

WRS Cathodic Protection B.V.

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**SACRIFICIAL ANODES
CATALOGUE**

**Zinc
Aluminium
Magnesium**

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WRS Cathodic protection

WRS Cathodic protection is a worldwide operating specialist in corrosion control within the marine and offshore industry.

WRS was originally founded in 1994 and well known as WRS Marine Inspections. The company can provide tailor made solutions in Cathodic protection surveyis, impressed current systems, sacrificial anodes, marine consultancy, calculations and anti-fouling systems. Our aim is to deliver an added value in project management by reducing timings, deliver strong recommendations and work with high quality standards.

It is well known that capital assets can be seriously affected by the adverse consequences of corrosion. Roughening of hull surfaces causes increased drag and leads to excessive fuel consumption. Corrosion can also lead to weld grooving, which requires expensive and time-consuming repairs in dry-dock. Corrosion of structural members in tanks can jeopardize the integrity of a ship's structure. Repairing corrosion damage is inevitably costly, involving substantial steel renewal. Delays while vessels are out of commission take the cost of corrosion even higher. By comparison, cost of prevention by cathodic protection is modest.

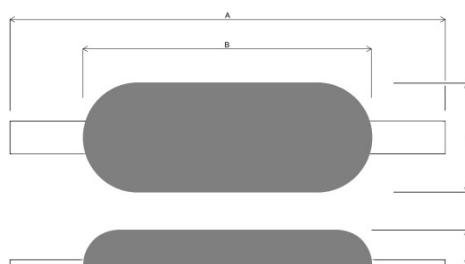
In the field of marine corrosion protection, WRS CP has been acknowledged for its vast engineering expertise, together with the Wilson Walton range of branded products, provides the firm foundation on which WRS Cathodic Protection division has been built. Our Marine Division provides corrosion protection solutions for every type of vessel, from small inshore pleasure craft, through fishing boats, ferries and dredgers to bulk carriers, tankers, cruise liners and warships. We can offer both impressed current and galvanic anode systems. Electrolytic Anti-fouling for seawater cooling systems is one of the latest advances in the field of marine growth prevention. In addition to providing consultancy and engineering on South Eastern Europe or worldwide through our group network, we design, install, supervise service cathodic protection and monitoring equipment. Supplying virtually every major shipyard and shipping company worldwide.

Galvanic Hull Anodes

Technical Product Information



Composition	Impalloy III XH	ASTM-B418 Type 1 Standard
Zinc	2.8 – 6.5 %	Balance
Aluminium	Balance	0.005 % max
Copper	0.006 % max	0.002 % max
Silicon	0.10 % max	-
Iron	0.15 % max	0.0014 % max
Titanium	0.025 % max	-
Indium	0.01 – 0.02 % max	-
Lead	-	0.003 % max
Cadmium	-	0.003 % max
Other	0.02 % max	-
Nominal Electromechanical Capacity (AH/kg)	2700	780
Nominal Solution Potential (mV)	-1100	-1050
Density (kg/m ³)	2710	7000

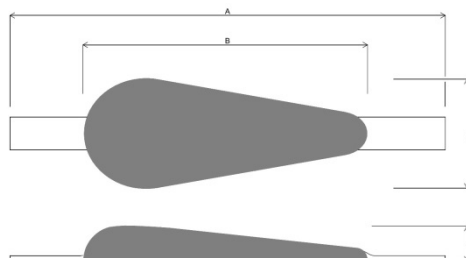


Aluminium (Impalloy) anodes							
Type	A	B	C	D	Insert dims.	Netto Wt.	Gross Wt.
W131	300	200	95	32	40 x 6	1,2	1,3
W5M-A	400	265	100	32	30 x 5	1,8	2,2
W130	350	270	150	32	40 x 6	2,6	3,2
W111	500	400	150	32	40 x 6	4,0	5,0
W114	650	550	130	50	40 x 6	8,0	9,2
W117	650	550	130	65	50 x 6	10,1	11,6
W119	650	550	130	75	50 x 6	12,6	14,1
W118	650	550	130	95	50 x 6	16,5	18,0
W124	1015	920	130	50	50 x 6	13,0	15,4
W126	1015	920	130	75	50 x 6	21,0	24,0
W128	1015	920	130	105	50 x 6	30,0	33,0

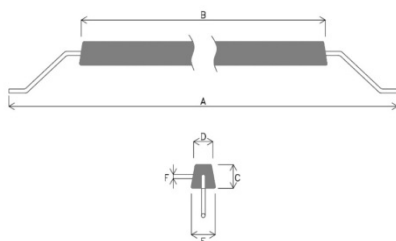
Zinc (ASTM-B418) anodes							
Type	A	B	C	D	Insert dims.	Netto Wt.	Gross Wt.
WP3	300	200	95	30	40 x 3	3,1	3,2
W5M	400	265	100	32	30 x 5	4,8	5,1
W6Z	350	270	150	32	40 x 6	6,5	7,1
W11Z	500	400	150	32	40 x 6	10,8	11,8
W14Z	650	550	130	50	40 x 6	21,3	22,5
W17Z	650	550	130	65	50 x 6	25,0	26,5
W19Z	650	550	130	75	50 x 6	33,0	34,5

Galvanic Hull Anodes

Technical Product Information



Teardrop shaped anodes						Zinc anode		Aluminium anode	
Type	A	B	C	D	Insert dims.	Netto Wt.	Gross Wt.	Netto Wt.	Gross Wt.
WP1	260	180	60	32	20 x 3	1,0	1,1	0,4	0,5
WP2	300	220	75	38	20 x 3	2,15	2,3	0,8	0,9
WP5	380	290	100	50	30 x 5	4,55	5,0	1,7	2,1
W10Z	400	280	150	75	40 x 5	9,5	10,0	3,6	4,0
W16Z	520	420	160	70	40 x 6	15,0	16,0	6,0	6,5



Aluminium Tank anodes								
Type	A	B*	C	D	E	F (dia)	Netto Wt.	Gross Wt.
W110	1225	765	50	40	50	Ø12	4,2	5,3
W115	1985	1525	50	40	50	Ø12	8,4	10,2
W156	765	305	70	50	76	Ø12	3,3	3,8
W155	1070	610	70	50	76	Ø12	7,1	8,1
W154	1222	762	70	50	76	Ø12	8,7	10,0
W153	1476	1016	70	50	76	Ø12	11,6	13,1
W152	1730	1270	70	50	76	Ø12	14,5	16,3
W151	1984	1524	70	50	76	Ø12	17,3	19,3
W196	765	305	95	75	85	Ø12	5,8	6,5
W195	1060	600	95	75	85	Ø12	12,2	13,1
W194	1210	750	95	75	85	Ø12	15,0	16,1
W193	1465	1005	95	75	85	Ø12	20,2	21,5
W192	1720	1260	95	75	85	Ø12	25,4	26,9
W191	1984	1524	95	75	85	Ø12	30,9	32,7

Zinc Tank anodes								
Type	A	B*	C	D	E	F (dia)	Netto Wt.	Gross Wt.
WT50Z	1676	1219	63	57	12	Ø19	21,0	22,5
WT70Z	1676	1219	76	68	12	Ø23	30,0	32,0
WT90Z	1676	1219	82	78	12	Ø25	40,0	42,0
WT110Z	1676	1219	94	91	20	Ø32	50,0	54,0

Note:

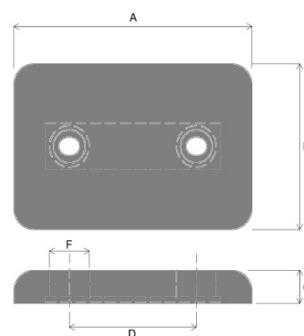
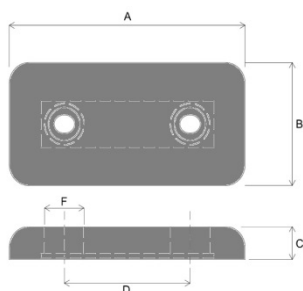
- Anode lengths given in the tables are standard but other lengths can be supplied to order.
- All weights in kilogram (kg). All dimensions in millimetre (mm). All weights and dimensions are nominal.
- Our standard range of alloys is detailed in the tables. Other alloy formulations or modifications to the standard alloys, e.g. in respect of limits on residual elements such as iron, can be manufactured to customer specification.

Galvanic Bolt-On Anodes

Technical Product Information



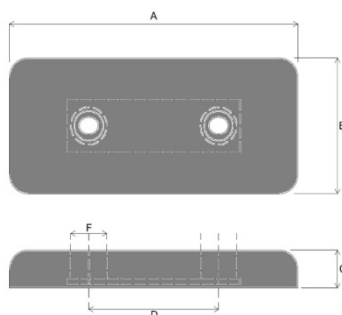
Composition	Impalloy III XH	ASTM-B418 Type 1 Standard
Zinc	2.8 – 6.5 %	Balance
Aluminium	Balance	0.005 % max
Copper	0.006 % max	0.002 % max
Silicon	0.10 % max	-
Iron	0.15 % max	0.0014 % max
Titanium	0.025 % max	-
Indium	0.01 – 0.02 % max	-
Lead	-	0.003 % max
Cadmium	-	0.003 % max
Other	0.02 % max	-
Nominal Electromechanical Capacity (AH/kg)	2700	780
Nominal Solution Potential (mV)	-1100	-1050
Density (kg/m ³)	2710	7000



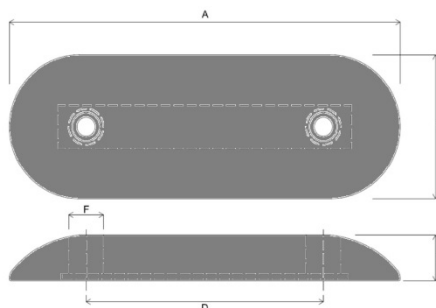
Standard bolt-on anodes						Aluminium		Zinc	
Type	A	B	C	D	F	Netto Wt.	Gross Wt.	Netto Wt.	Gross Wt.
B4	200	100	30	110	38	1,3	1,5	3,4	3,6
B4E	200	100	40	110	38	1,6	1,8	4,0	4,2
B9	300	150	30	160	50	3,1	3,3	8,1	8,3
B9E	300	150	40	160	50	4,4	4,6	10,8	11,0
B9F	300	150	50	160	50	5,3	5,5	13,6	13,8
B9H	300	150	60	160	50	6,3	6,5	16,3	16,5
B9G	300	150	65	160	50	6,8	7,0	21,8	22,0
B12	300	200	30	160	50	5,8	6,0	12,8	13,0
B12E	300	200	40	160	50	6,4	6,6	15,0	15,2
B12F	300	200	50	160	50	7,3	7,5	18,6	18,8
B12H	300	200	60	160	50	9,5	9,7	24,8	25,0
B12G	300	200	65	160	50	10,5	10,7	26,6	26,8

Galvanic Bolt-On Anodes

Technical Product Information



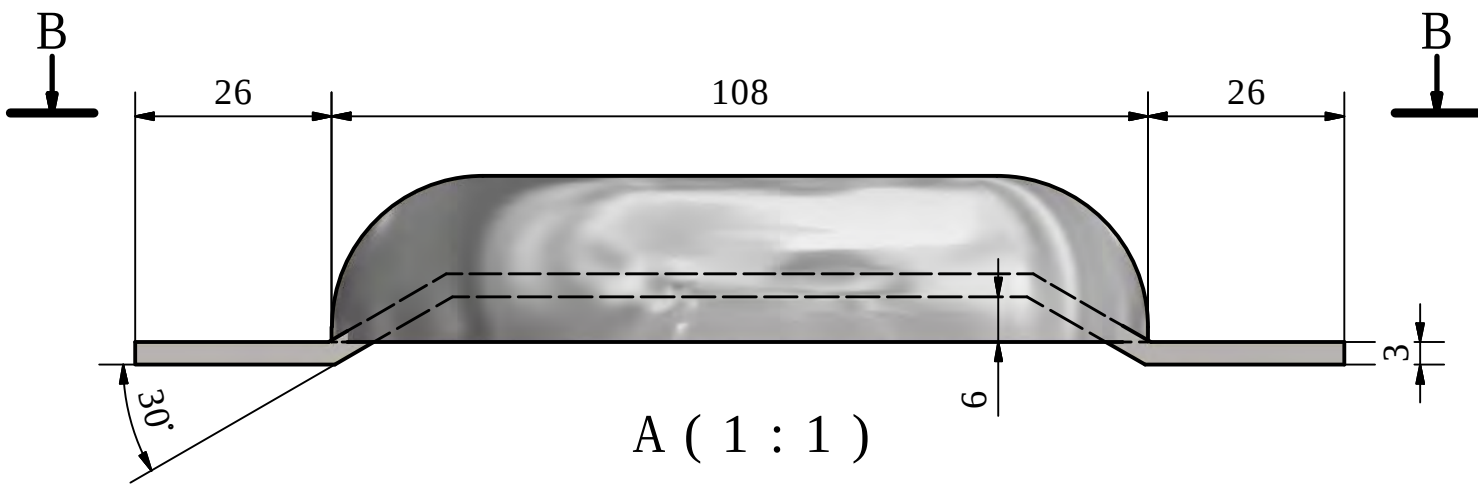
Aluminium bolt-on anode							
Type	A	B	C	D	F	Netto Wt.	Gross Wt.
MF134 E	400	180	40	180	50	7,4	7,8
MF134 F	400	180	50	180	50	9,3	9,7
MF134 H	400	180	60	180	50	11,2	11,6
MF134	400	180	70	180	50	13,0	13,4



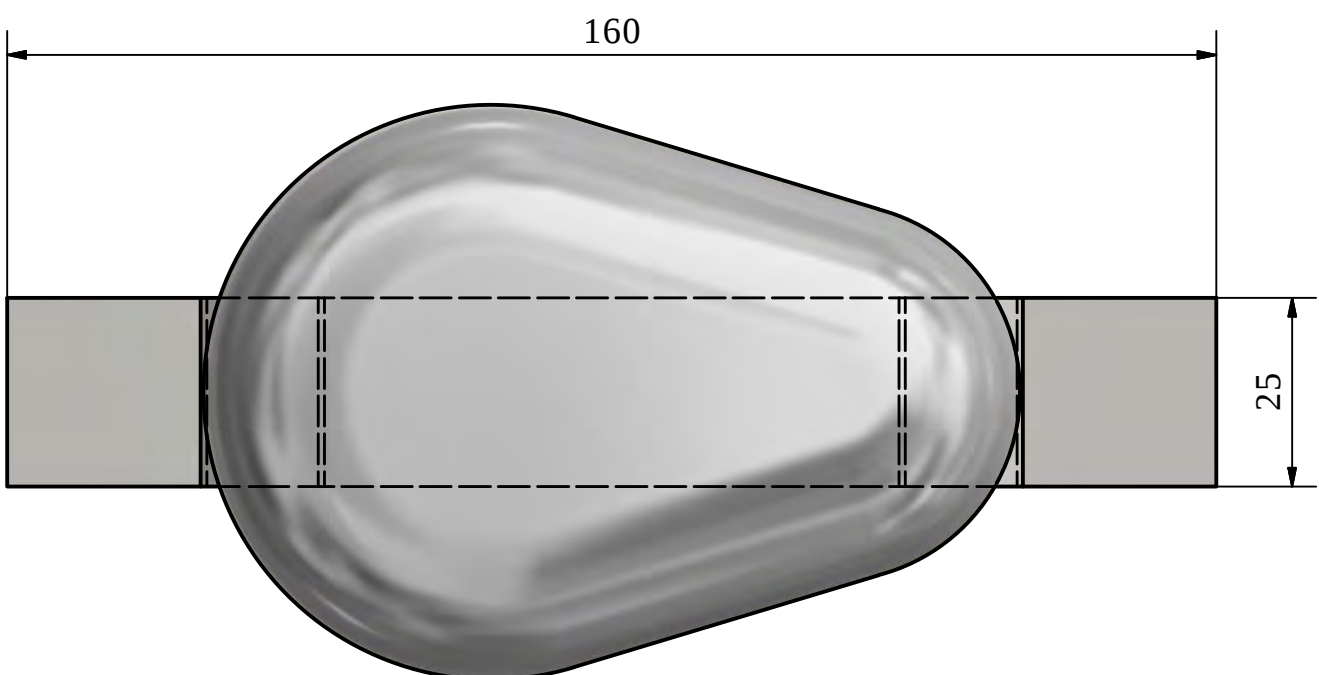
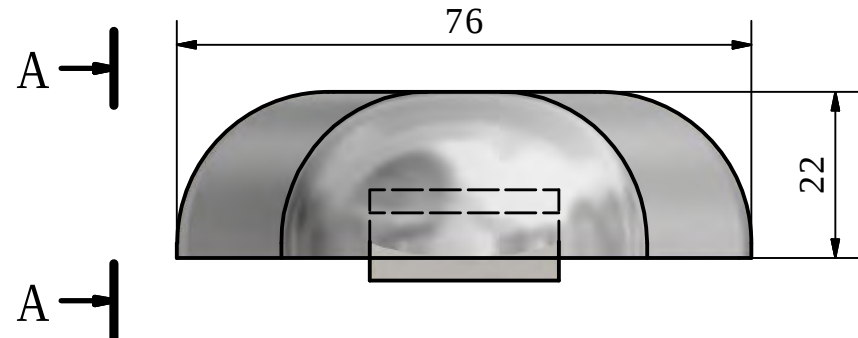
Bolt-on anodes						Zinc anode		Aluminium anode	
Type	A	B	C	D	F	Netto Wt.	Gross Wt.	Netto Wt.	Gross Wt.
RF-118	460	200	64	260	50	-	-	11,5	11,8
RF-155	540	200	65	340	50	-	-	15,1	15,4
B36Z	305	76	36	205	50	3,7	4,1	-	-
W7B	425	100	35	229	40	6,5	7,0	-	-
B114Z	456	102	53	230	60	11,4	12,1	-	-

Note:

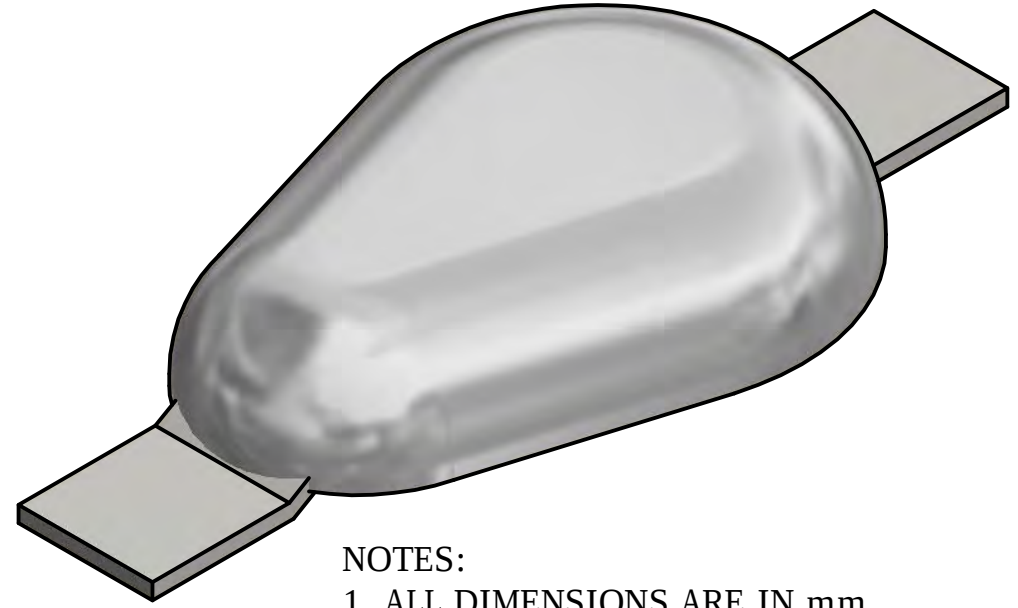
- Anode lengths given in the tables are standard but other lengths can be supplied to order.
- All weights in kilogram (kg). All dimensions in millimetre (mm). All weights and dimensions are nominal.
- Our standard range of alloys is detailed in the tables. Other alloy formulations or modifications to the standard alloys, e.g. in respect of limits on residual elements such as iron, can be manufactured to customer specification.



A (1 : 1)



B (1 : 1)

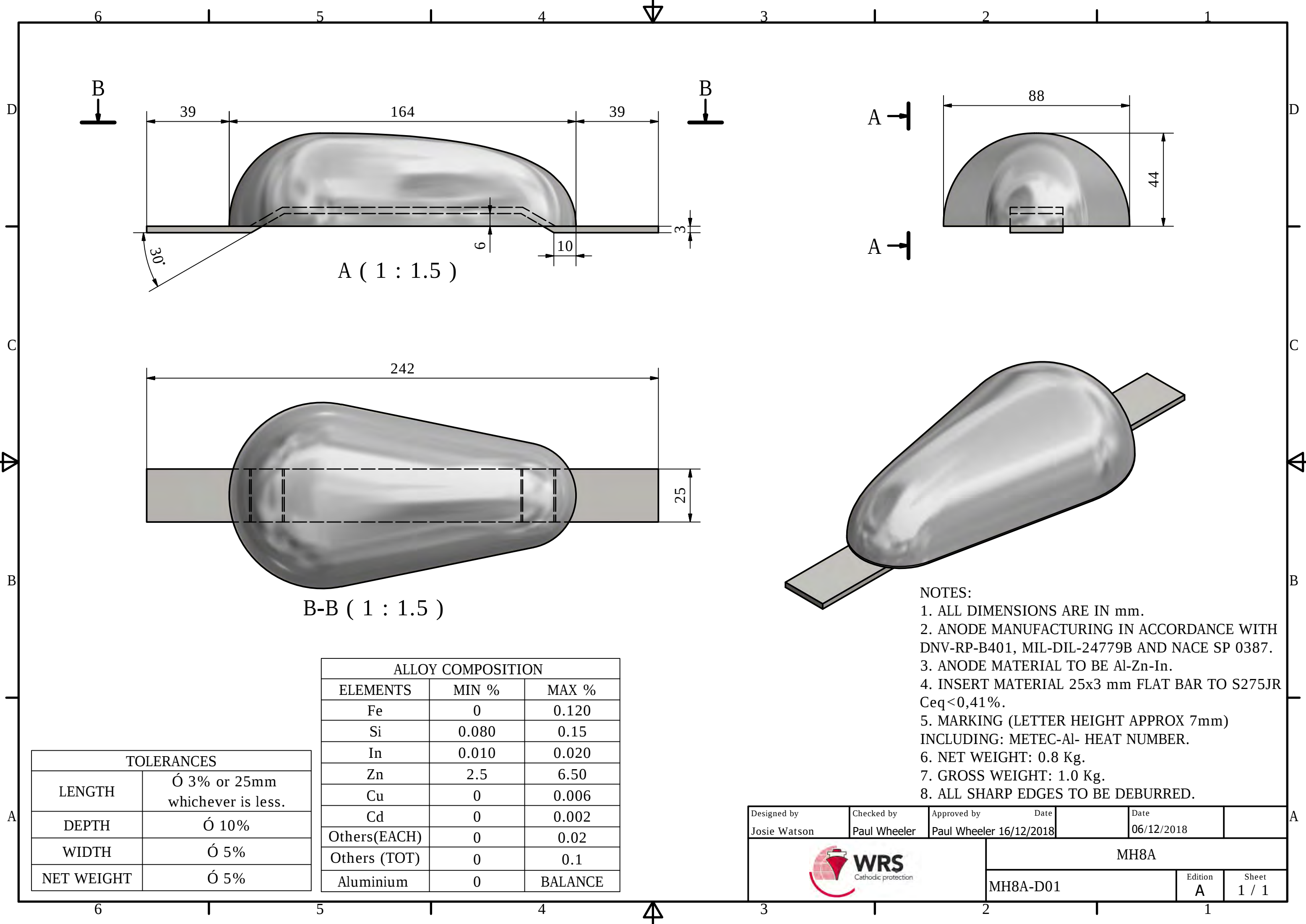


- NOTES:
- 1. ALL DIMENSIONS ARE IN mm.
 - 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 - 3. ANODE MATERIAL TO BE Al-Zn-In.
 - 4. INSERT MATERIAL 25x3 mm FLAT BAR TO S275JR Ceq<0,41%.
 - 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
 - 6. NET WEIGHT: 0.3 Kg.
 - 7. GROSS WEIGHT: 0.4 Kg.
 - 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% or 25mm whichever is less.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 5%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	MH3A	
		MH3A-D01		Edition A	Sheet 1 / 1



A (1 : 1.5)

B-B (1 : 1.5)

