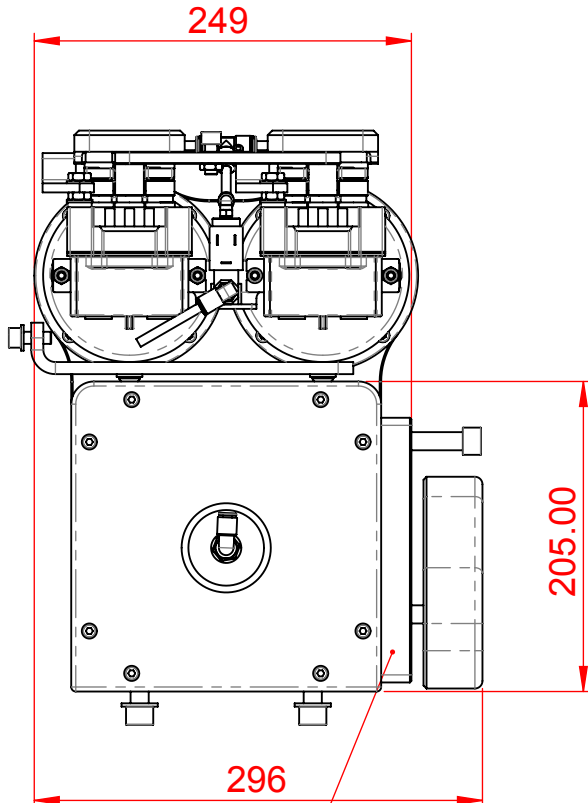


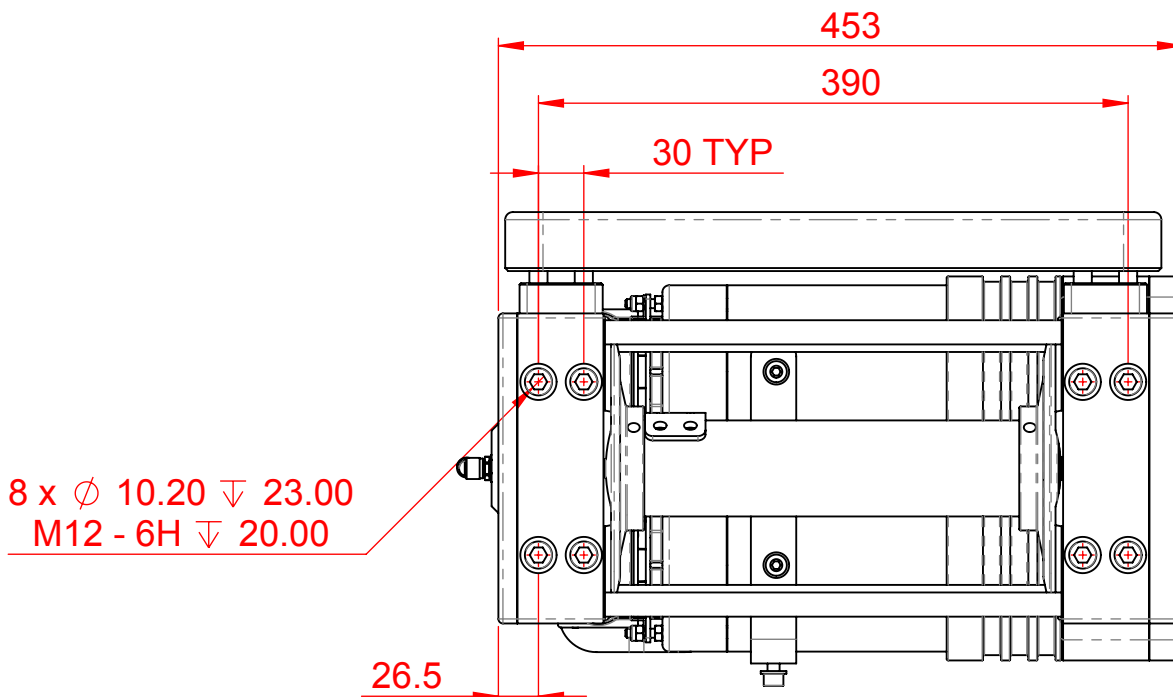
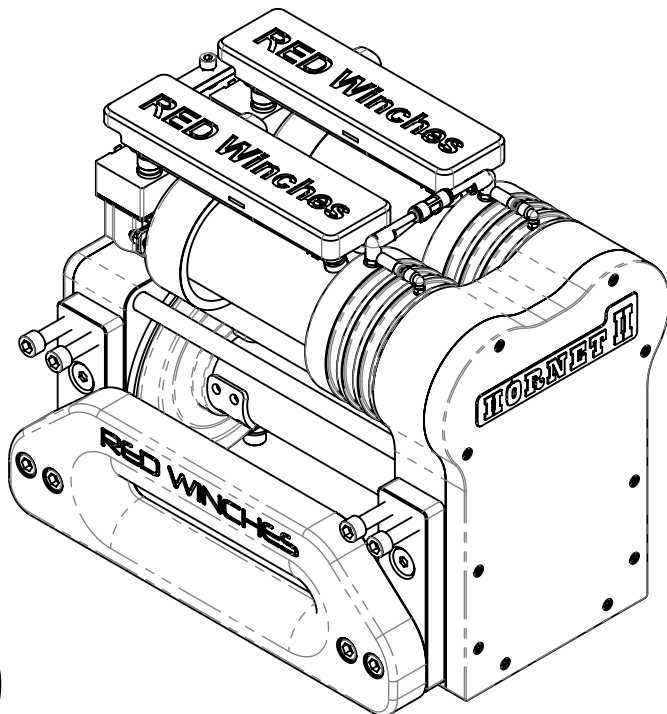
