

## HCM-380 Coil Winding Machine



**HCM-380 shown above with 500mm faceplate, large safety guard, electronic foot pedal**

- Very well proven machine in service all over the world. Very easy to maintain with minimal fitted with very high quality components.
- Heavy duty, cast iron frame construction for extreme rigidity



- Winding motor is driven by an inverter for speed control
- Drive is via a three-speed mechanical gearbox providing very high torque (up to 980Nm). Three speed ranges can be selected so that the maximum winding speed can be easily controlled, and excessive speed eliminated. Within each speed range an adjustable potentiometer controls the maximum speed.
- Supplied with either a 500mm or 300mm diameter slotted faceplate.
- All machines have an interlocked safety guard for operator protection.
- All machines are fitted as standard with a digital revolution counter with slow down facility so that the last few turns are done at a slow speed. This means that the machine can stop at a precise angular position to suit the winding.
- Optionally a microprocessor can be fitted to allow multiple stops to be programmed and winding programs can be stored.
- Optionally an encoder can be fitted to that winding accuracy up to 0.1 degree can be achieved (often suitable for manufacturing and more complex windings)
- All machines are fitted with an electric brake to the winding motor
- As standard all machines have a wire guide bar fitted to facilitate the manual alignment of the winding wires
- All machines are 230V single phase 50/60Hz
- HCM-380L for winding electric motor stator coils up to 100kW/150HP
- HCM-380 for winding electric motor stator coils up to 250kW
- HCM-380S for winding electric motor stator coils up to 300kW

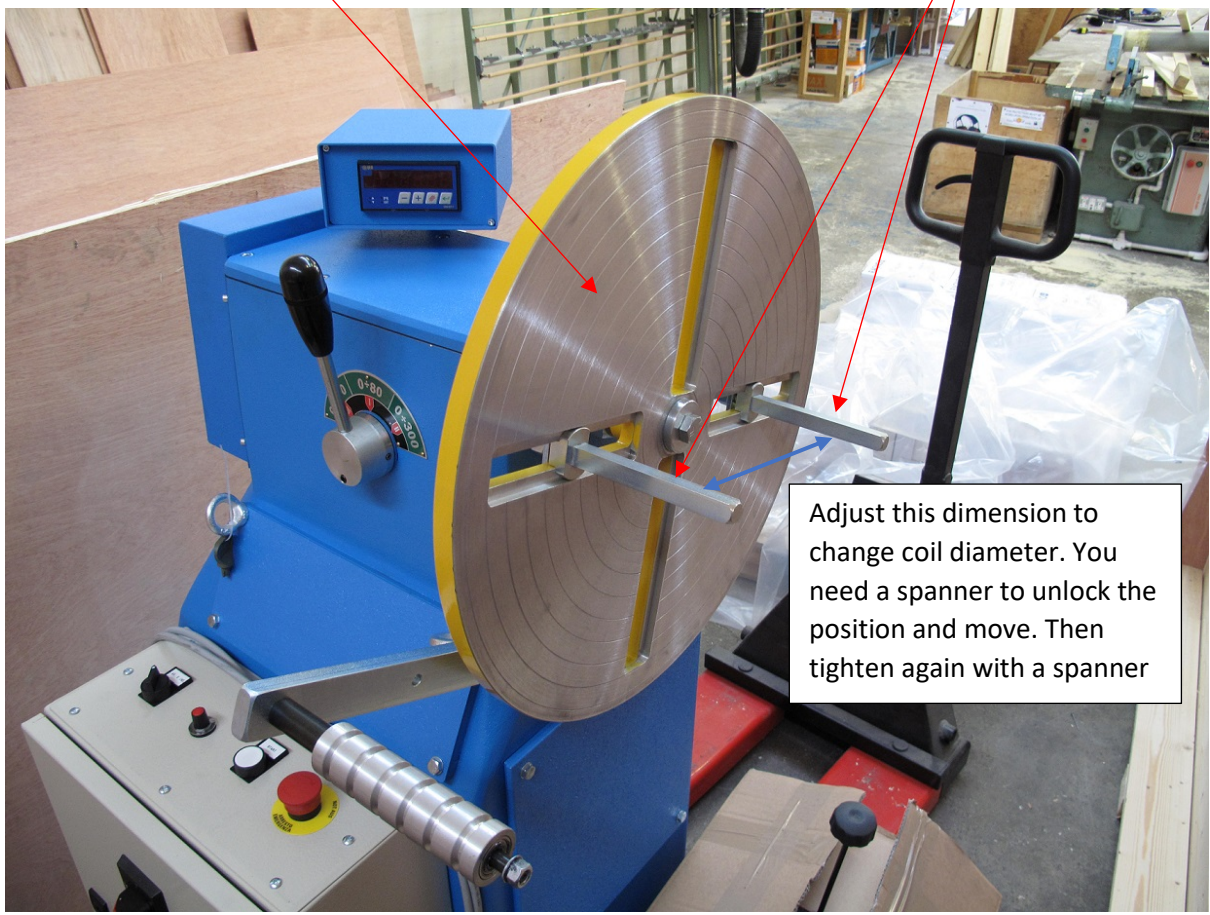
Machine	Inverter	Max. coil weight	Max. Coil Diameter	Safety Guard Diameter	Faceplate Diameter
HCM-380L	1.2kW	30kg	800mm	630mm	300mm
HCM-380	1.5kW	40kg	1300mm	950mm	500mm
HCM-380S	2.2kW	55kg	1300mm	950mm	500mm



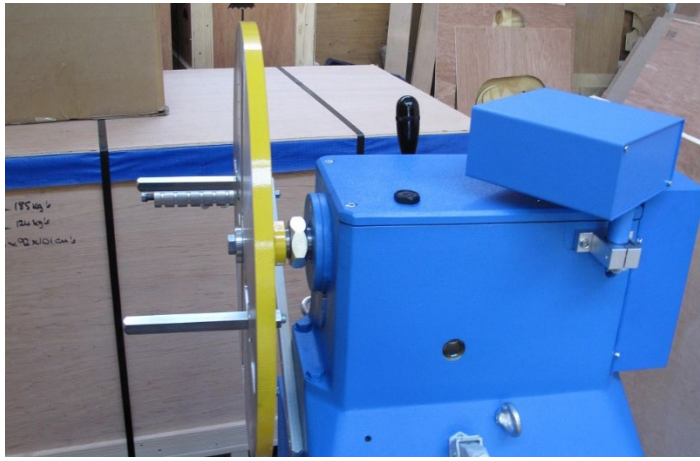
### HCM-380

500mm diameter slotted faceplate

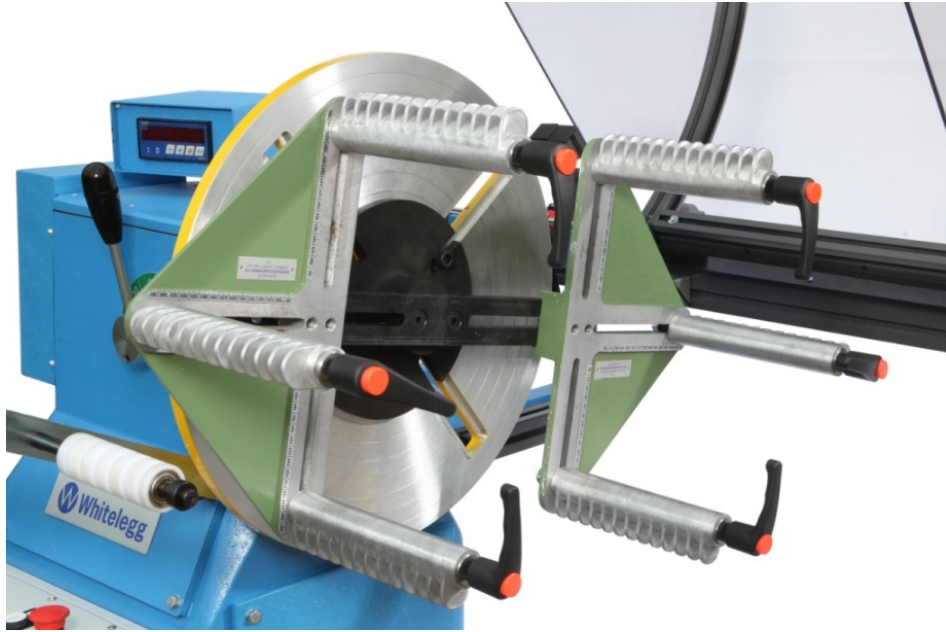
Steel mandrel. Onto these fit PAC and PAE winding arbors. These slide in the slot to change the coil diameter



Adjust this dimension to change coil diameter. You need a spanner to unlock the position and move. Then tighten again with a spanner