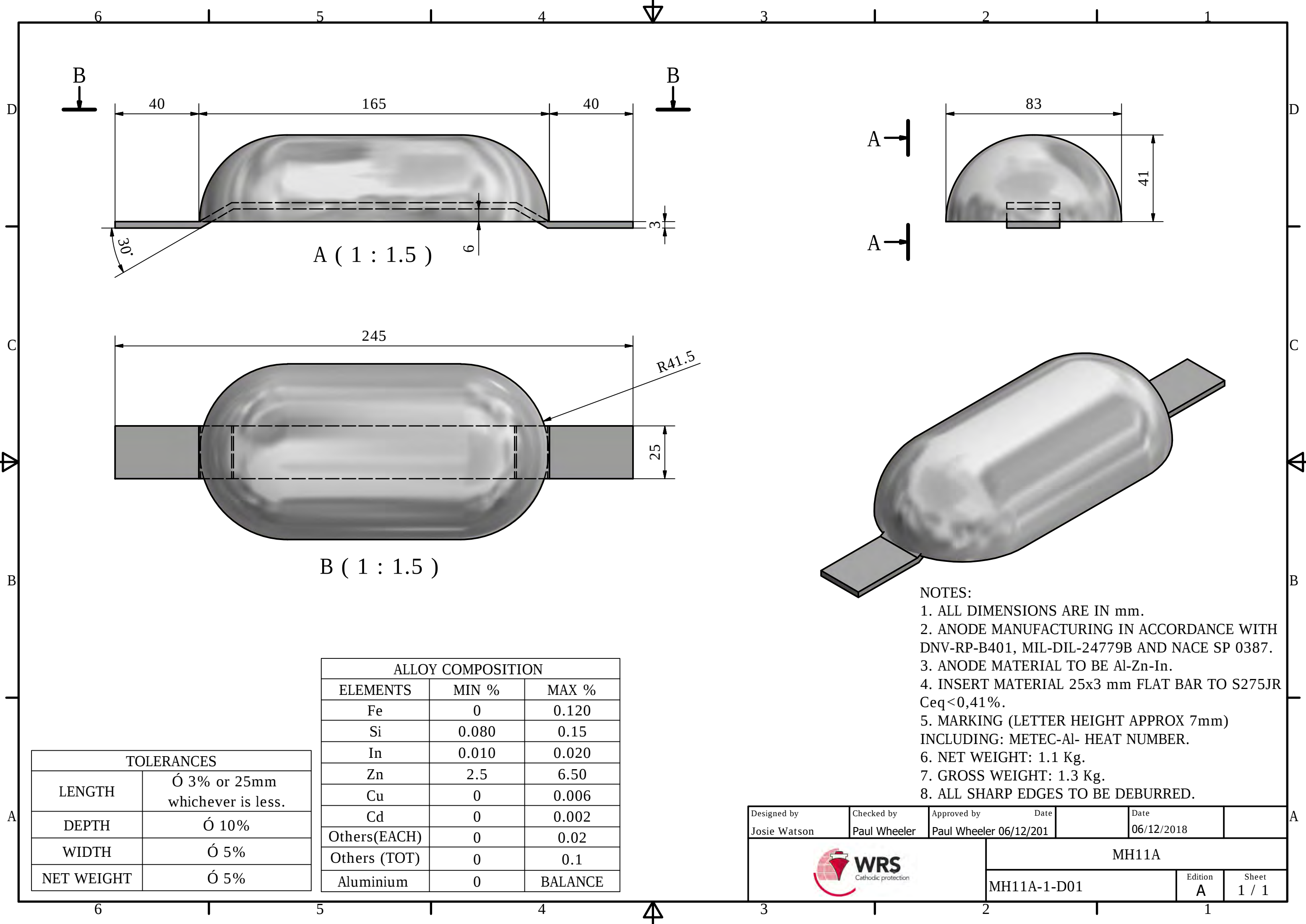
NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
3. ANODE MATERIAL TO BE Al-Zn-In.
4. INSERT MATERIAL 25x3 mm FLAT BAR TO S275JR Ceq<0,41%.
5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
6. NET WEIGHT: 0.8 Kg.
7. GROSS WEIGHT: 1.0 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% or 25mm whichever is less.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 5%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 16/12/2018	Date 06/12/2018	
		MH8A		
		MH8A-D01	Edition A	Sheet 1 / 1



A (1 : 1.5)

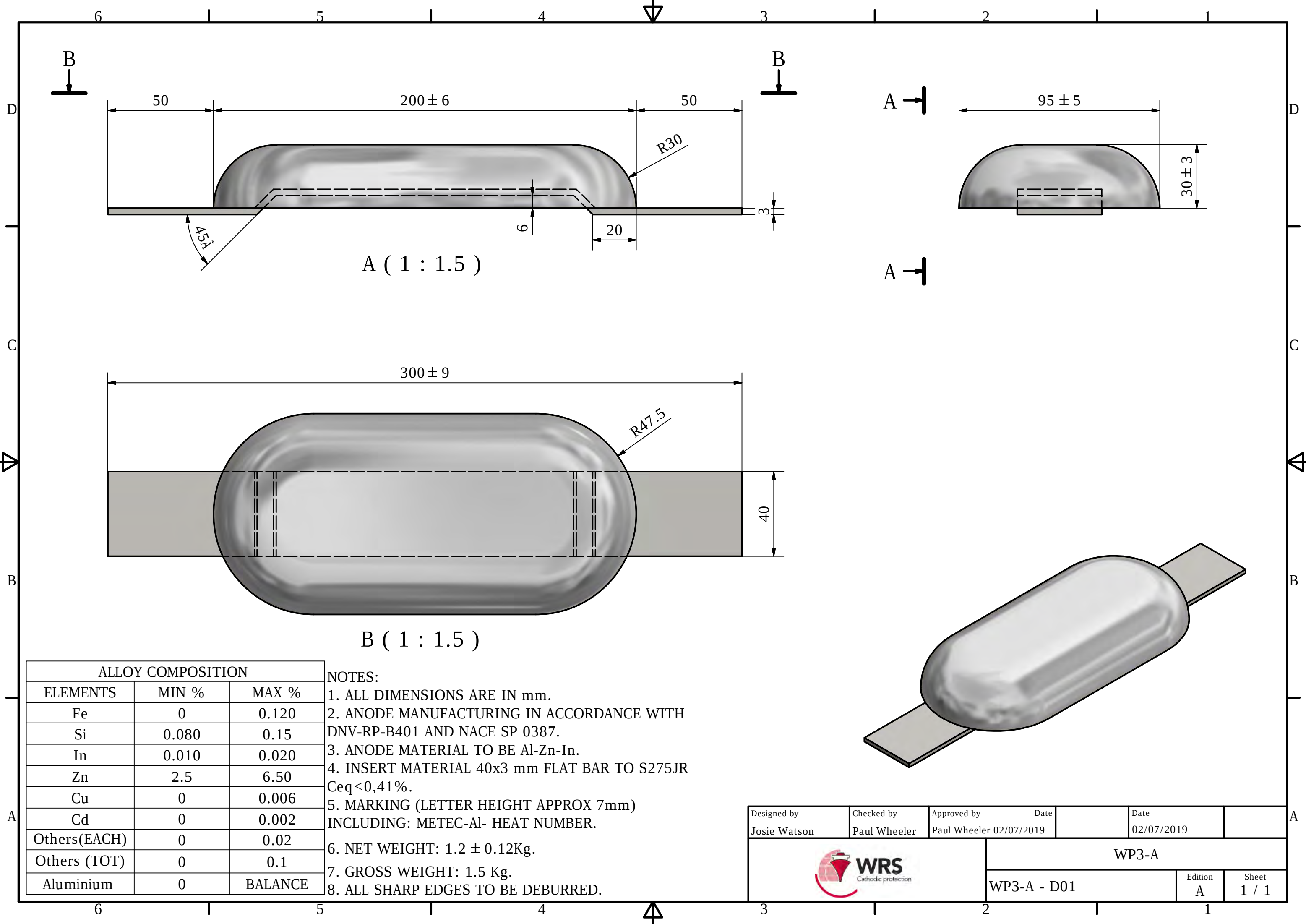
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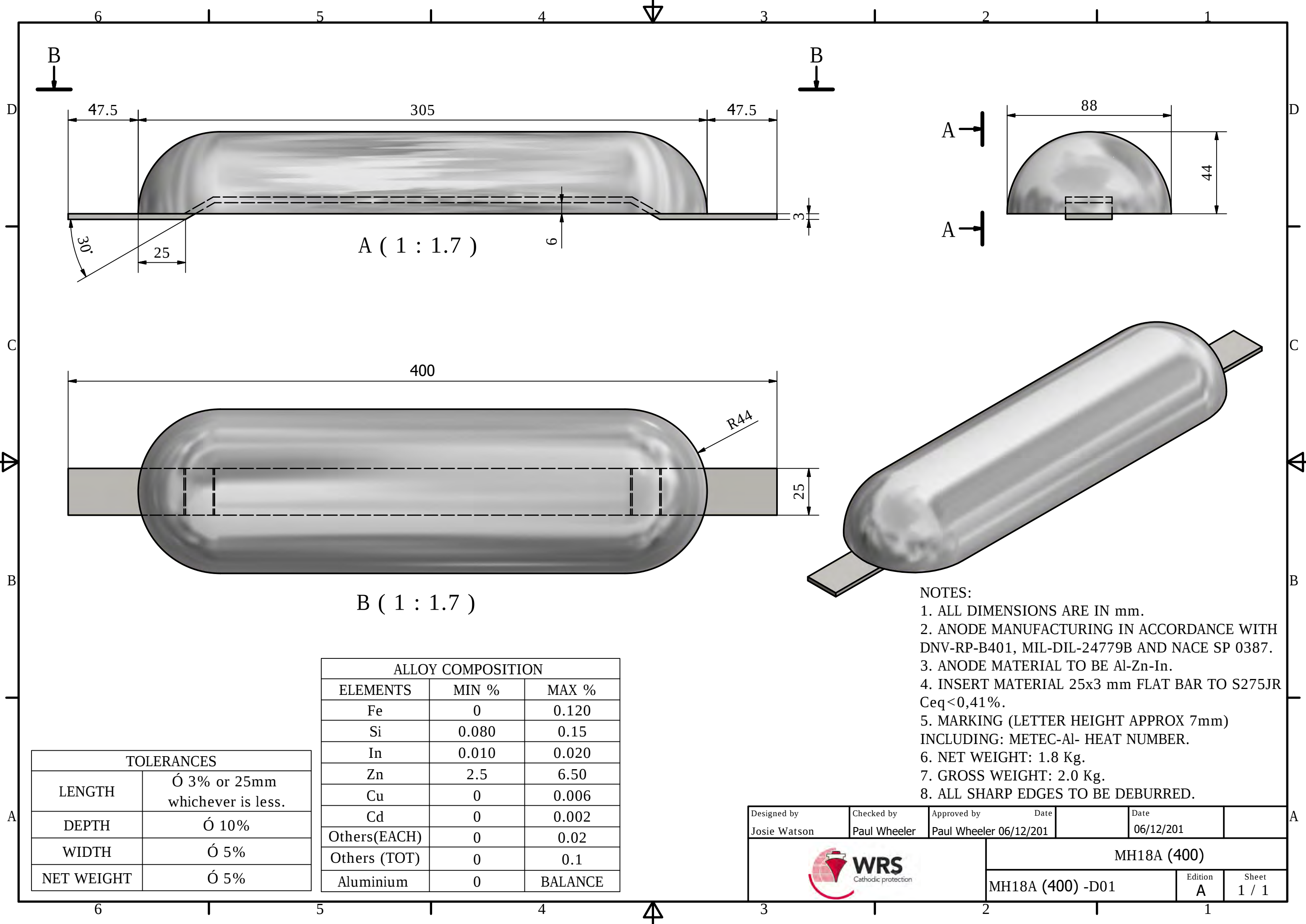
- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Al-Zn-In.
 4. INSERT MATERIAL 25x3 mm FLAT BAR TO S275JR Ceq<0,41%.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
 6. NET WEIGHT: 1.1 Kg.
 7. GROSS WEIGHT: 1.3 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% or 25mm whichever is less.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 5%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

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		MH11A		
		MH11A-1-D01	Edition A	Sheet 1 / 1





A (1 : 1.7)

B (1 : 1.7)

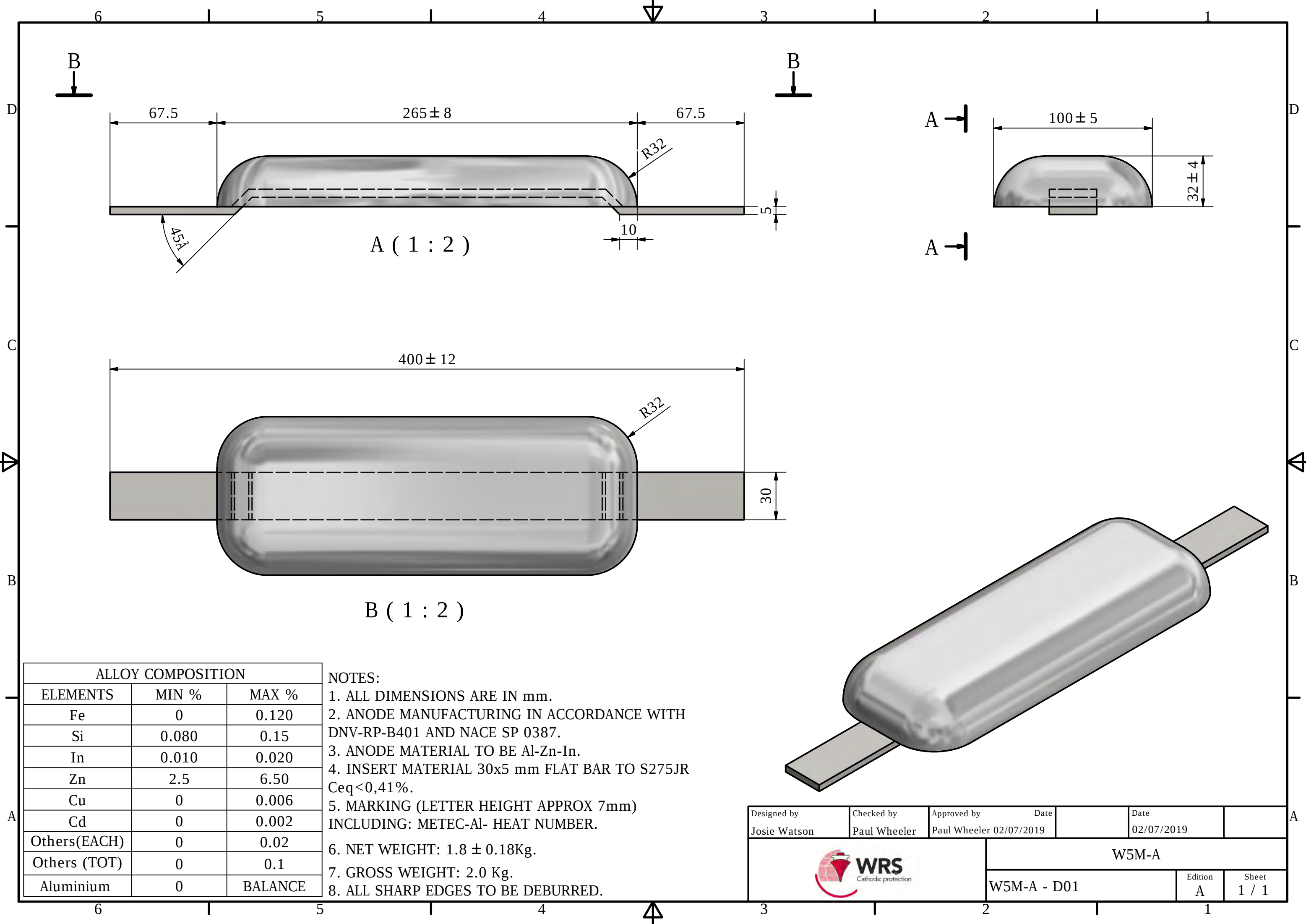
NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
3. ANODE MATERIAL TO BE Al-Zn-In.
4. INSERT MATERIAL 25x3 mm FLAT BAR TO S275JR Ceq<0,41%.
5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
6. NET WEIGHT: 1.8 Kg.
7. GROSS WEIGHT: 2.0 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% or 25mm whichever is less.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 5%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

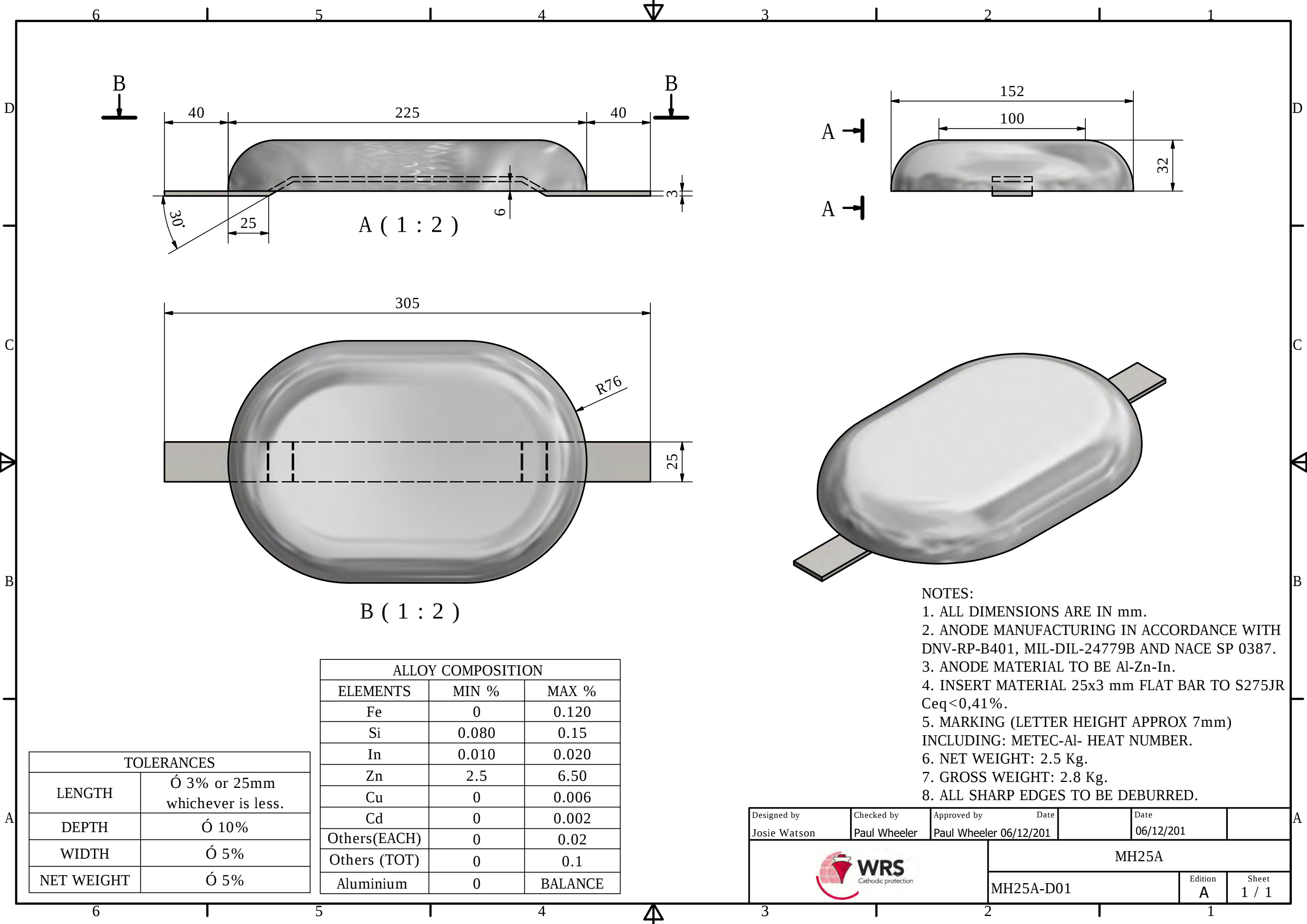
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		MH18A (400) -D01		Edition A	Sheet 1 / 1

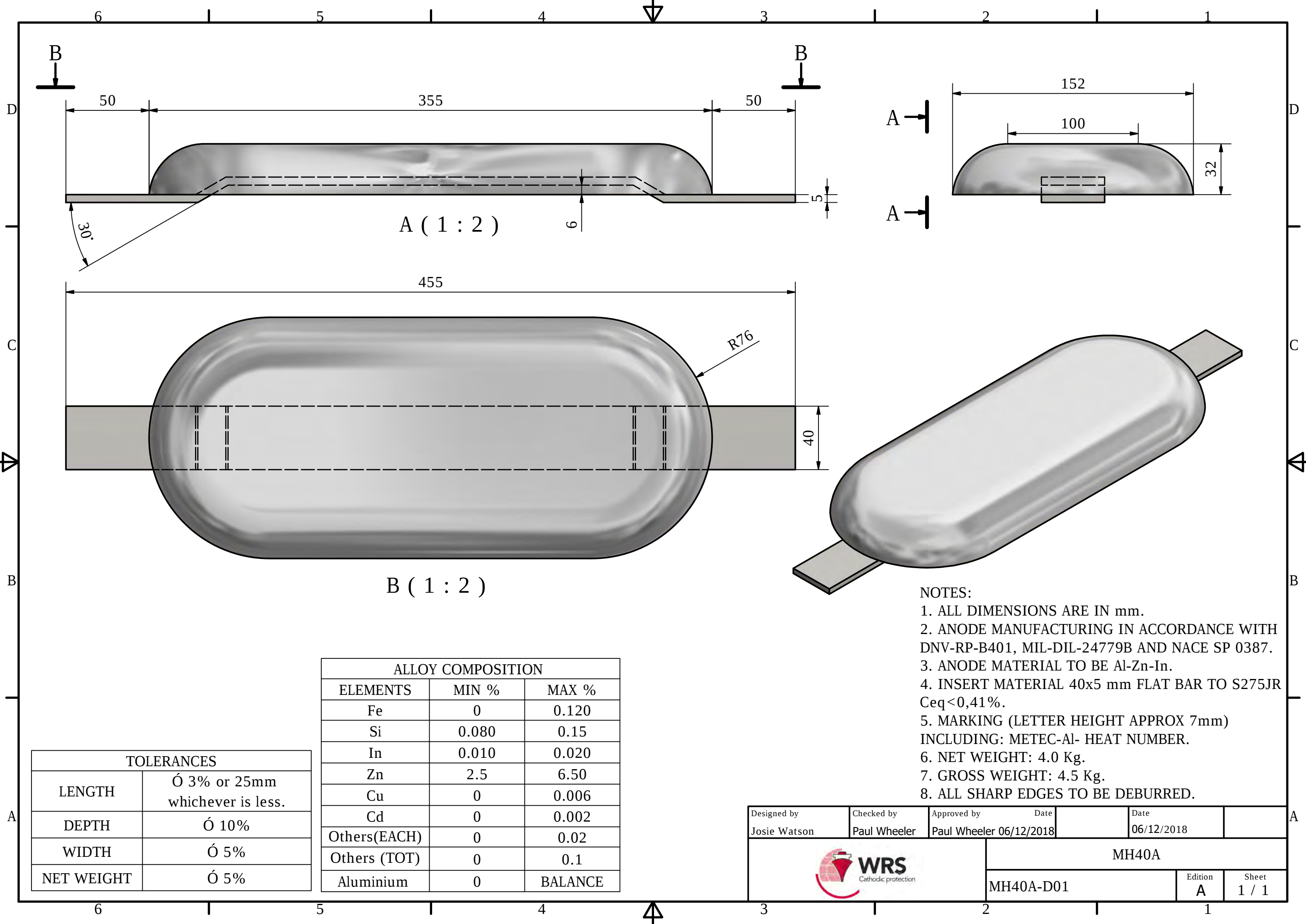


ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Al-Zn-In.
 4. INSERT MATERIAL 30x5 mm FLAT BAR TO S275JR Ceq<0,41%.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Al- HEAT NUMBER.
 6. NET WEIGHT: 1.8 ± 0.18Kg.
 7. GROSS WEIGHT: 2.0 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 02/07/2019	Date 02/07/2019	
		W5M-A		
		W5M-A - D01	Edition A	Sheet 1 / 1



