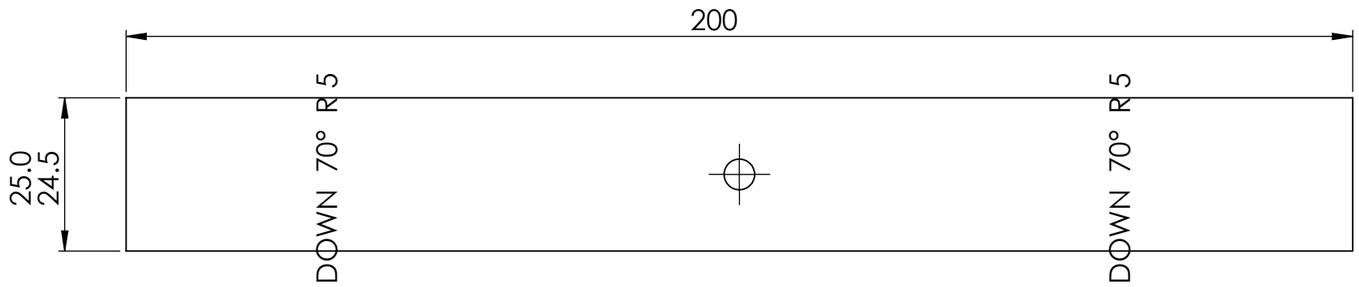
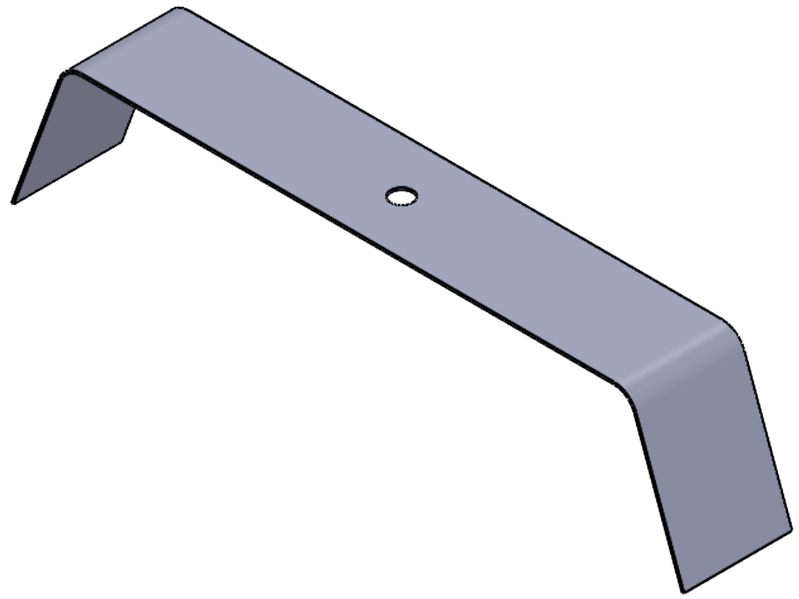
WorldSkills Industrial Mechanics Skill # 1

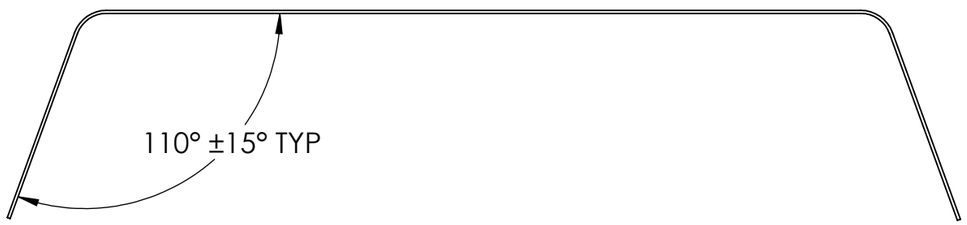
Mechanical Assembly & Machining Detail Drawings

WSC2026_TPXX_AA_BB_EN_MULTI-SHEET.dwg

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PART #:	1000	MTL:	ALUM
SCALE:	1:1	QNTY:	1

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Drawing Title:

WSC2026_TP01_CA_1000_EN

Scale: NTS

SCM: CRAIG BRAZIL

Drawn by: SIMON HEATHCOTE

Sheet Size: A3 | **Dwg No:** 1 OF 1

Date: 26_08_2026

Notes:

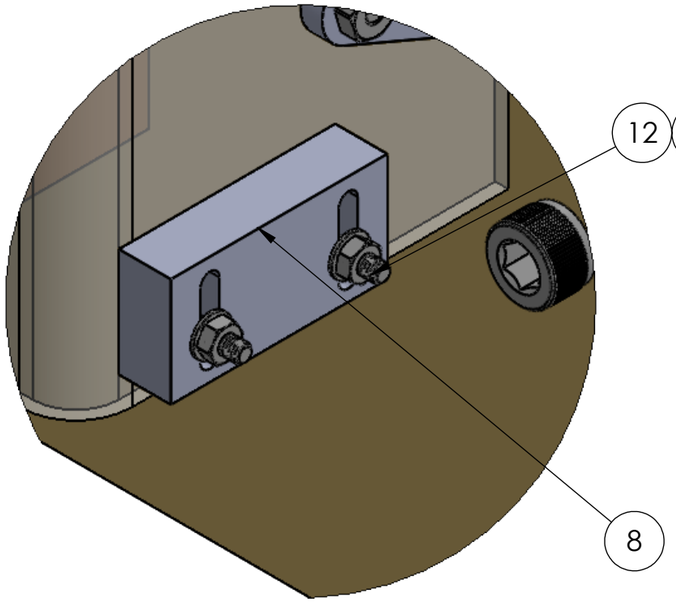
MATERIAL IS 0.5 THICK

Skill Name:

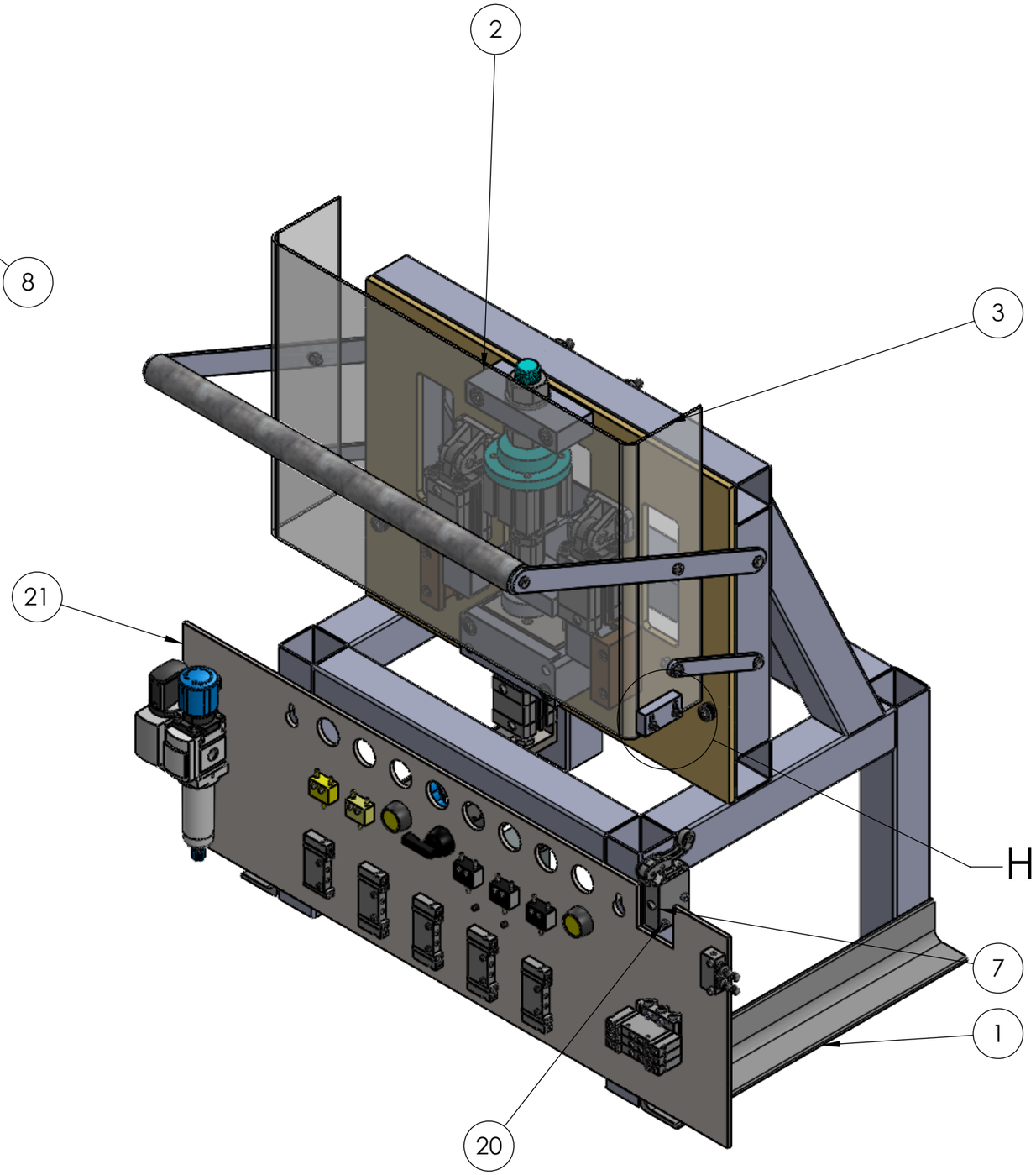
INDUSTRIAL MECHANICS

Skill Number:

01



DETAIL H



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Drawing Title:

WSC2026_TP01_CA_100_EN

Scale: 1 : 5

SCM: CRAIG BRAZIL

Drawn by: SIMON HEATHCOTE

Sheet Size: A3 | **Dwg No:** 1 of 3

Date: 25/08/2026

Notes:

PROJECTION

Skill Name:

INDUSTRIAL MECHANICS

Skill Number:

01

WSI

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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	200	WELDMENT	1
2	300	BACK PLATE ASSEMBLY	1
3	107	SAFETY SHIELD	1
4	105	HANDLE	1
5	102	LONG ARM	2
6	101	SHORT ARM	2
7	8049239 VMEF-RT-M32-M-G18---(1)	SAFETY SWITCH	1
8	104	SAFETY SWITCH STRIKER	1
9	91290A129	M10 X 120 SHCS	2
10	91455A140	M10 STEEL WASHER	4
11	90591A171	M10 NUT	4
12	91239A152	M4 X 20 BUTTON HEAD HEX DRIVE SCREW	2
13	98269A430	M4 STEEL WASHER	4
14	90593A003	M4 NUT	2
15	90854A152	M6 X 15 STEEL HHCS	2
16	91310A333	M6 X 20 STEEL HHCS	4
17	94645A205	M6 NYLON-INSERT LOCKNUT	8
18	91280A351	M6 X 65 HHCS	4
19	91290A541	M10 X 75 SHCS	2
20	91290A176	M4 X 25 SHCS	2
21	500	PNEUMATIC ASSEMBLY	1

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Drawing Title:

WSC2026_TP01_CA_100_EN

Scale: N/A

SCM: **CRAIG BRAZIL**

Drawn by: **SIMON HEATHCOTE**

Sheet Size: A3 | **Dwg No:** 3 of 3

Date: 25/08/2026

Notes:

PROJECTION

Skill Name:

INDUSTRIAL MECHANICS

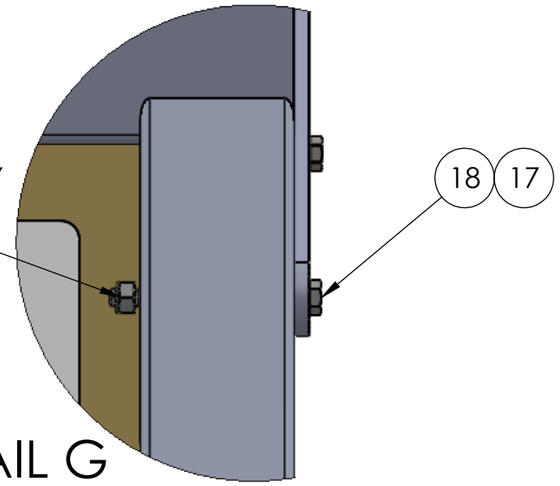
Skill Number:

01

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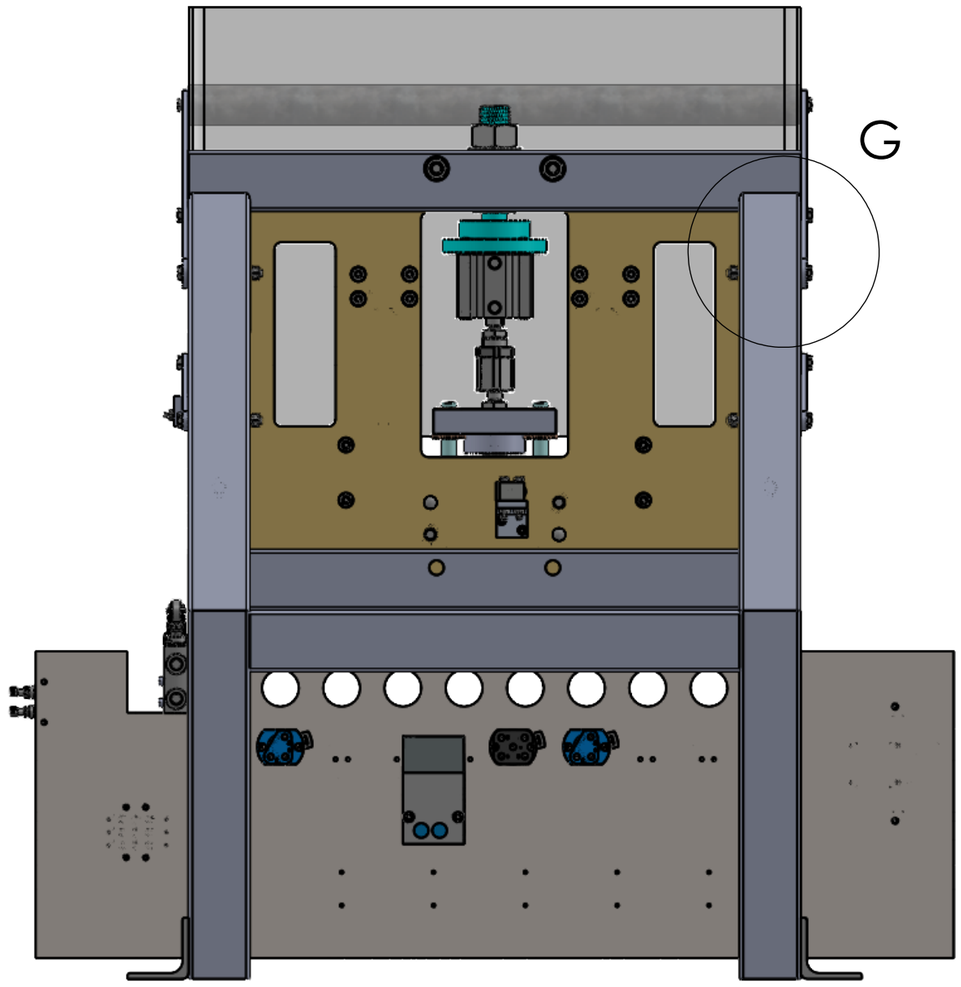
SOLIDWORKS Educational Product. For Instructional Use Only.