**HCM-380 fitted with large safety guard and showing AJ1 winding fixture with B Arbors**



**HCM-380 with PAC concentric winding arbors**



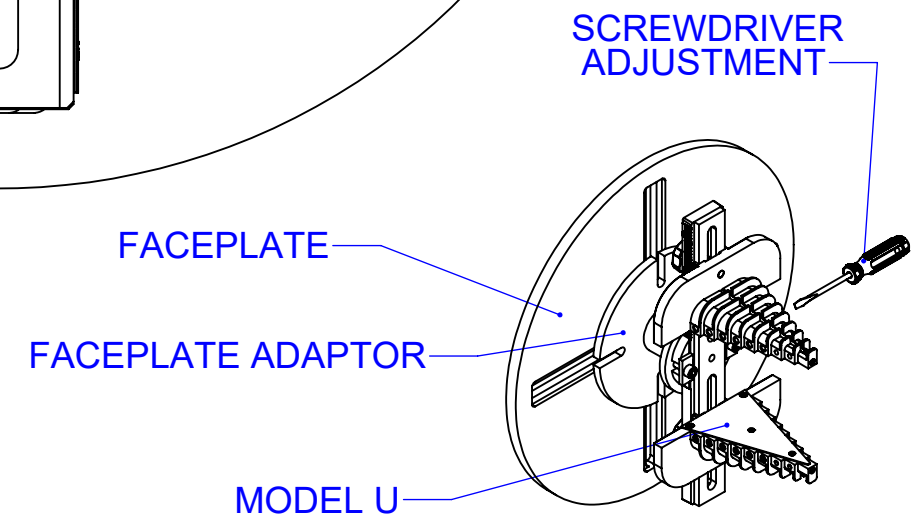
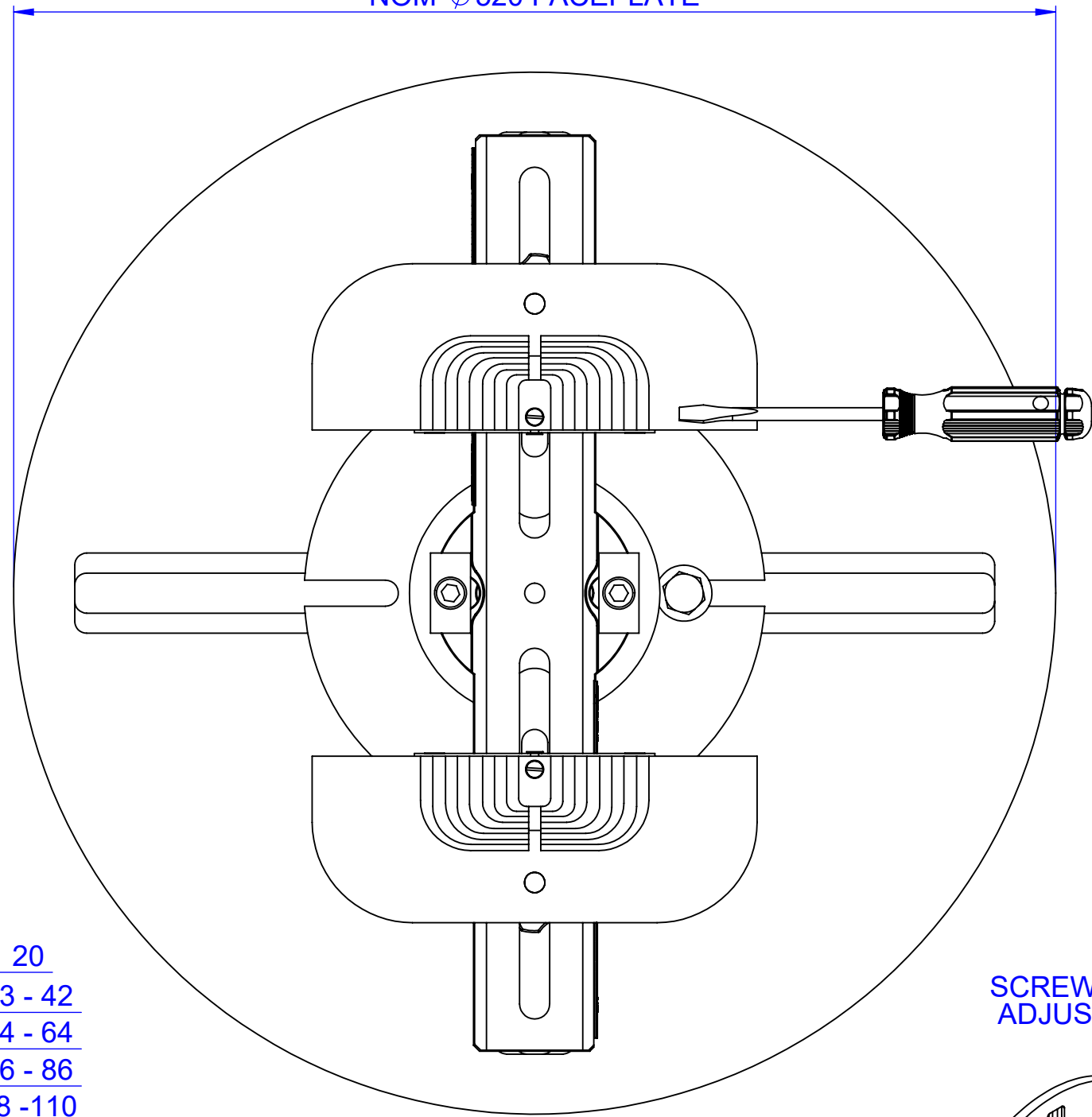
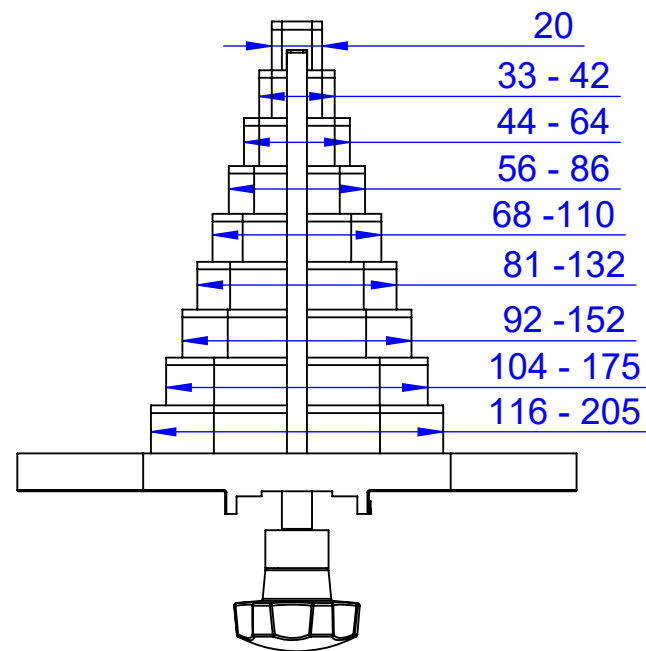
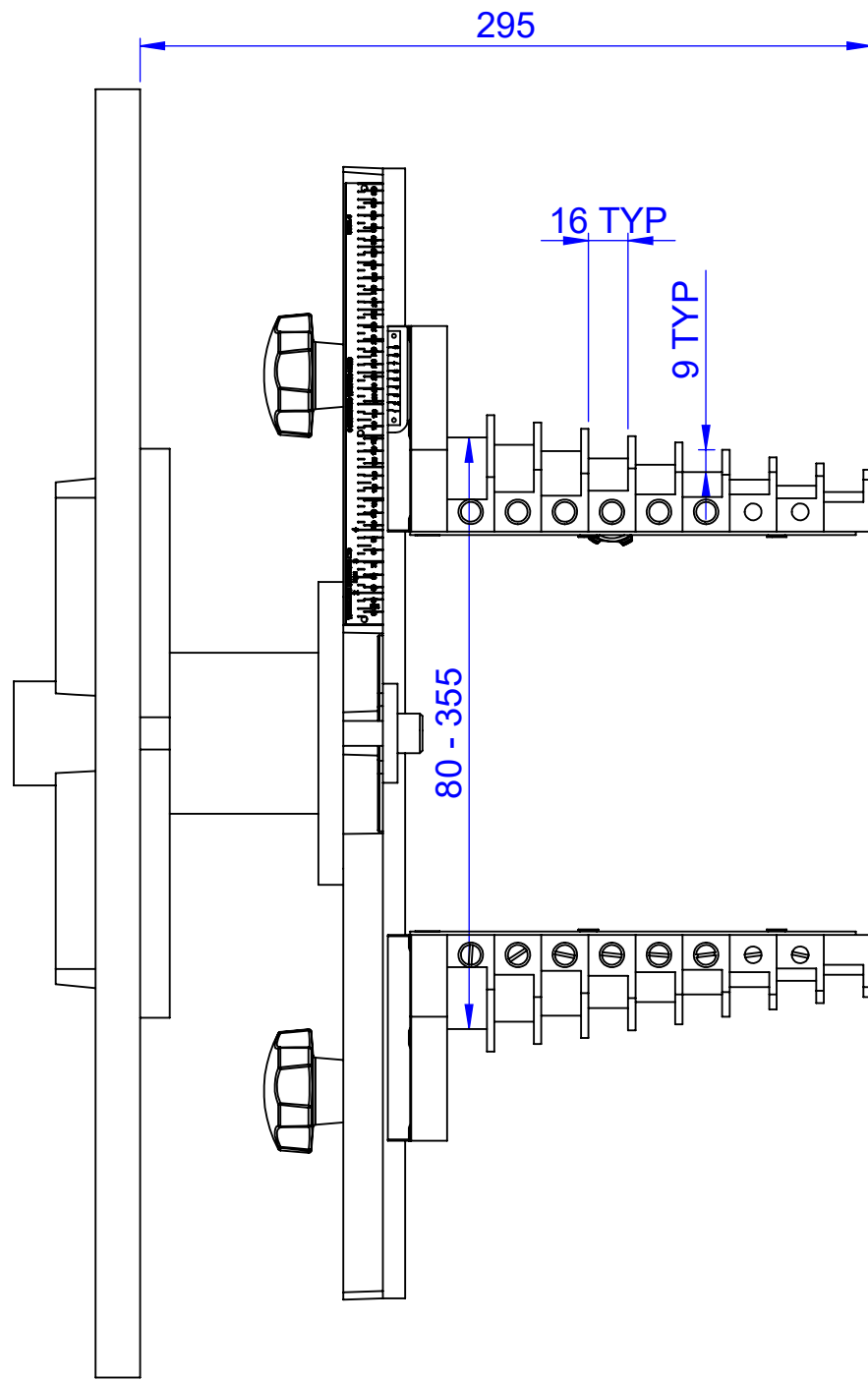
THIRD ANGLE PROJECTION

