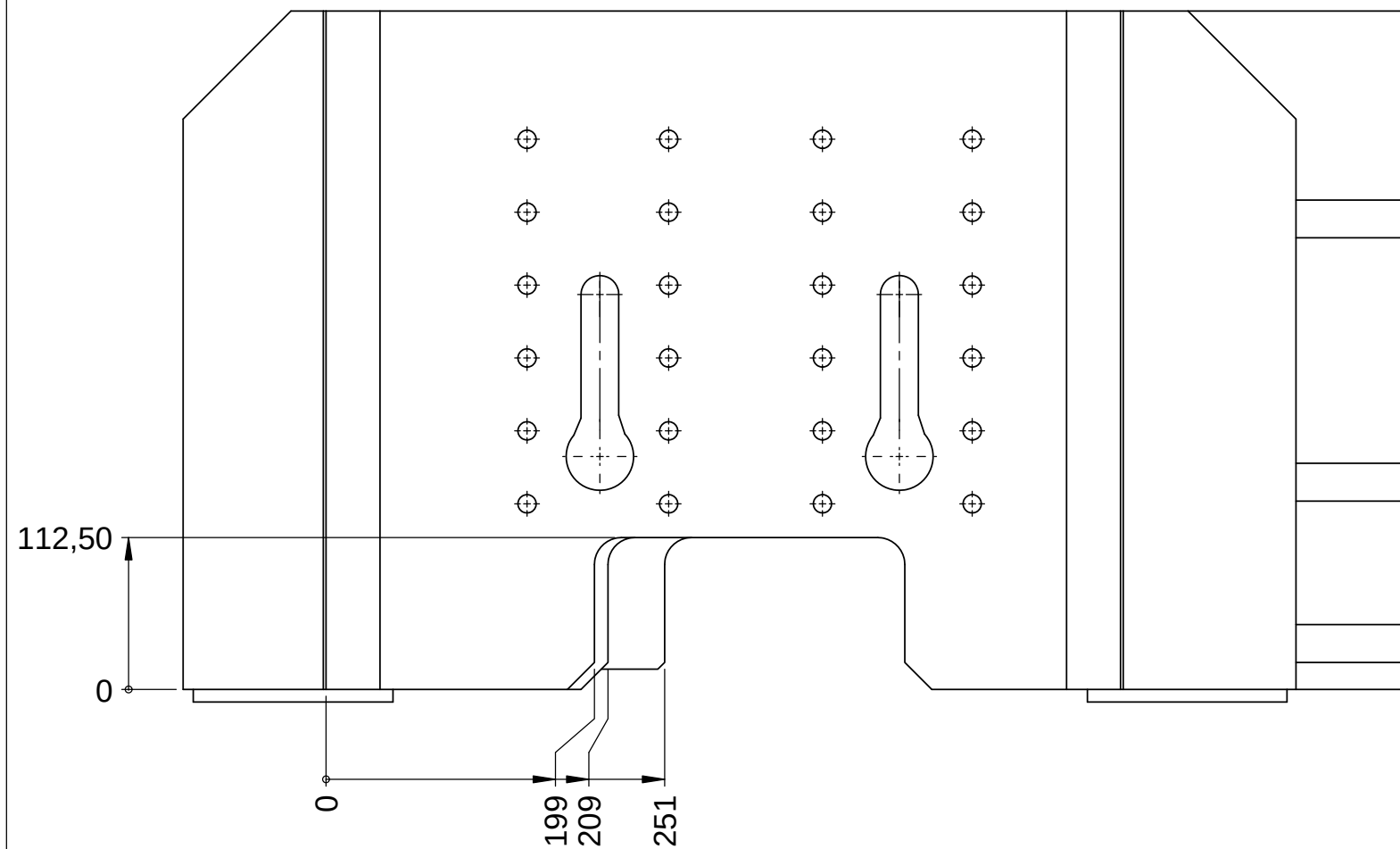
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0.0	Initial issue				RGG	06/05/15
Rev.	MODIFICATION				NAME	DATE
Drawn:		Approved :	Project	Document type	Description	
RGG			CTA-LST	Part	Guiding and Driving Frames	
Checked :		Authorized :			Material	Steel EN 10025-2/3 --- S355
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			Wght(kg)	864		
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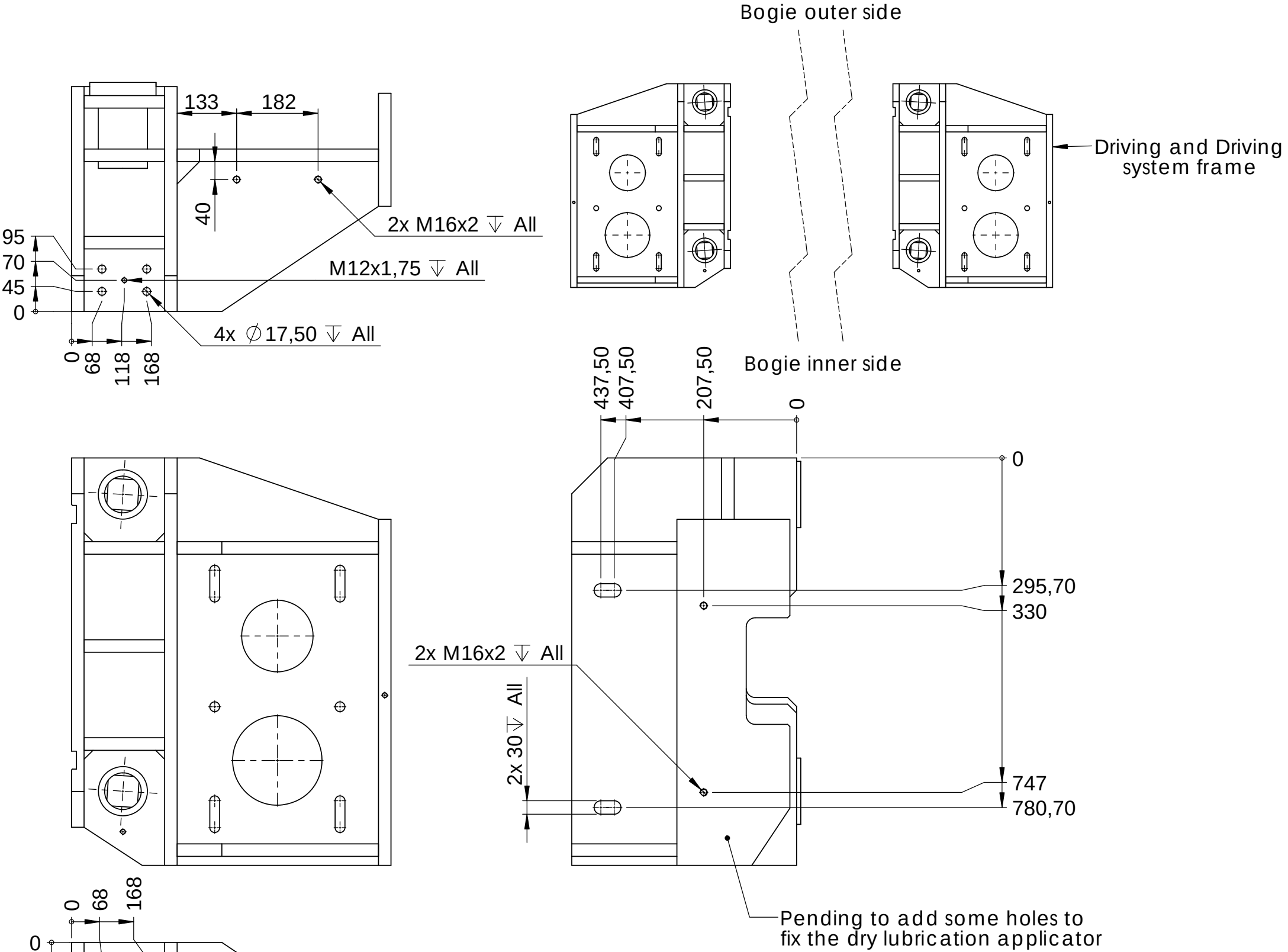
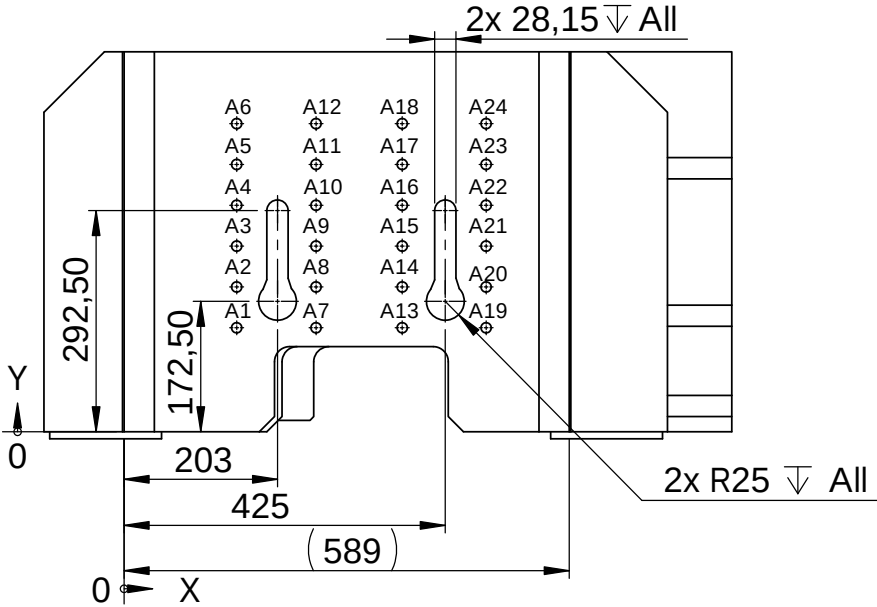