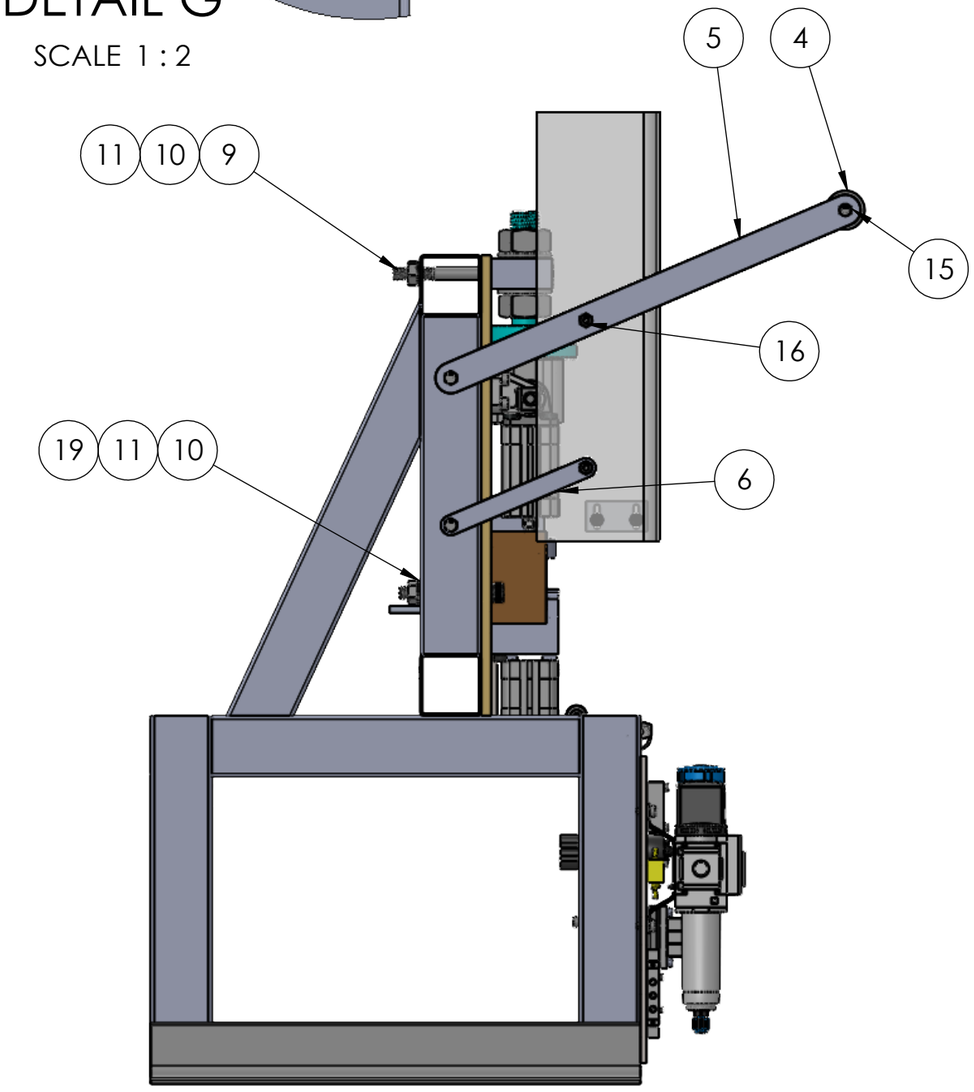
DO NOT TIGHTEN
NYLOCK NUTS, ALLOW
FREE MOVEMENT OF SAFETY
SHIELD - 8 PLACES



DETAIL G

SCALE 1 : 2





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Drawing Title:

WSC2026_TP01_CA_100_EN

Scale: 1 : 5

SCM: CRAIG BRAZIL

Drawn by: SIMON HEATHCOTE

Sheet Size: A3 **Dwg No:** 2 of 3

Date: 25/08/2026

Notes:

PROJECTION

Skill Name:

INDUSTRIAL MECHANICS

Skill Number:

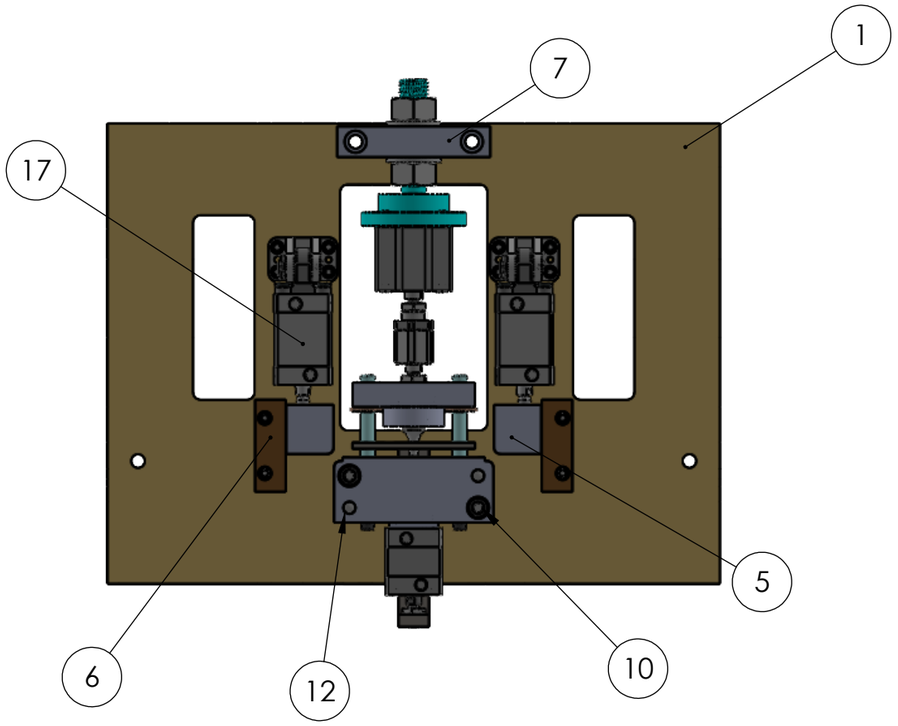
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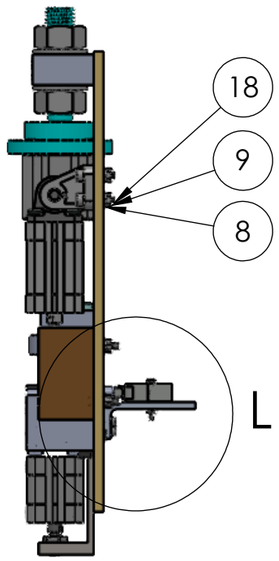
WSI