DO NOT SCALE - IF IN DOUBT - ASK.

REMOVE ALL BURRS AND ROUGH EDGES

MARK WITH PART No: IF SHOWN

NOM Ø520 FACEPLATE



TOLERANCES, UNLESS OTHERWISE STATED:  
 METRIC (mm) 0 +/-0.5  
 0.0 +/-0.2  
 0.00 +/-0.12  
 SQUARENESS: MACHINED FACES: 0.4mm/100mm  
 UNMACHINED: 0.8mm/100mm.  
 HOLES ARE CLASS H12 AND TRUE POSITION.  $\text{⌀} \ 0.4$   
 CONCENTRICITY ( MACHINED) 0.1mm  
 SURFACE FINISH: 3.2

4		
3		
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ISSUE	DETAILS OF CHANGE	DATE
QUANTITY REQUIRED PER ASSEMBLY / PER MACHINE		1 OFF

MATERIAL	N/A
FINISH	NATURAL
PROJECT	MODEL U

**WHITELEGG MACHINES LTD**  
 4 THE BOULEVARD, ALTIRA PARK,  
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DRAWN:	DATE:
<i>e.N.M</i>	06/03/2020
CHKD:	APPD:
CHK	APP
SCALE:	SHT OF
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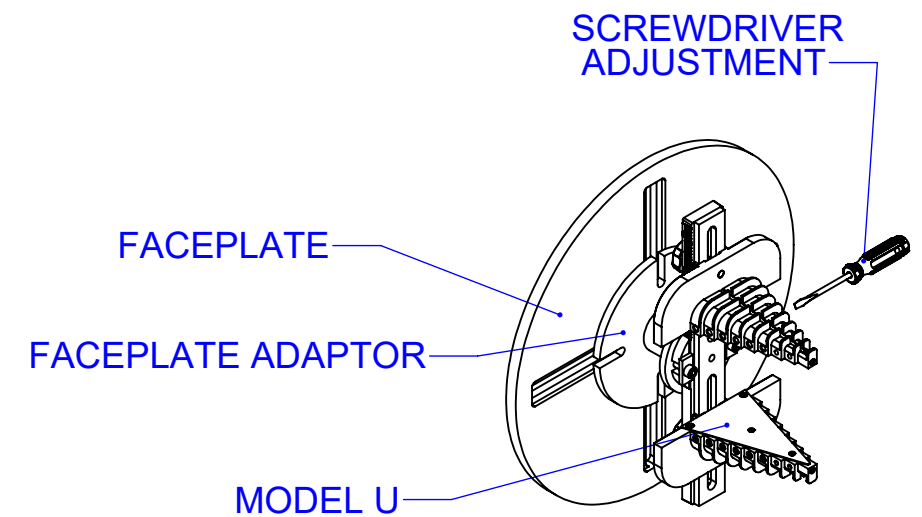


THIRD ANGLE PROJECTION

DO NOT SCALE – IF IN DOUBT – ASK.

REMOVE ALL BURRS AND ROUGH EDGES

MARK WITH PART No: IF SHOWN



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                   0.0 +/-0.2  
                   0.00 +/-0.12  
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QUANTITY REQUIRED PER ASSEMBLY / PER MACHINE		1 OFF