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Item	X	Y
A1	149	137,50
A2	149	191,50
A3	149	245,50
A4	149	299,50
A5	149	353,50
A6	149	407,50
A7	254	137,50
A8	254	191,50
A9	254	245,50
A10	254	299,50
A11	254	353,50
A12	254	407,50
A13	368	137,50
A14	368	191,50
A15	368	245,50
A16	368	299,50
A17	368	353,50
A18	368	407,50
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A24	479	407,50

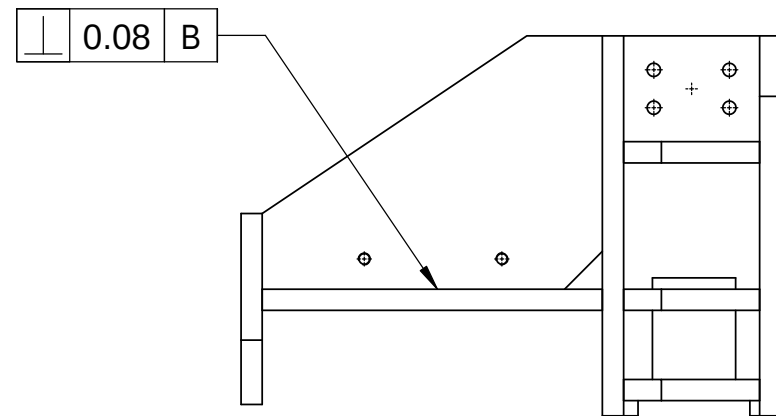
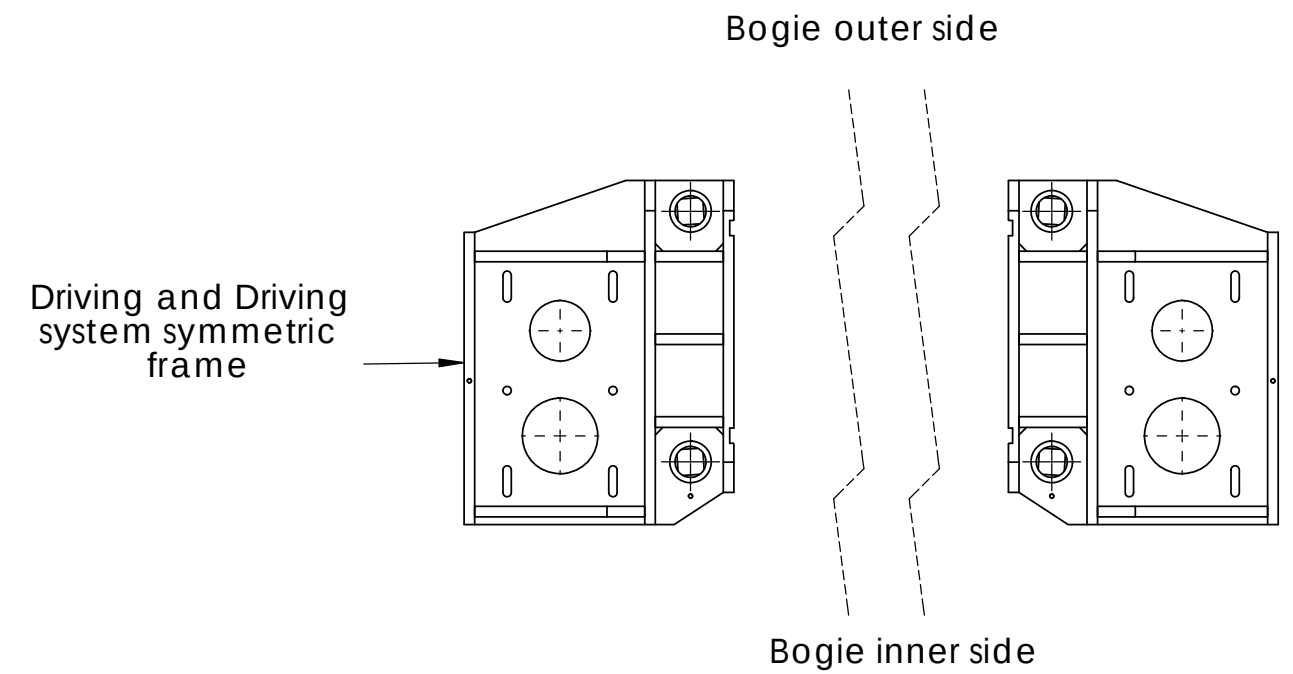
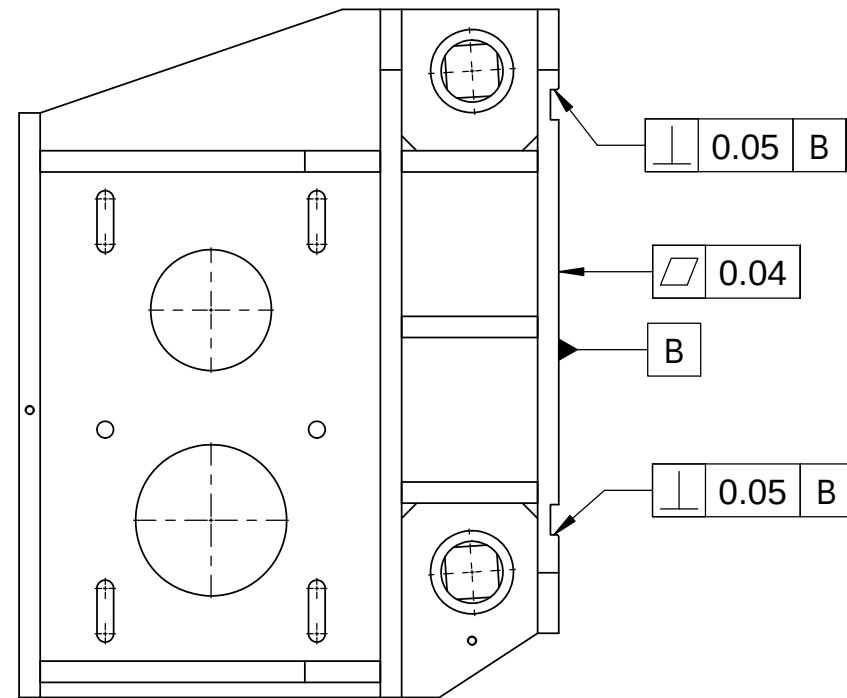
Hole type A ==> $\varnothing$ 13,5 ∇ All