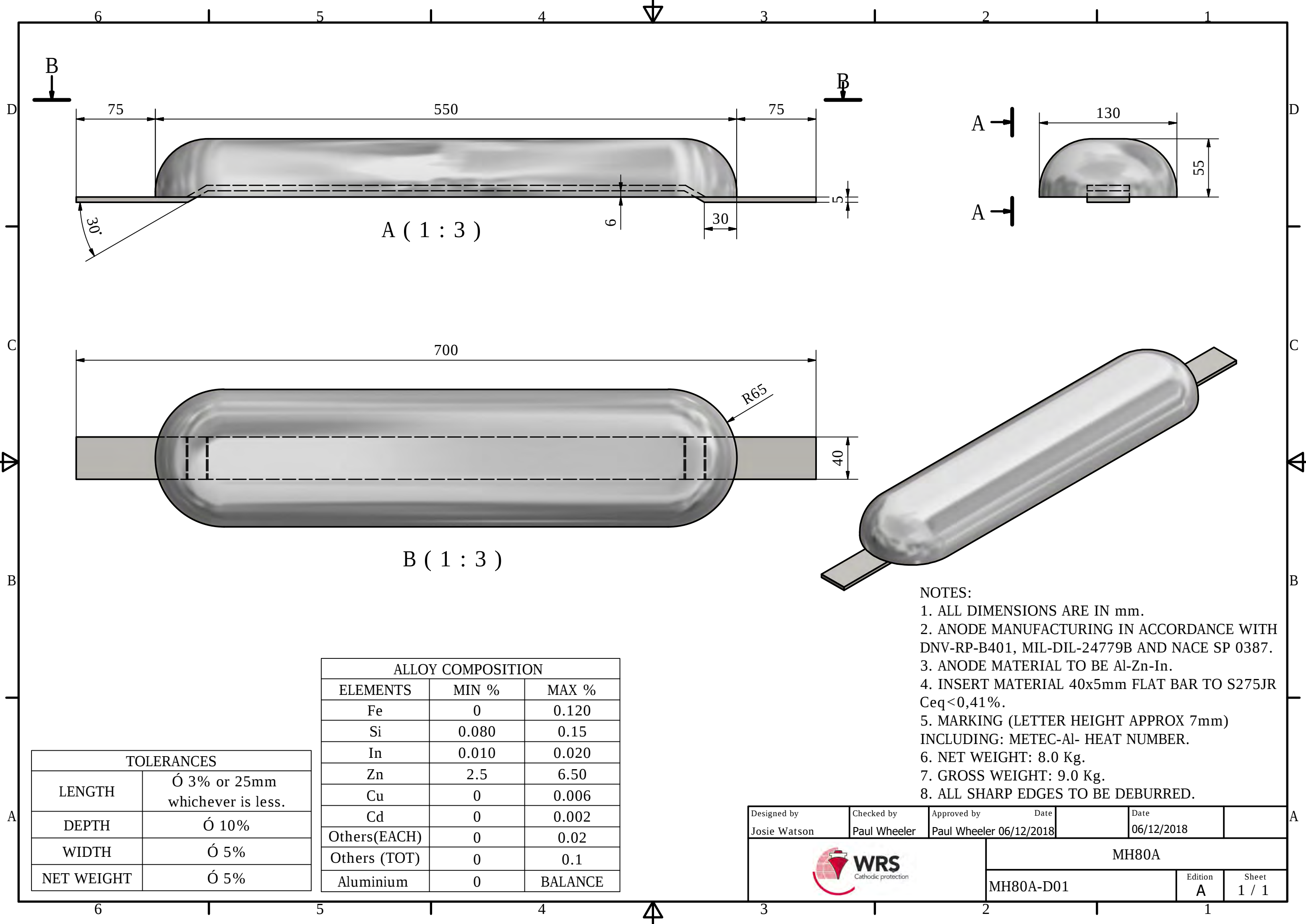


- NOTES:
- 1. ALL DIMENSIONS ARE IN mm.
 - 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 - 3. ANODE MATERIAL TO BE Al-Zn-In.
 - 4. INSERT MATERIAL 40x5 mm FLAT BAR TO S275JR Ceq<0,41%.
 - 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Al- HEAT NUMBER.
 - 6. NET WEIGHT: 4.0 Kg.
 - 7. GROSS WEIGHT: 4.5 Kg.
 - 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% or 25mm whichever is less.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 5%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

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		MH40A		
		MH40A-D01	Edition A	Sheet 1 / 1



A (1 : 3)

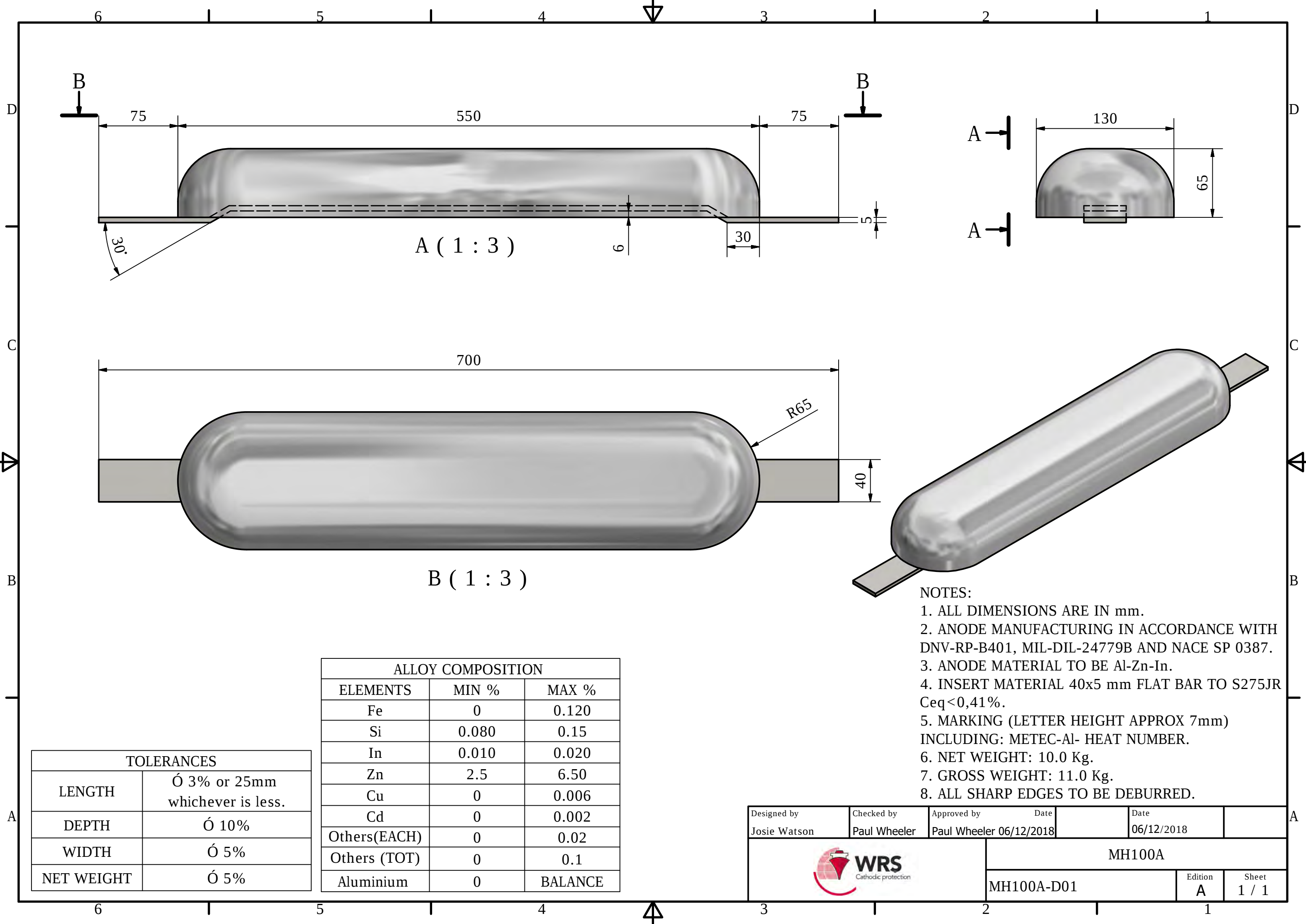
B (1 : 3)

- NOTES:
- 1. ALL DIMENSIONS ARE IN mm.
 - 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 - 3. ANODE MATERIAL TO BE Al-Zn-In.
 - 4. INSERT MATERIAL 40x5mm FLAT BAR TO S275JR Ceq<0,41%.
 - 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
 - 6. NET WEIGHT: 8.0 Kg.
 - 7. GROSS WEIGHT: 9.0 Kg.
 - 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% or 25mm whichever is less.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 5%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	Date 06/12/2018
		MH80A		
		MH80A-D01	Edition A	Sheet 1 / 1



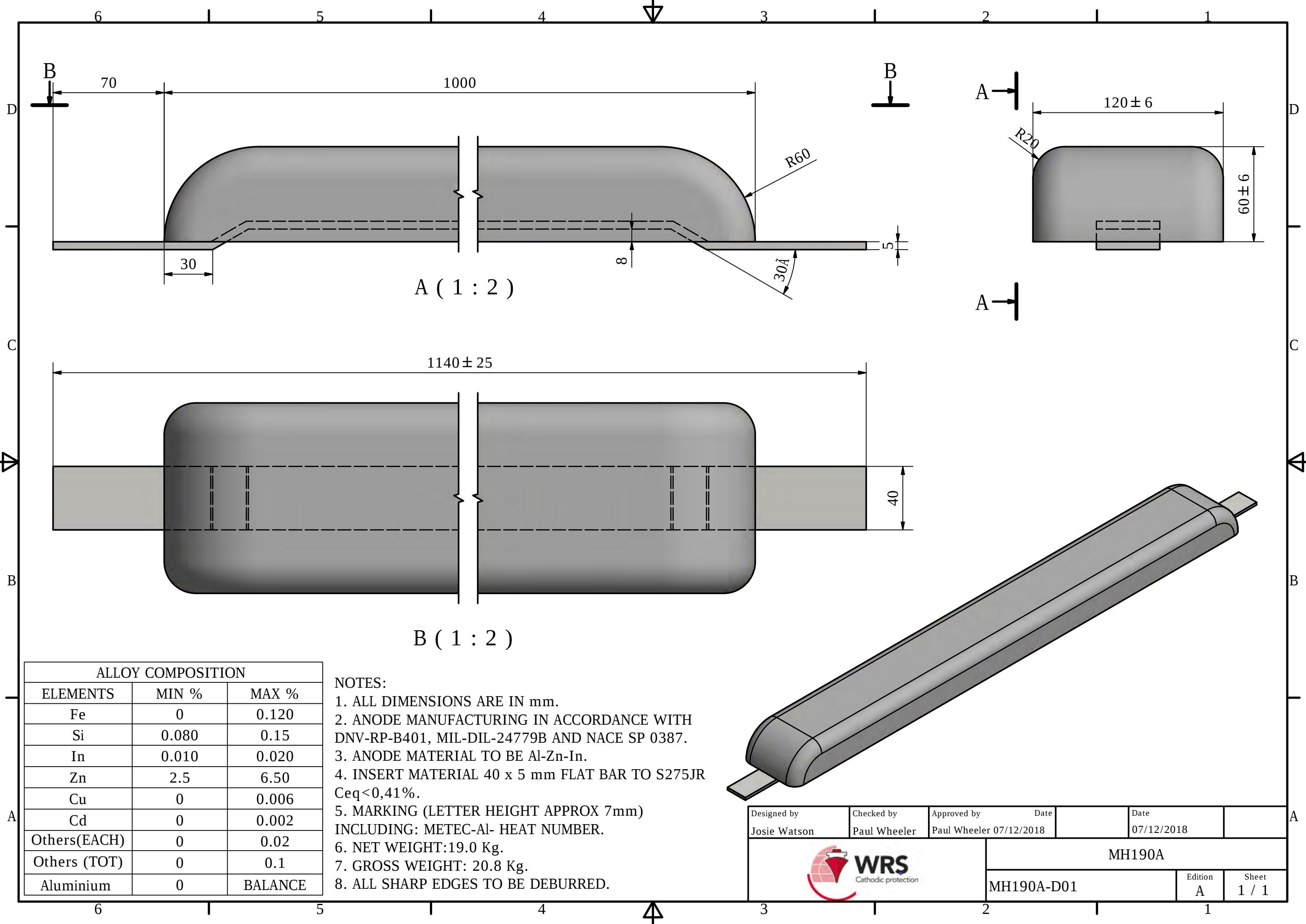
A (1 : 3)

B (1 : 3)

- NOTES:
- 1. ALL DIMENSIONS ARE IN mm.
 - 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 - 3. ANODE MATERIAL TO BE Al-Zn-In.
 - 4. INSERT MATERIAL 40x5 mm FLAT BAR TO S275JR Ceq<0,41%.
 - 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
 - 6. NET WEIGHT: 10.0 Kg.
 - 7. GROSS WEIGHT: 11.0 Kg.
 - 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES		ALLOY COMPOSITION		
LENGTH	Ó 3% or 25mm whichever is less.	ELEMENTS	MIN %	MAX %
DEPTH	Ó 10%	Fe	0	0.120
WIDTH	Ó 5%	Si	0.080	0.15
NET WEIGHT	Ó 5%	In	0.010	0.020
		Zn	2.5	6.50
		Cu	0	0.006
		Cd	0	0.002
		Others(EACH)	0	0.02
		Others (TOT)	0	0.1
		Aluminium	0	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	MH100A	
		MH100A-D01		Edition A	Sheet 1 / 1



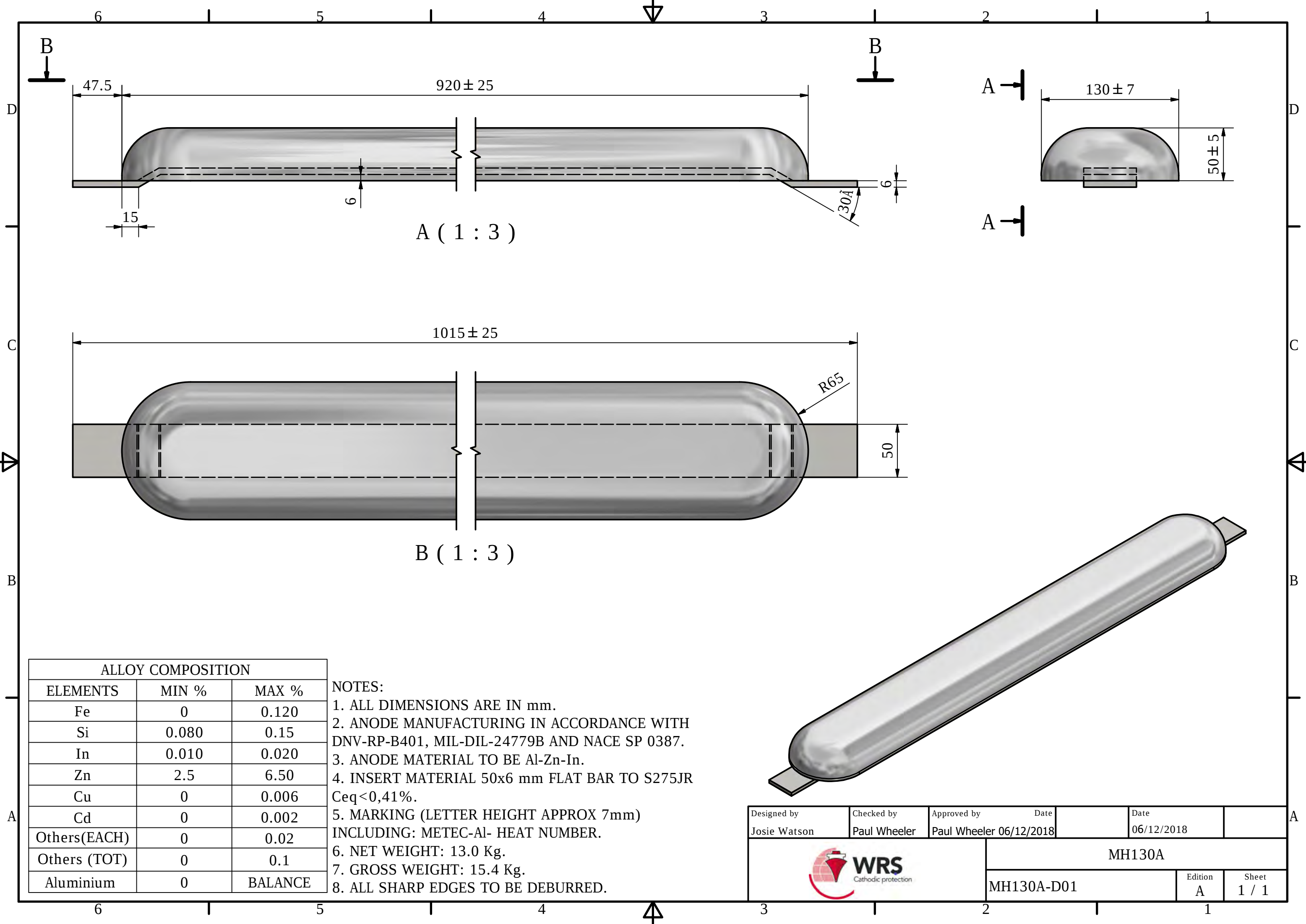
A (1 : 2)

B (1 : 2)

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Al-Zn-In.
 4. INSERT MATERIAL 40 x 5 mm FLAT BAR TO S275JR Ceq<0,41%.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Al- HEAT NUMBER.
 6. NET WEIGHT:19.0 Kg.
 7. GROSS WEIGHT: 20.8 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

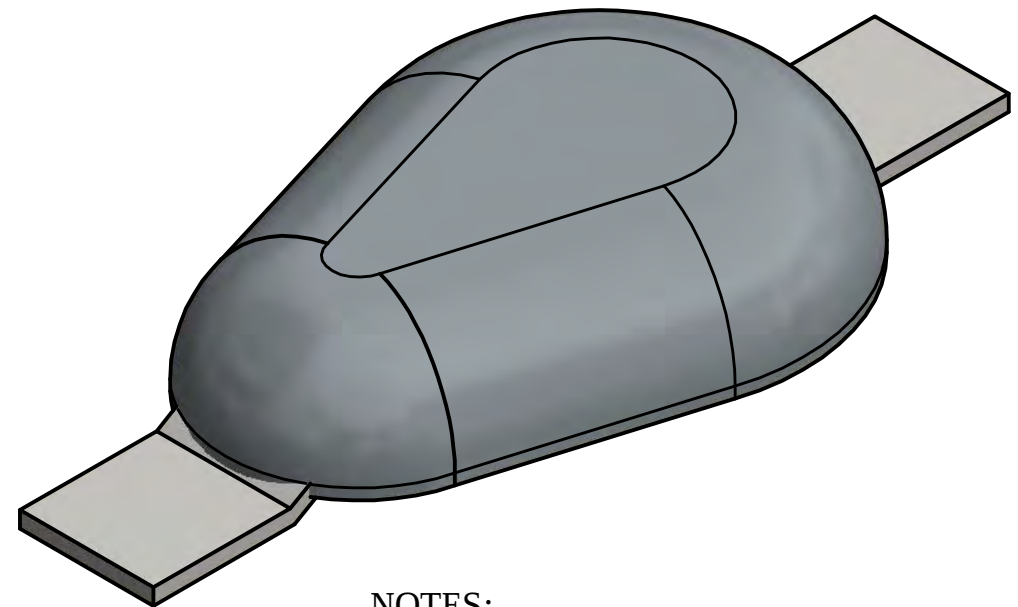
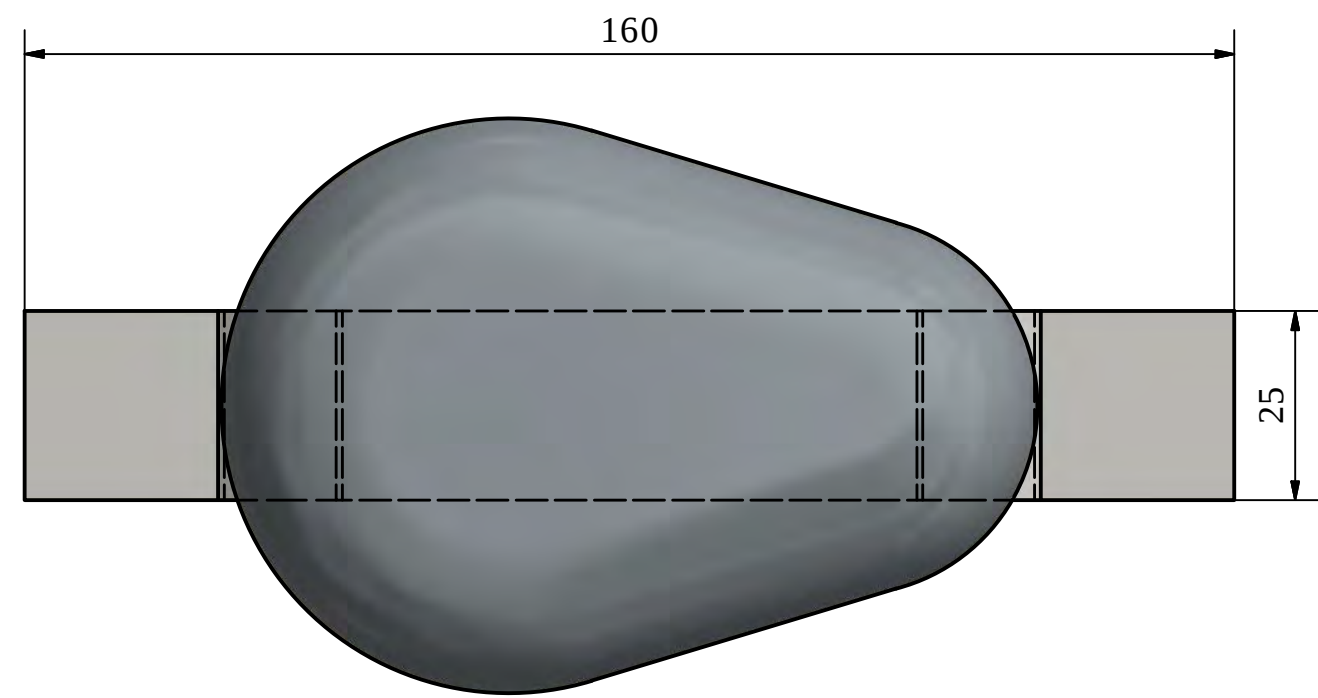
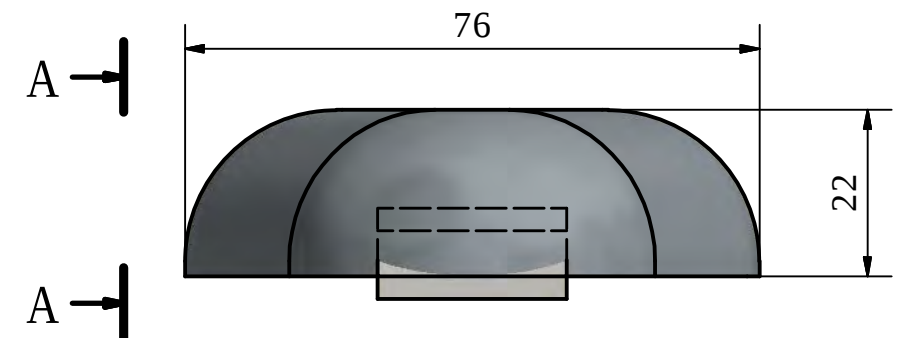
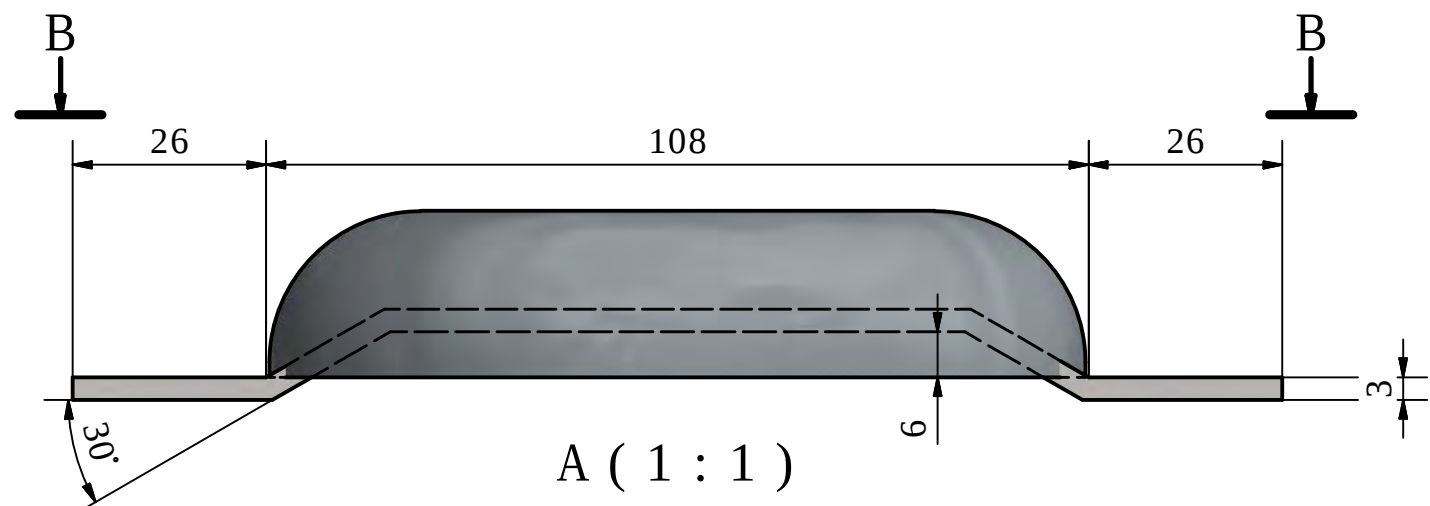
Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 07/12/2018	Date 07/12/2018	
		MH190A		
		MH190A-D01	Edition A	Sheet 1 / 1



ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Al-Zn-In.
 4. INSERT MATERIAL 50x6 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
 6. NET WEIGHT: 13.0 Kg.
 7. GROSS WEIGHT: 15.4 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

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			MH130A		
			MH130A-D01	Edition A	Sheet 1 / 1

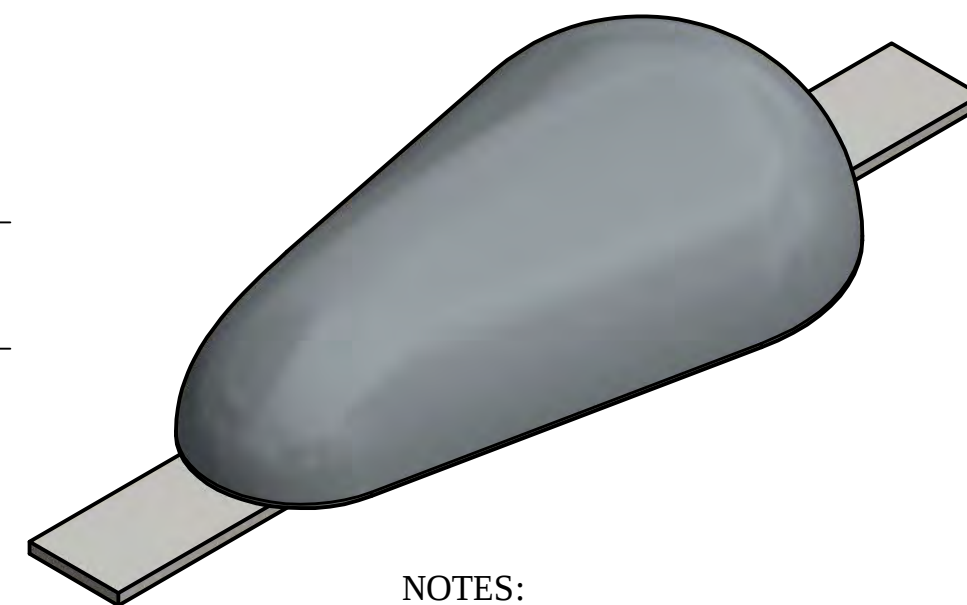
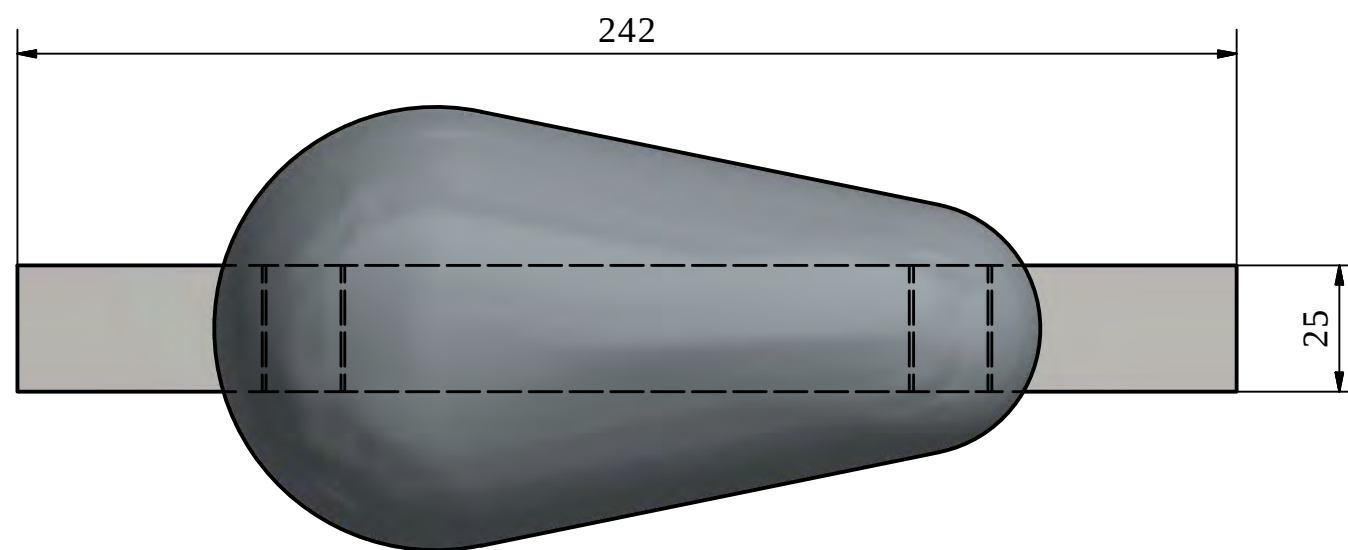
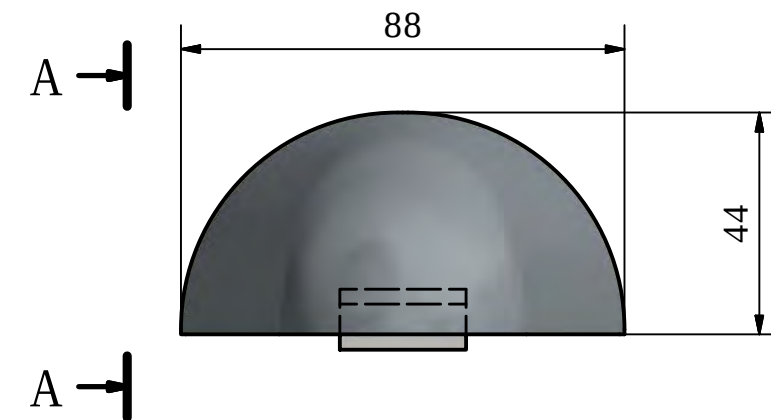
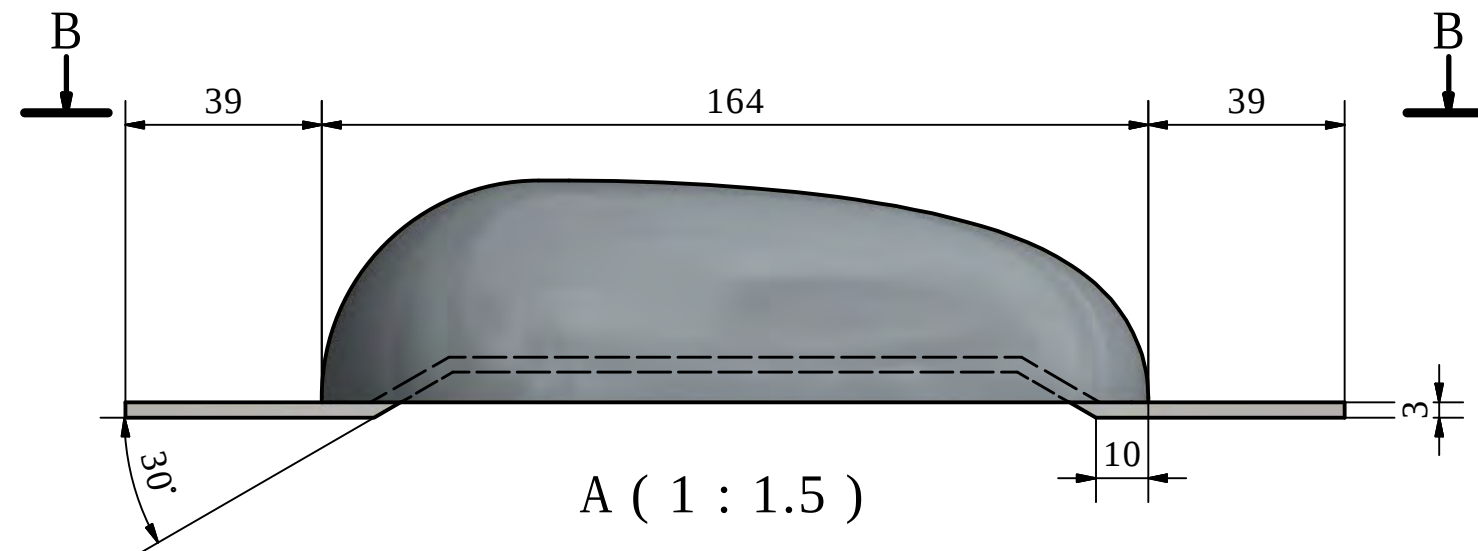


- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL 25 x 3 mm FLAT BAR TO S275JR Ceq<0,41%. ZINC PLATED/ GALVANISED
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 0.9 Kg.
 7. GROSS WEIGHT: 1.0 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MH9Z-1		
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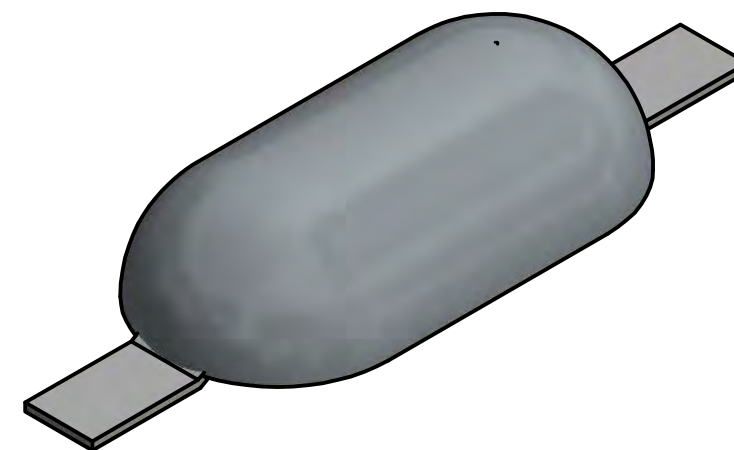
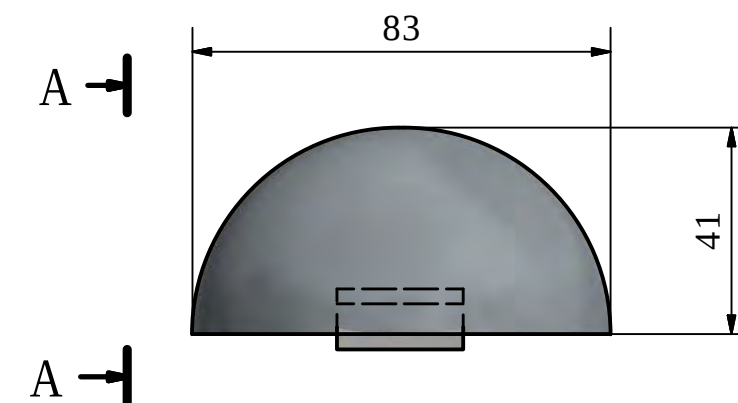
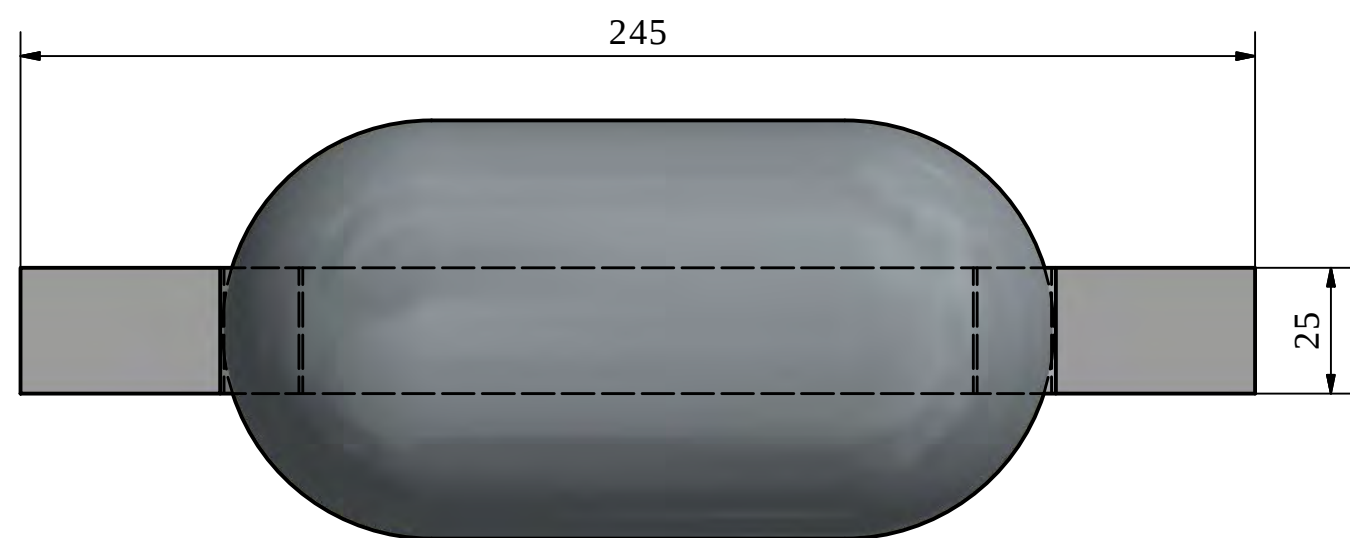
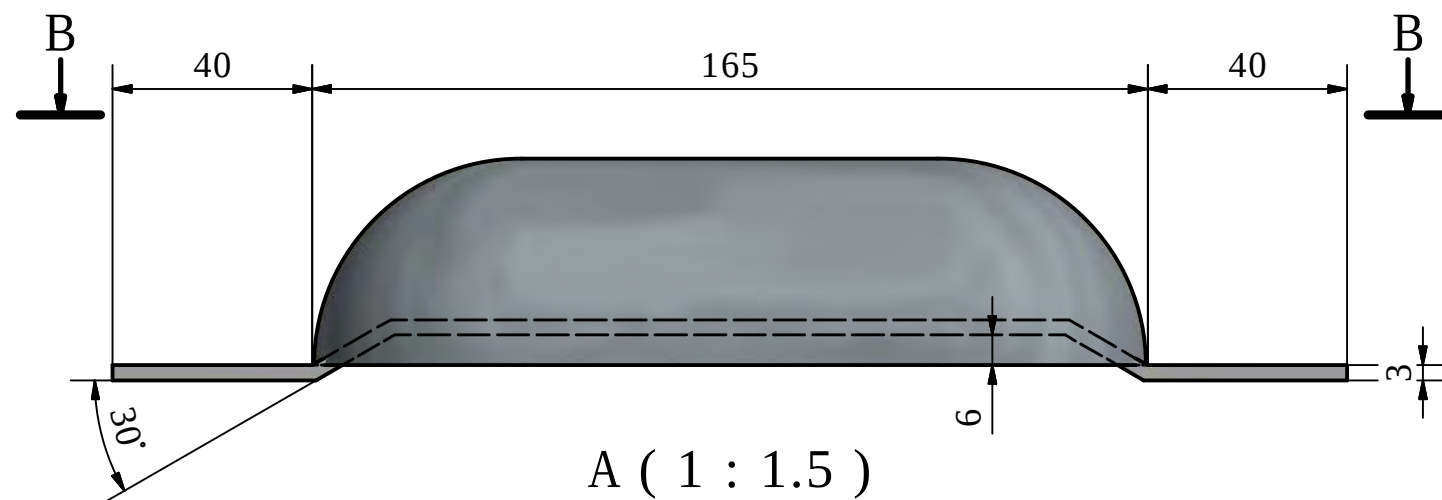
NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
3. ANODE MATERIAL TO BE Zn-Al-Cd.
4. INSERT MATERIAL 25 x 3 mm FLAT BAR TO S275JR $C_{eq} < 0.41\%$. ZINC PLATED/ GLAVANISED.
5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
6. NET WEIGHT: 2.0 Kg.
7. GROSS WEIGHT: 2.1 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
			MH20Z	
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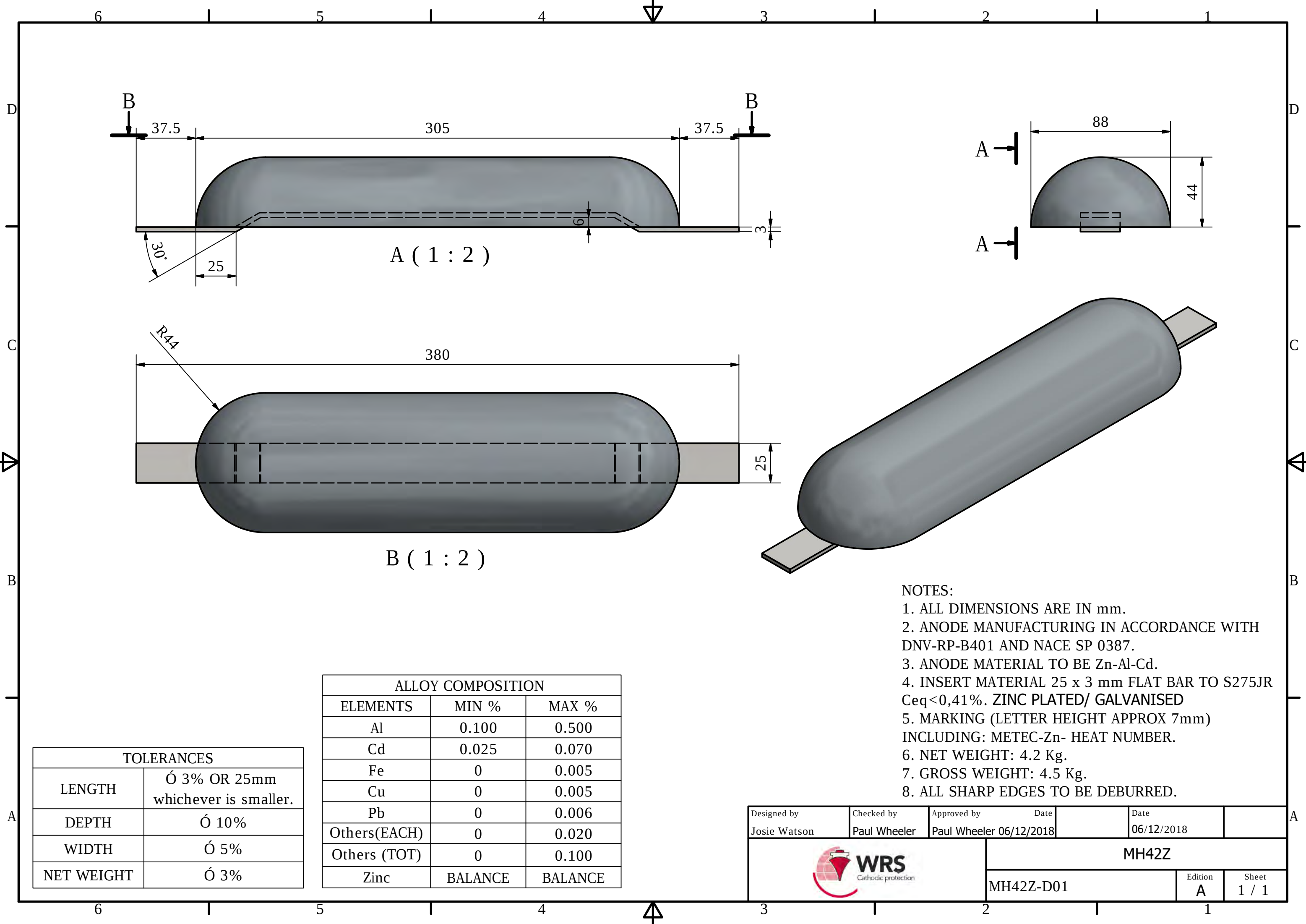
NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
3. ANODE MATERIAL TO BE Zn-Al-Cd.
4. INSERT MATERIAL 25 x 3 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$. ZINC PLATED/ GALVANISED
5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
6. NET WEIGHT: 2.8 Kg.
7. GROSS WEIGHT: 3.0 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MH28Z-1		
		MH28Z-1-D01	Edition A	Sheet 1 / 1



A (1 : 2)

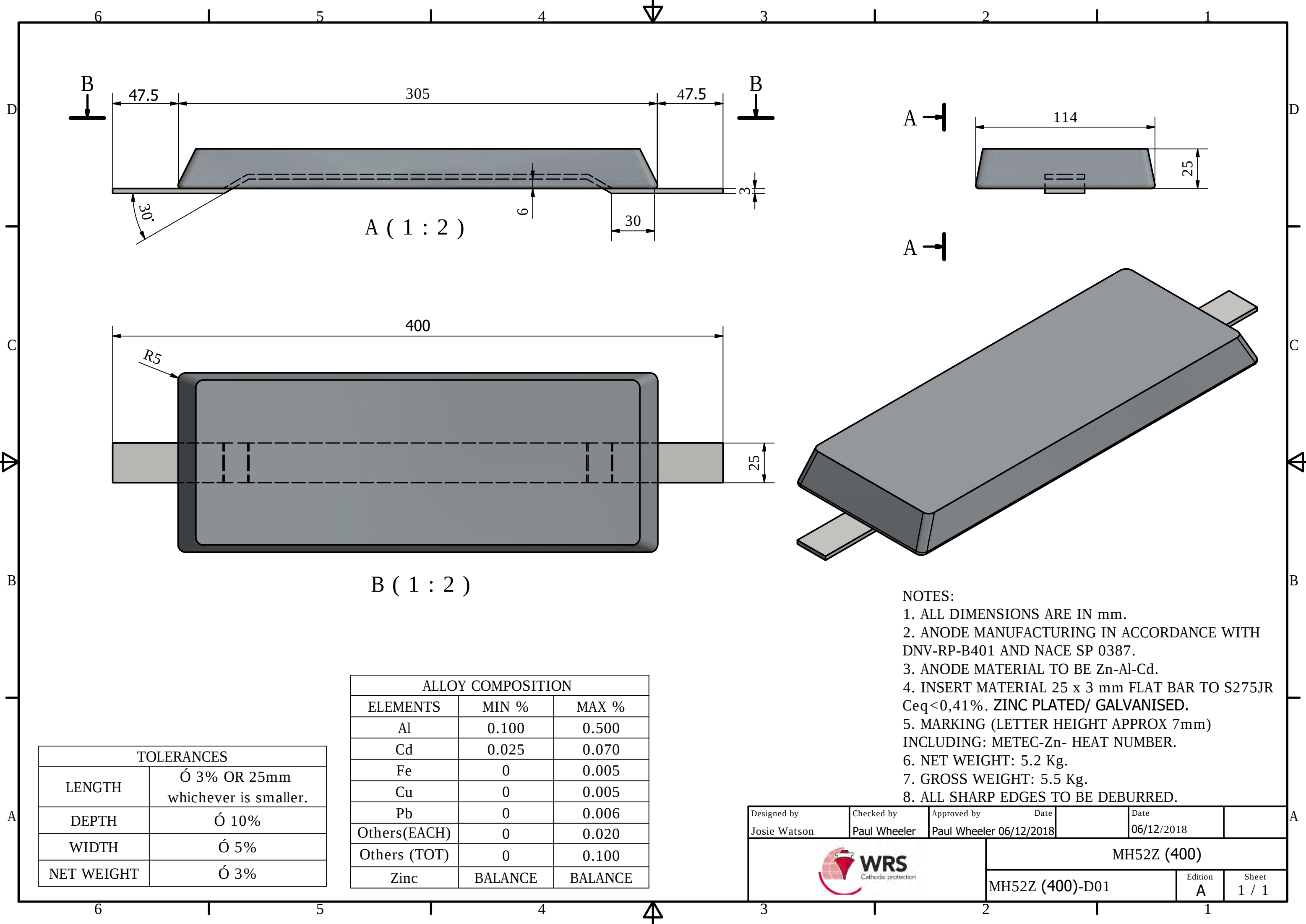
B (1 : 2)

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL 25 x 3 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$. ZINC PLATED/ GALVANISED
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 4.2 Kg.
 7. GROSS WEIGHT: 4.5 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% OR 25mm whichever is smaller.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	MH42Z	
		MH42Z-D01		Edition A	Sheet 1 / 1



A (1 : 2)

