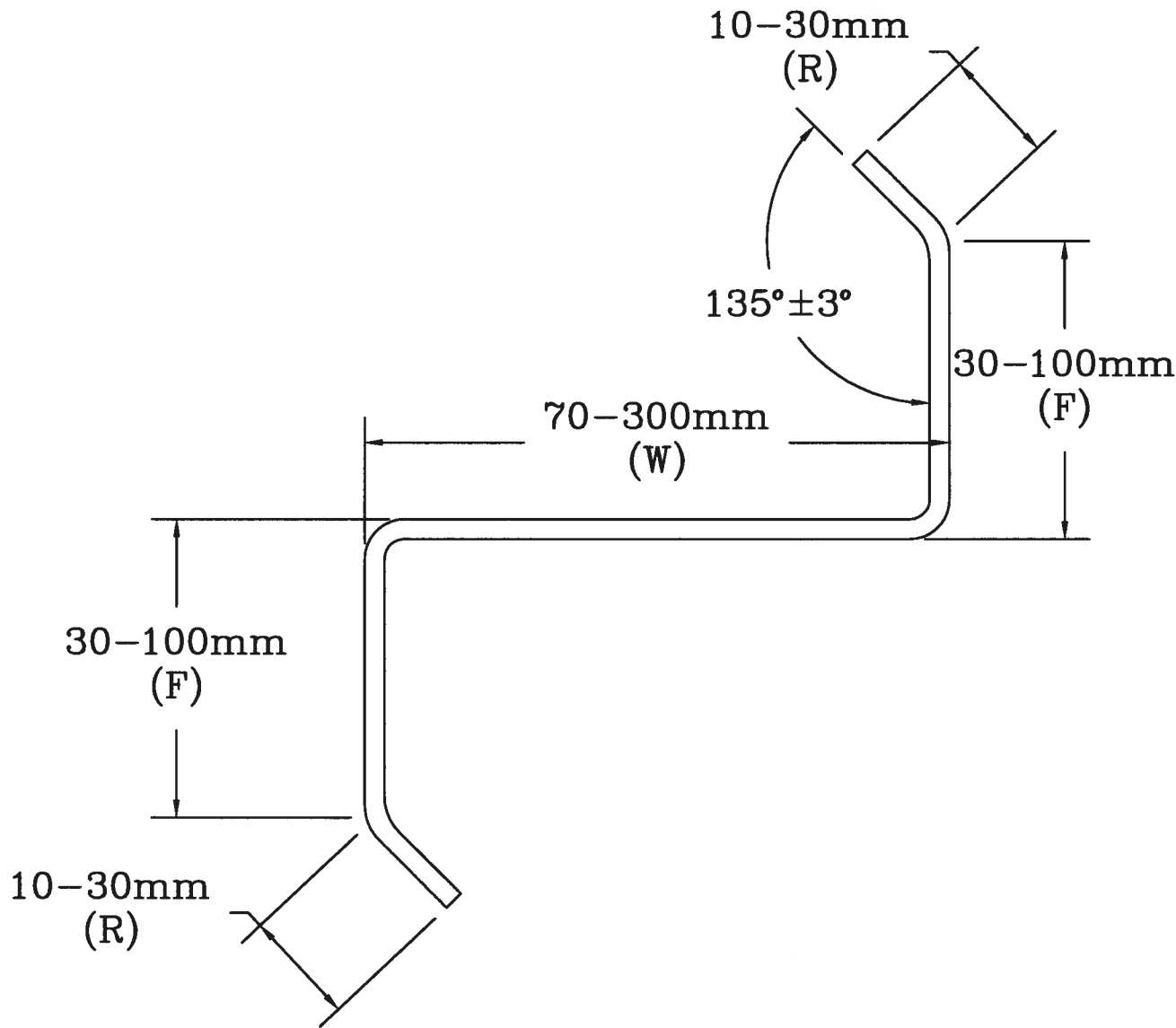


TOLERANCES, DIMENSIONS, & MATERIAL SPECIFICATIONS
ON THIS DRAWING SUPERCEDE ALL OTHER DOCUMENTS.

