

- NOTES
1. CLAMP TO SPECIFICATION CEE 0063.
  2. CLAMP TO BE SUPPLIED AS A COMPLETE ASSEMBLY.

STORES ITEM NO.	ALUMINIUM CONDUCTOR SIZES
54032504	160mm <sup>2</sup> TO 160mm <sup>2</sup>
54000560	500mm <sup>2</sup> TO 160mm <sup>2</sup>
54000603	800mm <sup>2</sup> TO 160mm <sup>2</sup>

ITEM NO	DESCRIPTION	QTY	STORES ITEM NO	DRAWING NO
4	LOCKING WASHER, INTERNALLY TOOTHED, STAINLESS STEEL TO SPEC AISI GR 304, M12	2		
3	NUT, HEXAGON, STAINLESS STEEL TO SPEC CEE0063, M12	2		
2	BOLT, HEXAGON, STAINLESS STEEL TO SPEC CEE 0063, M12	2		
1	PARALLEL HALF CLAMP FOR 800mm <sup>2</sup> Al TO 160mm <sup>2</sup> Cu.	2		BBD5138 SHT 3
	PARALLEL HALF CLAMP FOR 500mm <sup>2</sup> Al TO 160mm <sup>2</sup> Cu.	2		BBD5138 SHT 2
	PARALLEL HALF CLAMP FOR 160mm <sup>2</sup> Al TO 160mm <sup>2</sup> Cu.	2		BBD5138 SHT 1

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2019-05-28

DIMENSIONS : mm SCALE : 1 : 1  
TOLERANCE : LIN ± 0.5 ANG ± 0.5 ITEM NO : -  
MATERIAL : -

VERSION INFO : REDRAWN AND NOTES ADDED

APPROVED: S SMIT

AUTHORISED: L O BORCHARD

DRAWN: D HATTINGH

DESIGNED: -

CHECKED: D HATTINGH

**TRANSNET**  
freight rail

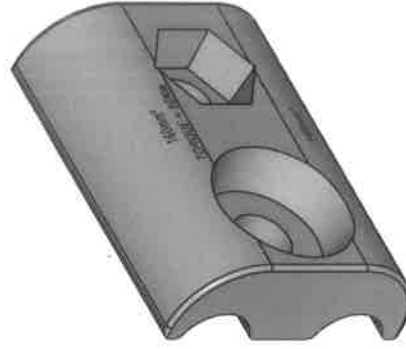
**BBG7987**  
VERSION 3

## ALUMINIUM PARALLEL CLAMP ASSEMBLY

A4



e) TORQUE = 50Nm



CHECKED : D HATTINGH

ALUMINIUM PARALLEL HALF CLAMP  
160mm<sup>2</sup> TO 160mm<sup>2</sup> Al.  
TIGER CATENARY



TABLE 1 (SEE NOTE 1)	
CONTINUOUS	1140A
5 MIN.	1840A
1 MIN.	3760A

1. WITH AN AMBIENT TEMPERATURE OF 20°C THE TEMPERATURE IN THE CLAMP SHALL NOT EXCEED 60°C WHEN APPLYING THE CURRENT IN TABLE 1.

1. ALL UNSPECIFIED RADII R2.
2. RECESS TO SUITE M12 NUT.
3. FOR ASSEMBLY, SEE DRAWING 8BG7987.
4. ALUMINUM CLAMP TO SPECIFICATION CEE 0063.
5. THE FOLLOWING PERMANENT MARKINGS MUST APPEAR ON THIS ARTICLE:
  - a) TRANSET LOGO.
  - b) MANUFACTURERS IDENTIFICATION.
  - c) DATED BATCH NUMBER.
  - d) WIRE SIZES.
  - e) TORQUE = 50Nm

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**SCALE : 1:1**

DIMENSIONS	mm
TOLERANCE	LIN ± 1 ANG ± 0.5
MATERIAL	ALUMINIUM GRADE 6061-T6

ALUMINIUM PARALLEL HALF CLAMP  
500mm<sup>2</sup> ALUMINIUM TO 160mm<sup>2</sup> ALUMINIUM