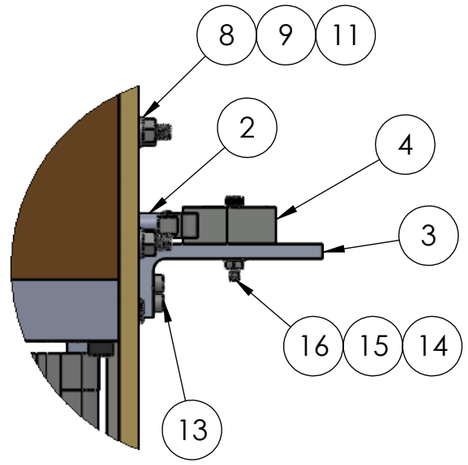
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	301	BACK PLATE	1
2	103	PART PRESENT CHECK PIN	1
3	106	PART PRESENT VALVE BRACKET	1
4	3629 R-3-M5 (0)	ROLLER VALVE	1
5	304 + 305	BENDING PUNCH	2
6	302	HEEL SLIDE	2
7	400	SUB ASSEMBLY	1
8	93475A250	M6 WASHER	12
9	90592A016	M6 Nut	12
10	91290A534	M10 X 55 SHCS	2
11	91290A344	M6 X 60 SHCS	4
12	91595A664	∅10 DOWEL 60 LONG	2
13	91290A148	M4 X 12 SHCS	2
14	98269A430	M4 WASHER	2
15	90593A003	M4 NUT	2
16	91290A172	M4 X 30 SHCS	2
17	536273 ADN-32-30-A-P-A- with fittings	SQUARE BODY CYLINDER C/W MOUNTING CLEVIS	2
18	91290A330	M6 X 25 SHCS	8







DETAIL L

SCALE 2 : 5

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Drawing Title:

WSC2026_TP01_CA_300_EN

Scale: 1 : 5

SCM: **CRAIG BRAZIL**

Drawn by: **SIMON HEATHCOTE**

Sheet Size: A3 | **Dwg No:** 1 of 1

Date: 25/08/2026

Notes:

PROJECTION

Skill Name:

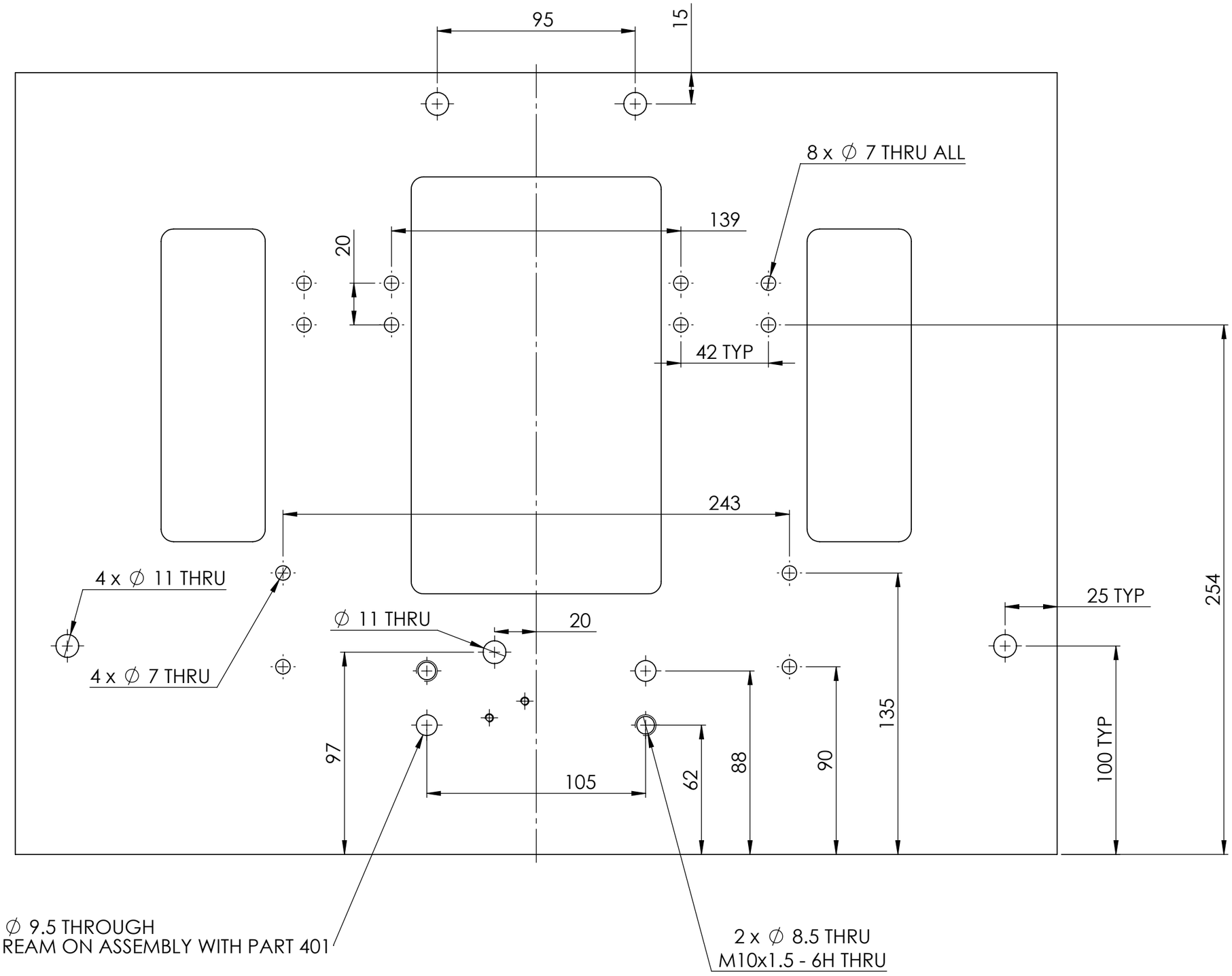
INDUSTRIAL MECHANICS

Skill Number:

01

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PART #:	301	MTL:	STEEL
SCALE:	1:2	QNTY:	1

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Drawing Title:
WSC2026_TP01_CA_301_EN

Scale: 1 : 2
SCM: CRAIG BRAZIL
Drawn by: SIMON HEATHCOTE
Sheet Size: A3 | **Dwg No:** 1 of 1
Date: 25/08/2026

Notes:

PROJECTION

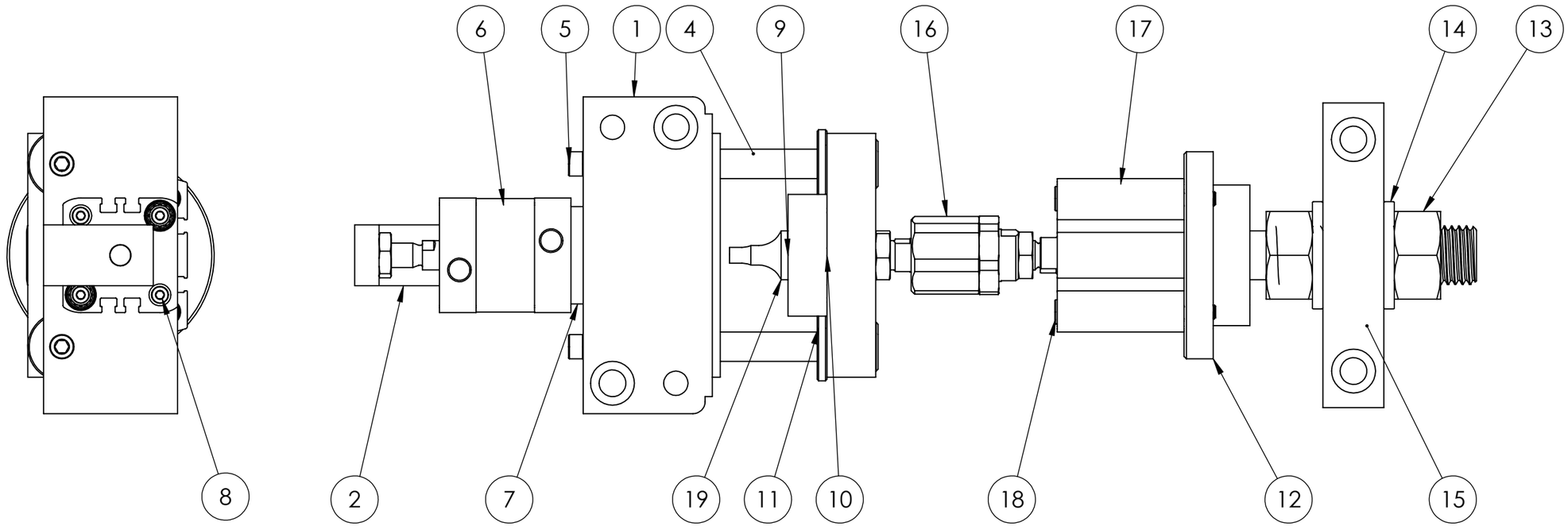
1. ALL HOLE LOCATIONS ± 0.5
2. BREAK ALL SHARP EDGES