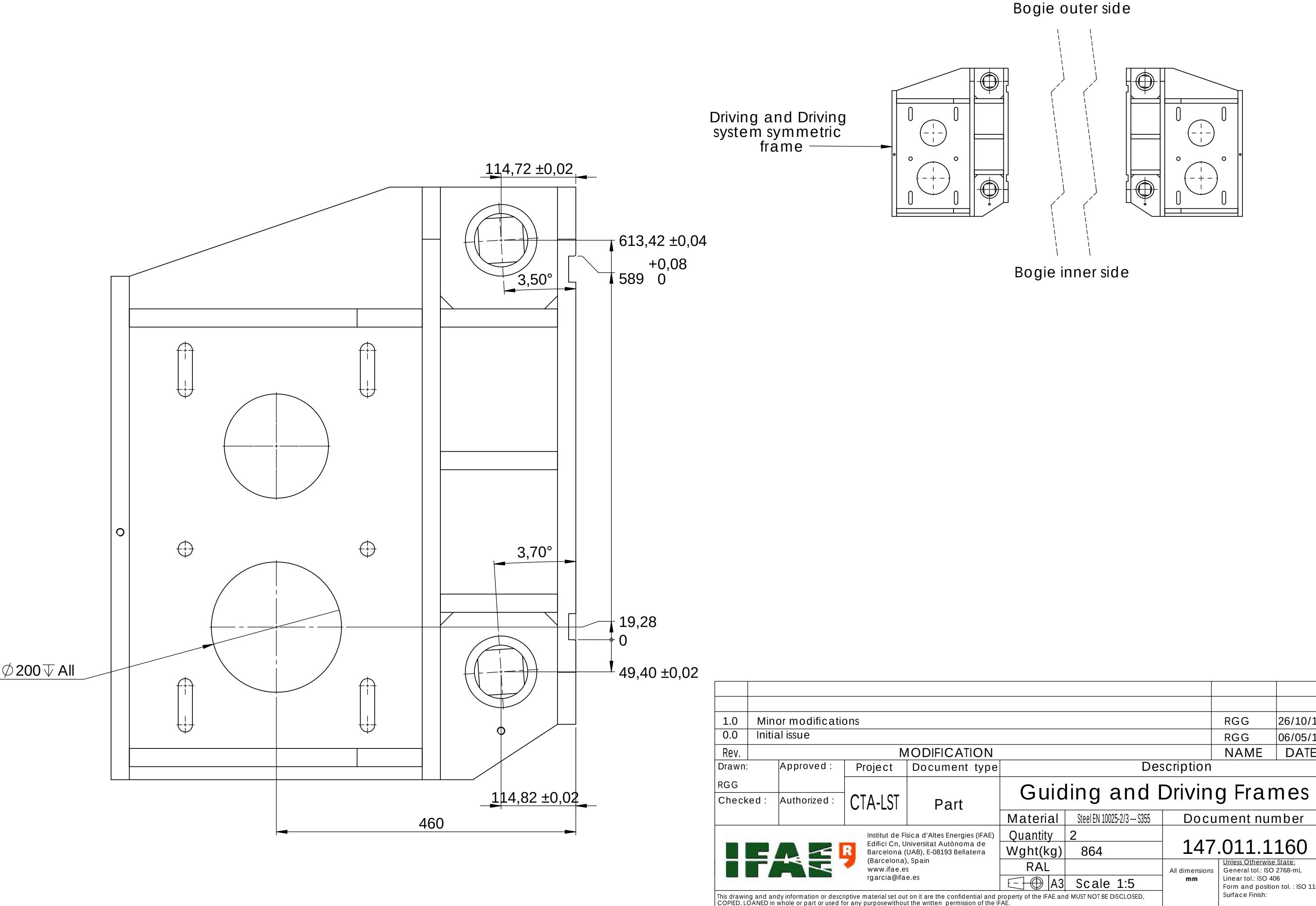
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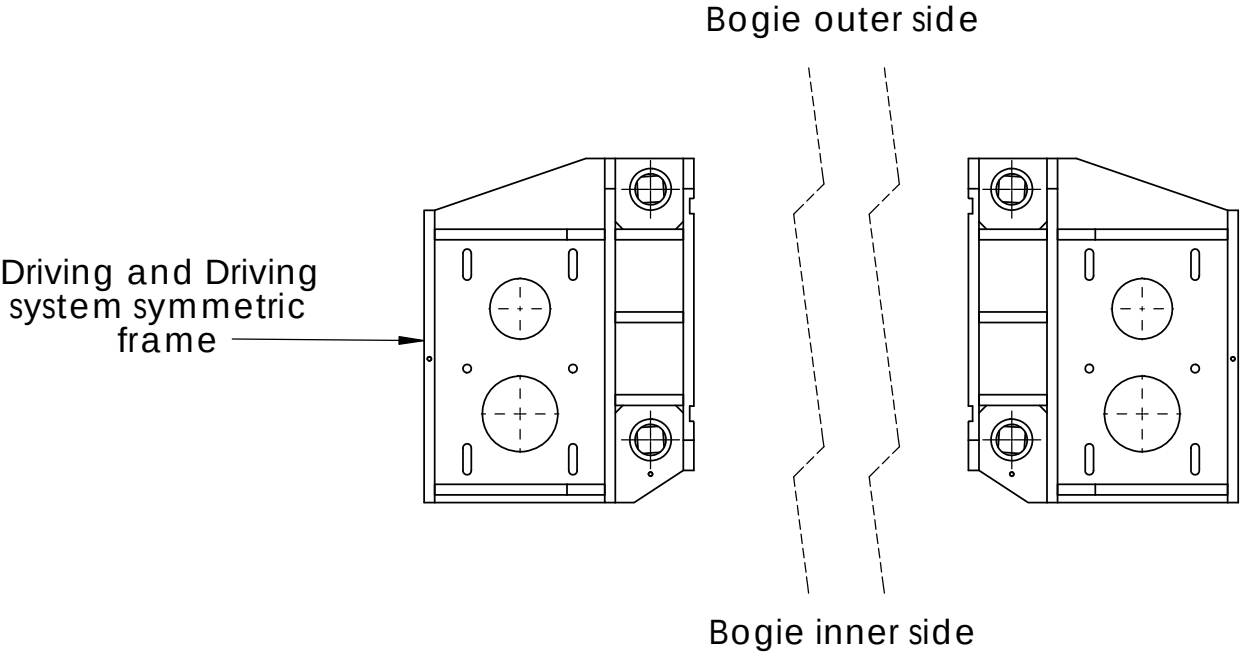
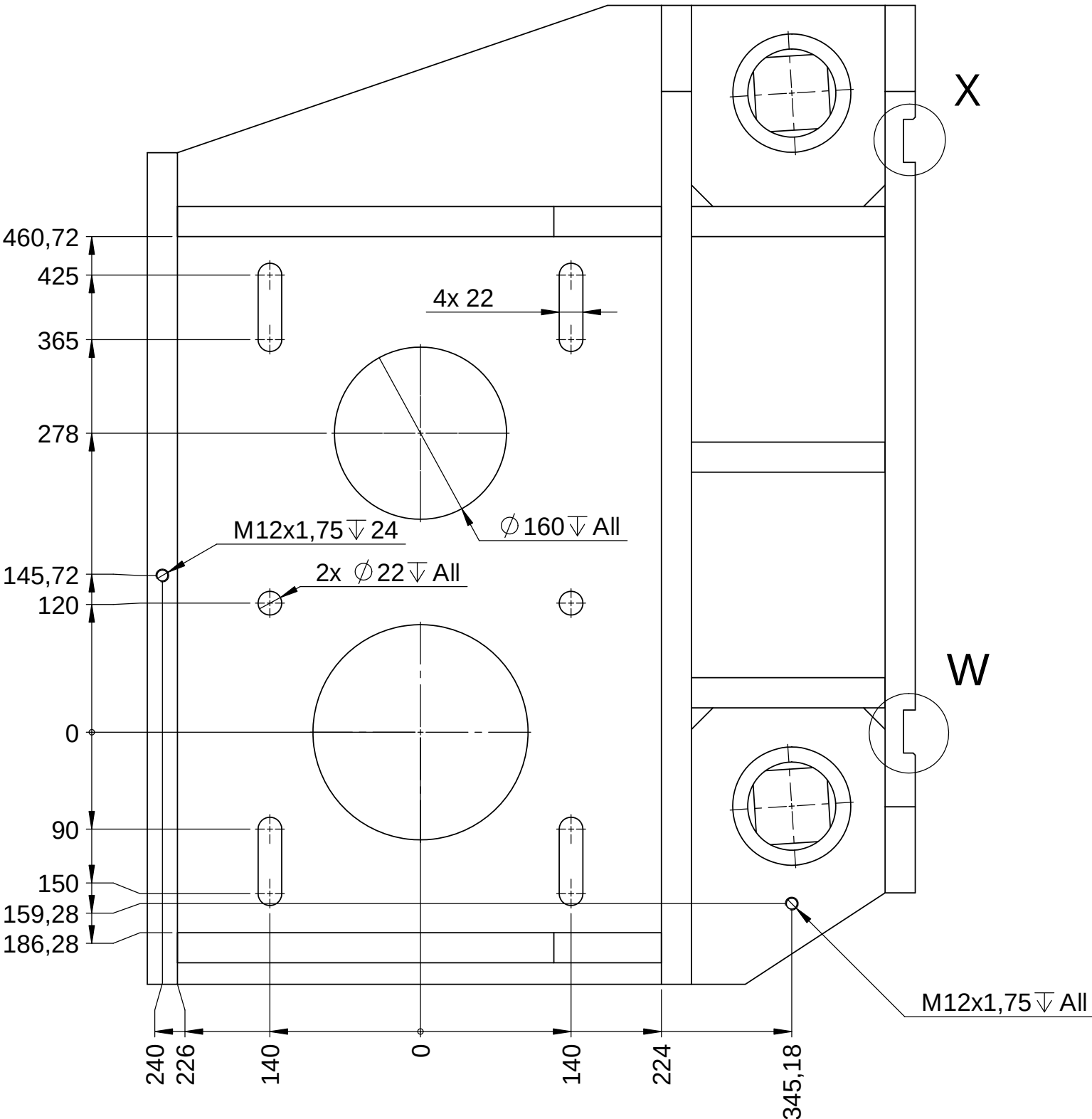
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0.0	Initial issue	RGG	06/05/15
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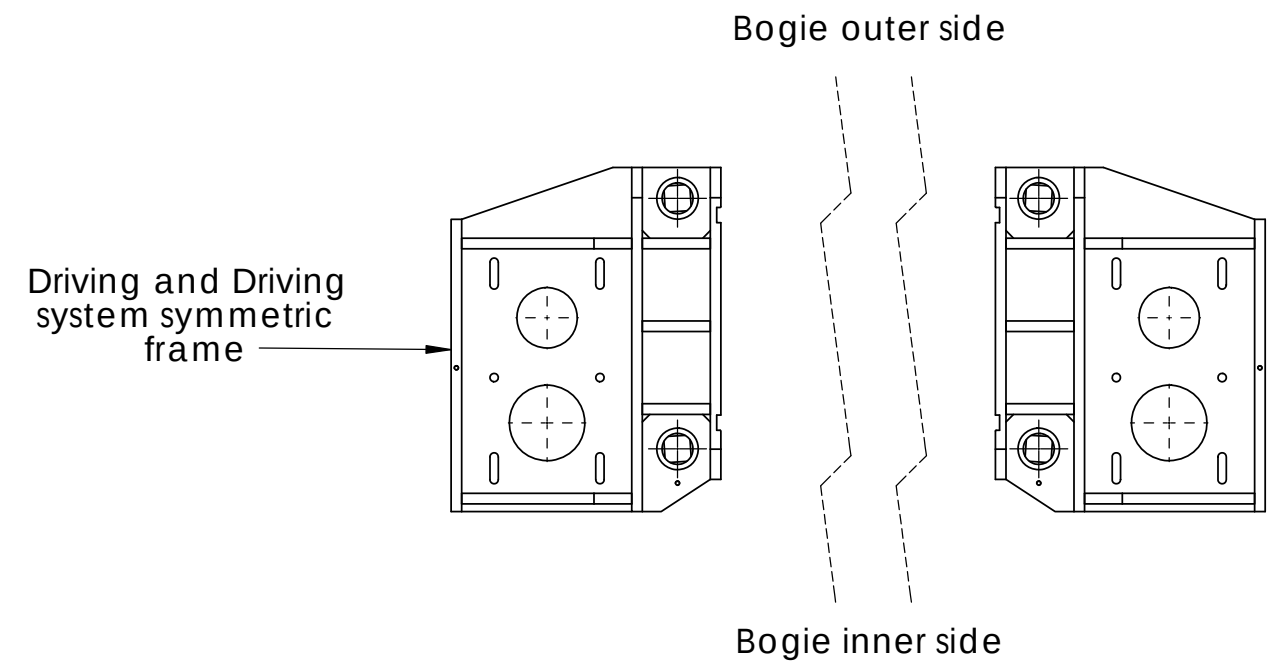
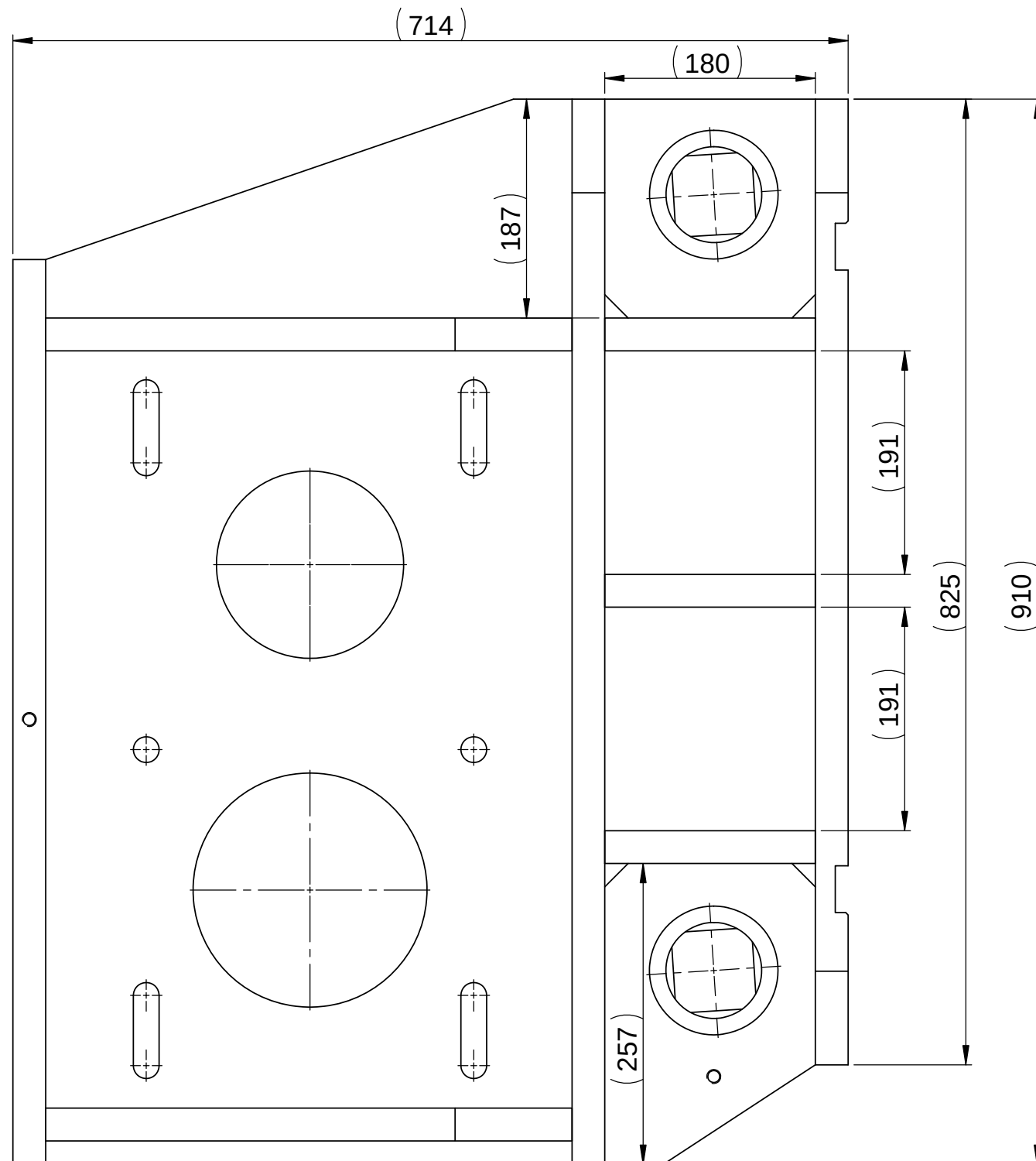
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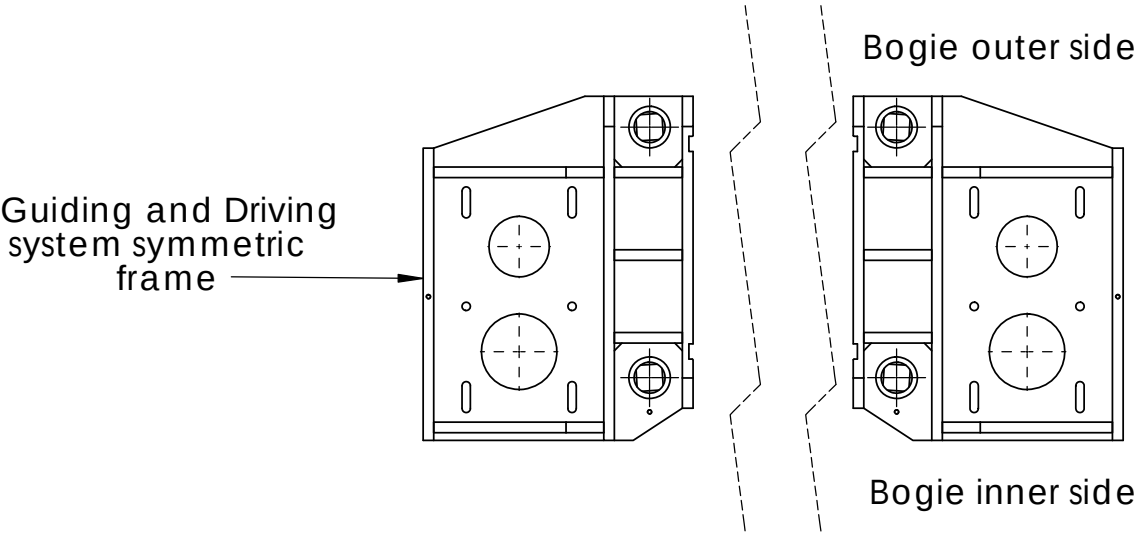
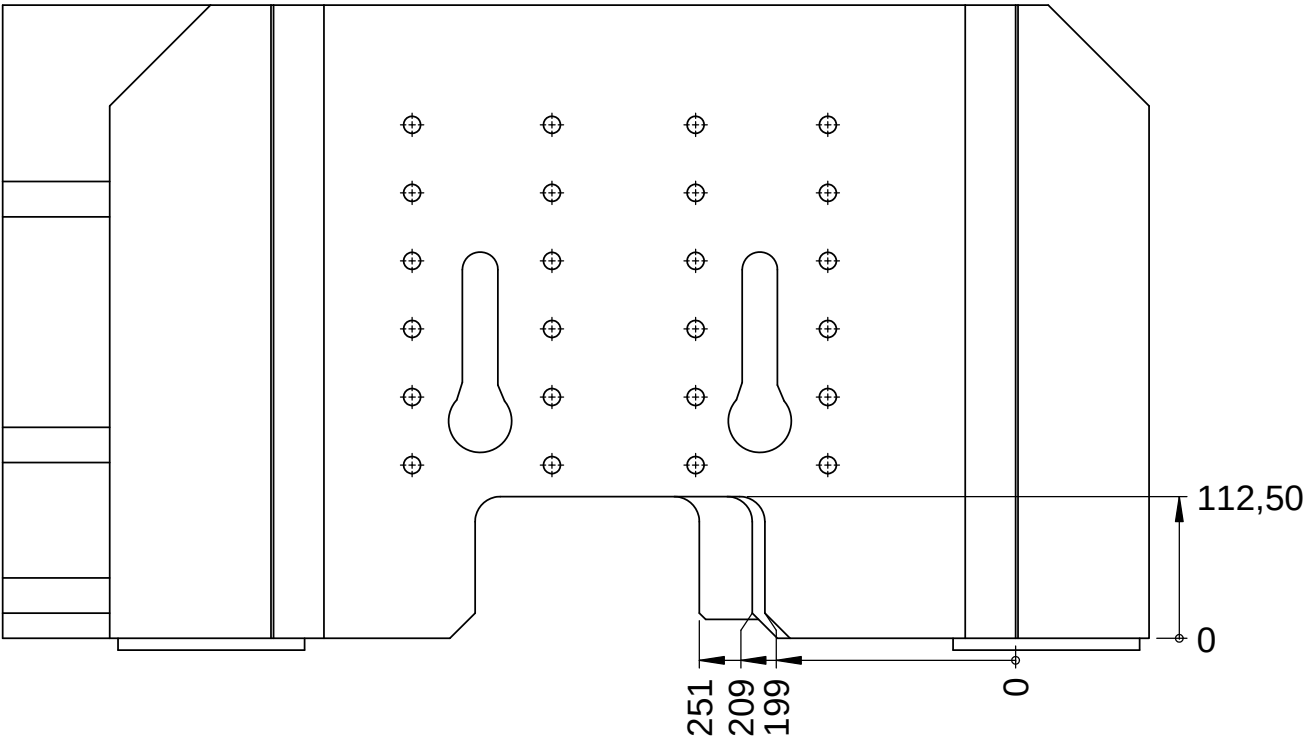
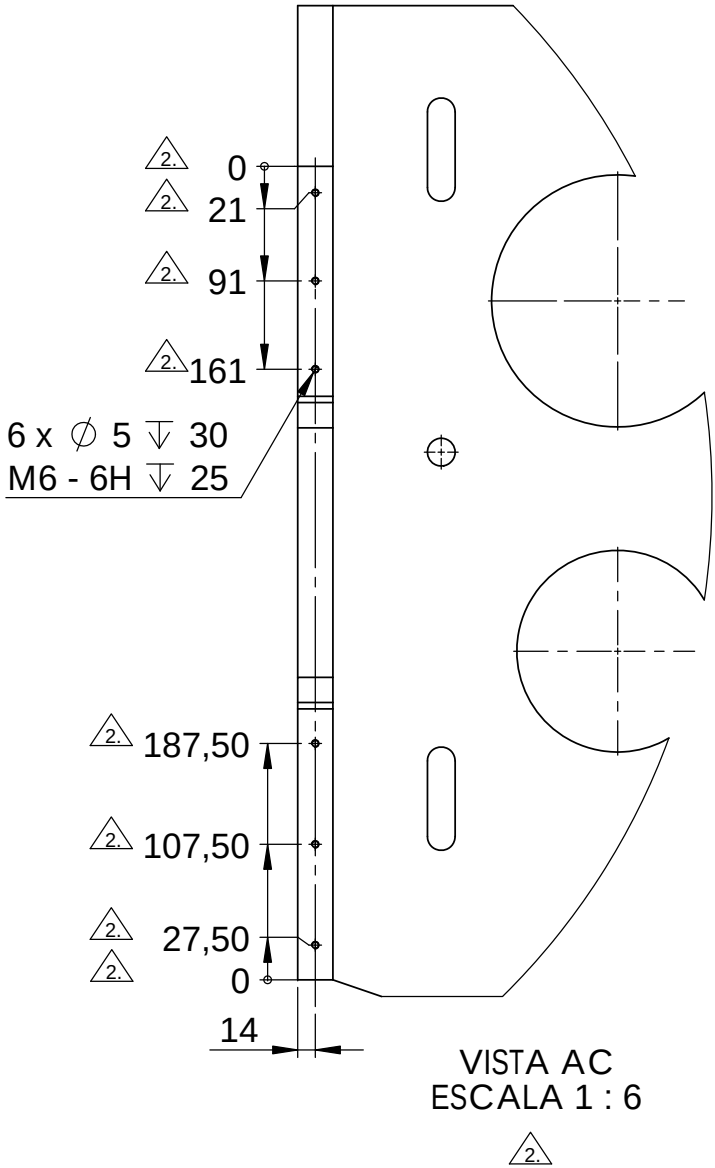