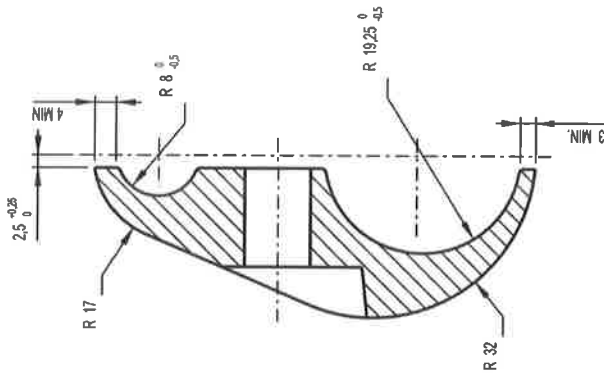


**TRANSNER**  
freight rail

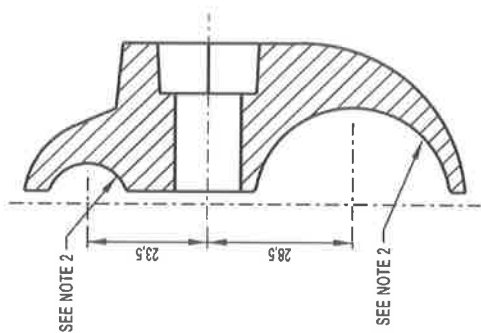
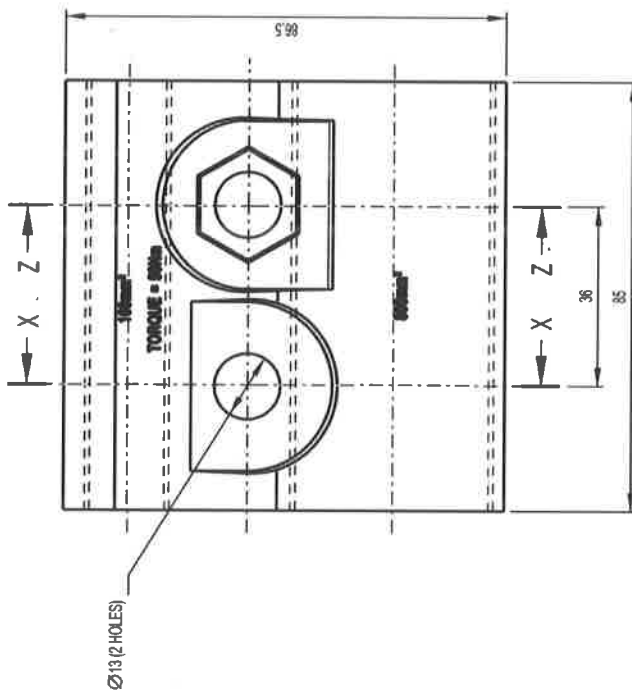
BBG7987 SHT 2

DRAWN : D HATTINGH      CHECKED : D HATTINGH

VERSION 3 A3



SECTION X-X



SECTION Z-Z

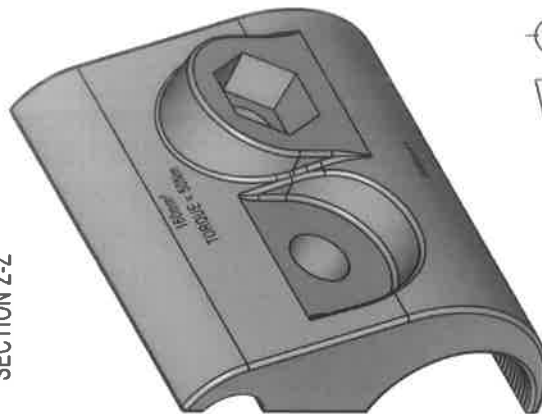
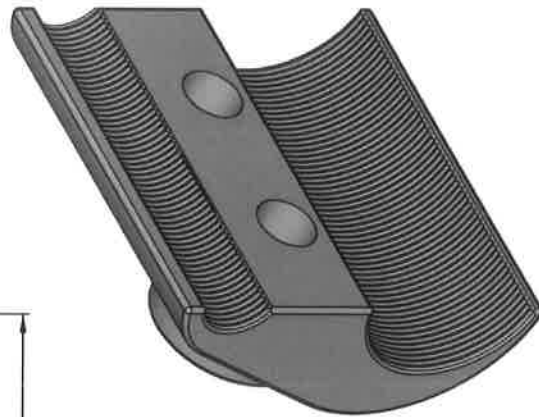