Skill Name:
INDUSTRIAL MECHANICS

Skill Number:
01

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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	401	DIE BLOCK	1
2	402	CLAMP	1
3	ADX20-A20-M2-P6.6	DIE BUTTON	1
4	VFJT-100-M6	GUIDE PINS	2
5	91290A332	M6 X 30 SHCS	2
6	536418 AEN-32-10-A-P-A---(0)	SQUARE BODY CYLINDER	1
7	402	SPACER	2
8	91290A083	M4 X 65 SHCS	4
9	404	PUNCH HOLDER	1
10	403	PUNCH PLATE	1
11	2934T138	FLANGED SLEEVE BEARING	2
12	401	STROKE POSITIONING SCREW	1
13	90593A015	M24 NUT	2
14	98687A327	M24 WASHER	2
15	305	STROKE POSITIONING BLOCK	1
16	6141 FK-M12X1,25---(asm_0_0)	MISALIGNMENT COUPLER	1
17	8092076 ADN-S-50-20-A-P-A---(0_high)	SQUARE BODY CYLINDER	1
18	91290A344	M6 X 60 SHCS	4
19	SPTWA20-40-P6.5-B5-V8-F12	PUNCH	1
20	91290A326	M6 X 20 SHCS	3



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Drawing Title:
WSC2026_TP01_CA_400_EN

Scale: 1 : 2
SCM: CRAIG BRAZIL
Drawn by: SIMON HEATHCOTE
Sheet Size: A3 | **Dwg No:** 2 of 2
Date: 25/08/2026

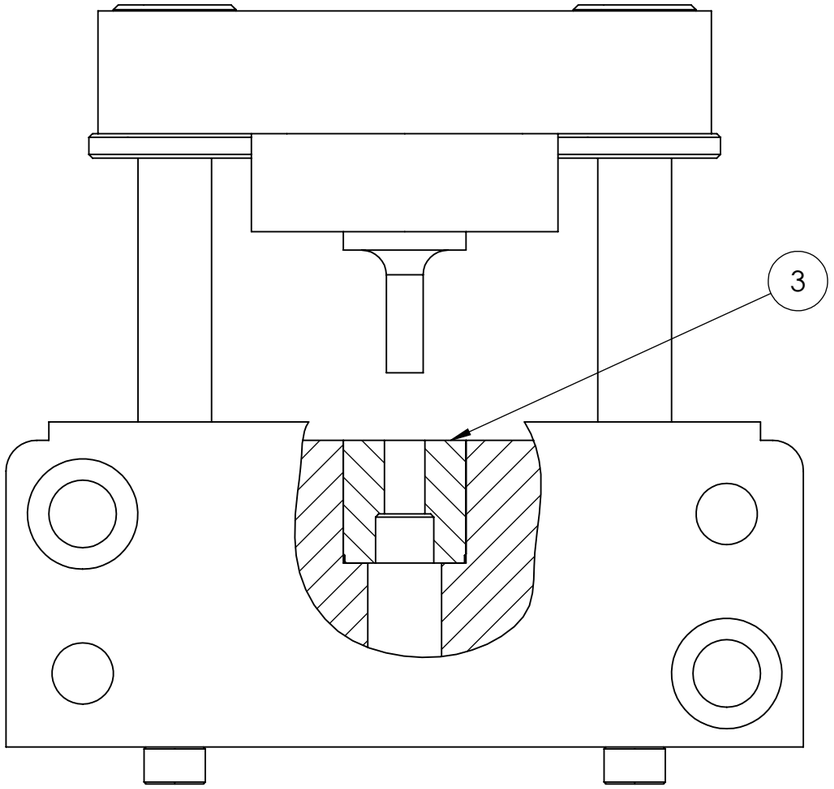
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PROJECTION

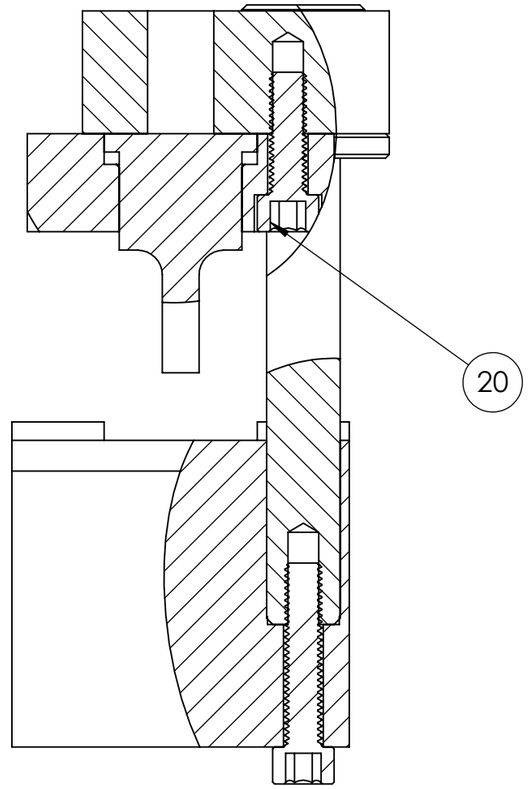
Skill Name:
INDUSTRIAL MECHANICS

Skill Number:
01

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PRE-BUILD ASSEMBLY AS SHOWN, BEFORE CONTINUING ENSURE THAT;
1, THE UPPER ASSEMBLY SLIDES EVENLY ON THE GUIDE PINS - MAY NEED TO REAM THE BUSHINGS
2, THE PUNCH ENTERS THE DIE BUTTON EVENLY WITH EQUAL CLEARANCE ALL AROUND

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Drawing Title:
WSC2026_TP01_CA_400_EN