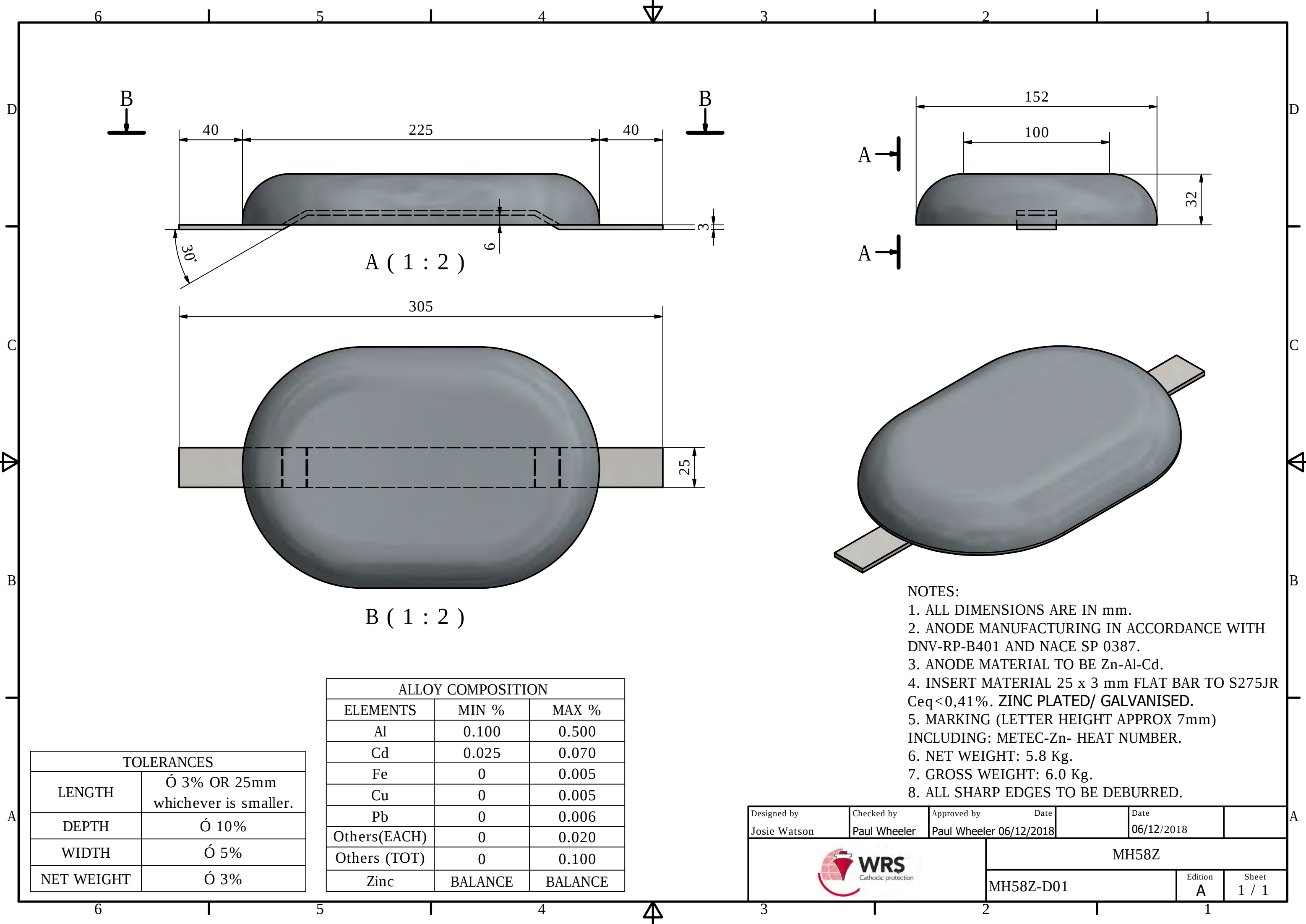
B (1 : 2)

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL 25 x 3 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$. ZINC PLATED/ GALVANISED.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 5.2 Kg.
 7. GROSS WEIGHT: 5.5 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler	Date 06/12/2018	Date 06/12/2018	
			MH52Z (400)		
			MH52Z (400)-D01		Edition A
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A (1 : 2)

B (1 : 2)

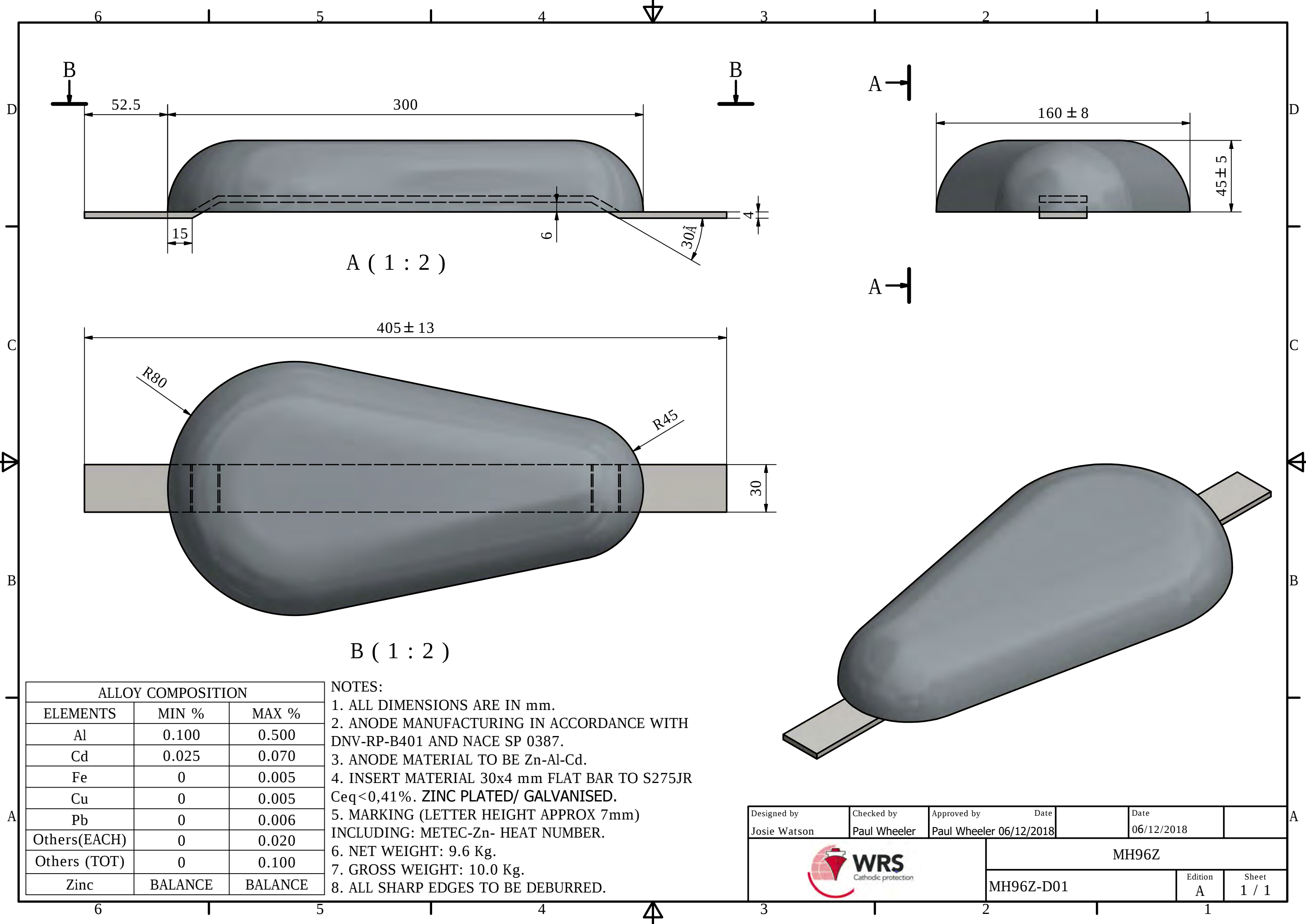
NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
3. ANODE MATERIAL TO BE Zn-Al-Cd.
4. INSERT MATERIAL 25 x 3 mm FLAT BAR TO S275JR Ceq<0,41%. ZINC PLATED/ GALVANISED.
5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
6. NET WEIGHT: 5.8 Kg.
7. GROSS WEIGHT: 6.0 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% OR 25mm whichever is smaller.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MH58Z		
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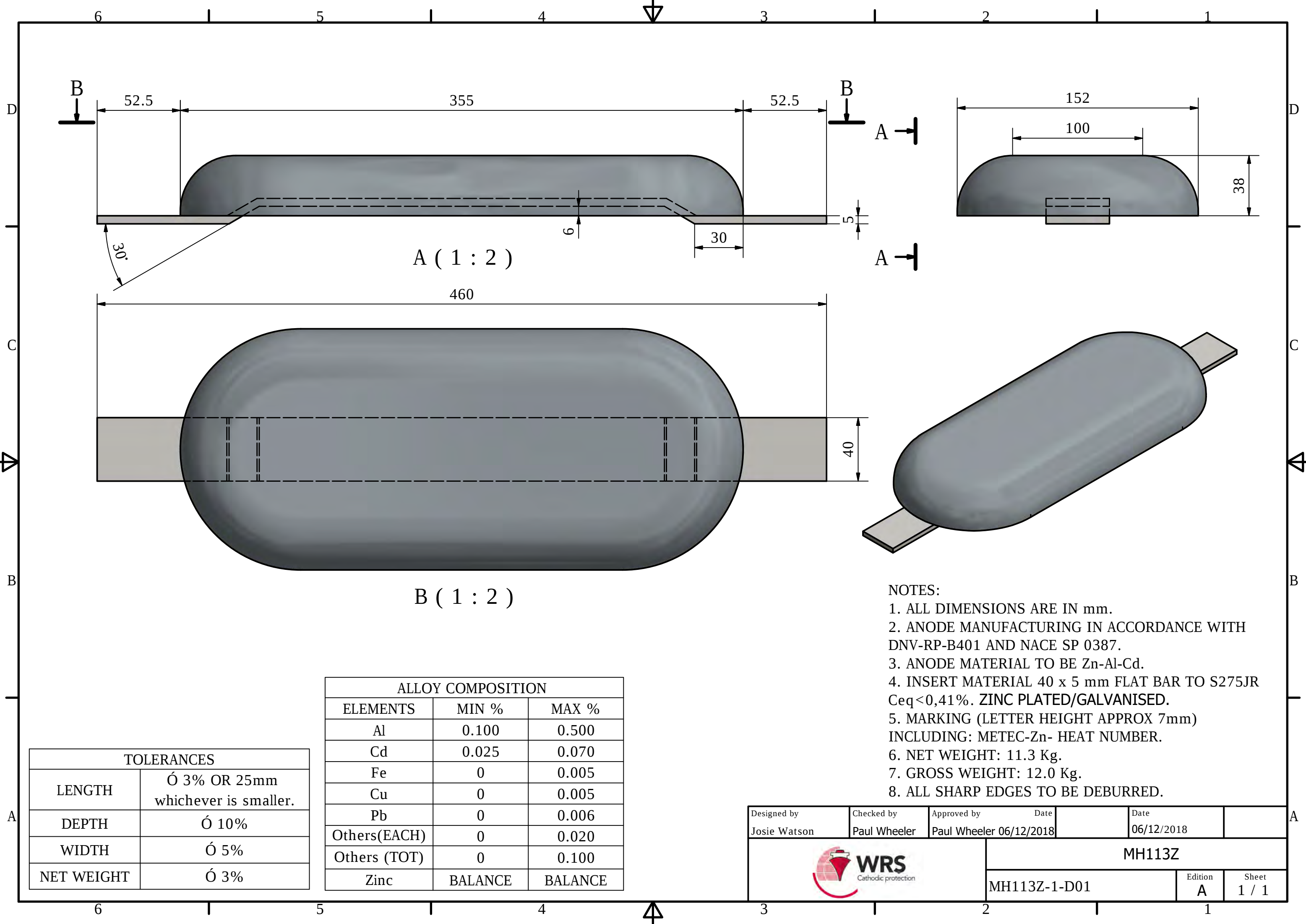
A (1 : 2)

B (1 : 2)

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL 30x4 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$. ZINC PLATED/ GALVANISED.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 9.6 Kg.
 7. GROSS WEIGHT: 10.0 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler	Date 06/12/2018	Date 06/12/2018	
			MH96Z		
			MH96Z-D01	Edition A	Sheet 1 / 1



A (1 : 2)

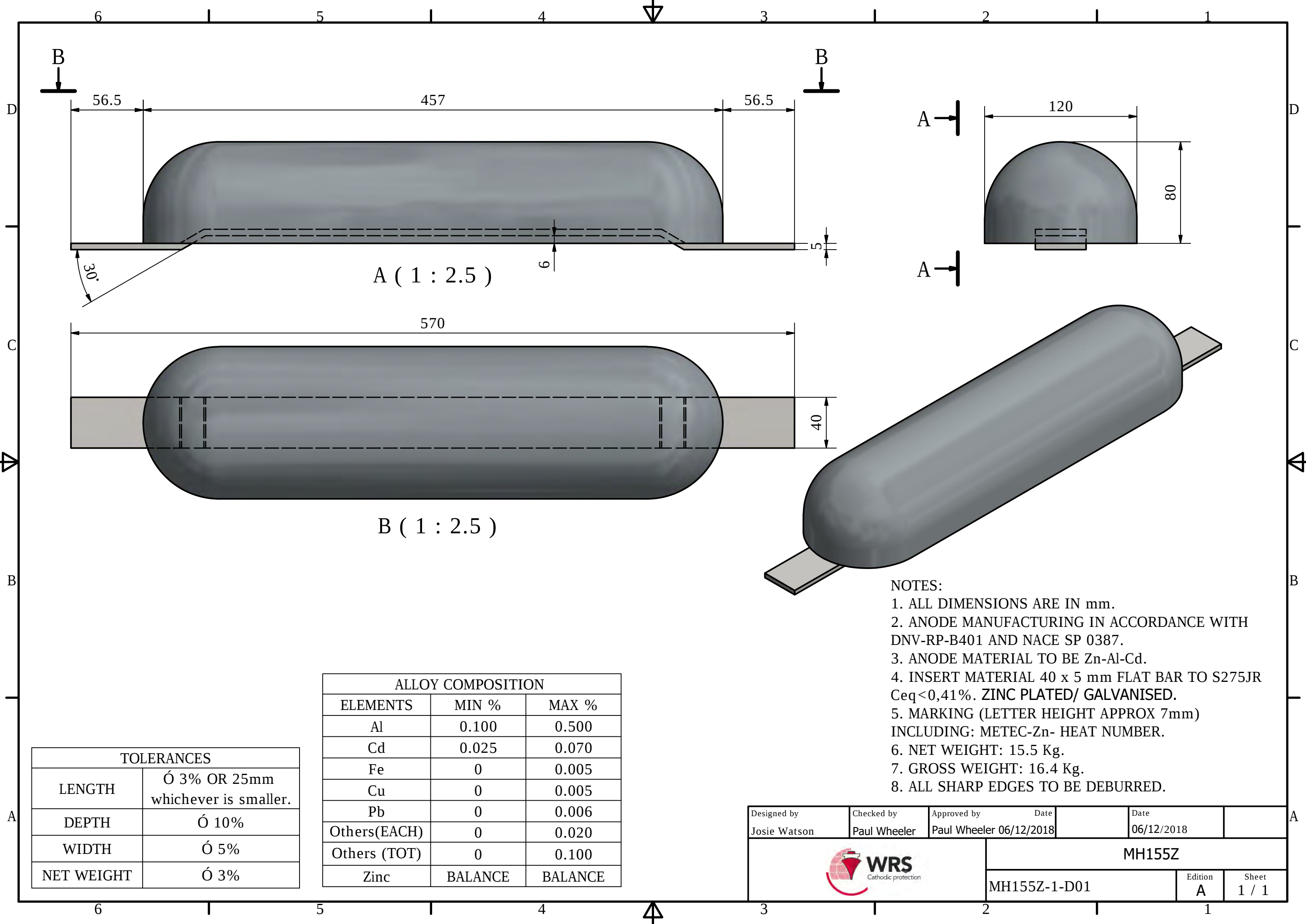
B (1 : 2)

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL 40 x 5 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$. ZINC PLATED/GALVANISED.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 11.3 Kg.
 7. GROSS WEIGHT: 12.0 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MH113Z		
		MH113Z-1-D01	Edition A	Sheet 1 / 1



A (1 : 2.5)

B (1 : 2.5)

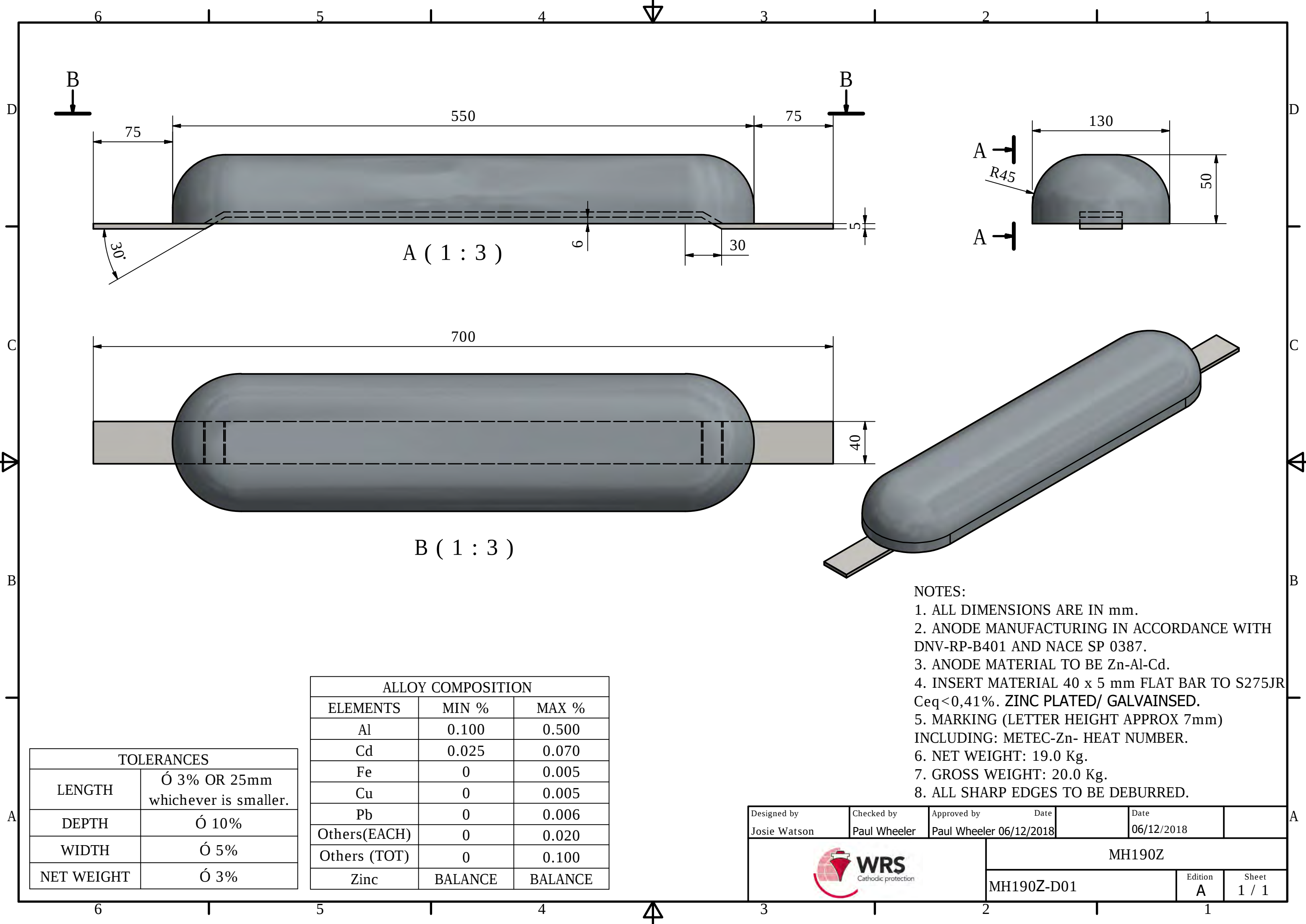
NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
3. ANODE MATERIAL TO BE Zn-Al-Cd.
4. INSERT MATERIAL 40 x 5 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$. ZINC PLATED/ GALVANISED.
5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
6. NET WEIGHT: 15.5 Kg.
7. GROSS WEIGHT: 16.4 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler	Date 06/12/2018	Date 06/12/2018	
			MH155Z		
			MH155Z-1-D01	Edition A	Sheet 1 / 1

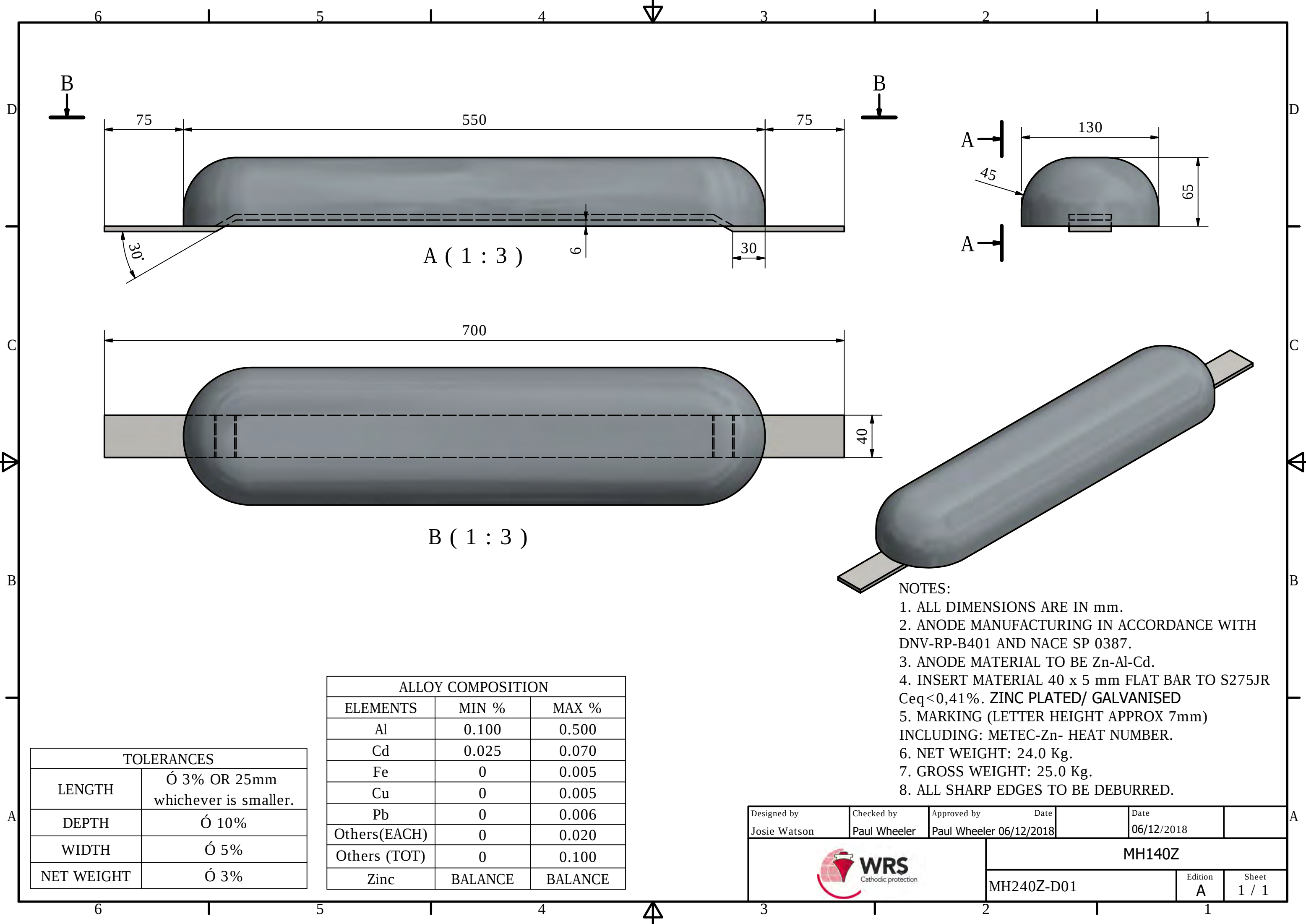


TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL 40 x 5 mm FLAT BAR TO S275JR Ceq<0,41%. ZINC PLATED/ GALVAINSED.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 19.0 Kg.
 7. GROSS WEIGHT: 20.0 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

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		MH190Z		
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A (1 : 3)

B (1 : 3)

- NOTES:
- 1. ALL DIMENSIONS ARE IN mm.
 - 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 - 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 - 4. INSERT MATERIAL 40 x 5 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$. ZINC PLATED/ GALVANISED
 - 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 - 6. NET WEIGHT: 24.0 Kg.
 - 7. GROSS WEIGHT: 25.0 Kg.
 - 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% OR 25mm whichever is smaller.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 3%

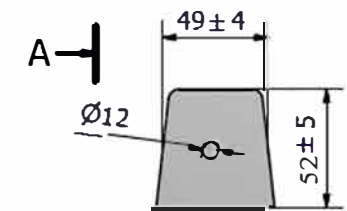
ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	MH140Z	
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B