TABLE 1 (SEE NOTE 1)	
CONTINUOUS	1140A
5 MIN.	1840A
1 MIN.	3760A

- NOTES
1. WITH AN AMBIENT TEMPERATURE OF 20°C THE TEMPERATURE IN THE CLAMP SHALL NOT EXCEED 60°C WHEN APPLYING THE CURRENT IN TABLE 1.
  2. CLAMPING SURFACES TO BE SERRATED, PITCH 1,5 x 0,3 DEEP.
  3. ALL UNSPECIFIED RADII R2.
  4. RECESS TO SUITE M12 NUT.
  5. FOR ASSEMBLY, SEE DRAWING BBG7987.
  6. ALUMINIUM CLAMP TO SPECIFICATION CEE 0063.
  7. THE FOLLOWING PERMANENT MARKINGS MUST APPEAR ON THIS ARTICLE:
    - a) TRANSNET LOGO.
    - b) MANUFACTURERS IDENTIFICATION.
    - c) DATED BATCH NUMBER.
    - d) WIRE SIZES.
    - e) TORQUE = 50Nm



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DIMENSIONS : mm SCALE : 1 : 1

TOLERANCE : LIN ± 1 ANG ± -

MATERIAL : ALUMINIUM, GRADE 6063 TO SPEC CEE 0063.

DRAWN : D HATTINGH CHECKED : D HATTINGH

ALUMINIUM PARALLEL HALF CLAMP  
800mm<sup>2</sup> AI FEEDER TO 160mm<sup>2</sup> AI.

TRANSNET  
freight rail

BBG7987 SHT 3

VERSION 3

A3



ITEM	DESCRIPTION	QTY	STORES ITEM NO	DRG NO CEE-	AMENDMENTS		
1	CLAMP, ELECTRICAL, HALF DROPPER CLIP WITH THREAD AND SPACER PIN	1	_____	TND-0022 SHT 2	NO	NAME	DATE
2	CLAMP, ELECTRICAL, HALF DROPPER CLIP WITHOUT THREAD	1	_____	TND-0022 SHT 3	5	<i>[Signature]</i>	13/02/07
3	SCREW, STAINLESS STEEL, HEX. HEAD, M8 x 30L TO SPECIFICATION AISI GRADE 316	1	_____	_____	ITEM 3 AND 4 WAS M10		
4	WASHER, LOCKING, INTERNAL TOOTH, STAINLESS STEEL, M8 TO SPECIFICATION AISI GRADE 316	1	_____	_____	ECP REF: BBC5700		
					DO REF: CDO/5261		