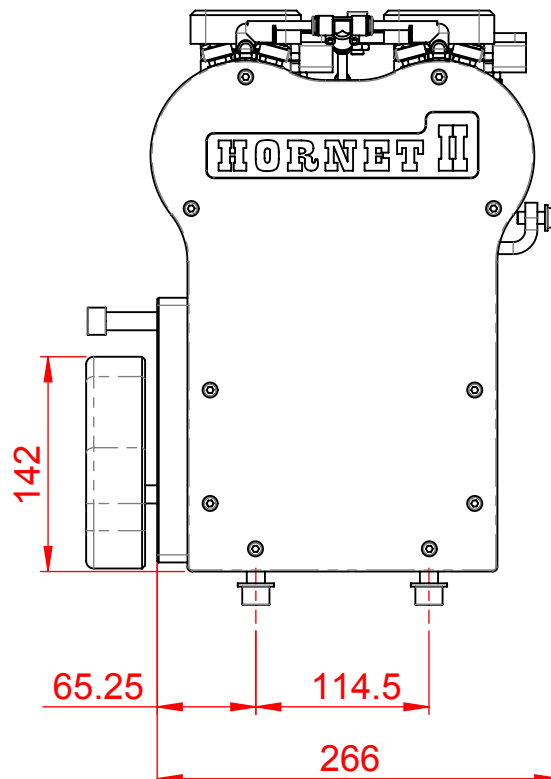
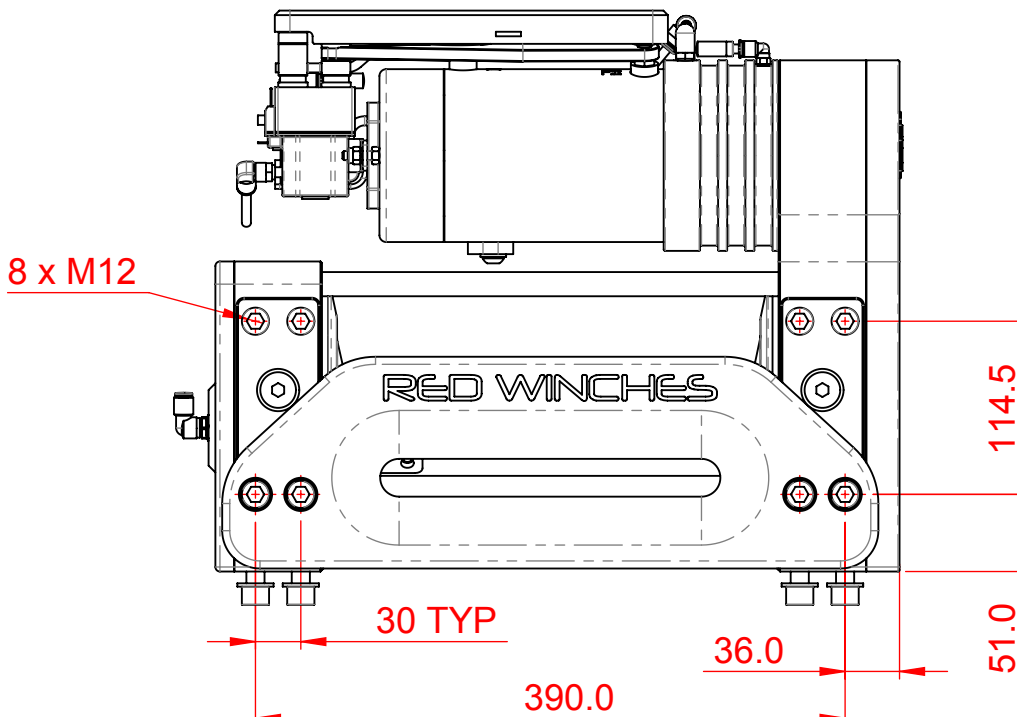
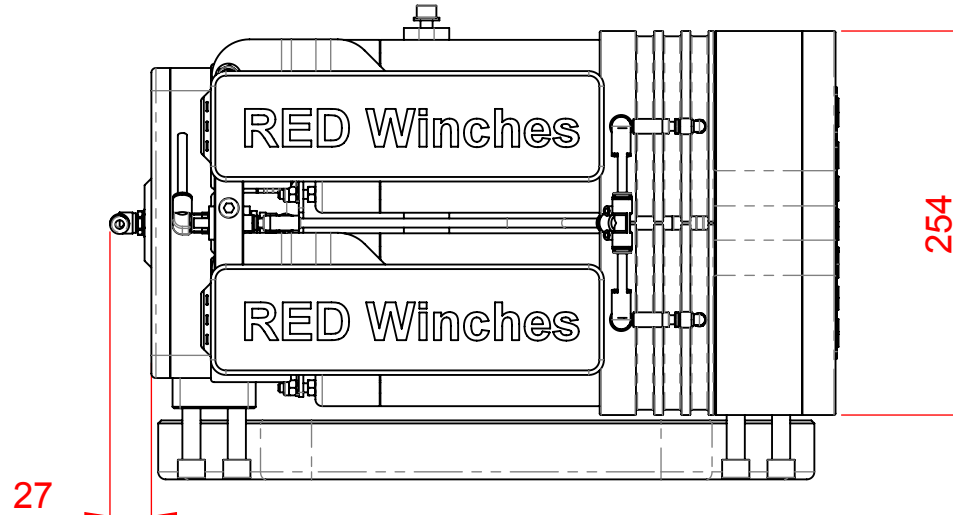
GENERAL TOLERANCES UNLESS SPECIFIED				
X +/-0.50	X.X +/-0.25	X.XX +/-0.1	X +/-1°	X.X +/-0.5°
FLATNESS & SQUARE TOLERANCES:		M/C +/-0.2	FABRICATION: +/-1	