TOP SIDE



TOLERANCES UNLESS OTHERWISE SPECIFIED:

ANGULAR ±2°
FLARE 2T MAX PER SIDE
TWIST 6.35mm (1/4") OVER 3m (10FT), 12.7mm (1/2") MAX (LAYING UNDER ITS OWN WEIGHT)
BOW & CAMBER 6.35mm (1/4") PER 3m (10FT), 12.7mm (1/2") MAX.
PROFILE TOLERANCES TO BE MEASURED AT A MINIMUM 300mm (12") FROM THE END
ALL OTHER TOLERANCES AS PER EN 10162

	APPROVAL SIGNATURE	DATE
ROLL TOOLING MANAGER		
QUALITY		
PROJECT LEADER		
CUSTOMER		

W	F	R
70-100	30-50	10
100-300	50-65	13-17
150-300	65-75	13-23
150-300	75-100	13-30

FLANGE HEIGHT MAY NOT EXCEED 50% OF THE WEB WIDTH.

MECHANICAL PROPERTIES OF MATERIAL :-

MATERIAL= HOT ROLL STEEL, GALVANIZED STEEL
THICKNESS= 0.8mm to 3.2mm
YIELD STRENGTH = 340–550 MPA Max

FINAL STRIP WIDTH WILL BE DETERMINED AFTER TESTING
INSIDE BEND RADIUS 3.5mm REF
CUSTOMER TO SUPPLY DEFECT FREE MATERIAL SUCH AS
AS OIL CANNING, WAVINESS, CAMBER ETC

SAMCO MACHINERY
LIMITED
351 PASSMORE AVENUE, TORONTO, ON M1V 3N8 CANADA

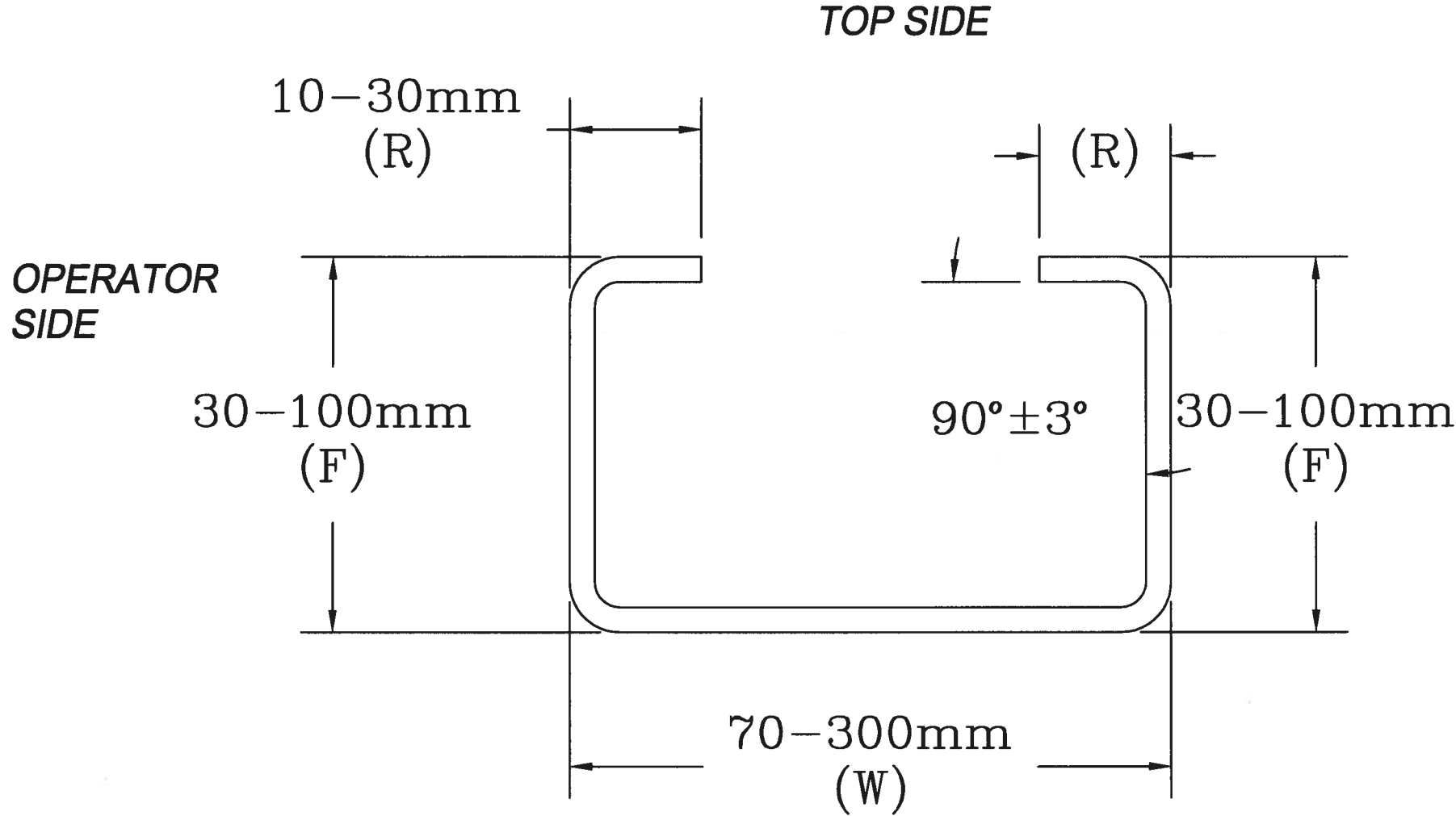
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TITLE: Z-SECTION		
SCALE: 1/1	DESIGNED: C.SINGH	
DATE: 07-12-2015	CHECKED: C.SINGH	
DRAWN: JAIVIR	REVISION:	
DRAWING NO.	9054-PD-02	SHEET OF