B

1000 ± 25

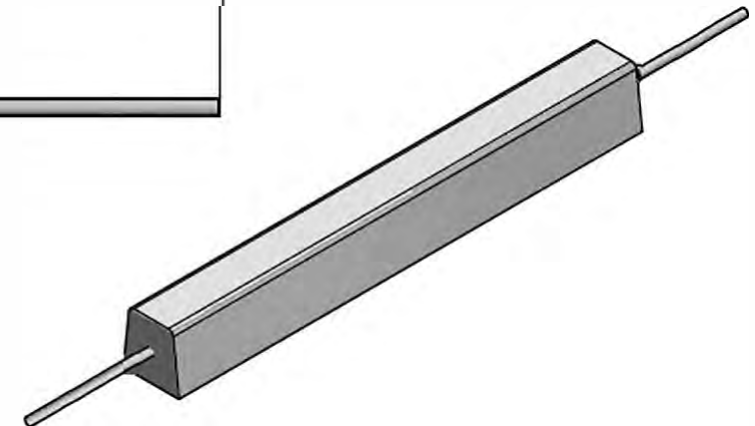


A (1 : 4)

A

1500 ± 25

B (1 : 4)

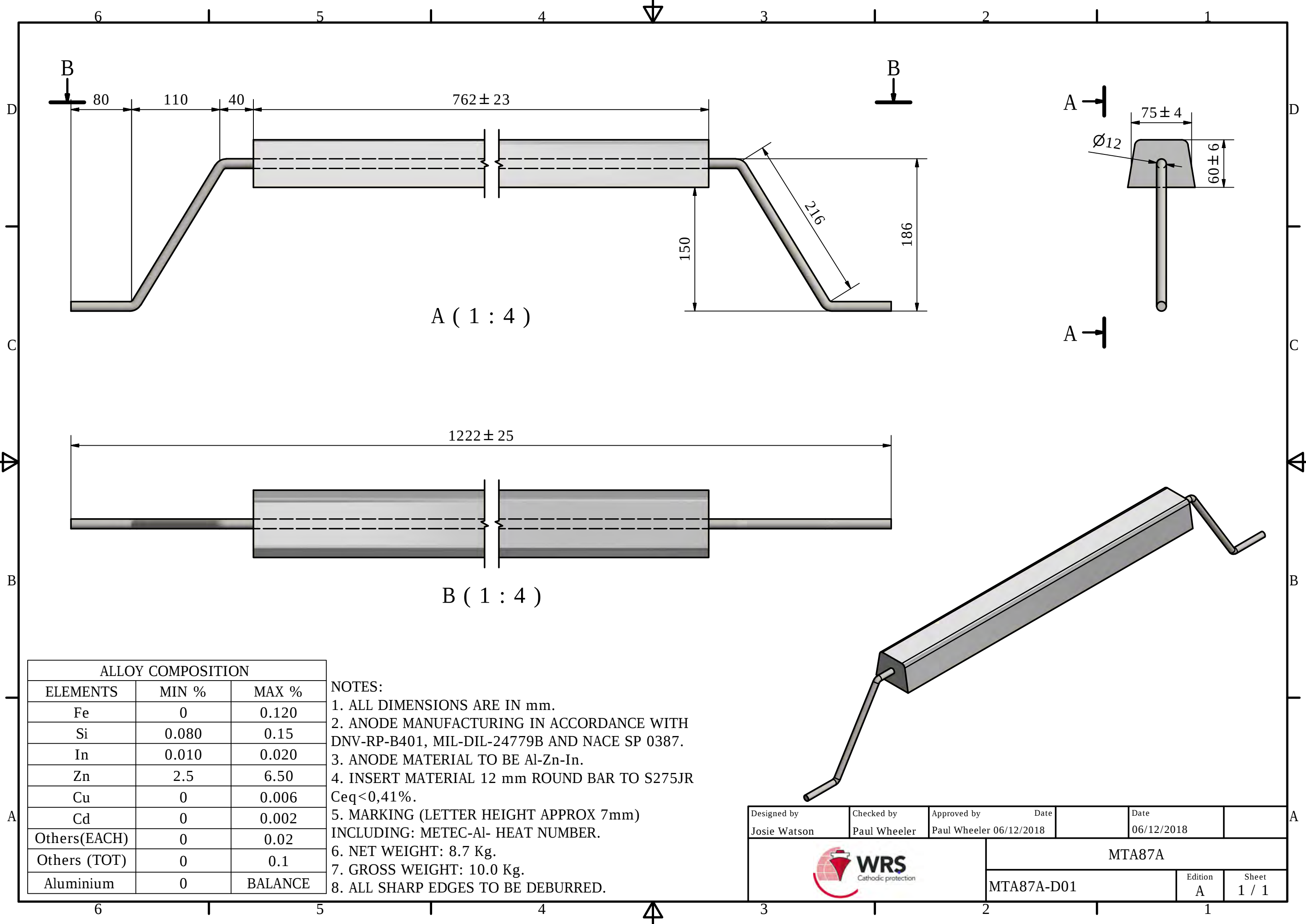


ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
3. ANODE MATERIAL TO BE Al-Zn-In.
4. INSERT MATERIAL 12 mm ROUND BAR TO S275JR $Ceq < 0,41\%$.
5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
6. NET WEIGHT: 6,5 Kg.
7. GROSS WEIGHT: 8,0 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.

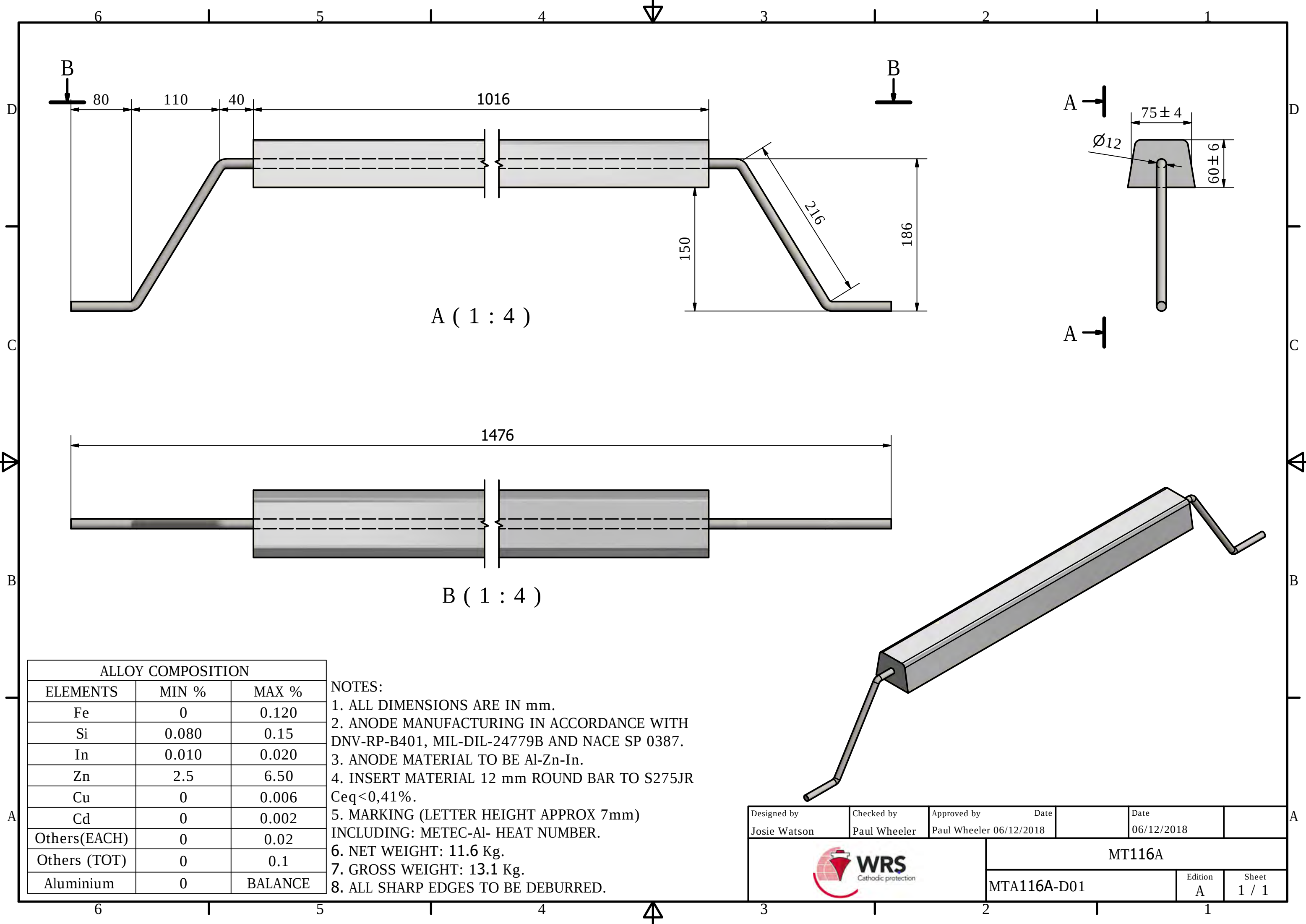
Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler	Date 06/12/2018	Date 06/12/2018	
			MTA65A		
			MTA65A-D01	Edition A	Sheet 1 / 1



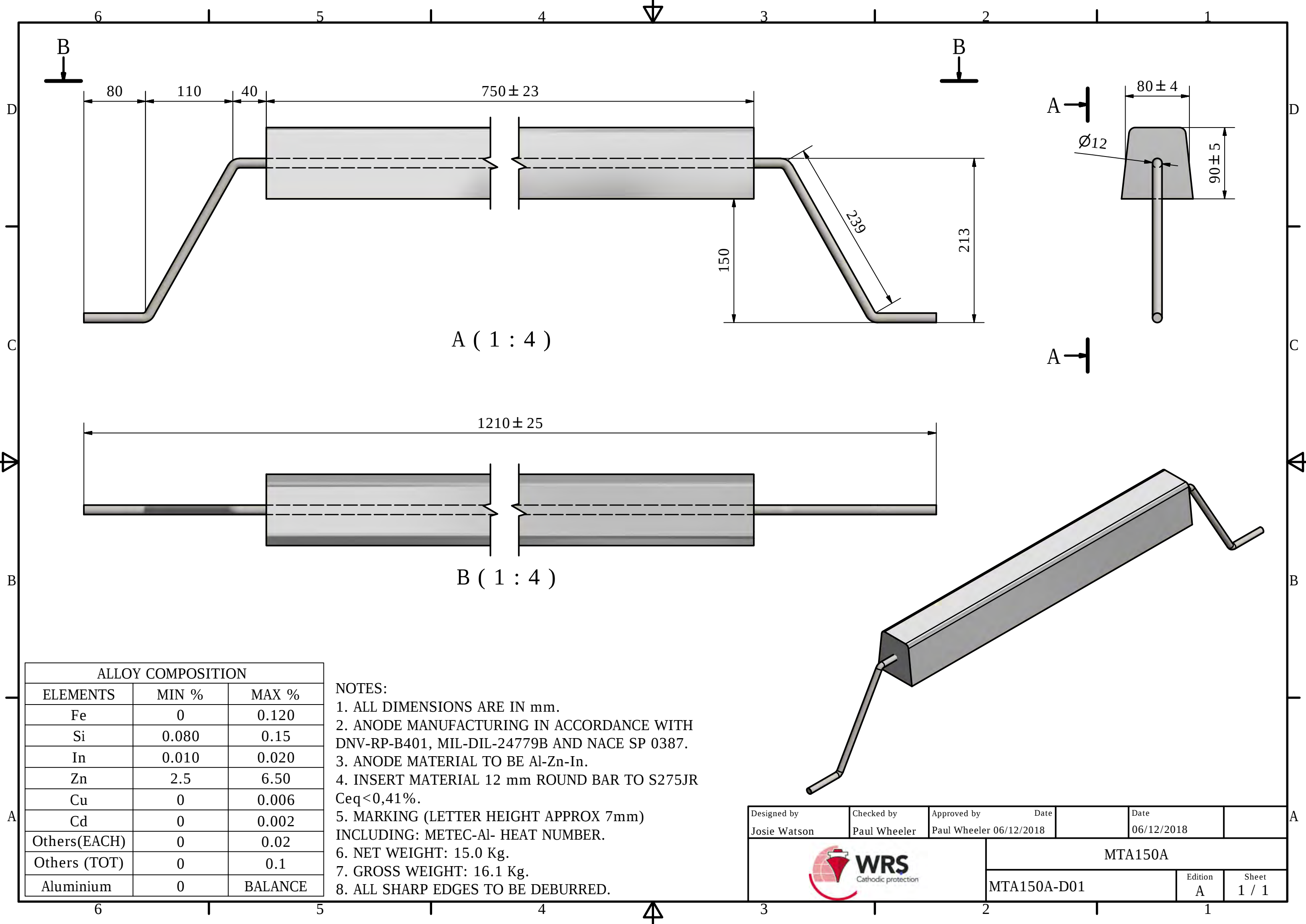
ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Al-Zn-In.
 4. INSERT MATERIAL 12 mm ROUND BAR TO S275JR $C_{eq} < 0,41\%$.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
 6. NET WEIGHT: 8.7 Kg.
 7. GROSS WEIGHT: 10.0 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MTA87A		
		MTA87A-D01	Edition A	Sheet 1 / 1



Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MT116A		
		MTA116A-D01	Edition A	Sheet 1 / 1



A (1 : 4)

B (1 : 4)

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

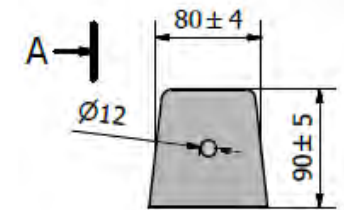
- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Al-Zn-In.
 4. INSERT MATERIAL 12 mm ROUND BAR TO S275JR $C_{eq} < 0,41\%$.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
 6. NET WEIGHT: 15.0 Kg.
 7. GROSS WEIGHT: 16.1 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MTA150A		
		MTA150A-D01	Edition A	Sheet 1 / 1

B

B

1100 ± 25

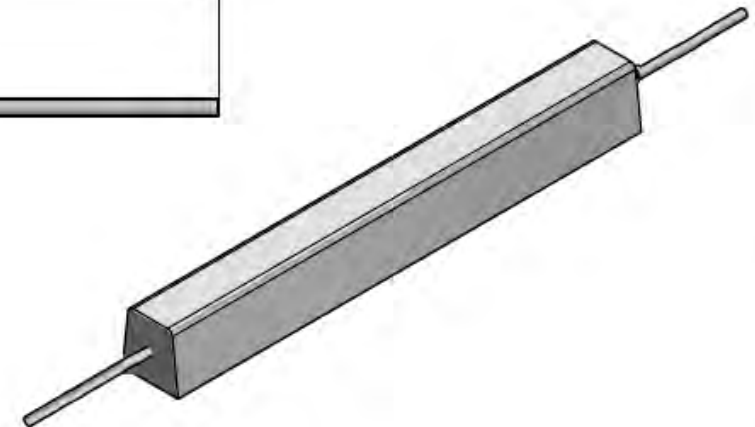


A (1 : 4)

A

1500 ± 25

B (1 : 4)



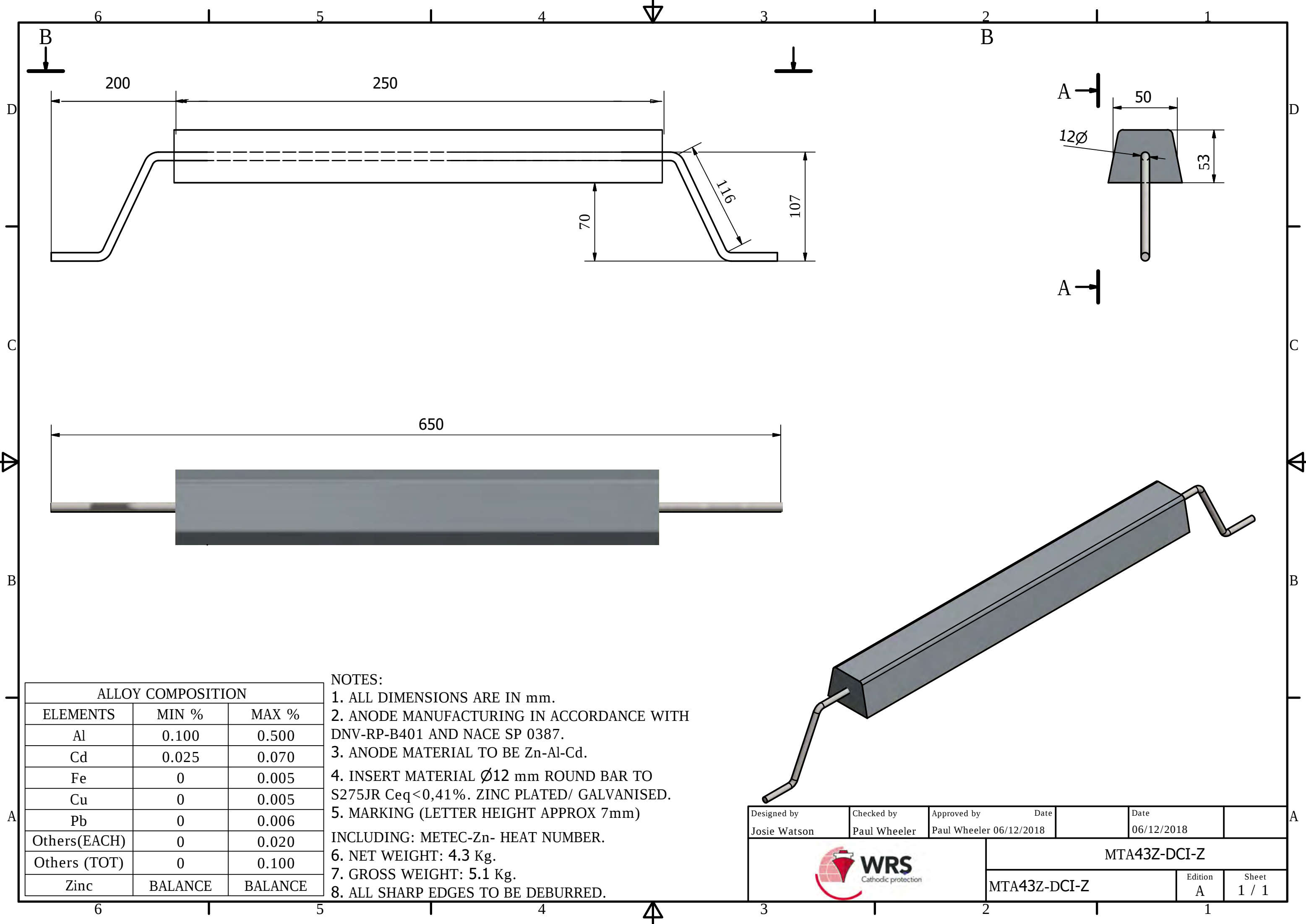
ALLOY COMPOSITION

ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
3. ANODE MATERIAL TO BE Al-Zn-In.
4. INSERT MATERIAL 12 mm ROUND BAR TO S275JR $C_{eq} < 0.41\%$.
5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
6. NET WEIGHT: 20.0 Kg.
7. GROSS WEIGHT: 21.2 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.

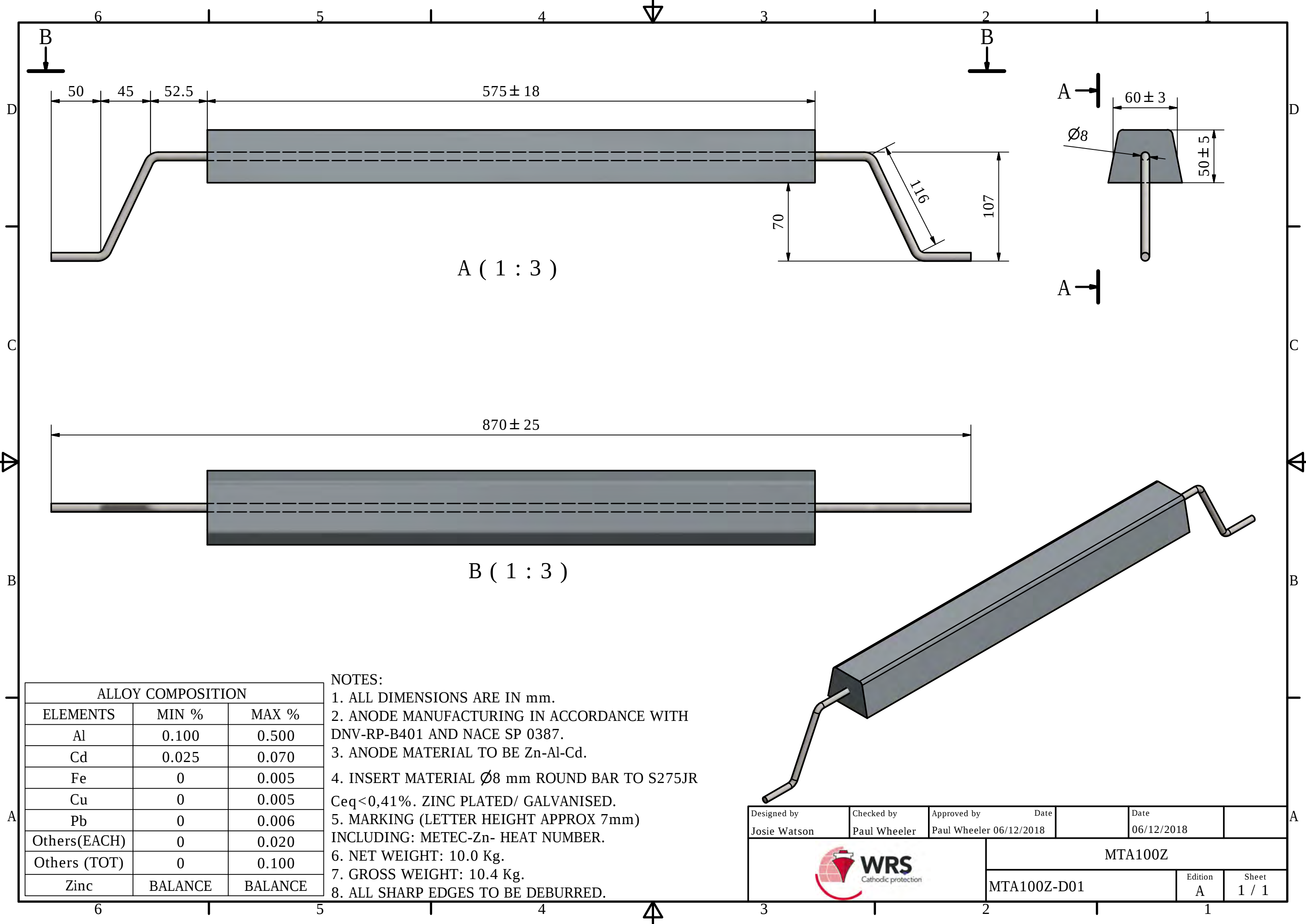
Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler	Date 06/12/2018	Date 06/12/2018	
			MTA200A		
			MTA200A-D01	Edition A	Sheet 1 / 1



ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL Ø12 mm ROUND BAR TO S275JR Ceq<0,41%. ZINC PLATED/ GALVANISED.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 4.3 Kg.
 7. GROSS WEIGHT: 5.1 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MTA43Z-DCI-Z		
		MTA43Z-DCI-Z	Edition A	Sheet 1 / 1