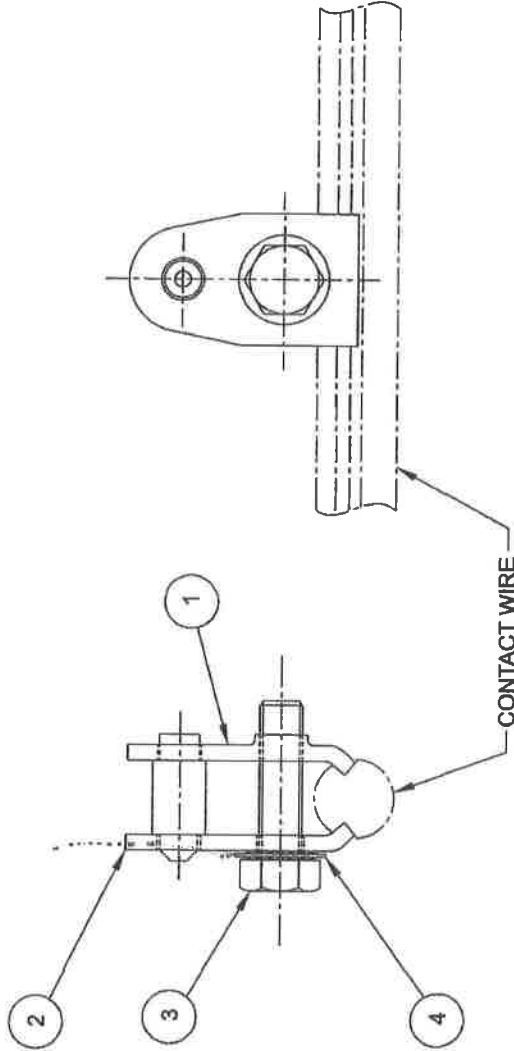


TABLE (SEE SHEET 5)		
CONTACT WIRE	STORES NO	
181mm <sup>2</sup> Cu	54/017312	
107mm <sup>2</sup> Cu	54/006787	

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DO REF: N41 / 70	GEN TOL: LIN#	ANG#	---
DRN: H F	CKD: H NIEHAUS	DATE:	70-05-04
ENG: PIENAAR	PHILLIPS	for CHIEF ENG	

CENTRAL DRAWING OFFICE  SPOORNET

## CLAMP, ELECTRICAL

DROPPER CLIP, COMPLETE, 161mm<sup>2</sup> / 107mm<sup>2</sup> Cu CONTACT WIRE  
KARL PHISTERER / ARTHUR FLURY SECTION INSULATOR