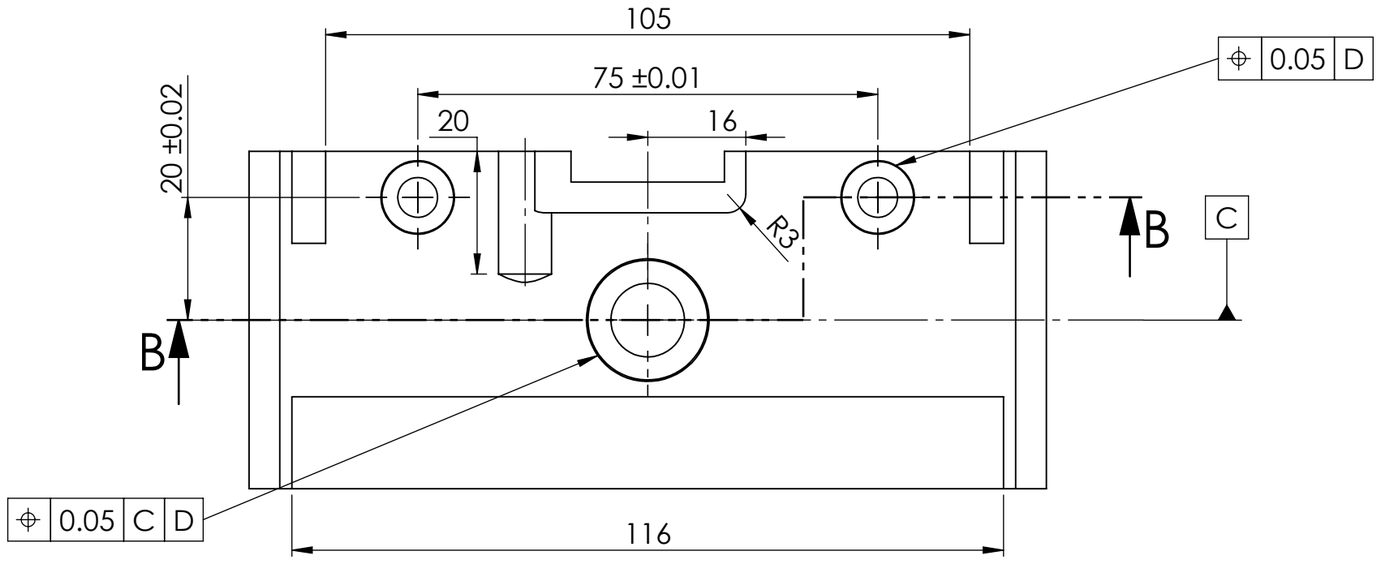
Scale: 1 : 1
SCM: CRAIG BRAZIL
Drawn by: SIMON HEATHCOTE
Sheet Size: A3 | **Dwg No:** 1 of 2
Date: 25/08/2026
Notes:

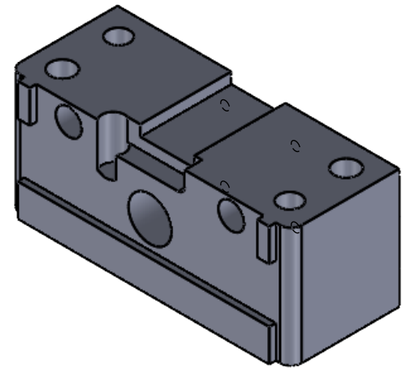
PROJECTION

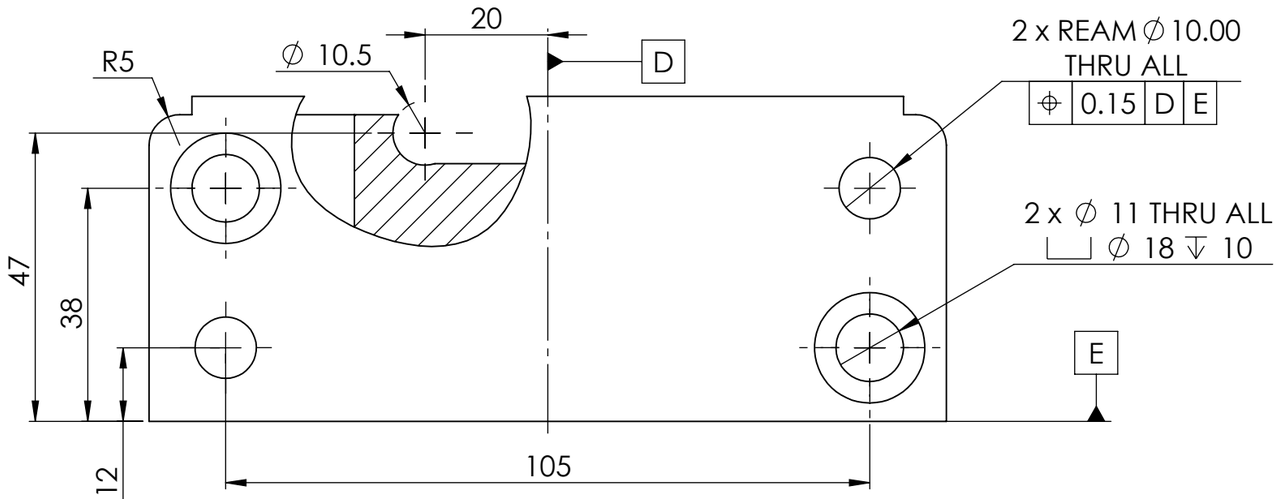
Skill Name:
INDUSTRIAL MECHANICS

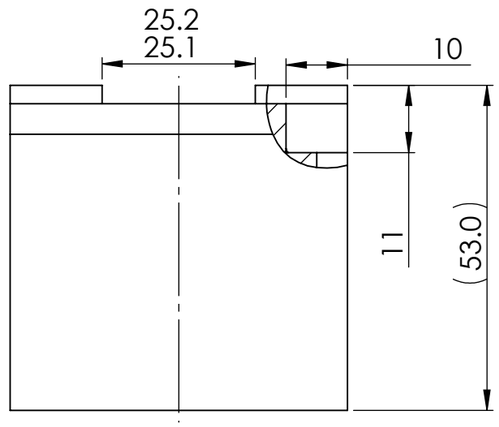
Skill Number:
01

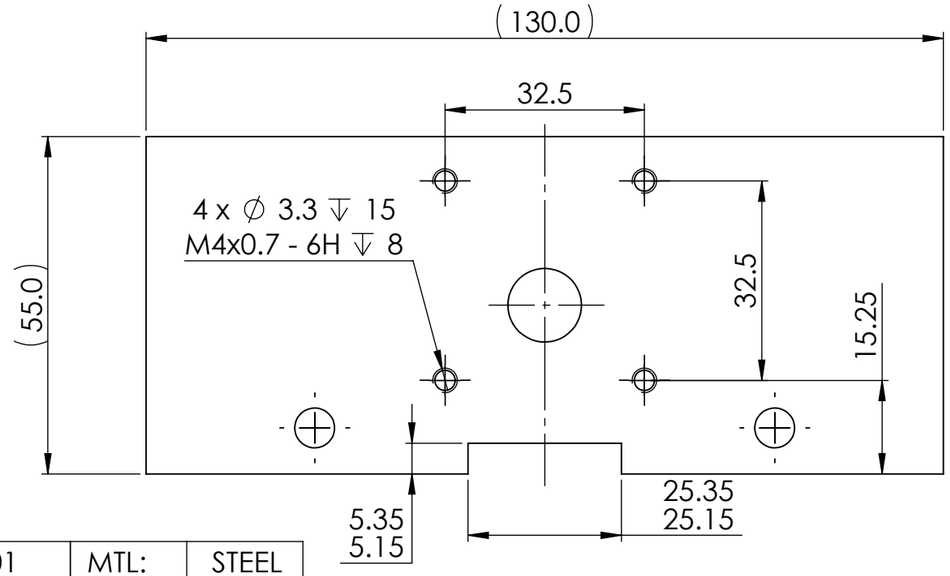
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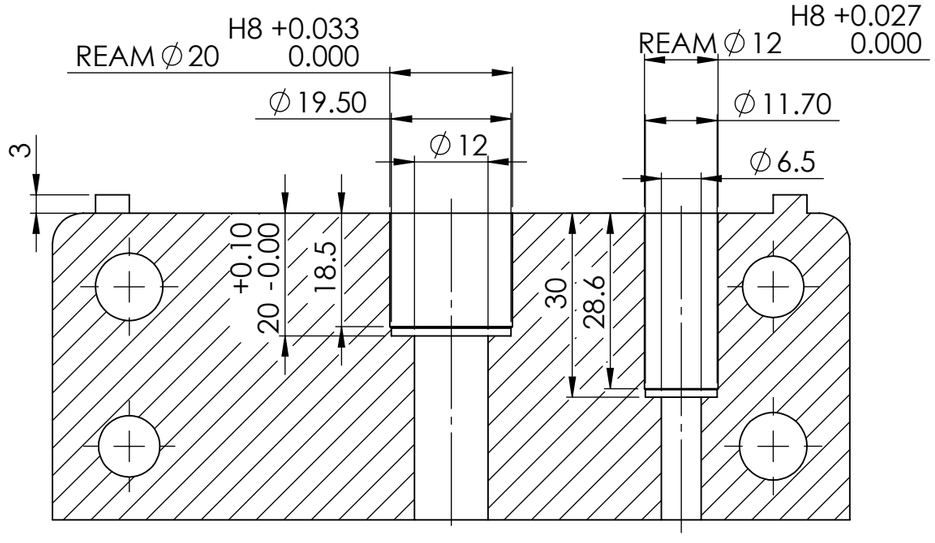