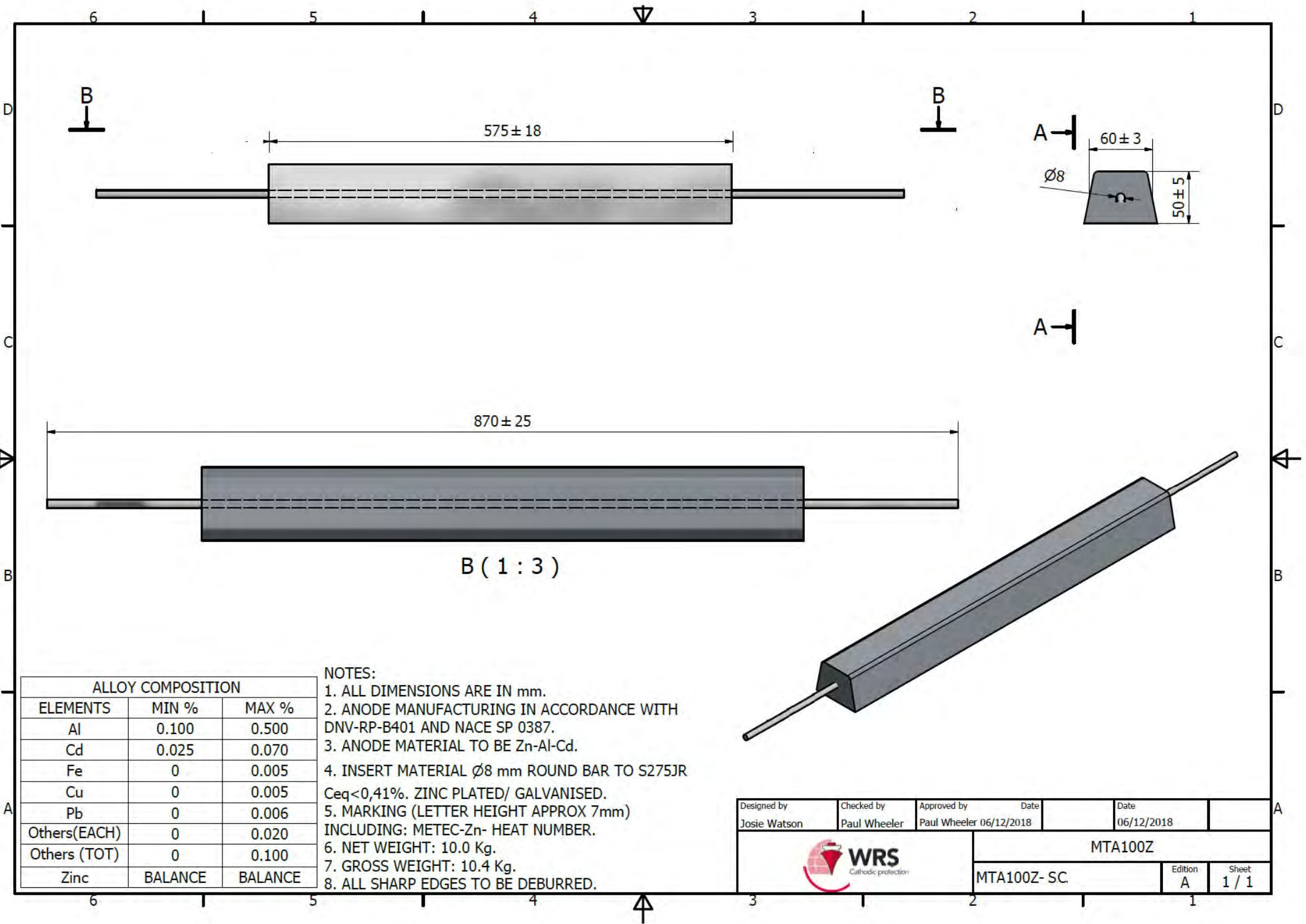
A (1 : 3)

B (1 : 3)

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL $\varnothing 8$ mm ROUND BAR TO S275JR $C_{eq} < 0.41\%$. ZINC PLATED/ GALVANISED.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 10.0 Kg.
 7. GROSS WEIGHT: 10.4 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

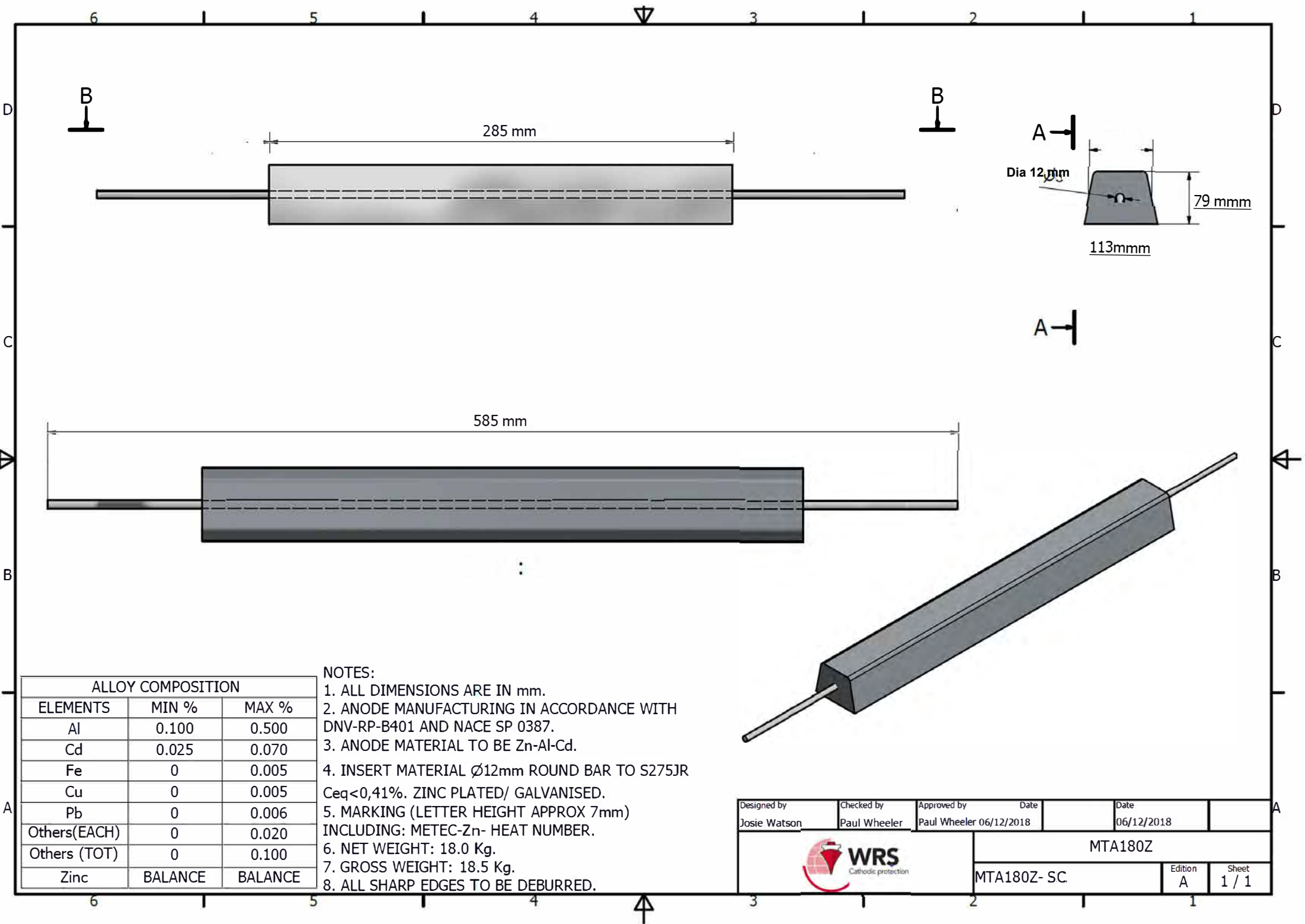
Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MTA100Z		
		MTA100Z-D01	Edition A	Sheet 1 / 1



ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL Ø8 mm ROUND BAR TO S275JR
Ceq<0,41%. ZINC PLATED/ GALVANISED.
 5. MARKING (LETTER HEIGHT APPROX 7mm)
INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 10.0 Kg.
 7. GROSS WEIGHT: 10.4 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

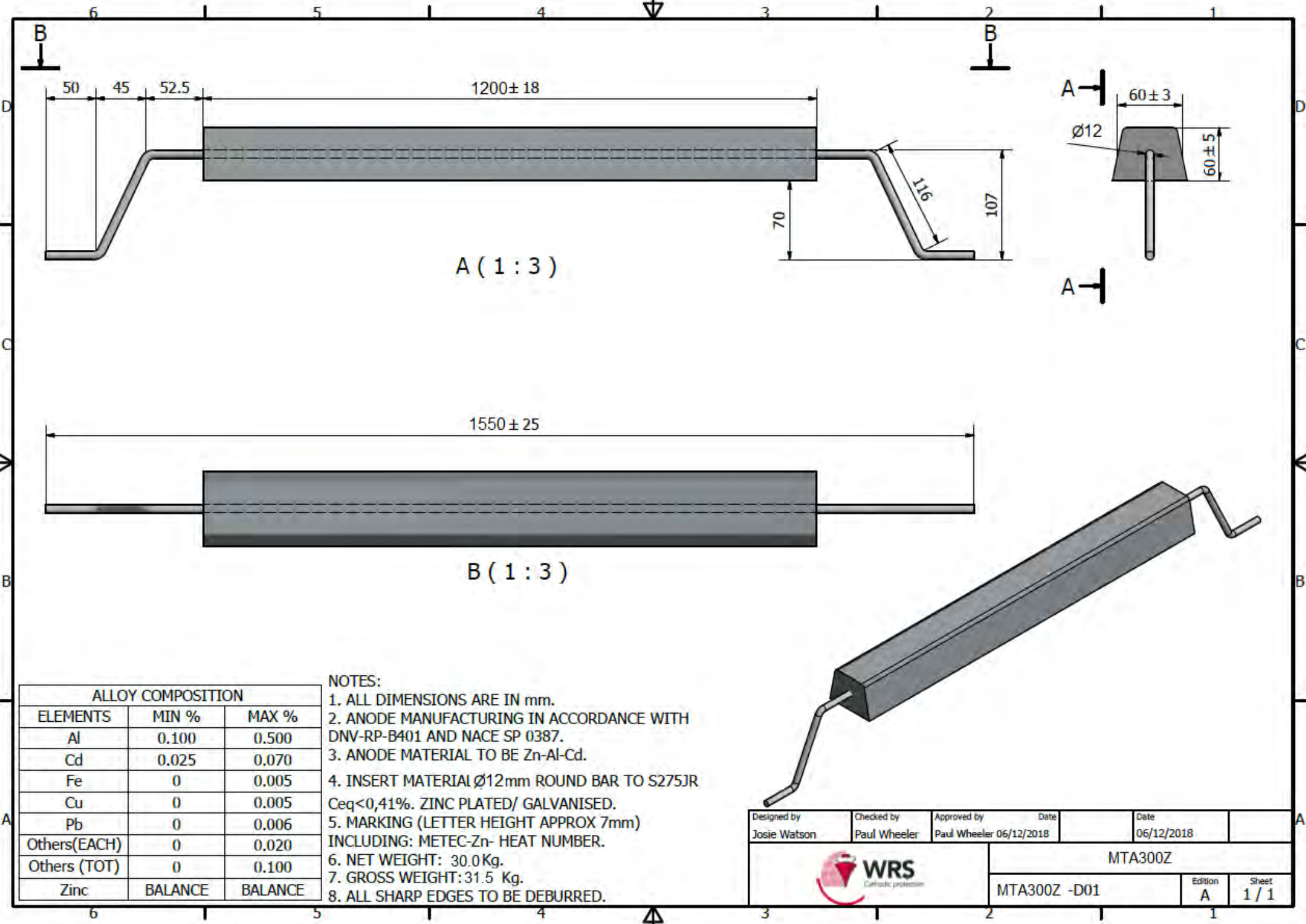
Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler	Date 06/12/2018	Date 06/12/2018	
			MTA100Z		
			MTA100Z- SC.		Edition A
			Sheet 1 / 1		



ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL Ø12mm ROUND BAR TO S275JR
Ceq<0,41%. ZINC PLATED/ GALVANISED.
 5. MARKING (LETTER HEIGHT APPROX 7mm)
INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 18.0 Kg.
 7. GROSS WEIGHT: 18.5 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler	Date 06/12/2018	Date 06/12/2018
		MTA180Z		
		MTA180Z- SC.		Edition A
		Sheet 1 / 1		



ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

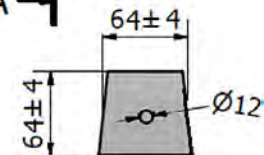
- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL Ø12mm ROUND BAR TO S275JR Ceq<0,41%. ZINC PLATED/ GALVANISED.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 30.0 Kg.
 7. GROSS WEIGHT: 31.5 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler	Date 06/12/2018	Date 06/12/2018
			MTA300Z	
			MTA300Z -D01	Edition A Sheet 1 / 1

B

B

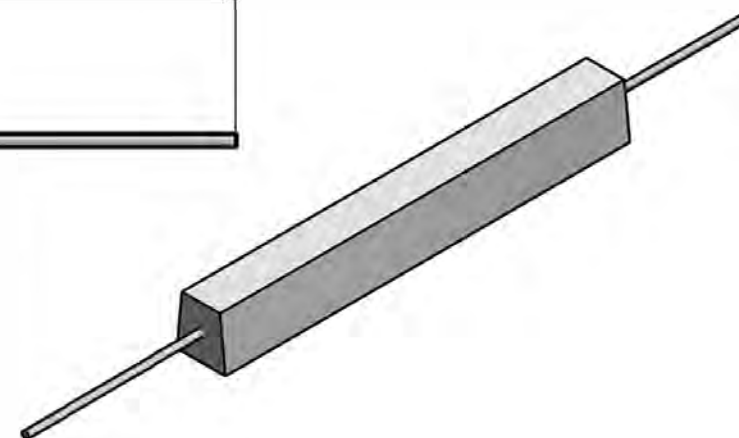
A



A

1700 ± 23

1500 ± 23



ALLOY COMPOSITION

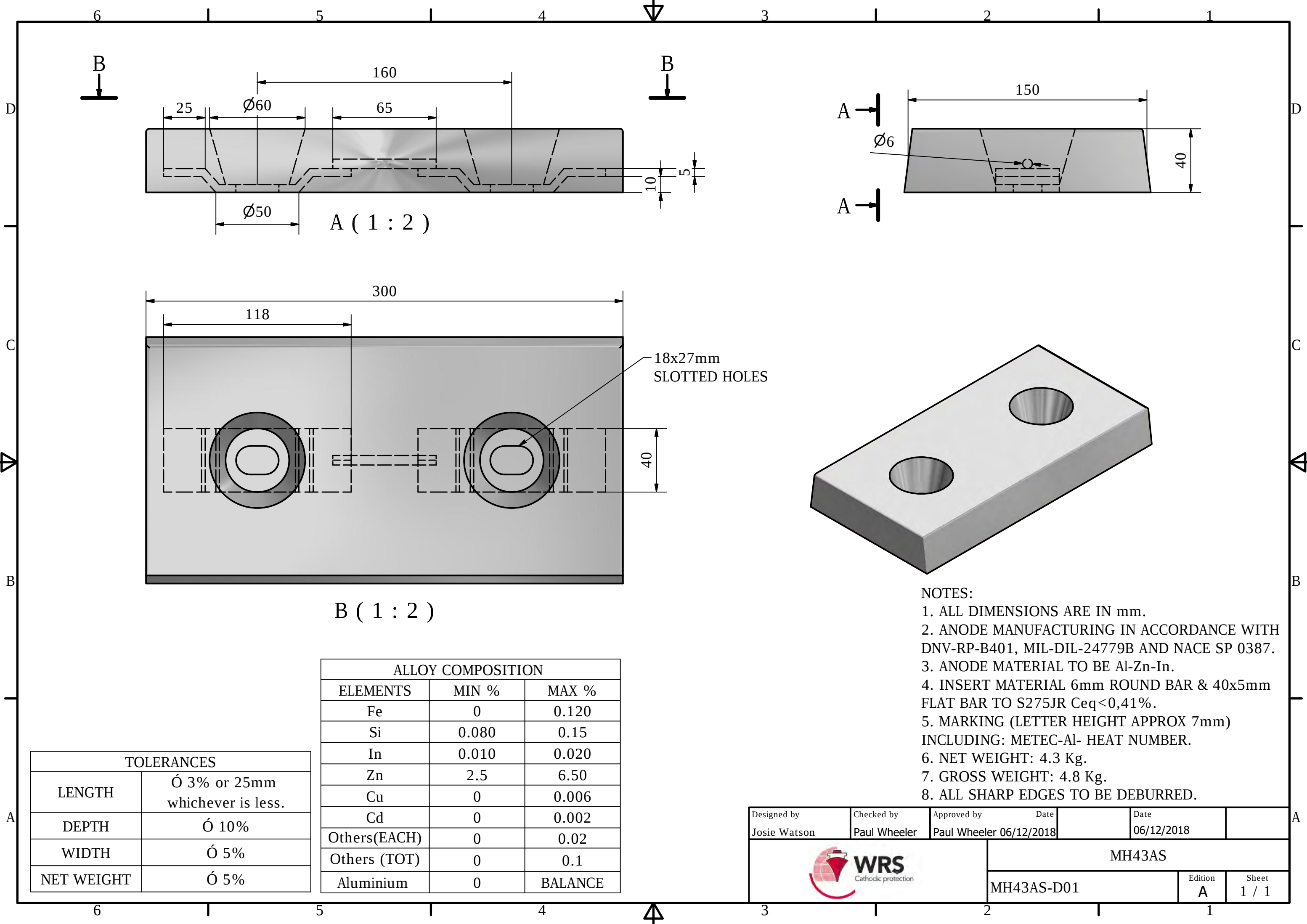
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

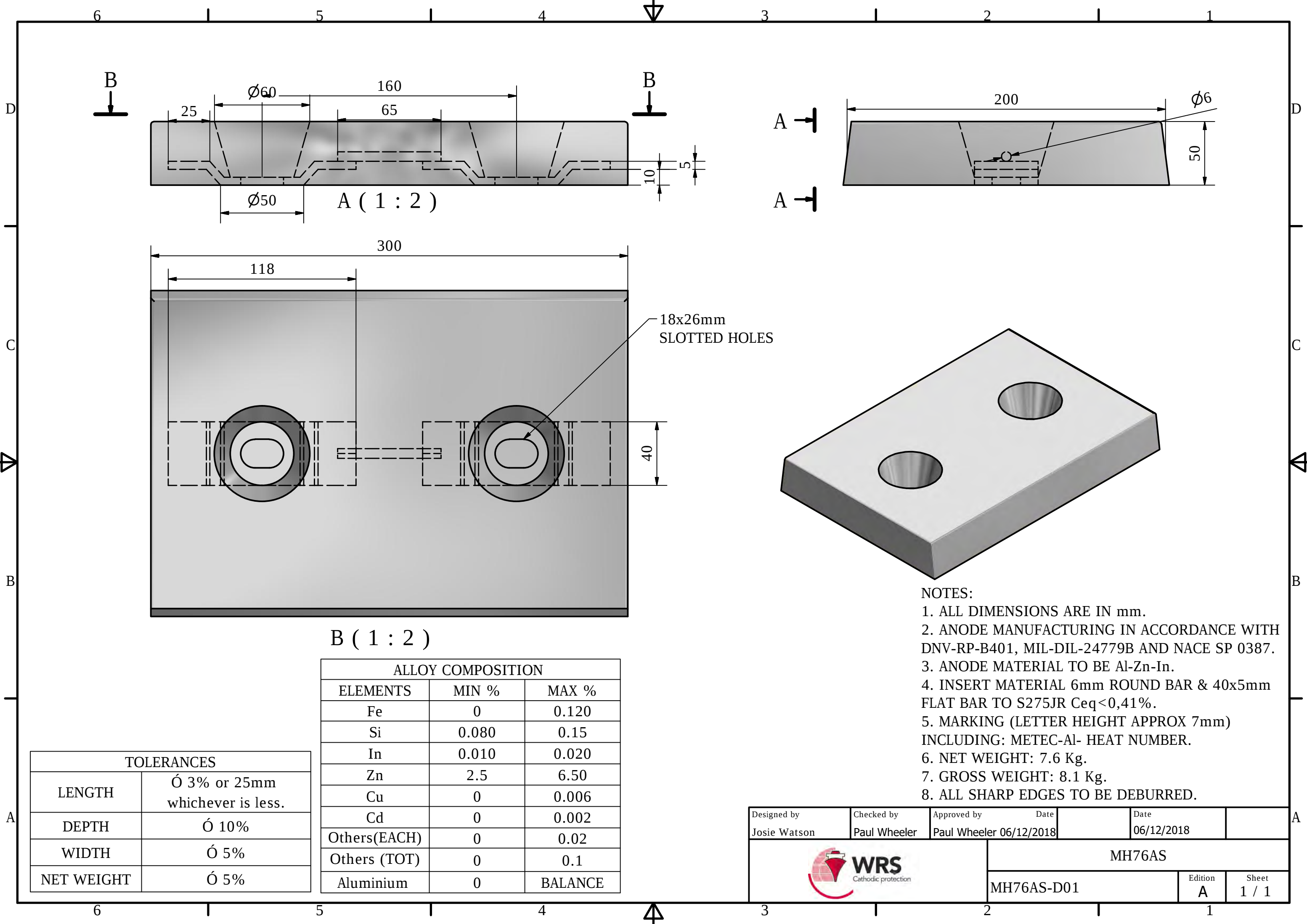
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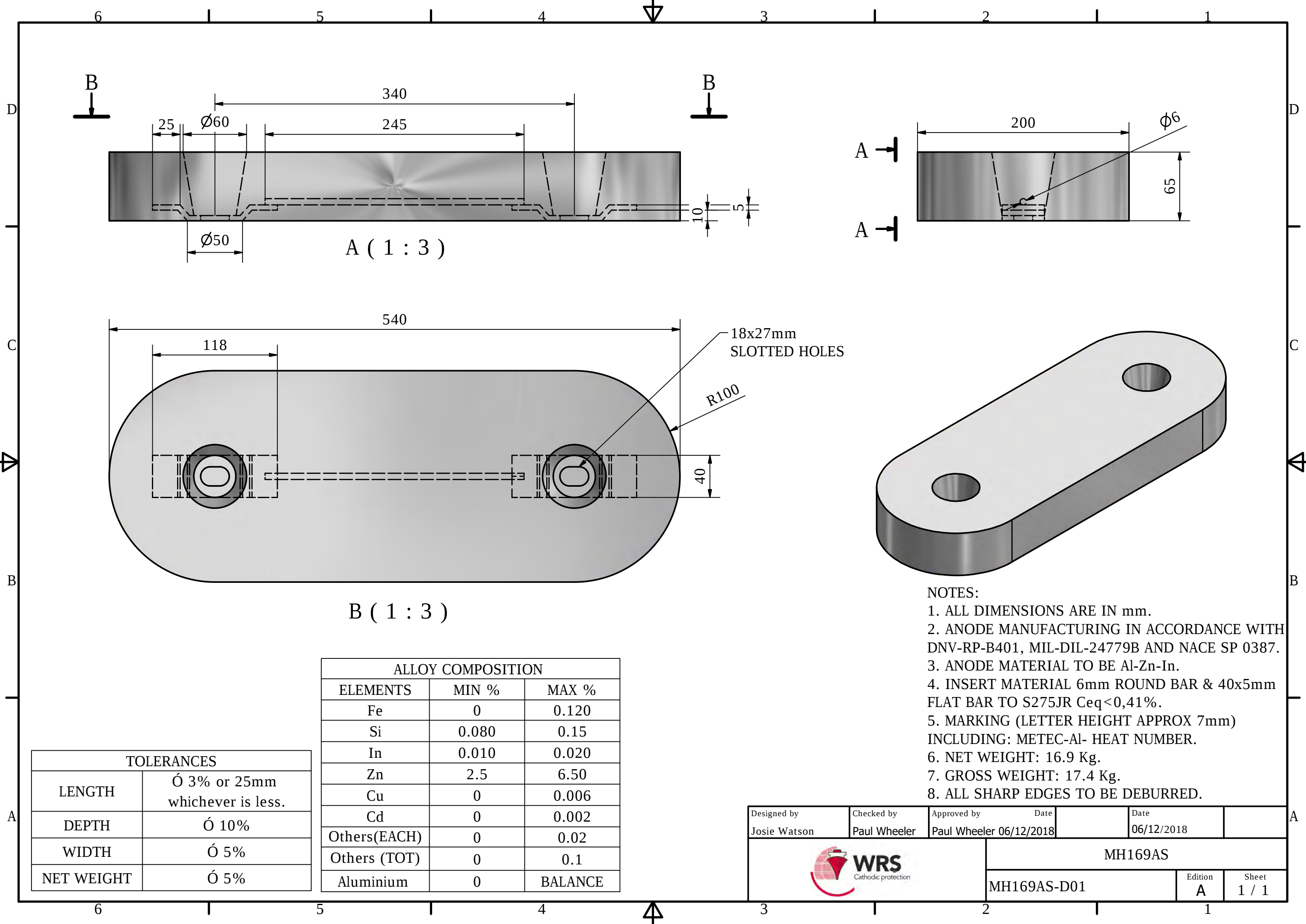
1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387 UNLESS OTHERWISE STATED.
3. ANODE MATERIAL TO BE Al-Zn-In.
4. INSERT MATERIAL 12 mm ROUND BAR TO S275JR
Ceq<0,41%.
5. MARKING (LETTER HEIGHT APPROX 7mm)
INCLUDING: METEC-AL- HEAT NUMBER.
6. NET WEIGHT: 40.8 ± 0.75Kg.
7. GROSS WIGHT: 42.4 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.