STORES ITEM NO  
SEE TABLE

DIMENSIONS: mm  
SCALE: 1:1

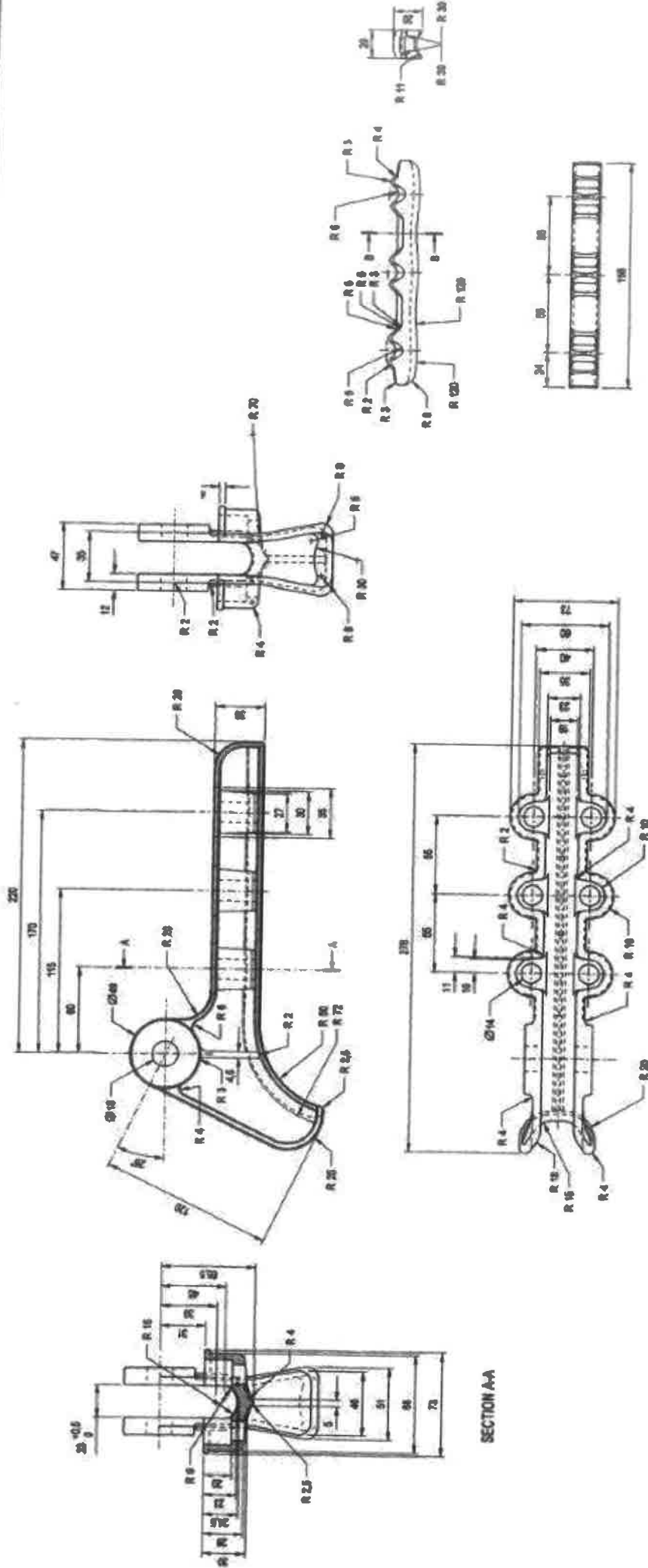


A3

DRAWING NO CEE-

TND - 0022



SHEET 1 OF 5



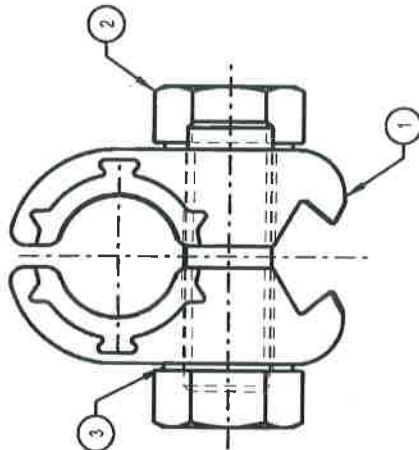
**NOTES**

1. IDENTIFICATION: BODY AND SADDLE MUST BE PERMANENTLY MARKED WITH MAKERS IDENTIFICATION AND MONTH AND YEAR OF MANUFACTURE.
2. THESE ARTICLES MUST BE MANUFACTURED UNDER THE MARK OF THE SABS.
3. ALL UNSPECIFIED RADY RT.

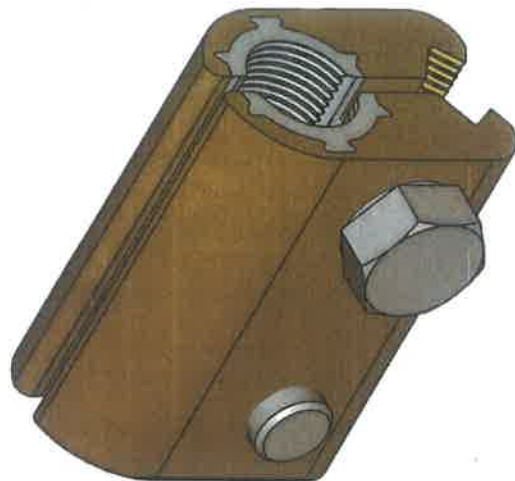
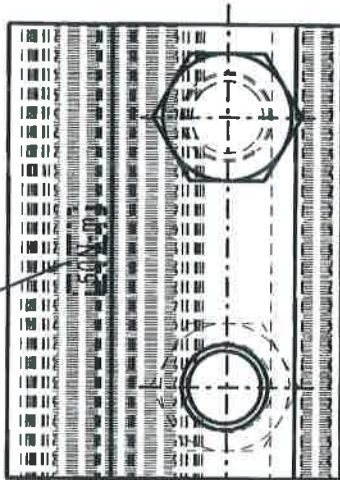
## • AS REQUIRED