MATERIAL	N/A
FINISH	NATURAL
PROJECT	MODEL U

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TITLE:	
<b>MODEL U ON 500mm FACEPLATE</b>	
A3 DRAWING	PART No:
W17004A	17-004A
REV	
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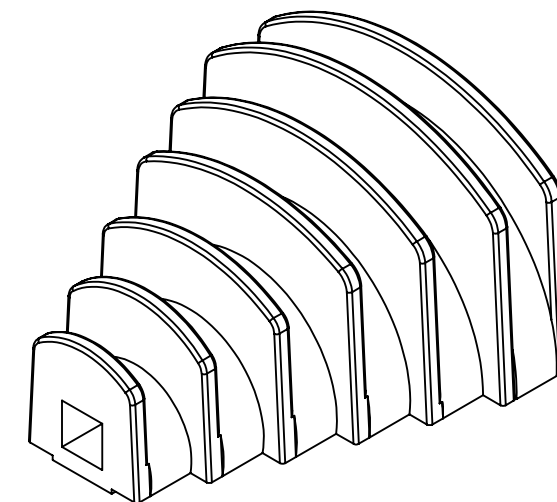
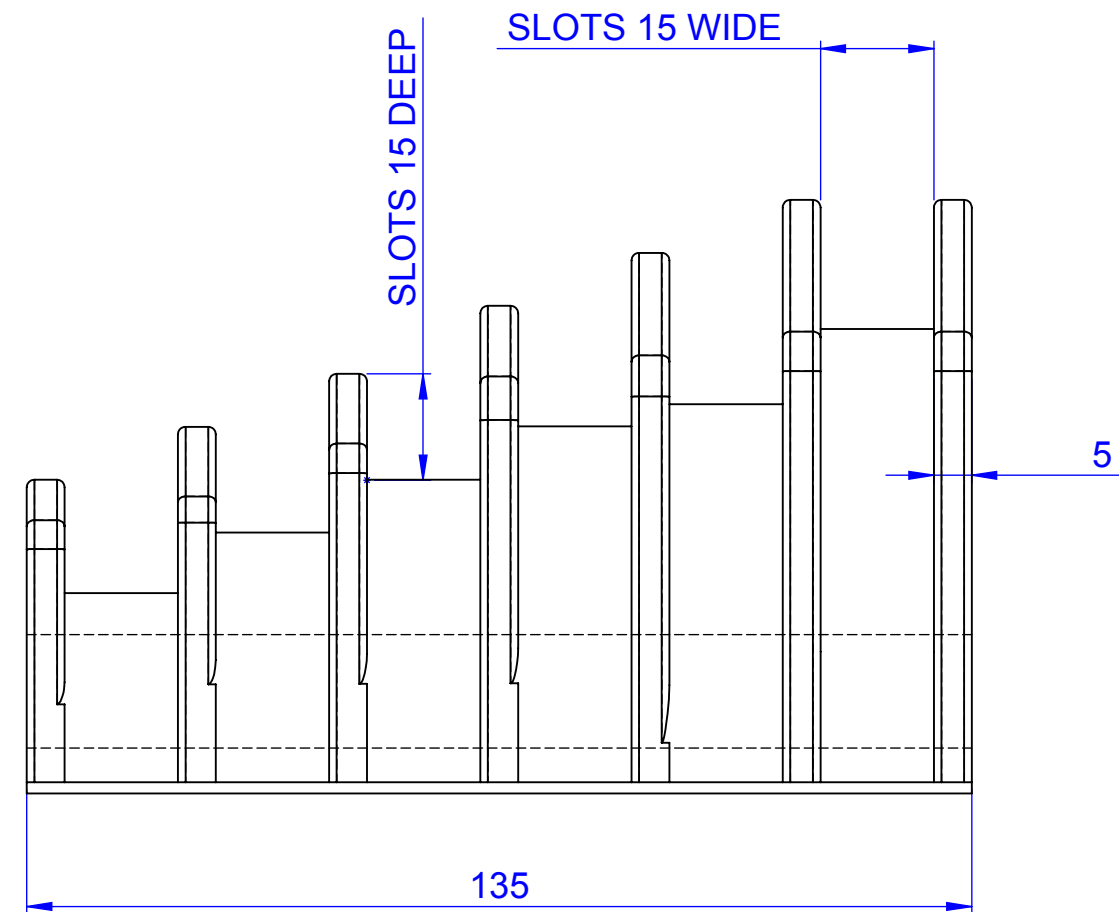
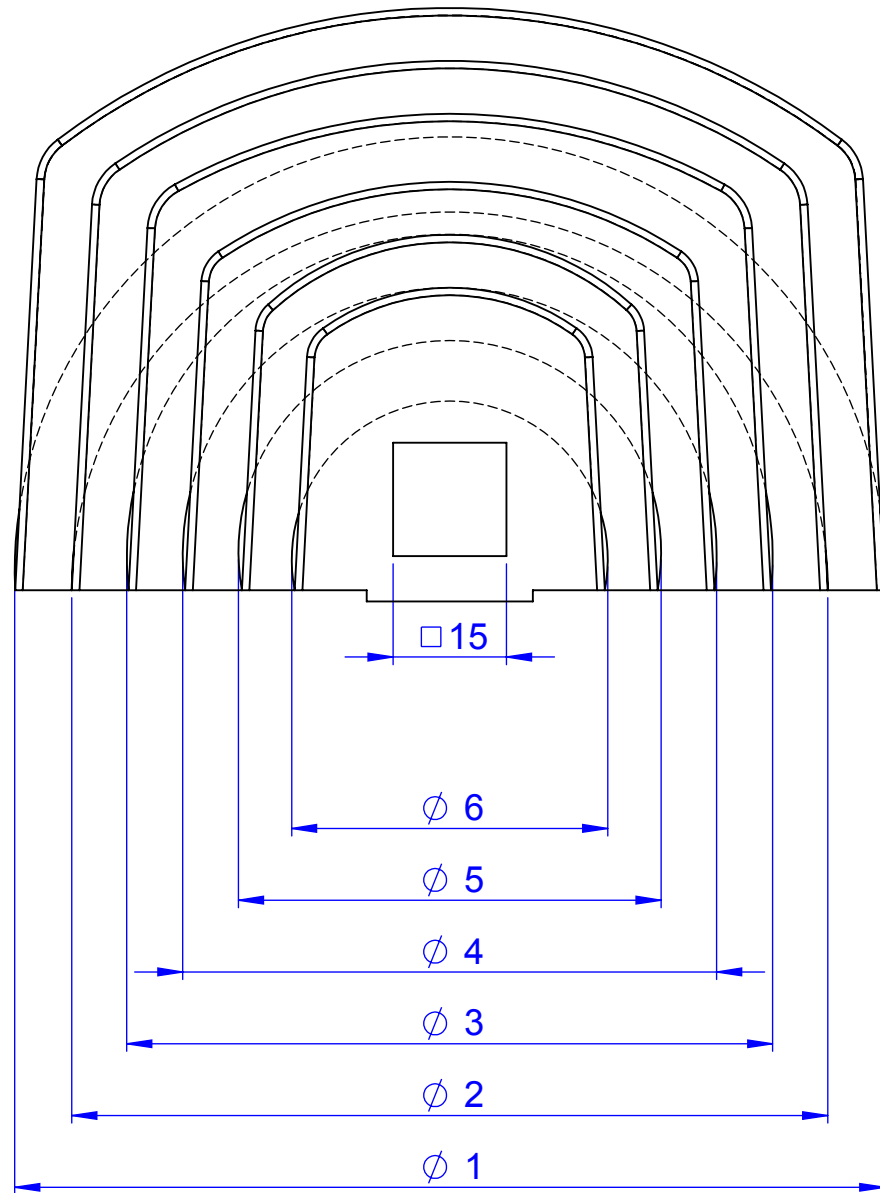
THIRD ANGLE PROJECTION

DO NOT SCALE – IF IN DOUBT – ASK.

REMOVE ALL BURRS AND ROUGH EDGES

MARK WITH PART No: IF SHOWN

REF	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6
PAC 10	90	80	70	60	50	40
PAC 15	115	100	85	70	55	40
PAC 20	140	120	100	80	60	40
PAC 25	165	140	115	90	65	40
PAC 30	190	160	130	100	70	40