UNLESS SPECIFIED IN CONTRACT ALL WELDS MUST BE PRODUCED BY QUALIFIED WELDERS TO BS EN287-1: 2004 - WELDING SYMBOLS TO BS499-2: 1980

REV.	DATE	DESCRIPTION	CHANGED BY
A	04/12/2015	FIRST ISSUE	NJ



MOUNTING INTERFACE PAD FOR FRONT MOUNTING OPTIONS



UNLESS SPECIFIED	
FASTENER	TORQUE
M6	10 Nm
M8	24 Nm
M10	45 Nm
M12	80 Nm
M16	160 Nm
M20	200 Nm

APPROX MASS: 45 Kg

Redstart//Design Ltd Professional Engineering Resource Tel: +44 (0)1460 67744 Fax: +44 (0)1823 281070 www.redstart-design.com		FORMAT A3	DRAWN N. JONES	DATE 04/12/2015
		QTY REQ N/A	CHECKED N. JONES	DATE 04/12/2015

DRAWING DESCRIPTION:

HORNET-2 TWIN MOTOR WINCH

MATERIAL:

12V / 24V - 4000 Kg

FINISH

SEE DETAIL DRAWINGS

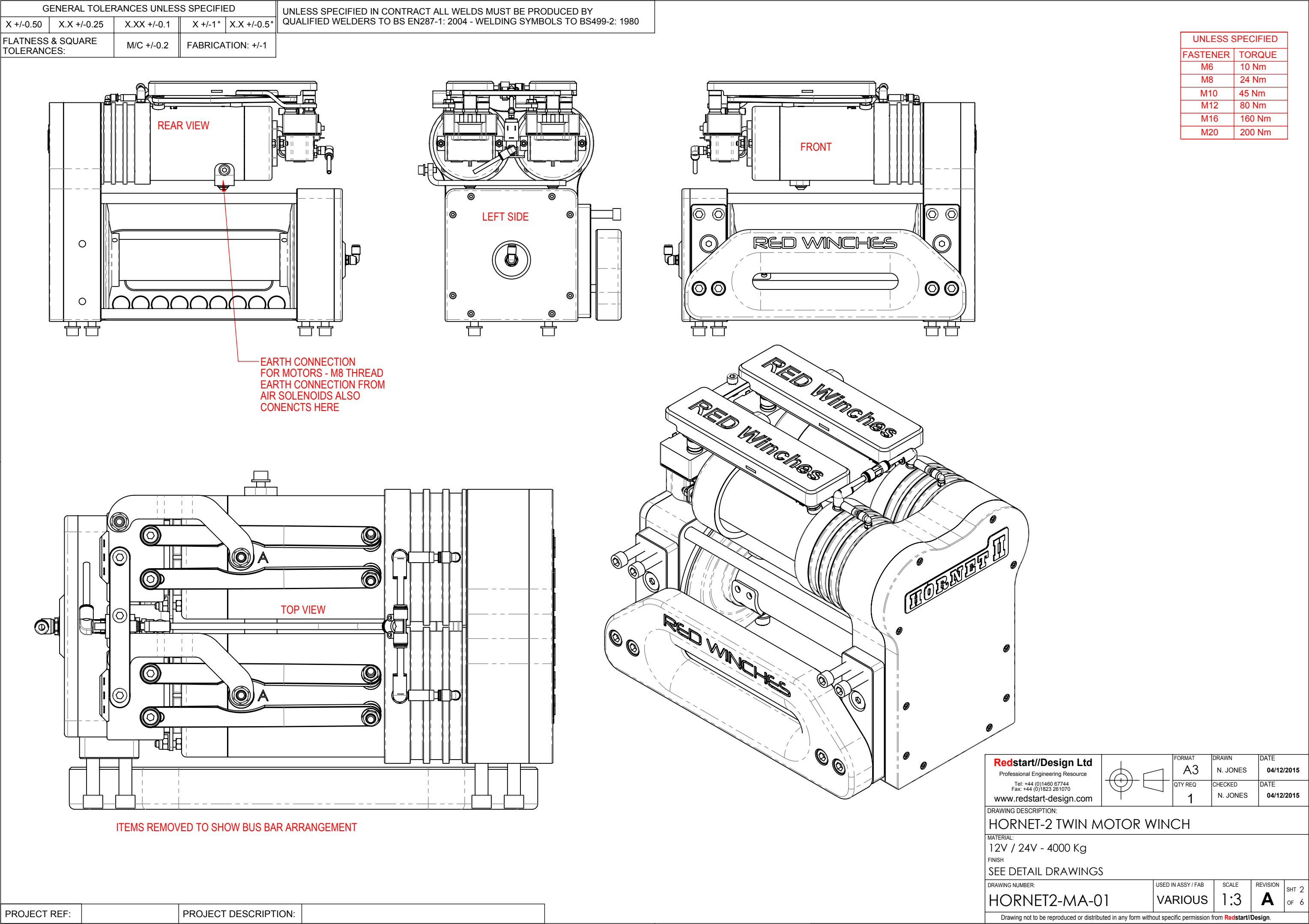
DRAWING NUMBER:	USED IN ASSY / FAB	SCALE	REVISION	SHT 1 OF 6
HORNET2-MA-01	VARIOUS	1:5	A	