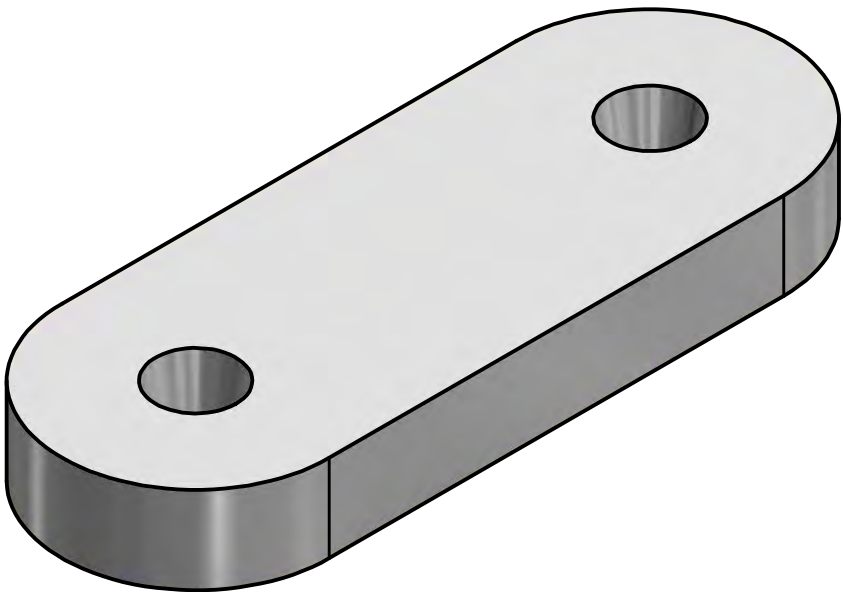
Designed by Josie Watson	Checked by Robert Forsyth	Approved by Robert Forsyth	Date 09/02/2018
MTA408Z-SC			
		Edition A	Sheet 1 / 1







B (1 : 3)

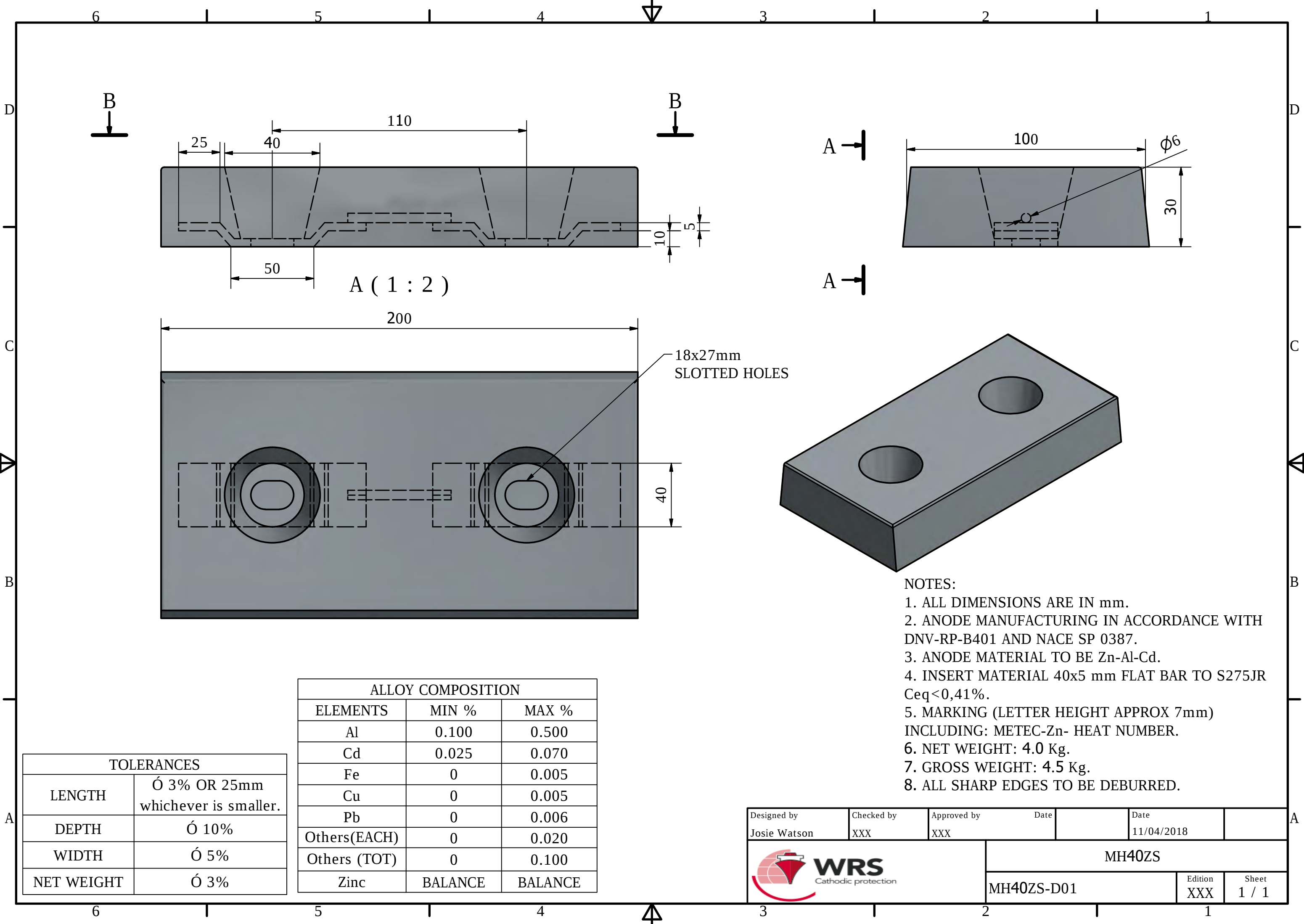


- NOTES:
- 1. ALL DIMENSIONS ARE IN mm.
 - 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401, MIL-DIL-24779B AND NACE SP 0387.
 - 3. ANODE MATERIAL TO BE Al-Zn-In.
 - 4. INSERT MATERIAL 6mm ROUND BAR & 40x5mm FLAT BAR TO S275JR Ceq<0,41%.
 - 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-AL- HEAT NUMBER.
 - 6. NET WEIGHT: 16.9 Kg.
 - 7. GROSS WEIGHT: 17.4 Kg.
 - 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	Ó 3% or 25mm whichever is less.
DEPTH	Ó 10%
WIDTH	Ó 5%
NET WEIGHT	Ó 5%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Fe	0	0.120
Si	0.080	0.15
In	0.010	0.020
Zn	2.5	6.50
Cu	0	0.006
Cd	0	0.002
Others(EACH)	0	0.02
Others (TOT)	0	0.1
Aluminium	0	BALANCE

Designed by Josie Watson	Checked by Paul Wheeler	Approved by Paul Wheeler 06/12/2018	Date 06/12/2018	
		MH169AS		
		MH169AS-D01	Edition A	Sheet 1 / 1

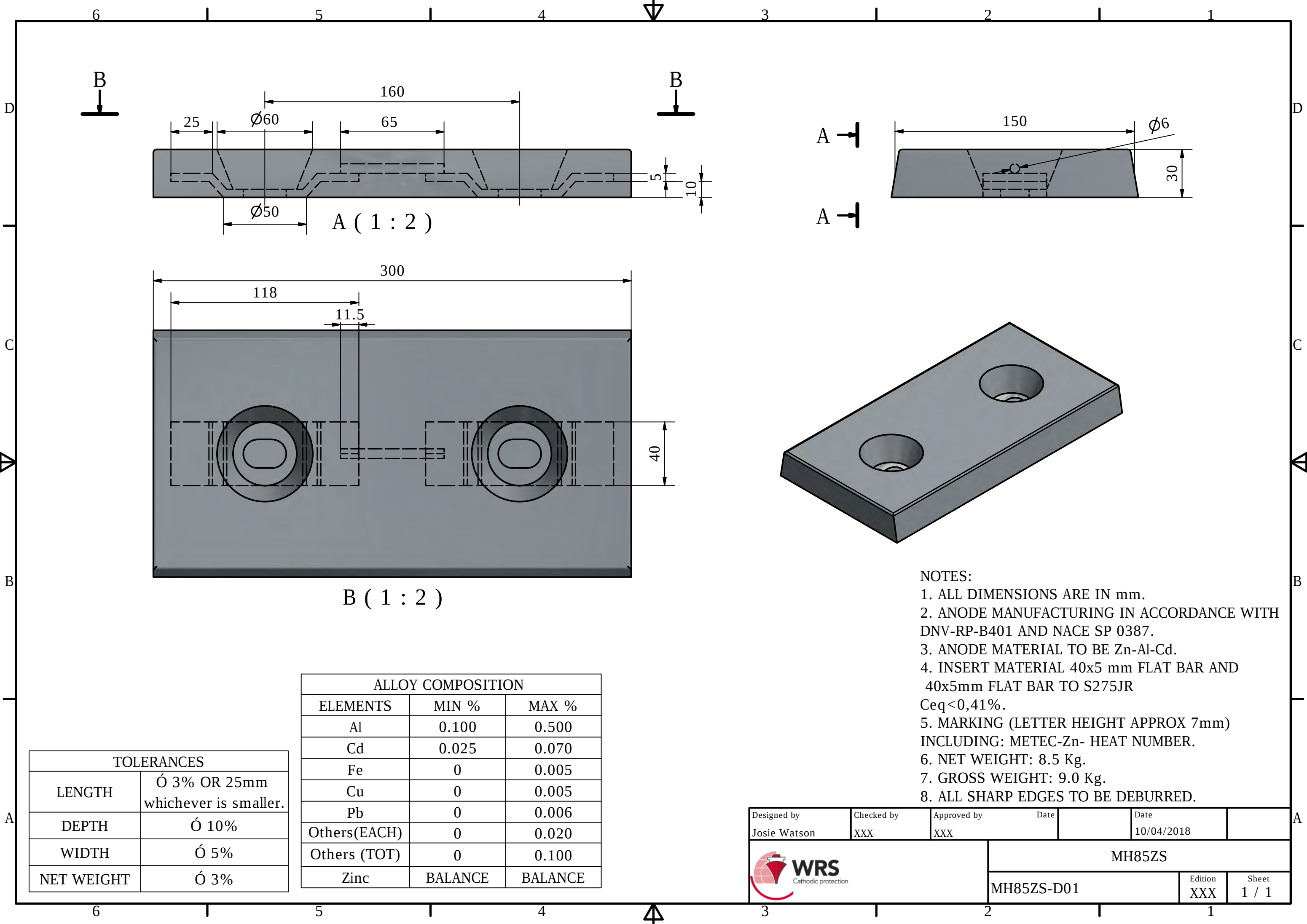


TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL 40x5 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$.
 5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 4.0 Kg.
 7. GROSS WEIGHT: 4.5 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

Designed by Josie Watson	Checked by XXX	Approved by XXX	Date 11/04/2018	
		MH40ZS		
		MH40ZS-D01	Edition XXX	Sheet 1 / 1



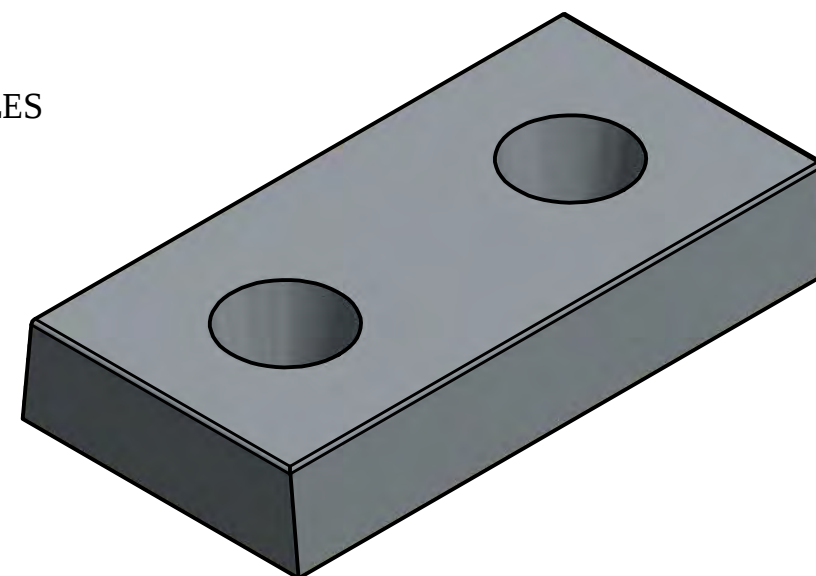
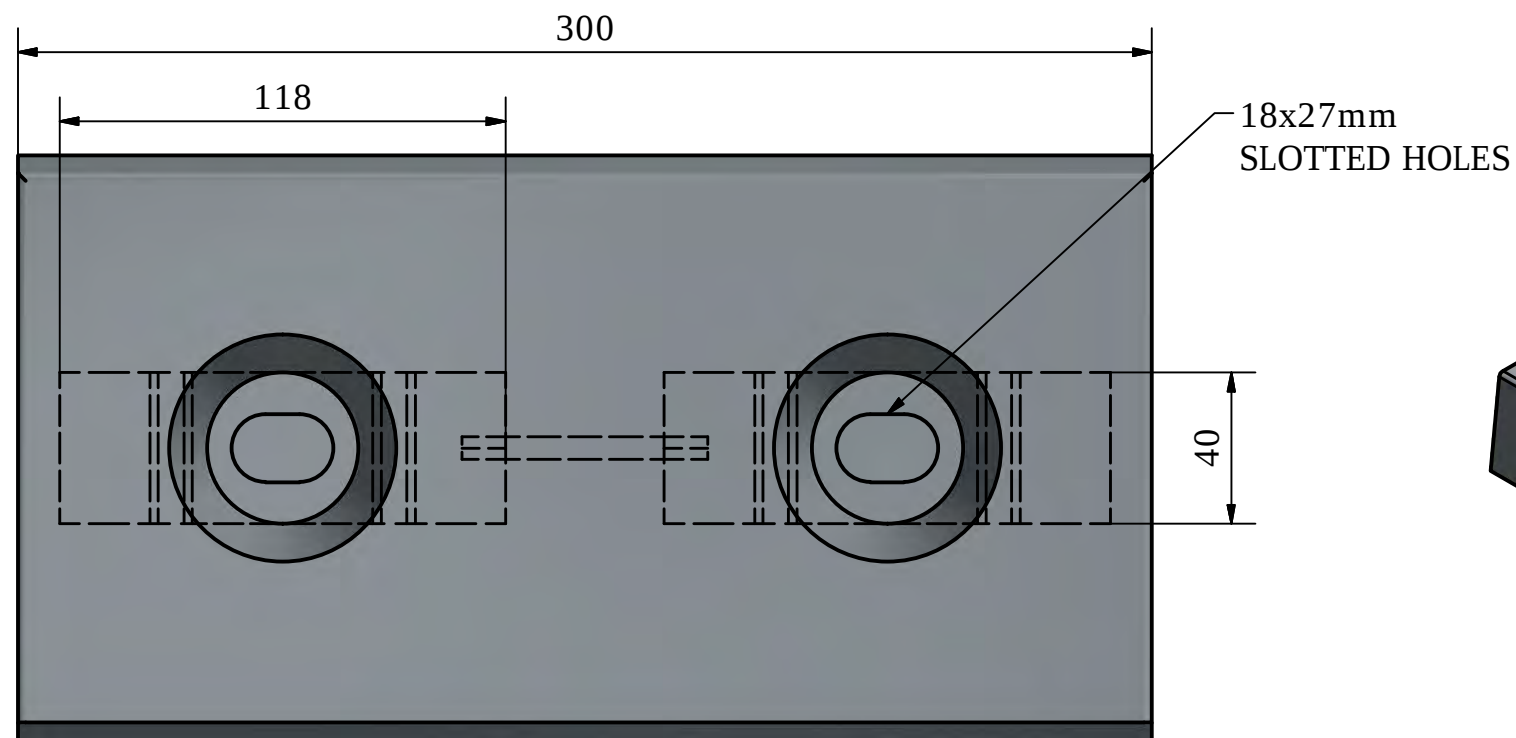
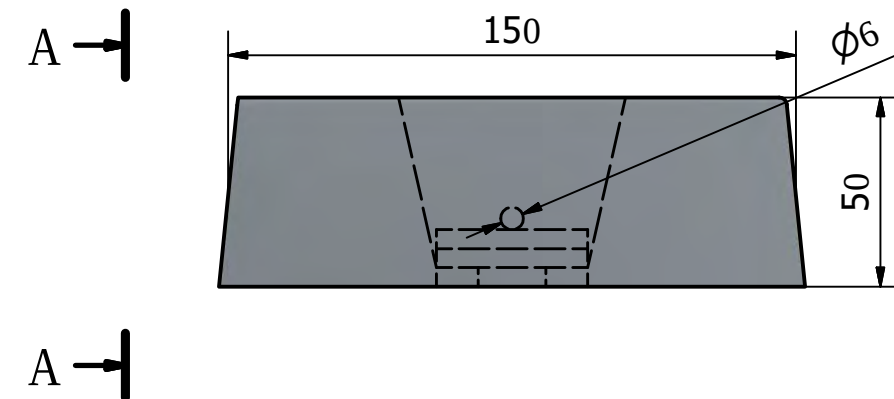
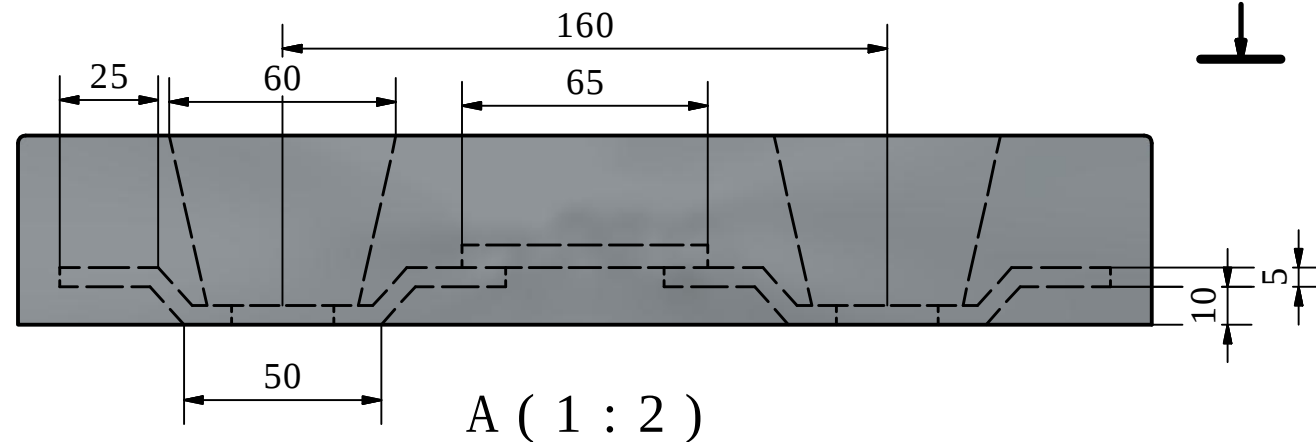
B (1 : 2)

- NOTES:
1. ALL DIMENSIONS ARE IN mm.
 2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
 3. ANODE MATERIAL TO BE Zn-Al-Cd.
 4. INSERT MATERIAL 40x5 mm FLAT BAR AND 40x5mm FLAT BAR TO S275JR
Ceq<0,41%.
 5. MARKING (LETTER HEIGHT APPROX 7mm)
INCLUDING: METEC-Zn- HEAT NUMBER.
 6. NET WEIGHT: 8.5 Kg.
 7. GROSS WEIGHT: 9.0 Kg.
 8. ALL SHARP EDGES TO BE DEBURRED.

TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

Designed by Josie Watson	Checked by XXX	Approved by XXX	Date 10/04/2018	
		MH85ZS		
		MH85ZS-D01	Edition XXX	Sheet 1 / 1



NOTES:

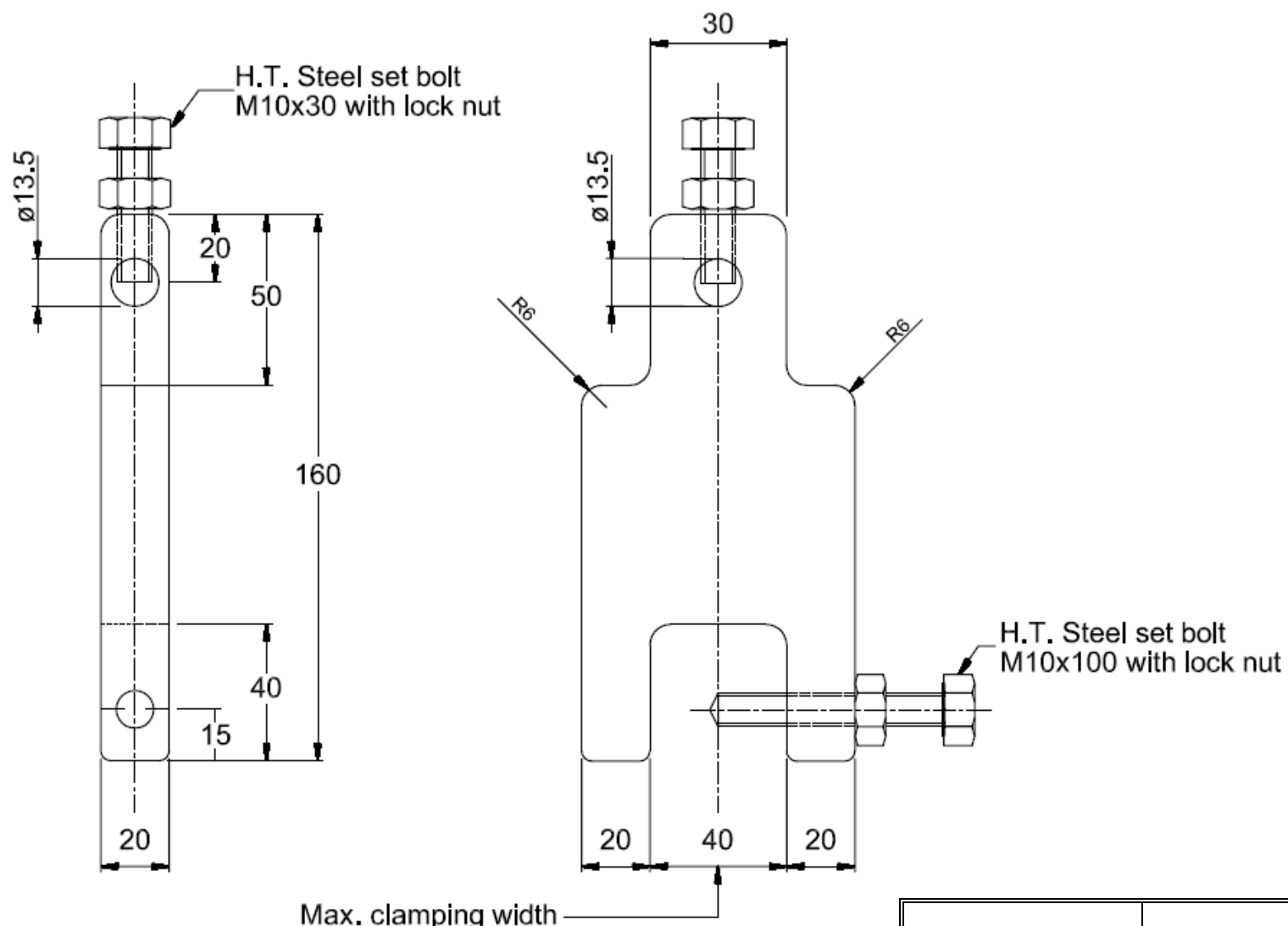
1. ALL DIMENSIONS ARE IN mm.
2. ANODE MANUFACTURING IN ACCORDANCE WITH DNV-RP-B401 AND NACE SP 0387.
3. ANODE MATERIAL TO BE Zn-Al-Cd.
4. INSERT MATERIAL 40x5 mm FLAT BAR TO S275JR $C_{eq} < 0,41\%$.
5. MARKING (LETTER HEIGHT APPROX 7mm) INCLUDING: METEC-Zn- HEAT NUMBER.
6. NET WEIGHT: 14.2 Kg.
7. GROSS WEIGHT: 14.7 Kg.
8. ALL SHARP EDGES TO BE DEBURRED.

B (1 : 2)

ALLOY COMPOSITION		
ELEMENTS	MIN %	MAX %
Al	0.100	0.500
Cd	0.025	0.070
Fe	0	0.005
Cu	0	0.005
Pb	0	0.006
Others(EACH)	0	0.020
Others (TOT)	0	0.100
Zinc	BALANCE	BALANCE

TOLERANCES	
LENGTH	± 3% OR 25mm whichever is smaller.
DEPTH	± 10%
WIDTH	± 5%
NET WEIGHT	± 3%

Designed by Josie Watson	Checked by XXX	Approved by XXX	Date 11/04/2018	
		MH142ZS		
		MH142ZS-D01	Edition XXX	Sheet 1 / 1



Type	M-Clamp	Material	FR 37-2	Netto Wt.	Gross Wt.
		Type	Mounting Material	2,0	2,0
		Prepared by	WRS Group		



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Our visiting address and storage



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