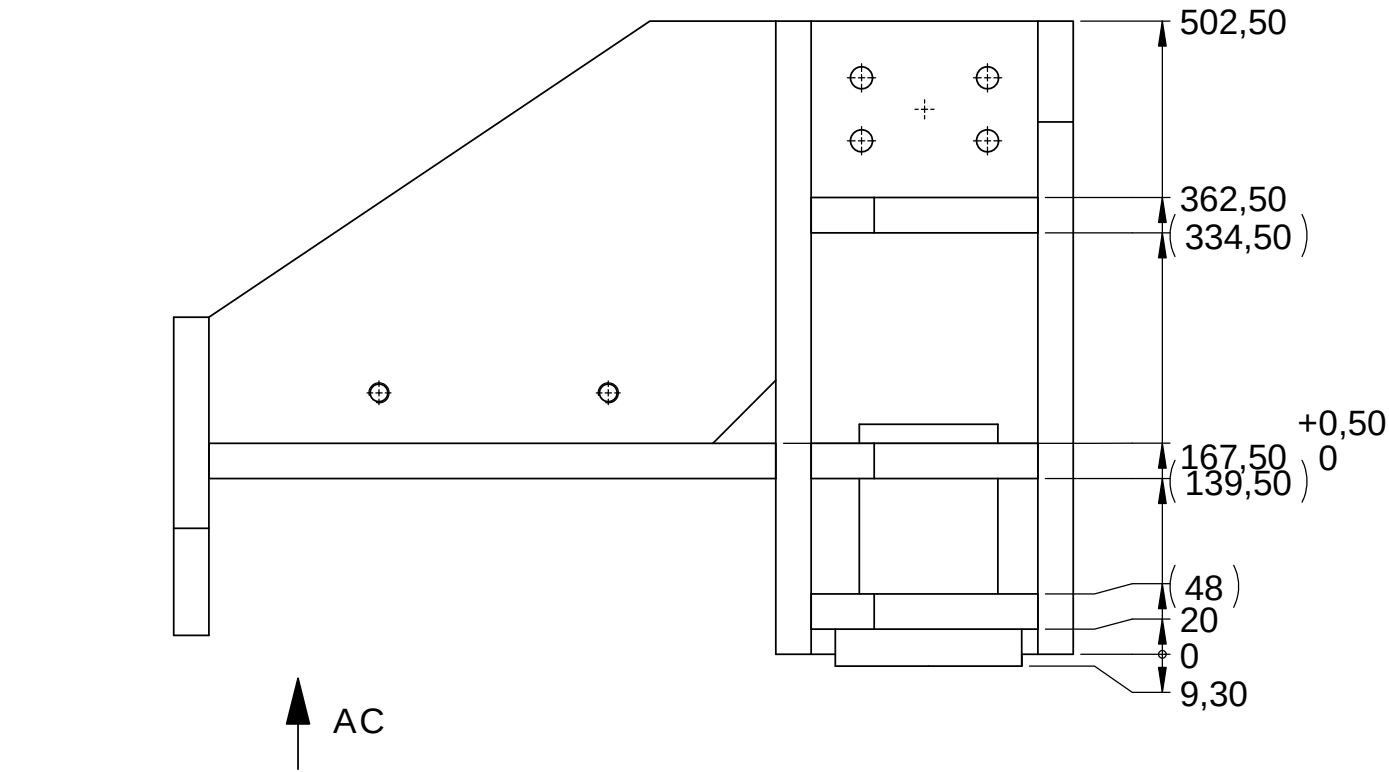


Detail X
Scale 1 : 1

Detail W
Scale 1 : 1

1.0	Minor modifications			RGG	26/10/15
0.0	Initial issue			RGG	06/05/15
Rev.	MODIFICATION			NAME	DATE
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RGG		CTA-LST	Part	Guiding and Driving Frames	
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				Scale	1:5
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[illegible]



Guiding and Driving system symmetric frame

Bogie outer side

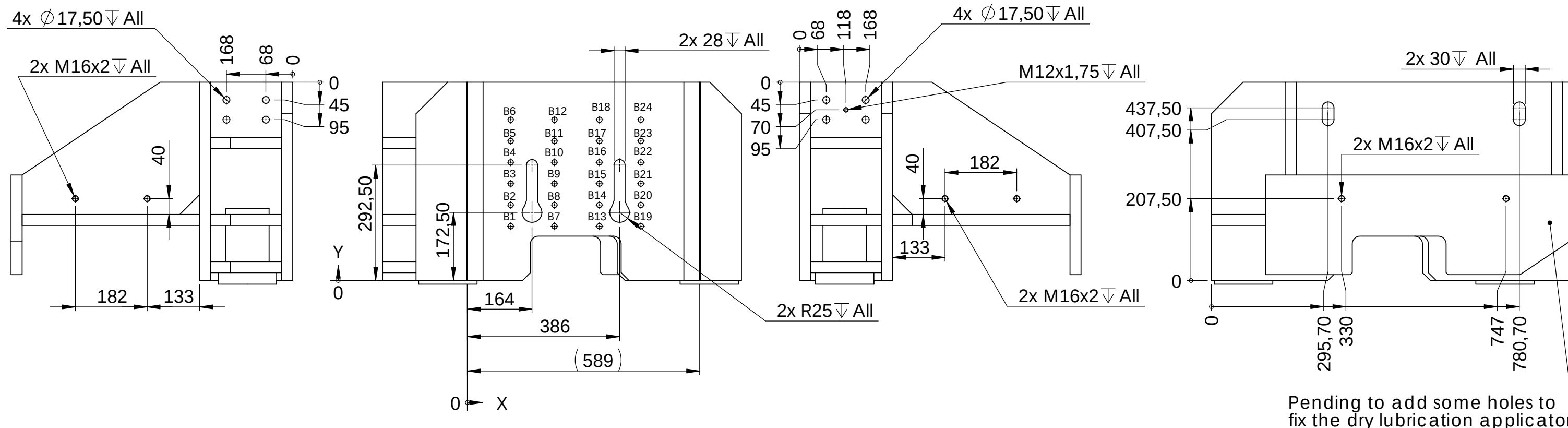