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ENSURE ALL FASTENERS ARE TORQUED TO THE CORRECT VALUES

LOCTITE 234 (THREADLOCKER)
TO BE APPLIED ON ALL FASTENERS

PROJECT REF:		PROJECT DESCRIPTION:	
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GENERAL TOLERANCES UNLESS SPECIFIED

X +/-0.50

X.X +/-0.25

X.XX +/-0.1

X +/-1°

X.X +/-0.5°

FLATNESS & SQUARE TOLERANCES:

M/C +/-0.2

FABRICATION: +/-1

UNLESS SPECIFIED IN CONTRACT ALL WELDS MUST BE PRODUCED BY QUALIFIED WELDERS TO BS EN287-1: 2004 - WELDING SYMBOLS TO BS499-2: 1980

Isometric view of the winch assembly. Callouts: 1 (top cover), 4 (motor assembly), 6 (winch drum), 12 (gear housing), and a question mark (internal component).

Cross-section A-A showing the internal gear train and motor assembly.

Front view of the gear housing. Callouts: 7 (gear 6), 5 (gear 1), 3 (gear 2), 13 (gear 3), 11 (gear 4), and a diameter callout of 154.00 for the main housing bore.

ITEM NO.	PART / DRG NUMBER	DESCRIPTION	Default/Q TY.
1	HORNET2-MA-02	HORNET-2 WINCH BODY ASSEMBLY	1
2	HORNET2-MA-03	WINCH DRUM ASSEMBLY	1
3	HORNET2-MA-04	DRIVE SHAFT & FREESPOOL ASSEMBLY	1
4	HORNET2-MA-06	TWIN MOTOR ASSEMBLY	1
5	HORNET2-MA-07	GEARS 2 & 3 ASSEMBLY	1
6	HORNET2-MD-18	HAWSE FAIRLEAD	1
7	HORNET2-MD-20	GEAR 6 - 15 TOOTH / MOD 2	2
8	HORNET2-MD-21	TOP MIDDLE GEAR	1
9	HORNET2-MD-24	GEAR 1 - 75 TOOTH / MOD 2	1
10	M10 x 70	M12 x 30 SKT CAP HEAD	1
11	M10 FORM C	ST/STEEL WASHER M10 - FORM C	8
12	M12 x 50	M12 x 50	8
13	M12 x 30	M12 x 30 CAP HD SCREW	8
14	ABU-MA-01	SINGLE MOTOR BRAKE ASSEMBLY	2

SPEED: 35m/MIN

PULL: 3500KG

POWER: 12 or 24vDC

BRAKE: AIR

FREE-SPOOL: AIR

Redstart//Design Ltd

Professional Engineering Resource

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FORMAT A3

QTY REQ 1

DRAWN N.JONES

CHECKED N. JONES

DATE 04/12/2015

DATE 04/12/2015

DRAWING DESCRIPTION:

HORNET-2 TWIN MOTOR WINCH

MATERIAL: 12V / 24V - 4000 Kg

FINISH: SEE DETAIL DRAWINGS

DRAWING NUMBER: HORNET2-MA-01

USED IN ASSY / FAB VARIOUS

SCALE 1:3

REVISION A

SHT 3 OF 6

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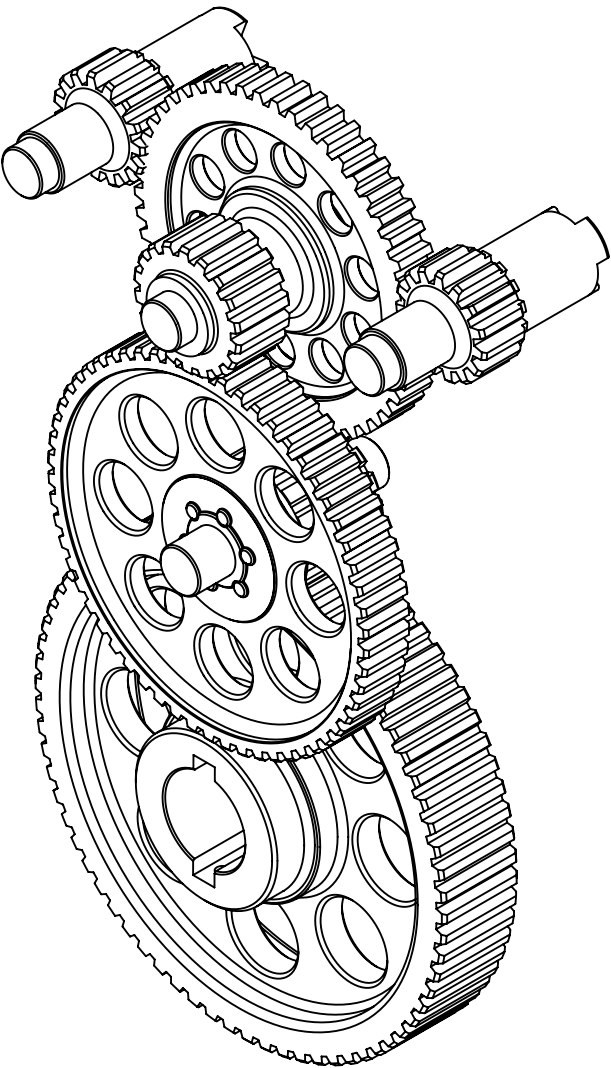
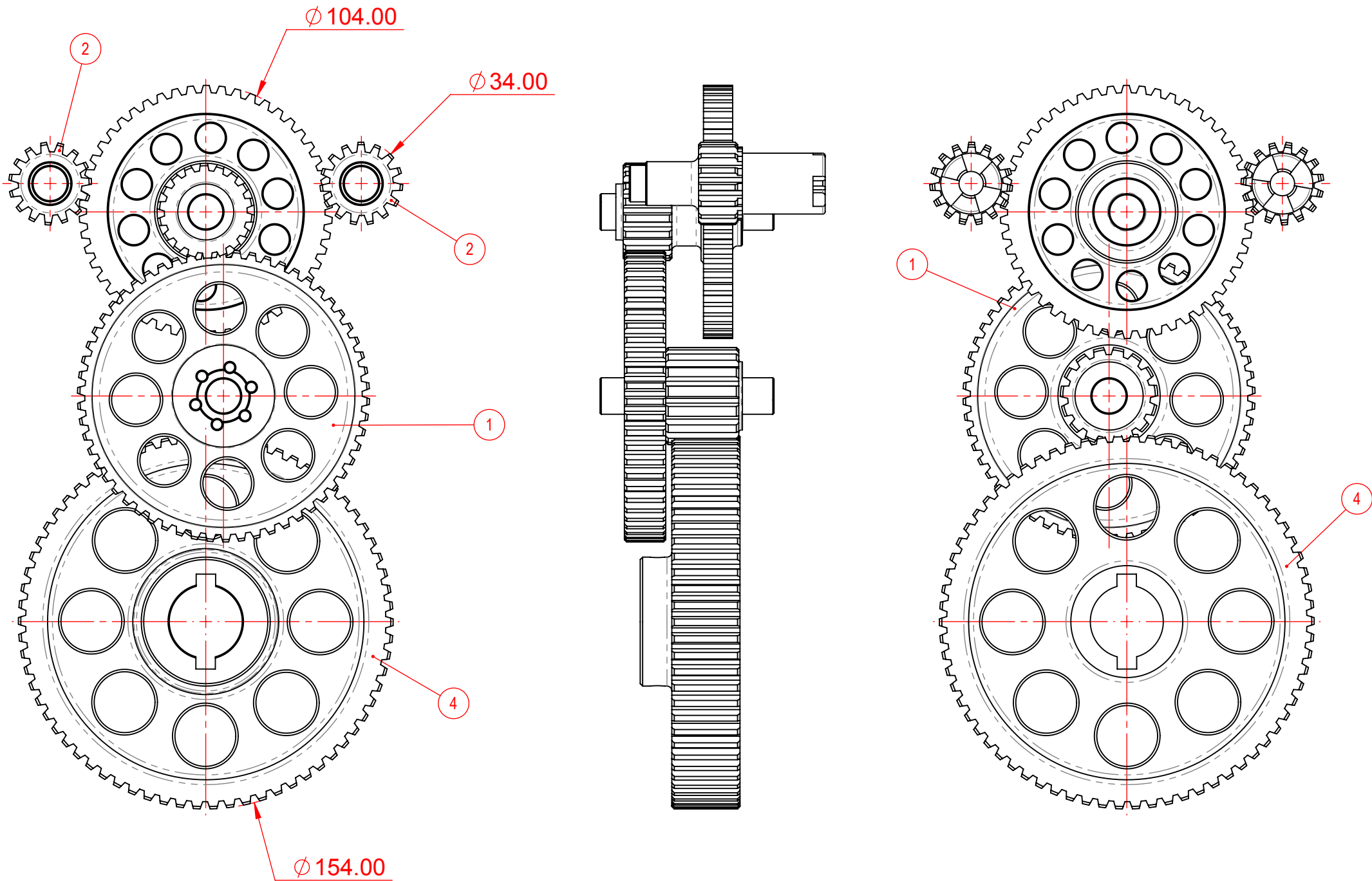
PROJECT REF:

PROJECT DESCRIPTION:

GENERAL TOLERANCES UNLESS SPECIFIED					UNLESS SPECIFIED IN CONTRACT ALL WELDS MUST BE PRODUCED BY QUALIFIED WELDERS TO BS EN287-1: 2004 - WELDING SYMBOLS TO BS499-2: 1980
X +/-0.50	X.X +/-0.25	X.XX +/-0.1	X +/-1°	X.X +/-0.5°	

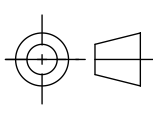
FLATNESS & SQUARE TOLERANCES:	M/C +/-0.2	FABRICATION: +/-1
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ITEM NO.	PART / DRG NUMBER	DESCRIPTION	Only Gears/QTY.
1	HORNET2-MA-07	GEARS 2 & 3 ASSEMBLY	1
2	HORNET2-MD-20	GEAR 6 - 15 TOOTH / MOD 2	2
3	HORNET2-MD-21	TOP MIDDLE GEAR	1
4	HORNET2-MD-24	GEAR 1 - 75 TOOTH / MOD 2	1

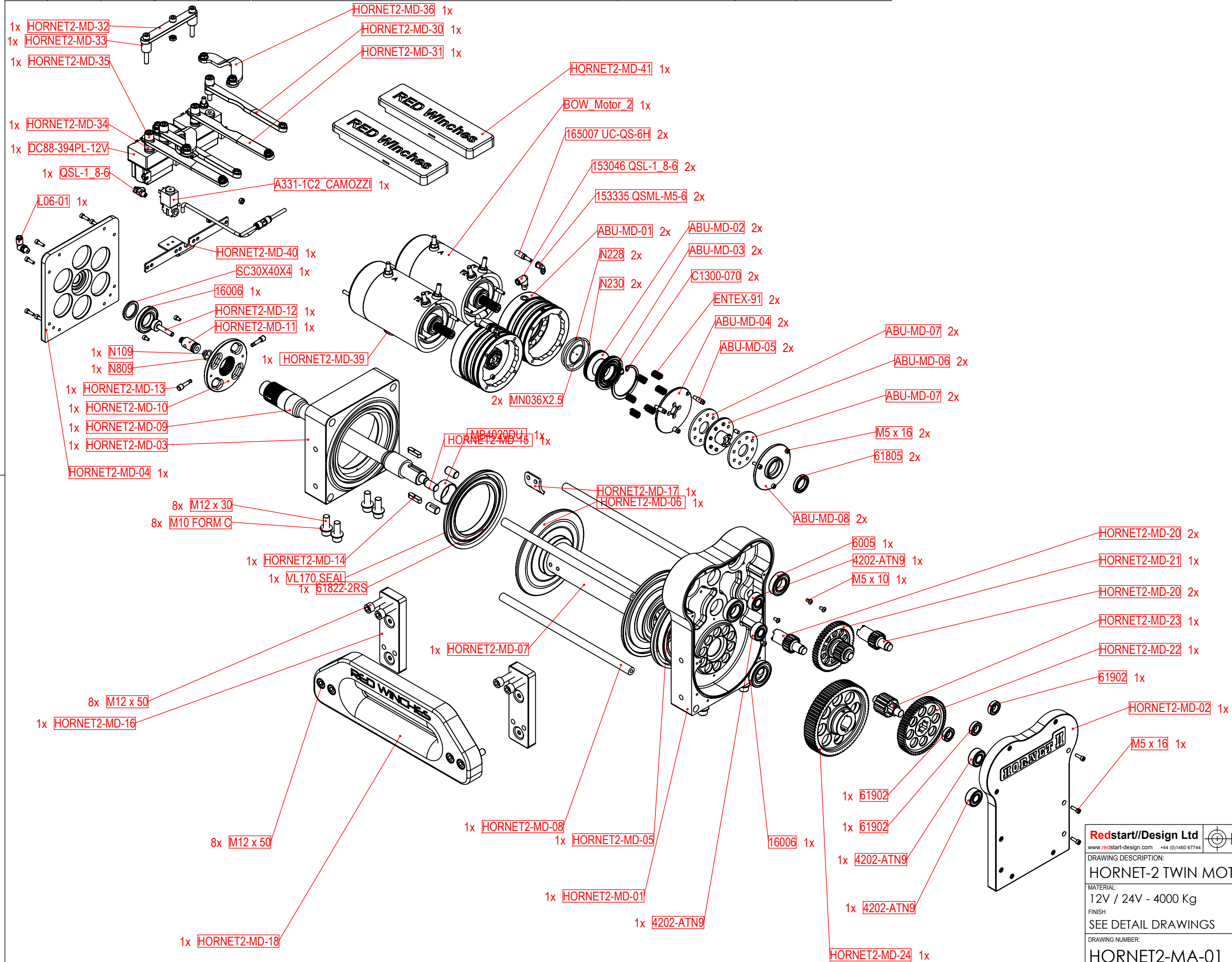


HORNET STANDARD GEARSET

PROJECT REF:		PROJECT DESCRIPTION:	
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		A3	N. JONES	04/12/2015
		QTY REQ	CHECKED	DATE
		1	N. JONES	04/12/2015
DRAWING DESCRIPTION:				