© COPYRIGHT PROTECTED										<div>STRAIN CLAMP, PISTOL GRIP (COMPONENTS)</div> <div>CENTRAL DRAWING OFFICE</div> <div> SPOORNET</div> <div>BBB1791 VERSION 2</div>													
DIMENSIONS : mm		SCALE : 1:1		DO REF : CDD1846		DATE : 05/05/2000														APPROVED		AUTHORISED	
TOLERANCE : L20 & ANG5.		ITEM NO. :		EDP REF : 282-039																			
MATERIAL :				DRAWN : JR Anthony																			
VERSION INFO : "PROTOTYPE" REMOVED				DESIGNED : Earlhard Martin ss																			
				CHECKED : JB van Gylt																			
						</																	





Torque value to be stencilled here  
50N-m



#### Note

1. Bi-metal feeder clamp to specification CEE-0063
2. The following permanent markings must appear on this article.
  - a) Transnet Logo.
  - b) Manufacturers identification.
  - c) Dated batch number.
  - d) Wire size.
  - e) Torque value.

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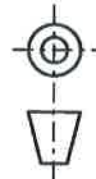
DIMENSIONS : mm SCALE : 1 : 1  
TOLERANCE : LIN - ANG - ITEM NO : 54000401  
MATERIAL :  
VERSION : NFO : Notes and slots added.

APPROVED: S Smit

DRAWN: D Hattingh

ECP REF: -

DO REF: CDO/ 9331



#### DESCRIPTION

ITEM NO	DESCRIPTION
3	Lock washer, Internally toothed, Stainless steel to Spec. AISI GR 304, M12
2	Machine screw, Stainless steel to spec. AISI GR 304, Hex head, M12 x 35 long
1	Feeder half clamp

QTY

STORES ITEM NO

DRAWING NO

2

2

2

BBG6147 Sht. 1

BBG6147

BI-METAL FEEDER CLAMP FOR  
160mm<sup>2</sup> Al / 161mm<sup>2</sup> Cu  
CONTACT WIRE

+ 14-3-2019

+ 14/03/2019

SCALE : 1 : 1

ITEM NO : 54000401

VERSION : NFO : Notes and slots added.