SECTION B-B REMOVED

PART #:	401	MTL:	STEEL
SCALE:	1:1	QNTY:	1

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Drawing Title:

WSC2026_TP01_CA_401_EN

Scale: 1 : 1

SCM: **CRAIG BRAZIL**

Drawn by: **SIMON HEATHCOTE**

Sheet Size: A3 | Dwg No: 1 of 1

Date: 25/08/2026

Notes:

PROJECTION

1. BREAK ALL SHARP EDGES
2. UNLESS OTHERWISE SPECIFIED SURFACE FINISH 1.6 ON ALL MACHINED SURFACES
3. UNLESS OTHERWISE SPECIFIED TOLERANCE CLASS IS m (MEDIUM) ISO2768-1fk

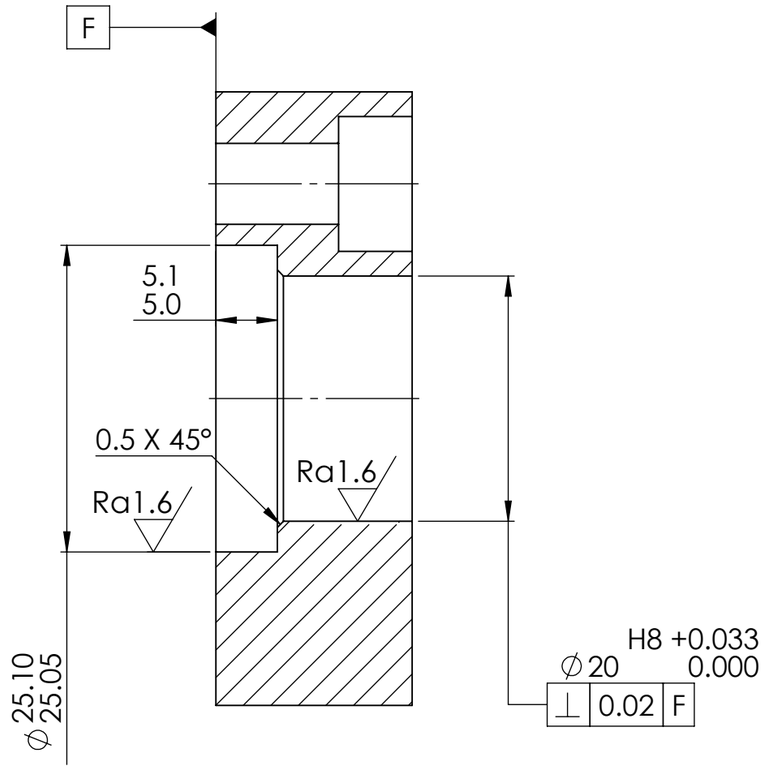
Skill Name:

INDUSTRIAL MECHANICS

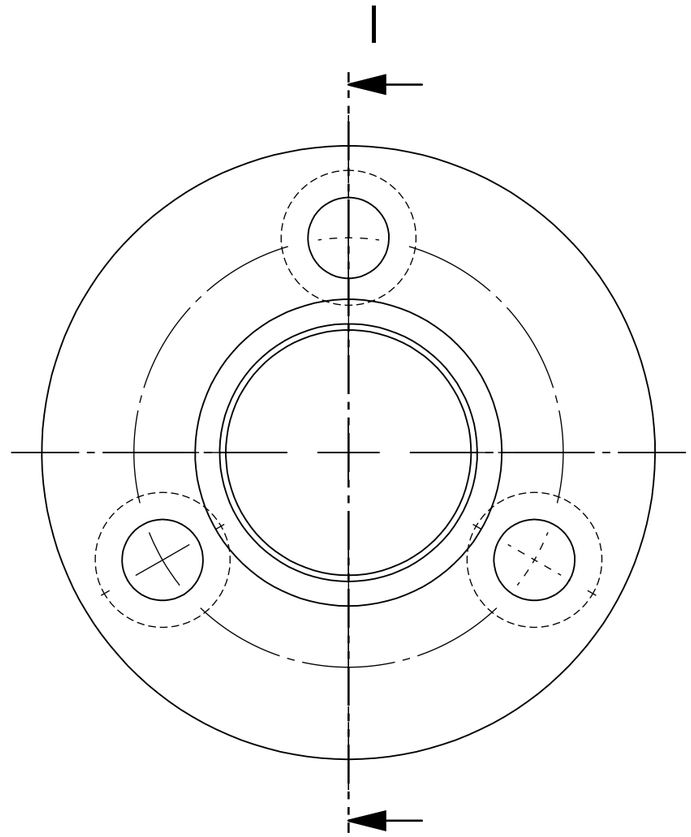
Skill Number:

01

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SECTION I-I
2 : 1



I

PART #:	404	MTL:	ALUM
SCALE:	2:1	QNTY:	1

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Drawing Title:

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Scale: 2 : 1

SCM: CRAIG BRAZIL

Drawn by: SIMON HEATHCOTE

Sheet Size: A3 | **Dwg No:** 1 of 1

Date: 25/08/2026

Notes:

PROJECTION

1. BREAK ALL SHARP EDGES
2. UNLESS OTHERWISE SPECIFIED SURFACE FINISH 1.6 ON ALL MACHINED SURFACES
3. UNLESS OTHERWISE SPECIFIED TOLERANCE CLASS IS m (MEDIUM) ISO2768-1fk