HORNET WINCH - TWIN MOTOR				
MATERIAL:				
12V / 24V - 4000 Kg				
FINISH				
ANODISE: RED / BLACK				
DRAWING NUMBER:	USED IN ASSY / FAB	SCALE	REVISION	SHT
HORNET2-MA-01	VARIOUS	1:2	A	4
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GENERAL TOLERANCES UNLESS SPECIFIED					UNLESS SPECIFIED IN CONTRACT ALL WELDS MUST BE PRODUCED BY QUALIFIED WELDERS TO BS EN287-1: 2004 - WELDING SYMBOLS TO BS499-2: 1980	FLATNESS & SQUARE TOLERANCES:	M/C +/-0.2	FABRICATION: +/-
X +/-0.50	X.X +/-0.25	X.XX +/-0.1	X +/-1°	X.X +/-0.5°				



 Redstart//Design Ltd www.redstart-design.com +44 (0)1460 67744		A3	DRAWN N. JONES	CHECKED N. JONES	DATE 04/12/2015
			DRAWING DESCRIPTION: HORNET-2 TWIN MOTOR WINCH		
MATERIAL: 12V / 24V - 4000 Kg					
FINISH SEE DETAIL DRAWINGS					
DRAWING NUMBER: HORNET2-MA-01			SCALE 1:7	REVISION A	SHT 6 OF 6
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