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ISSUE	DETAILS OF CHANGE	DATE
QUANTITY REQUIRED PER ASSEMBLY / PER MACHINE		1 PAIR

MATERIAL  
N/A

FINISH  
NATURAL

PROJECT  
PAC ARBOR

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SCALE:  
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DATE:  
02/05/2018

APPD:  
APP

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TITLE:  
**PAC CONCENTRIC ARBORS**

A3 DRAWING  
W700003

PART No:  
PAC-###

REV  
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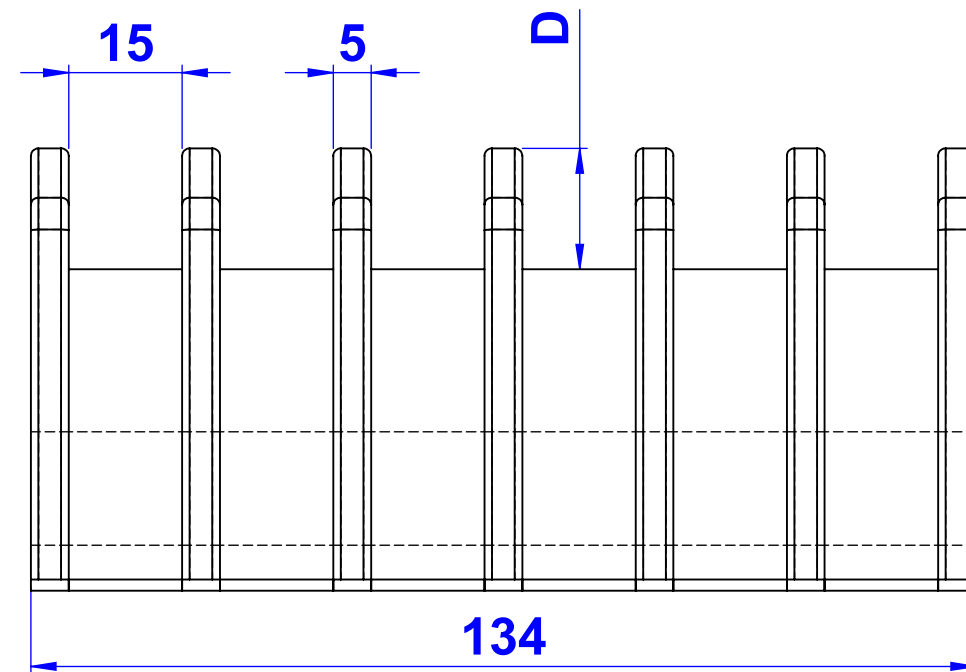
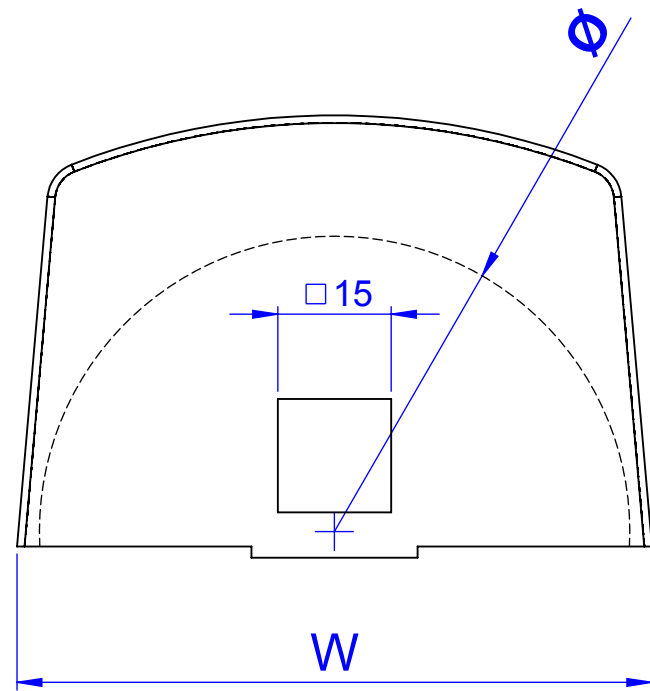
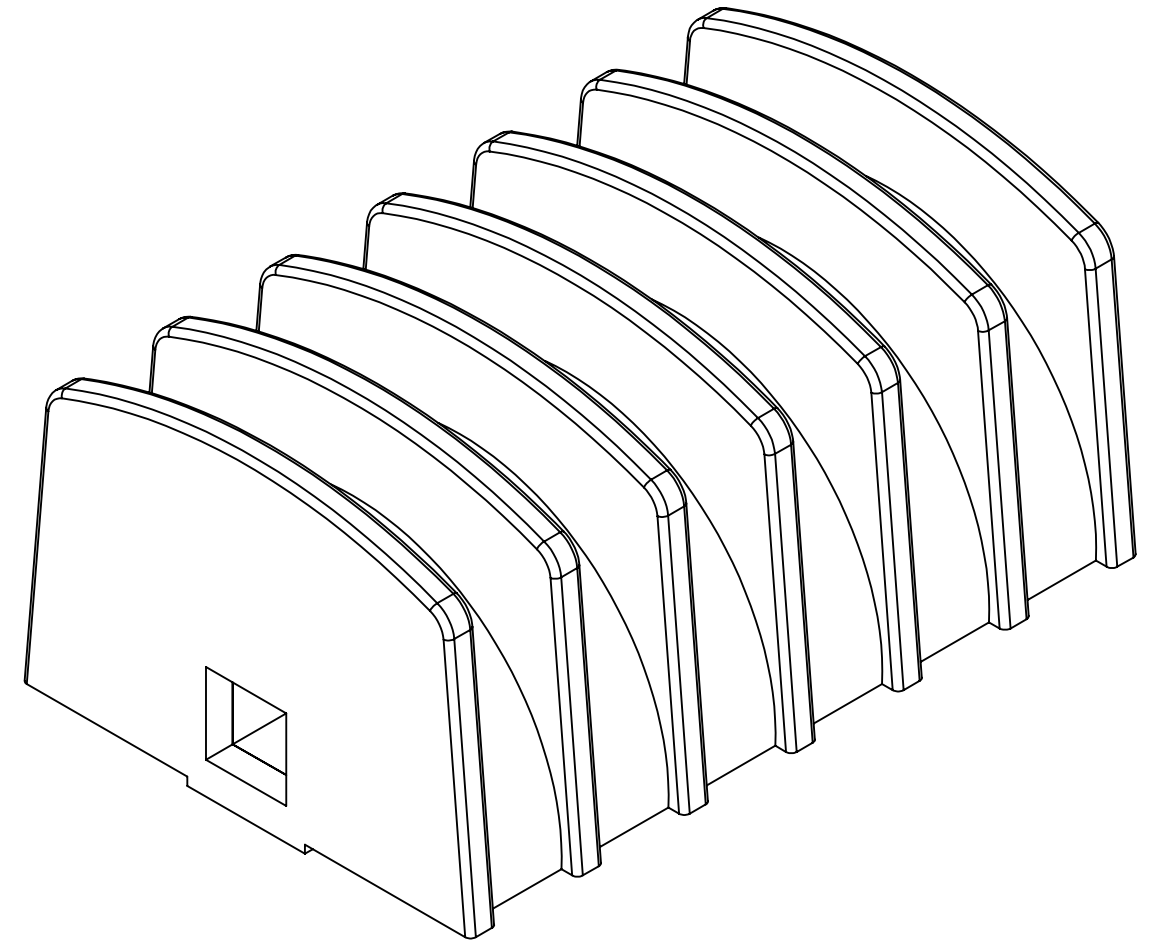
THIRD ANGLE PROJECTION