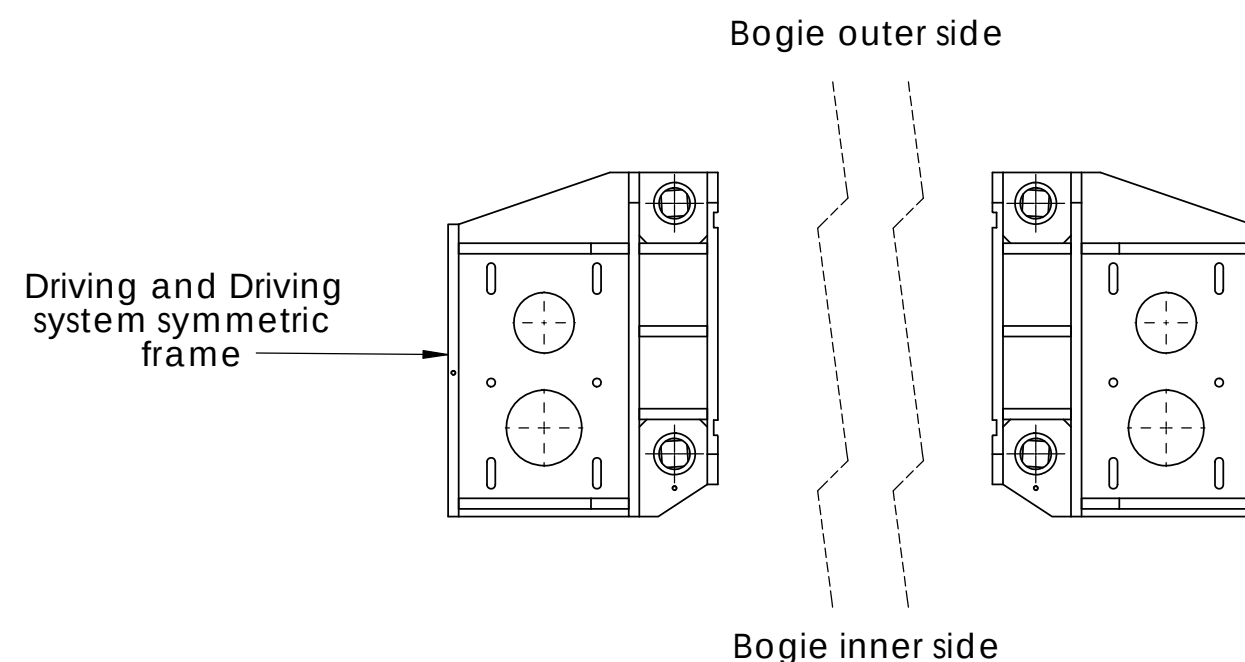
Bogie inner side

2.0	Part 3 modification: lower side length reduction and 6 threaded holes added.			JMC	04/02/16
1.0	Minor modifications			RGG	26/10/15
0.0	Initial issue			RGG	06/05/15
Rev.	MODIFICATION			NAME	DATE
Drawn:	Approved :	Project	Document type	Description	
RGG		CTA-LST	Part	Guiding and Driving Frames	
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355
				Quantity	2
				Wght(kg)	864
				RAL	
				Scale	1:6
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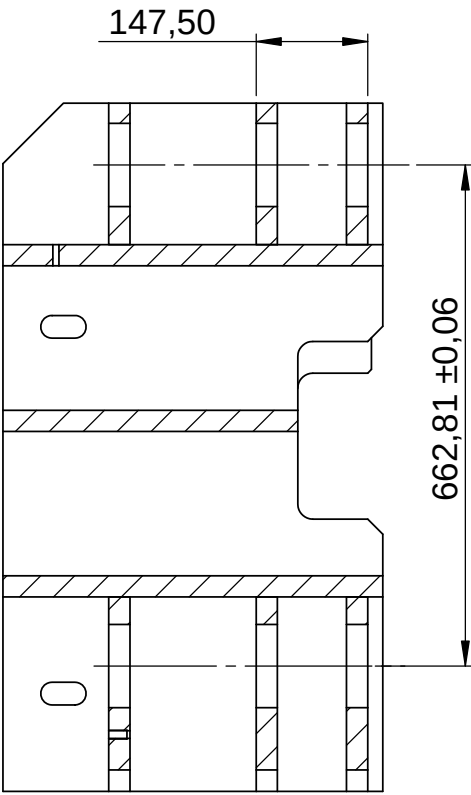