APPROVED: S Smit

DRAWN: D Hattingh

ECP REF: -

DO REF: CDO/ 9331

APPROVED: L O Borchard

DRAWN: D Hattingh

ECP REF: -

DO REF: CDO/ 9331

DESIGNED: -

APPROVED: S Smit

ECP REF: -

DO REF: CDO/ 9331

APPROVED: L O Borchard

DRAWN: D Hattingh

ECP REF: -

DO REF: CDO/ 9331

DESIGNED: -

APPROVED: S Smit

ECP REF: -

DO REF: CDO/ 9331

APPROVED: L O Borchard

DRAWN: D Hattingh

ECP REF: -

DO REF: CDO/ 9331

DESIGNED: -

APPROVED: S Smit

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APPROVED: L O Borchard

DRAWN: D Hattingh

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APPROVED: L O Borchard

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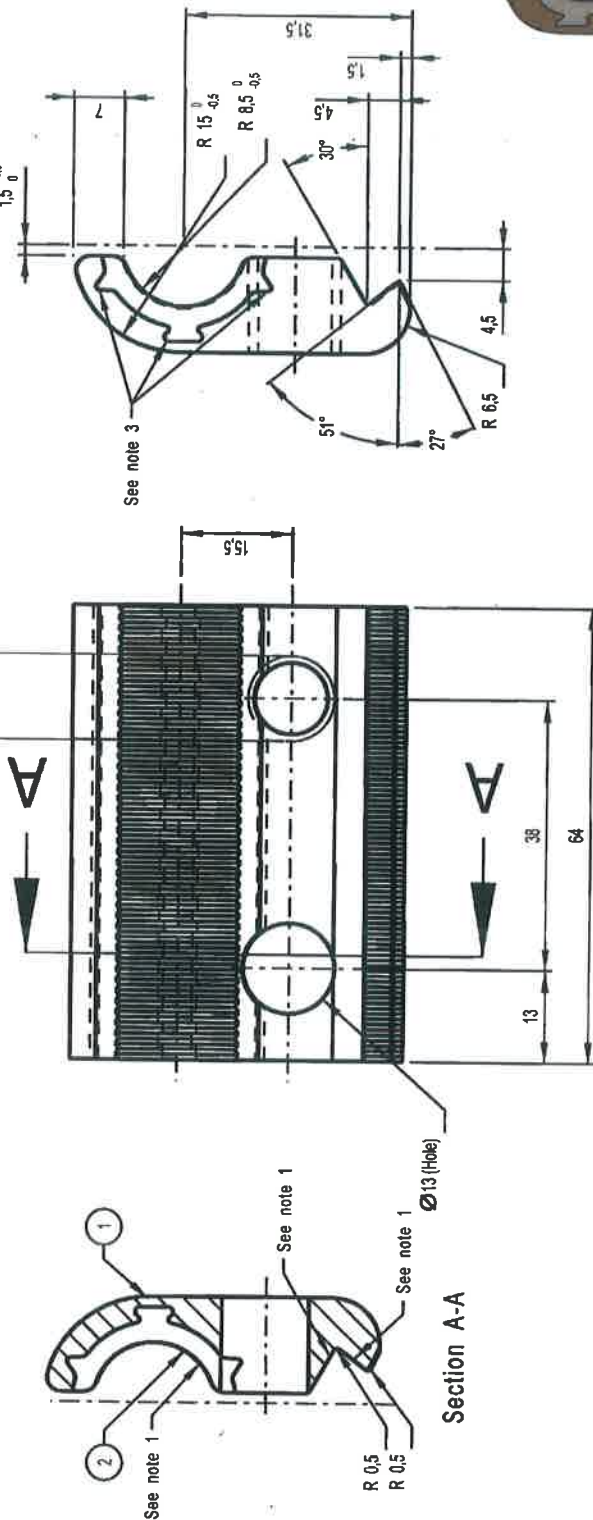
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DRAWN: D Hattingh

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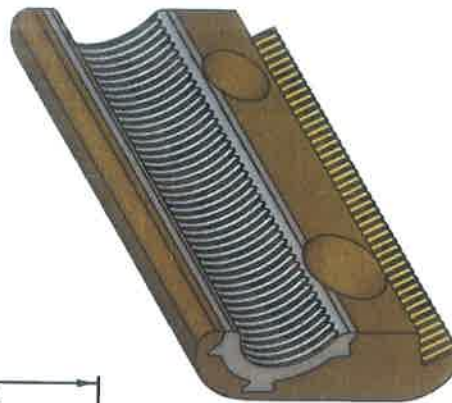


M12 x 175 - 6H  
(Tapped hole)



Notes:

1. These surfaces to be serated: 1.5 pitch x 0.3 deep.
2. All unspecified radii R2.
3. Slots in Cu-Ni-Si half clamp to prevent forcable removal of Aluminium liner after forging



ITEM NO	DESCRIPTION	QTY	STORES ITEM NO	DRAWING NO
2	Permanently Forged Aluminium Grade 6063 insert, 3mm thick	1	-	-
1	CU-Ni-Si Alloy to Spec. CEE-0063	1	-	-

DIMENSIONS mm  
TOLERANCE LIN ± 0.5 ANG ± 0°30'  
MATERIAL :  
VERSION : Notes and slots added.  
INFO

**BI-METAL FEEDER HALF CLAMP FOR**  
**160mm² AL / 161mm² Cu.**  
**CONTACT WIRE**

**TRANSNET**  
freight rail

**BBG6147 Sht 1**  
VERSION 5 A4

DRAWN : D Hattingh  
CHECKED : D Hattingh

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