DO NOT SCALE – IF IN DOUBT – ASK.

REMOVE ALL BURRS AND ROUGH EDGES

MARK WITH PART No: IF SHOWN

REF	Ø	W	D
PAE 40	Ø36	38	11
PAE 60	Ø60	63	10
PAE 80	Ø80	84	16
PAE 100	Ø100	104	15
PAE 120	Ø120	123	20
PAE 150	Ø158	161	30



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MATERIAL  
N/A

FINISH  
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*e.n.m*

DATE:  
02/05/2018

CHKD:  
CHK

APPD:  
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TITLE:  
**PAE  
EQUAL ARBORS**

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SCALE:  
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A3 DRAWING  
W700001

PART No:  
PAE-###

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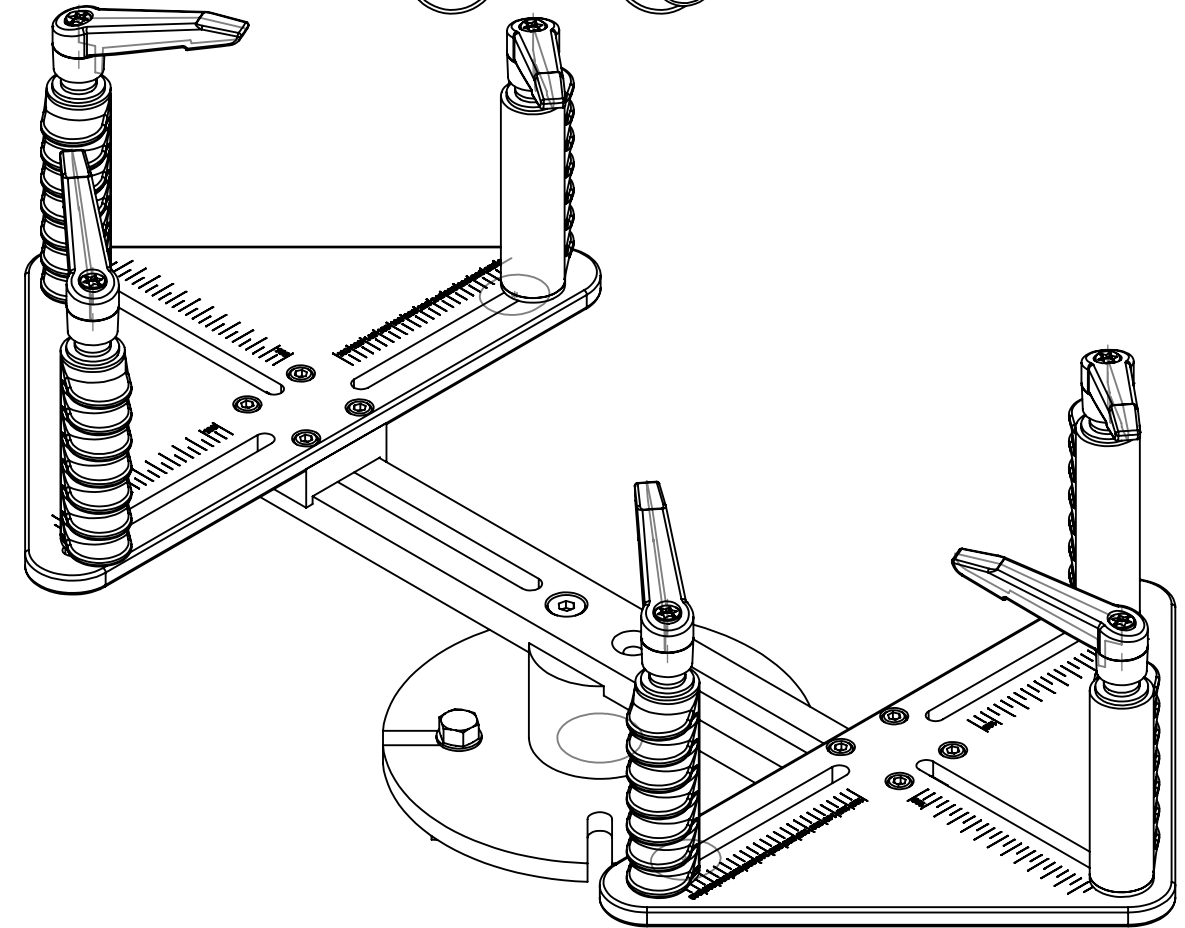
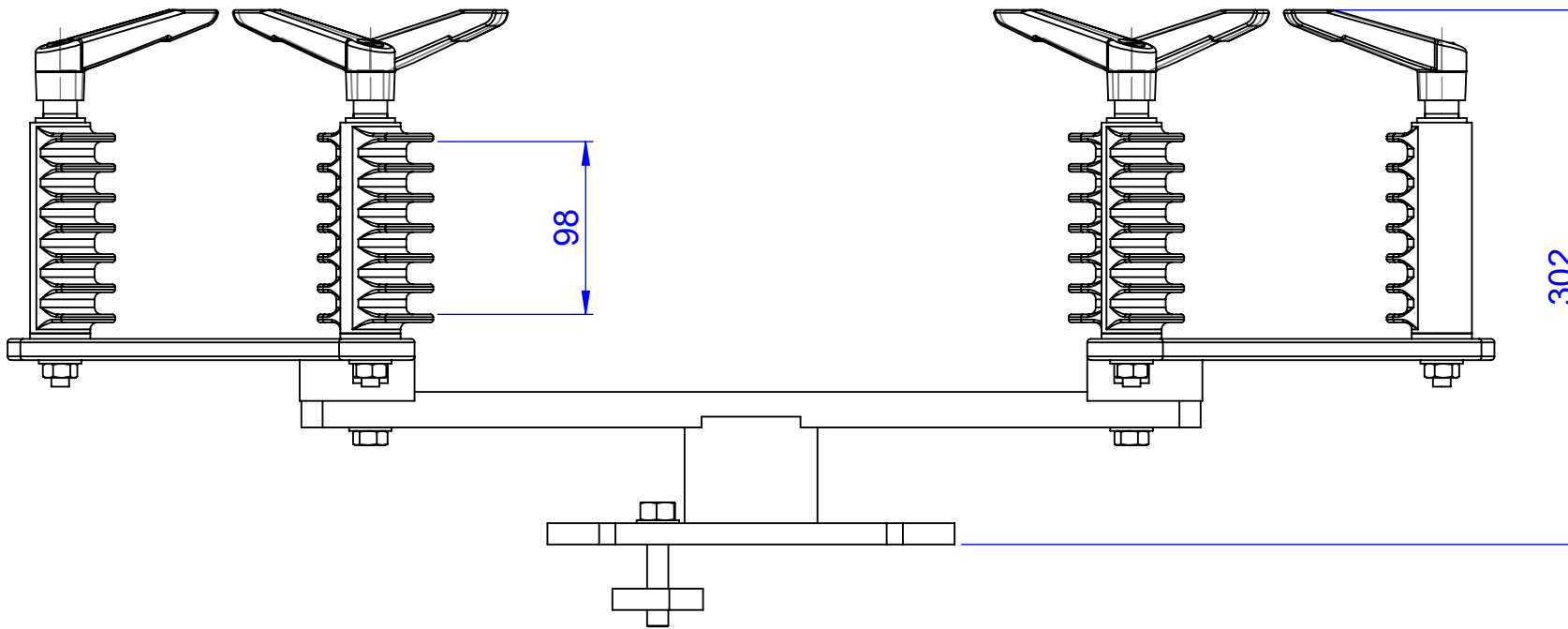
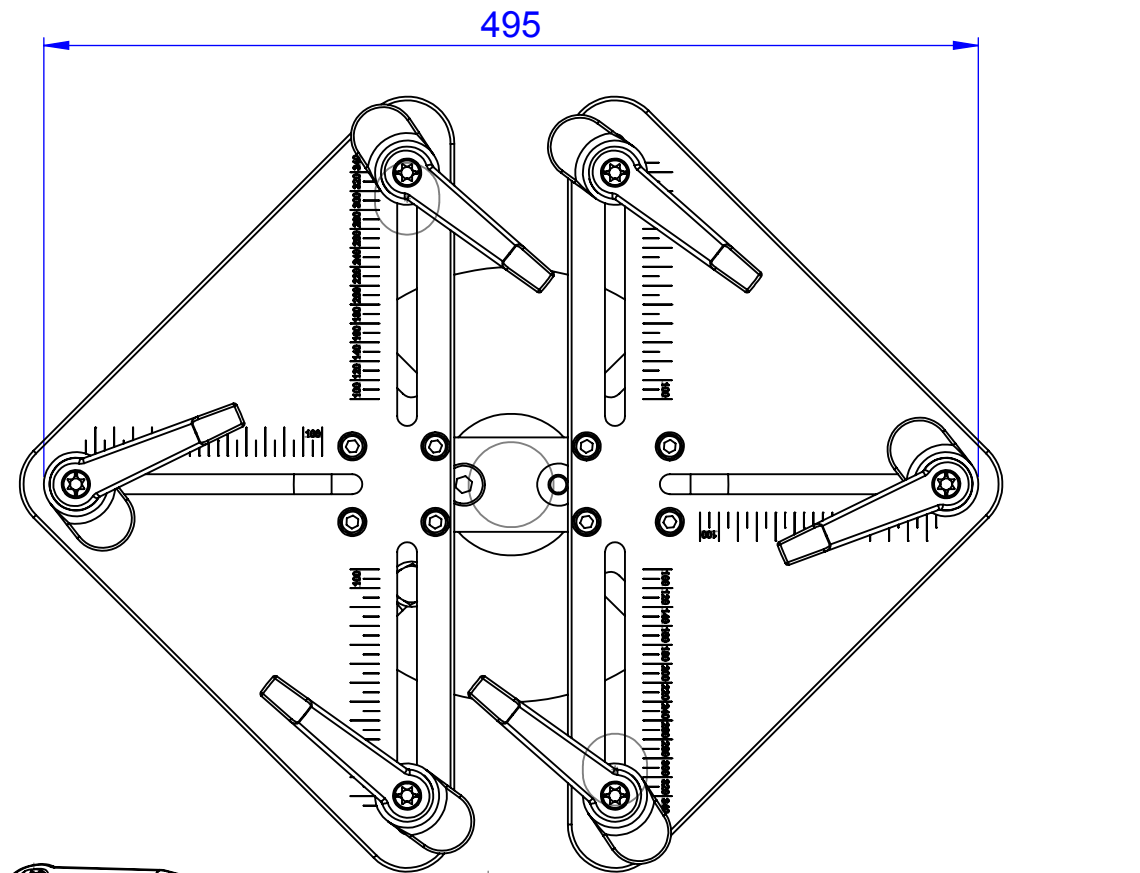
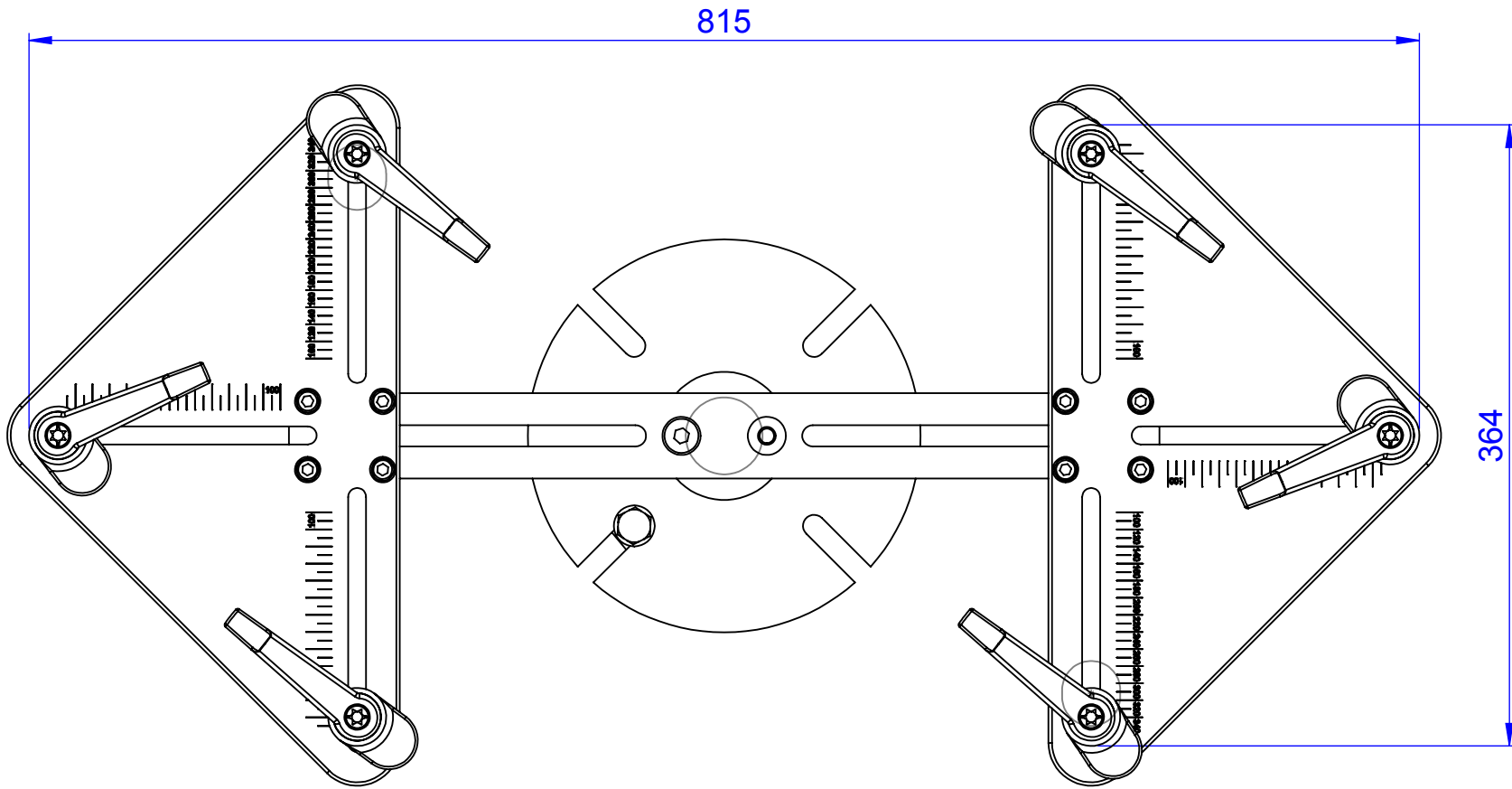