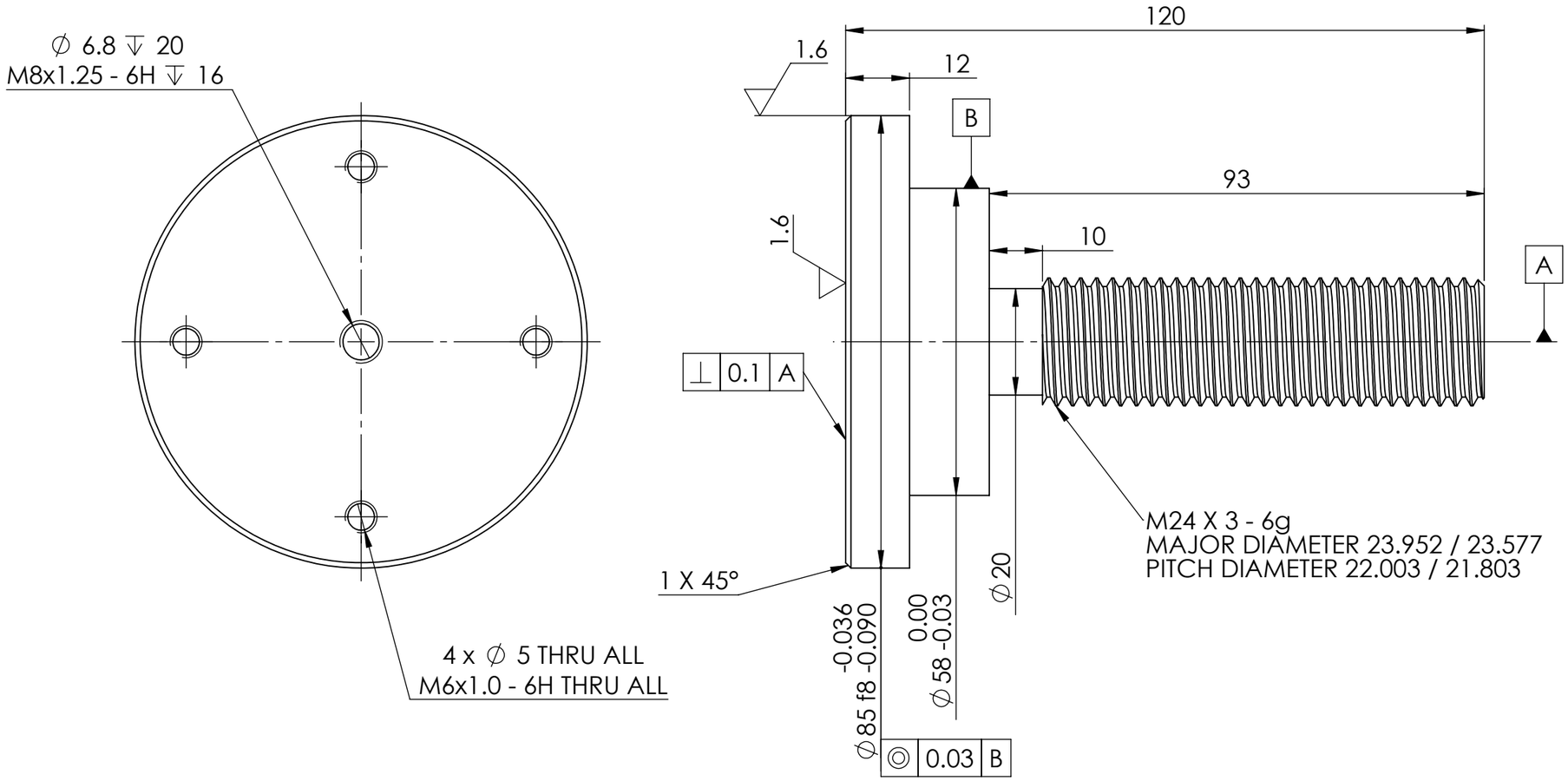
Skill Name:

INDUSTRIAL MECHANICS

Skill Number:

01

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PART #	405	MTL	STEEL
SCALE	1:1	QNTY	1

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Drawing Title:

WSC2026_TP01_CA_405_EN

Scale: 1 : 1

SCM: CRAIG BRAZIL

Drawn by: SIMON HEATHCOTE

Sheet Size: A3 | **Dwg No:** 1 of 1

Date: 25/08/2026

Notes:

PROJECTION

1. BREAK ALL SHARP EDGES
2. UNLESS OTHERWISE SPECIFIED SURFACE FINISH 3.2 ON ALL MACHINED SURFACES
3. UNLESS OTHERWISE SPECIFIED TOLERANCE CLASS IS m (MEDIUM) ISO2768-1fk

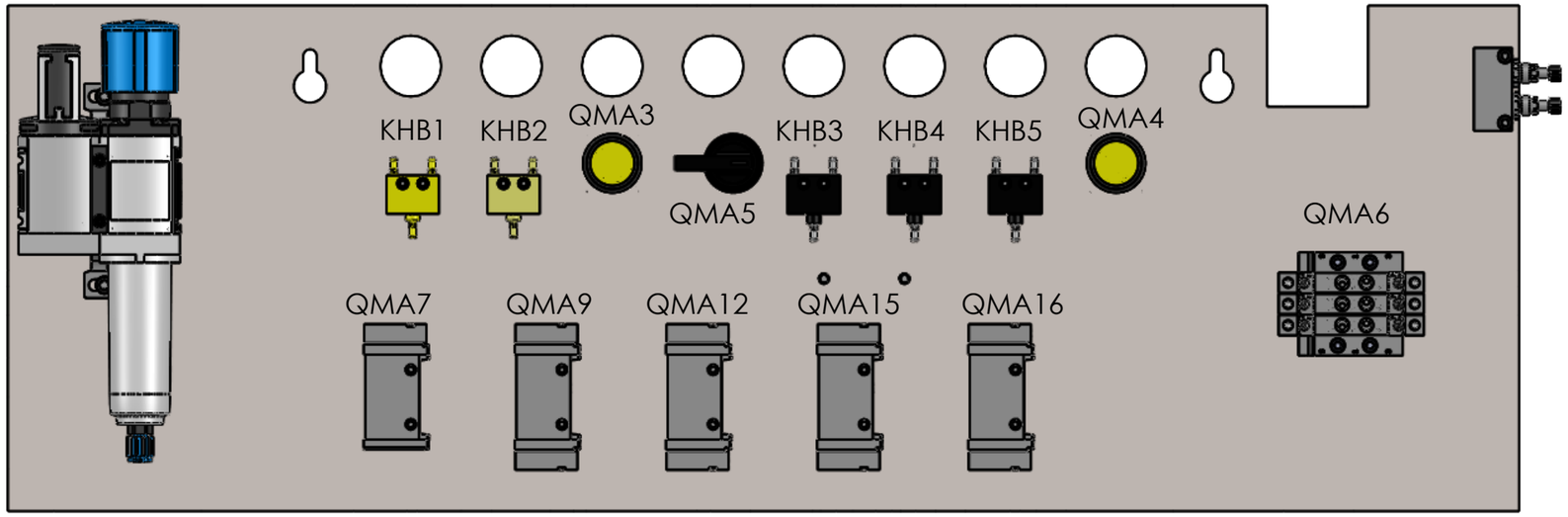
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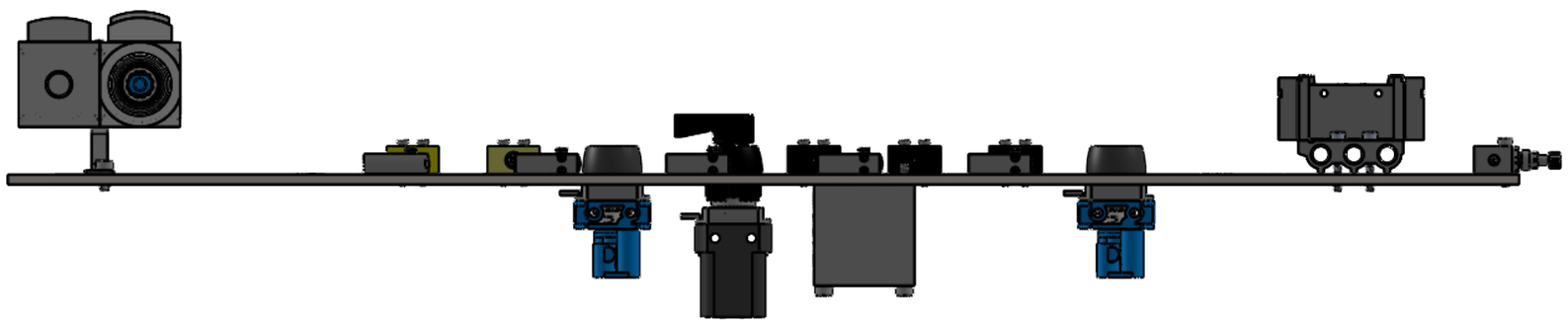
INDUSTRIAL MECHANICS

Skill Number:

01

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Drawing Title:

WSC2026_TP01_CA_500_EN

Scale: N.T.S.

SCM: CRAIG BRAZIL

Drawn by: SIMON HEATHCOTE

Sheet Size: A3 | **Dwg No:** 1 of 1

Date: 25/08/2026

Notes:

PROJECTION

Skill Name:

INDUSTRIAL MECHANICS

Skill Number:

01

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