Hole type B ==> $\varnothing$ 13,5 ∇ All

Item	X	Y
B1	110	137,50
B2	110	191,50
B3	110	245,50
B4	110	299,50
B5	110	353,50
B6	110	407,50
B7	221	137,50
B8	221	191,50
B9	221	245,50
B10	221	299,50
B11	221	353,50
B12	221	407,50

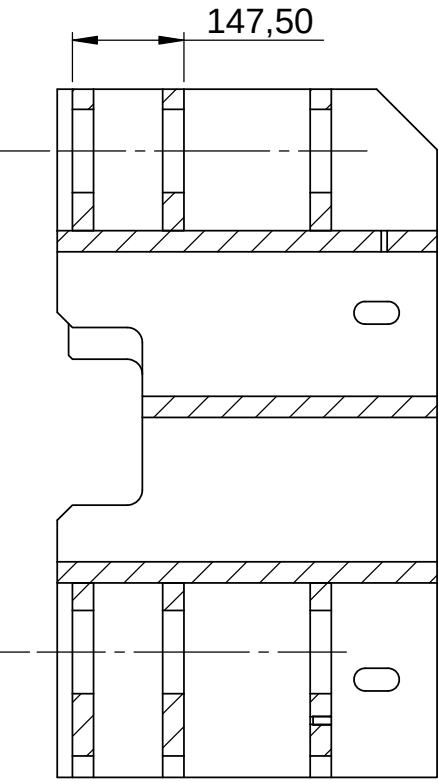
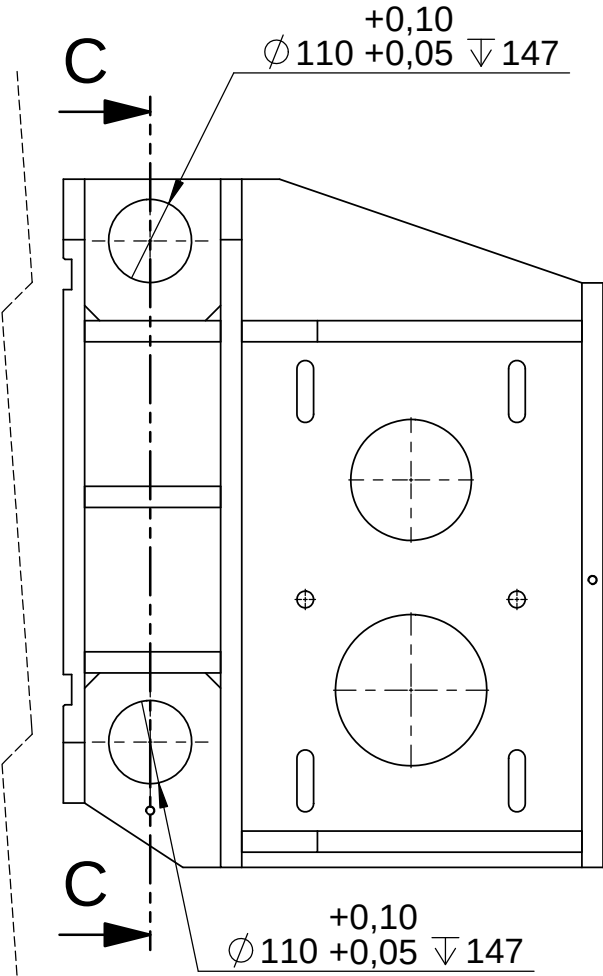
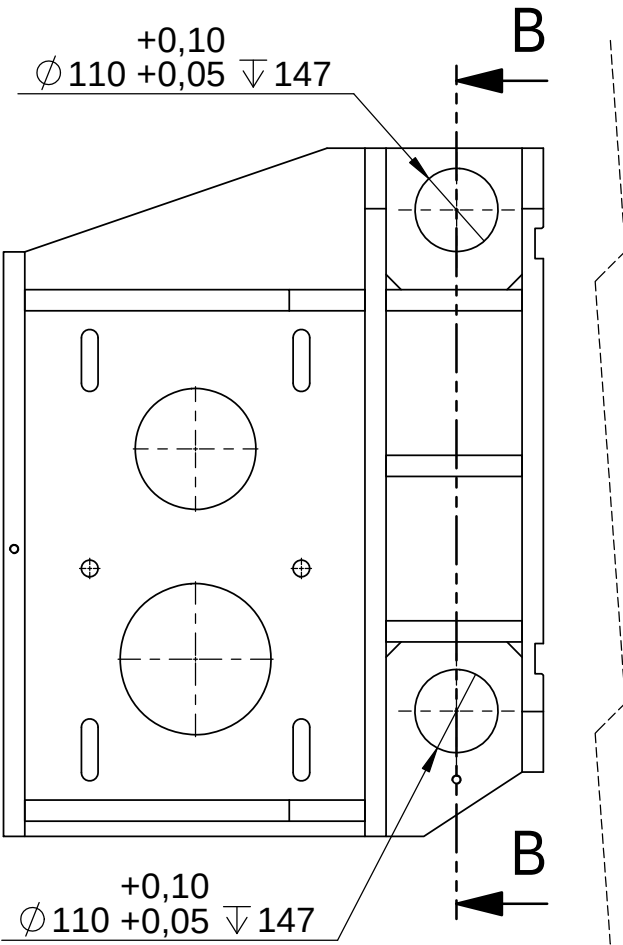
Item	X	Y
B13	335	137,50
B14	335	191,50
B15	335	245,50
B16	335	299,50
B17	335	353,50
B18	335	407,50
B19	440	137,50
B20	440	191,50
B21	440	245,50
B22	440	299,50
B23	440	353,50
B24	440	407,50



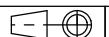
1.0	Minor modifications							RGG	26/10/1
0.0	Initial issue							RGG	06/05/1
Rev.	MODIFICATION							NAME	DATE
Drawn:	Approved :	Project	Document type	Description					
RGG		CTA-LST	Part	Guiding and Driving Frames					
Checked :	Authorized :								
				Material	Steel EN 10025-2/3 --- S355	Document number			
				Quantity	2	147.011.1160			
				Wght(kg)	864				
				RAL		All dimensions mm			
				 A3	Scale 1:10				
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Cross section B-B



Cross section C-C

1.0	Minor modifications				RGG	26/10/15
0.0	Initial issue				RGG	06/05/15
Rev.	MODIFICATION				NAME	DATE
Drawn:	Approved :	Project	Document type	Description		
RGG		CTA-LST	Part	Guiding and Driving Frames		
Checked :	Authorized :			Material	Steel EN 10025-2/3 --- S355	Document number
 Institut de Física d'Altes Energies (IFAE) Edifici Cn, Universitat Autònoma de Barcelona (UAB), E-08193 Bellaterra (Barcelona), Spain www.ifae.es rgarcia@ifae.es		Quantity	2		147.011.1160	
		Wght(kg)	864			
		RAL				
		 A3	Scale 1:10			
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