THIRD ANGLE PROJECTION

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ISSUE	DETAILS OF CHANGE	DATE
QUANTITY REQUIRED PER ASSEMBLY / PER MACHINE		1 OFF

MATERIAL  
N/A

FINISH  
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CHKD:  
CHK

SCALE:  
1:4

DATE:  
31/01/2019

APPD:  
APP

SHT OF  
1 1

TITLE:  
**A TYPE ARBORS  
- ON AJ1 WINGS**

A3 DRAWING  
W504061A

PART No:  
504-061A

REV  
0

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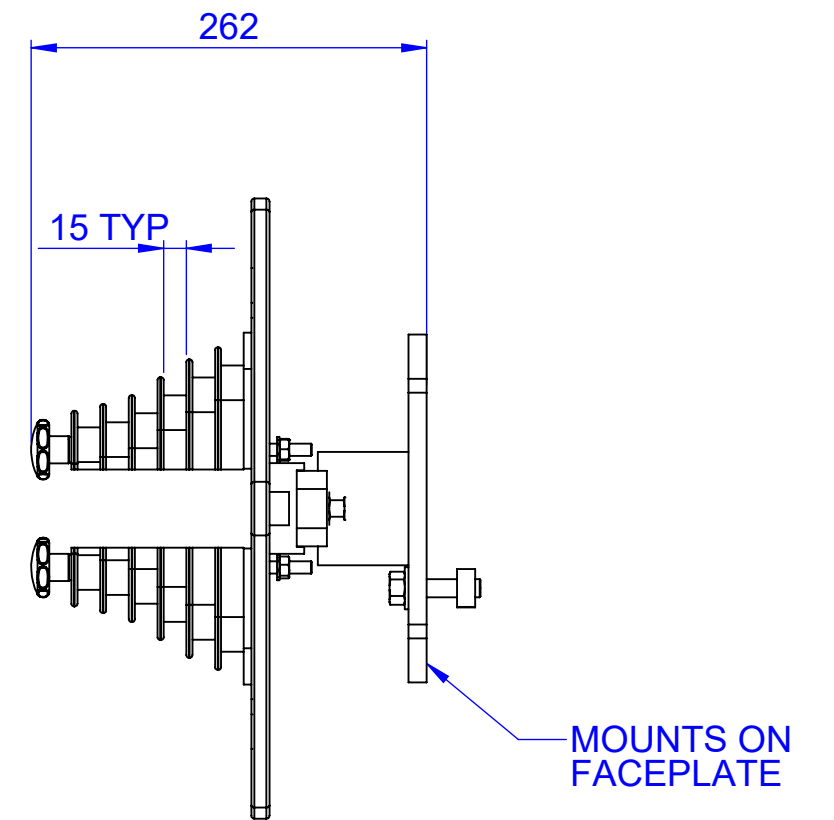
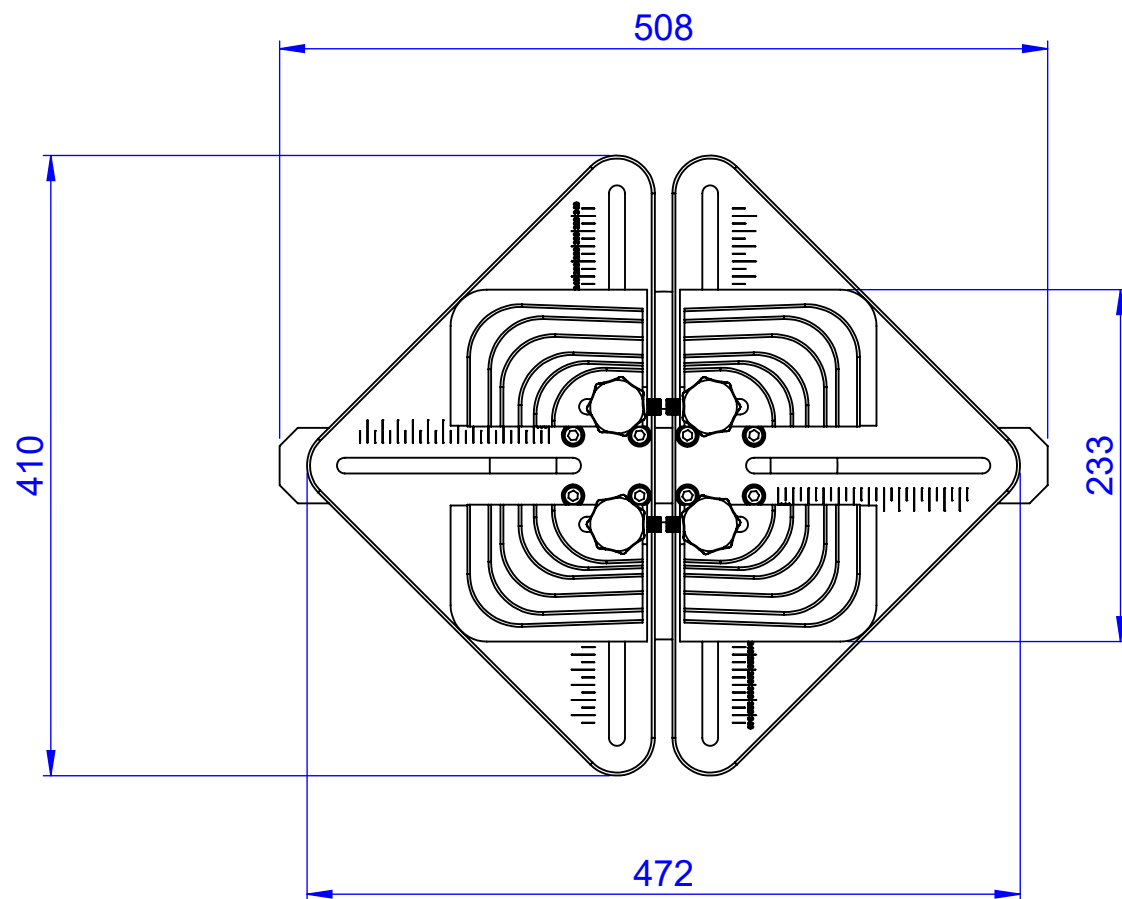
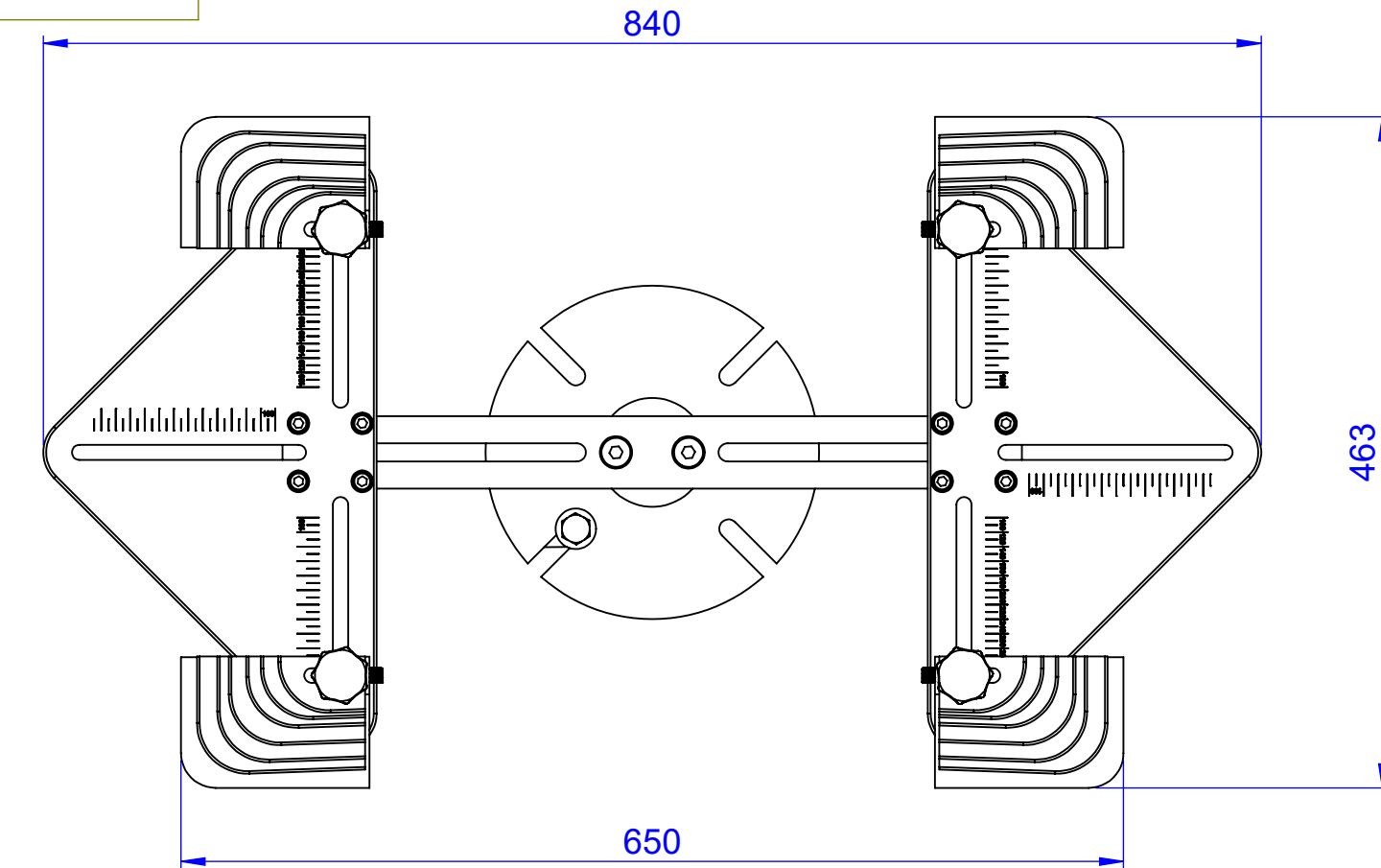


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ISSUE	DETAILS OF CHANGE	DATE	
QUANTITY REQUIRED PER ASSEMBLY / PER MACHINE		1 OFF	

MATERIAL  
N/A

FINISH  
NATURAL

PROJECT  
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DATE:  
28/04/2020

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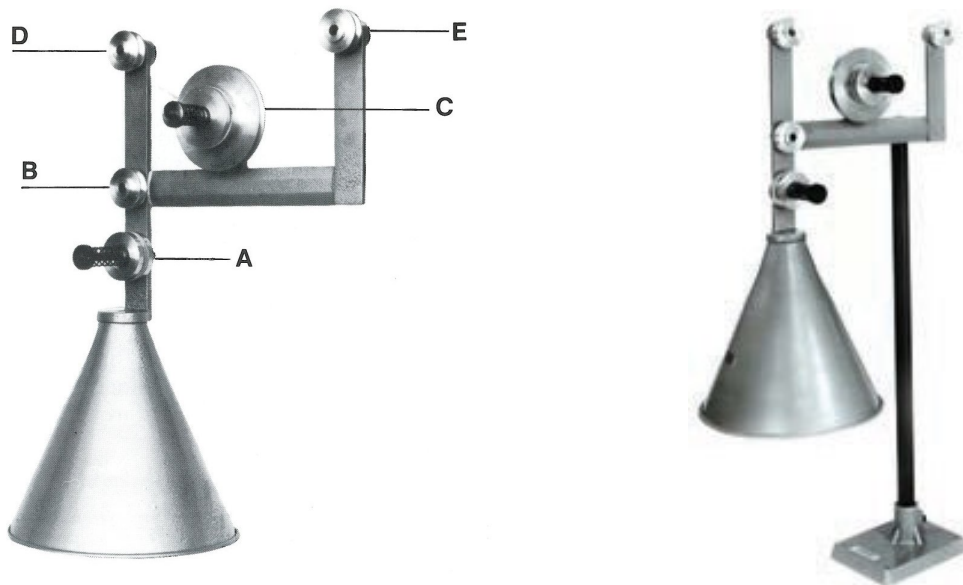
TITLE:  
**VX6-4 MOUNTED ON  
 - AJ 1 FIXTURE**

A3 DRAWING PART No: REV  
**W705042 705-042 0**

## OPERATING INSTRUCTIONS

### WIRE TENSIONING AND DE-REELING UNIT

**Type TI:** for a static reel. 0.3-2.0 mm diameter wire



Place the reel of copper wire on the ground centrally beneath the wire guide funnel, allowing sufficient distance for the wire to unwind smoothly.

For those units supplied with BM coil winding machines, a base, plastic case and funnel are also supplied to hold the coil of wire.

Pass the wire through the tube in the funnel, then through the two discs with felt pads (A), onto pulley (B), around pulley (C), onto pulley (D) and finally over pulley (E).

Pulley (C) is provided with a brake which is adjusted by turning the knurled knob which acts on a spring.

Tension can also be regulated by the knurled nut on the discs (A)





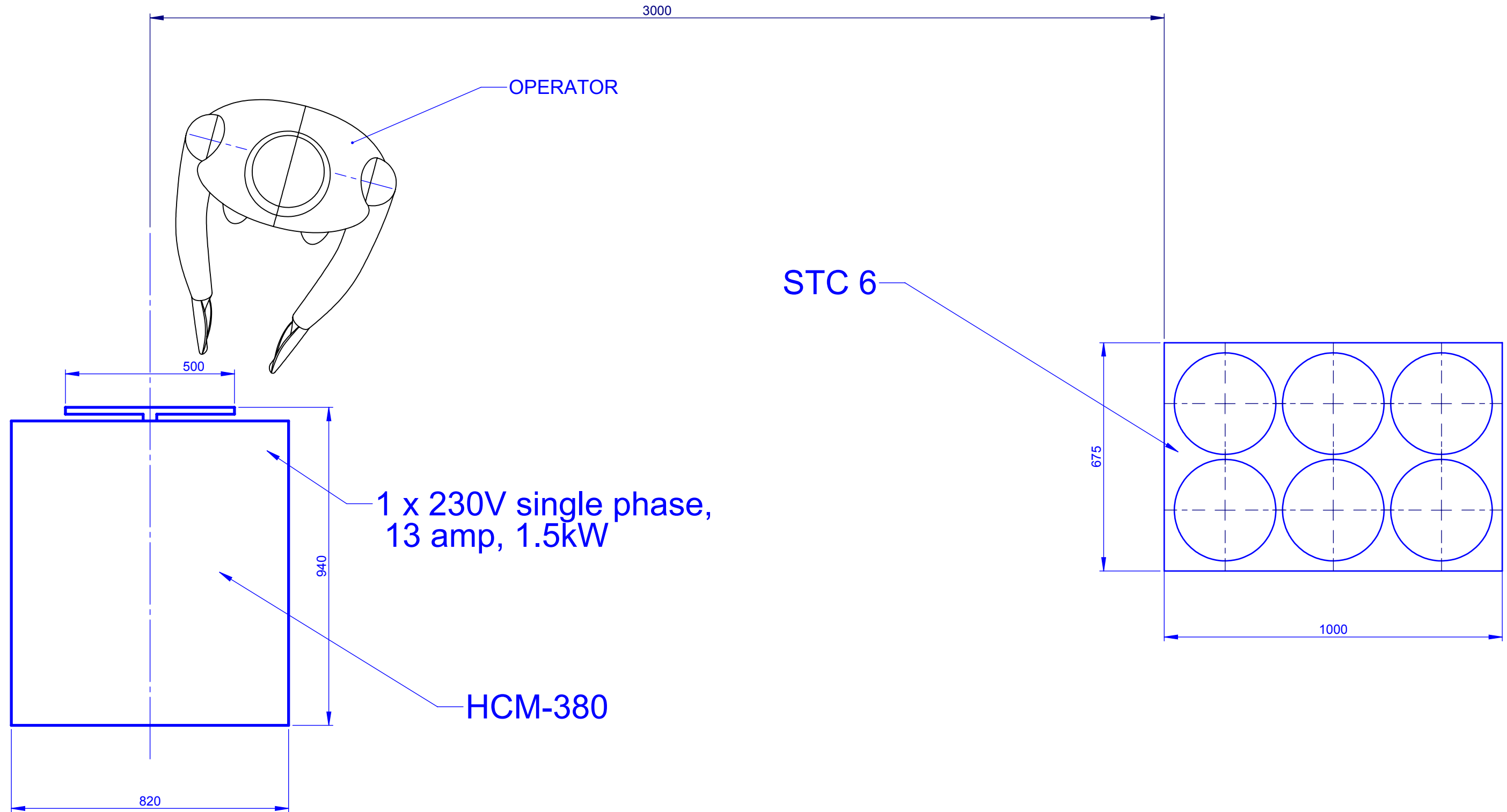


THIRD ANGLE PROJECTION

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 SURFACE FINISH: 3.2

ISSUE	DETAILS OF CHANGE	DATE
1	DETS1	04/03/2019

QUANTITY REQUIRED PER ASSEMBLY / PER MACHINE	1 OFF
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MATERIAL	N/A
FINISH	N/A
PROJECT	N/A

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CHKD: CHK	APPD: APP
SCALE: 1 : 1	SHT OF 1 1

TITLE: <b>FLOOR PLAN HCM-380 WITH STC 6</b>	
A3 DRAWING <b>WHCM02A</b>	PART No: <b>N/A</b>
REV <b>0</b>	