1		
2		
REV	DATE	REVISION DESCRIPTION

TOLERANCES, DIMENSIONS, & MATERIAL SPECIFICATIONS
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	APPROVAL SIGNATURE	DATE
ROLL TOOLING MANAGER		
QUALITY		
PROJECT LEADER		
CUSTOMER		



W	F	R
70-100	30-50	10
100-300	50-65	13-17
150-300	65-75	13-23
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

ANGULAR ±2°
FLARE 2T MAX PER SIDE
TWIST 6.35mm (1/4") OVER 3m (10FT), 12.7mm (1/2") MAX (LAYING UNDER ITS OWN WEIGHT)
BOW & CAMBER 6.35mm (1/4") PER 3m (10FT),12.7mm (1/2") MAX.
PROFILE TOLERANCES TO BE MEASURED AT A MINIMUM 300mm (12") FROM THE END
ALL OTHER TOLERANCES AS PER EN 10162

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SCALE: 1/1		DESIGNED: C.SINGH	
DATE: 07-12-2015		CHECKED: C.SINGH	
DRAWN: JAIVIR		REVISION:	
DRAWING NO.		9054-PD-01	
		SHEET OF	

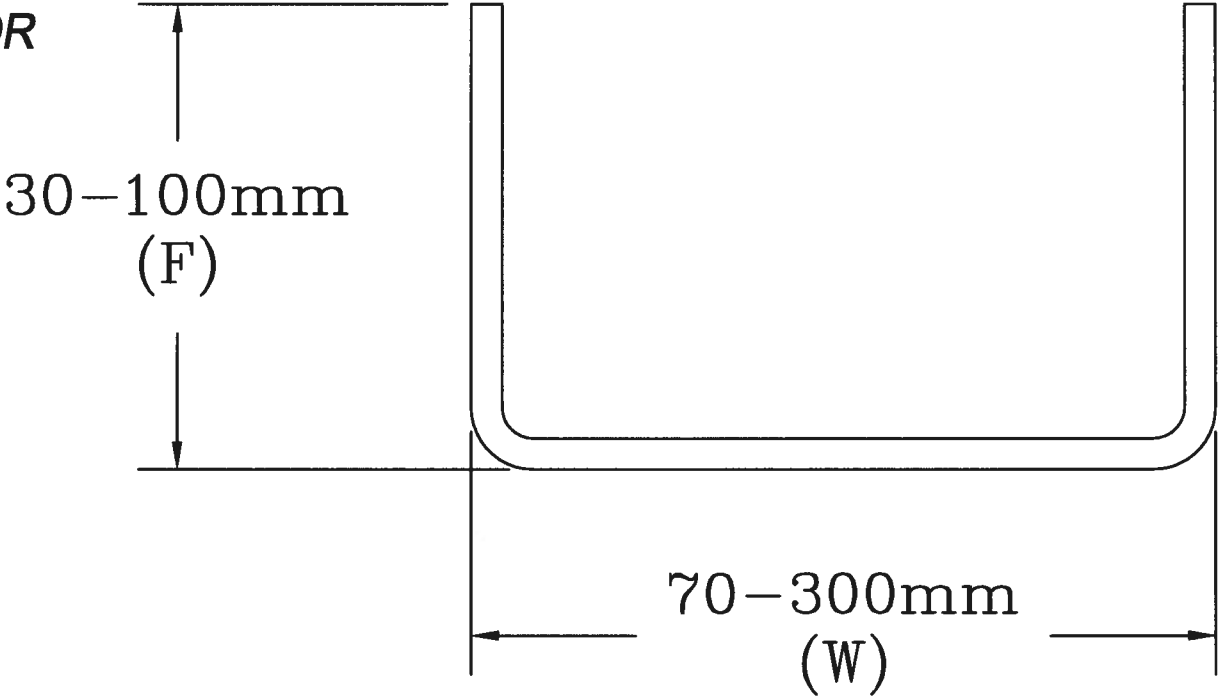
1		
2		
REV	DATE	REVISION DESCRIPTION

TOLERANCES, DIMENSIONS, & MATERIAL SPECIFICATIONS
ON THIS DRAWING SUPERCEDE ALL OTHER DOCUMENTS.

	APPROVAL SIGNATURE	DATE
ROLL TOOLING MANAGER		
QUALITY		
PROJECT LEADER		
CUSTOMER		

TOP SIDE

OPERATOR
SIDE



TOLERANCES UNLESS OTHERWISE SPECIFIED:

ANGULAR $\pm 2^\circ$
FLARE 2T MAX PER SIDE
TWIST 6.35mm (1/4") OVER 3m (10FT), 12.7mm (1/2") MAX (LAYING UNDER ITS OWN WEIGHT)
BOW & CAMBER 6.35mm (1/4") PER 3m (10FT), 12.7mm (1/2") MAX.
PROFILE TOLERANCES TO BE MEASURED AT A MINIMUM 300mm (12") FROM THE END
ALL OTHER TOLERANCES AS PER EN 10162

W	F
70-300	40-50
100-300	30-100

MECHANICAL PROPERTIES OF MATERIAL :-

MATERIAL= HOT ROLL STEEL, GALVANIZED STEEL
THICKNESS= 0.8mm to 3.2mm
YIELD STRENGTH = 340-550 MPA Max

FINAL STRIP WIDTH WILL BE DETERMINED AFTER TESTING
INSIDE BEND RADIUS 3.5mm REF
CUSTOMER TO SUPPLY DEFECT FREE MATERIAL SUCH AS
AS OIL CANNING, WAVINESS, CAMBER ETC

<div><div><div>SAMCO</div><div>MACHINERY LIMITED</div><div>351 PASSMORE AVENUE, TORONTO, ON M1V 3N8 CANADA</div></div><div>THIS PRINT IS EXCLUSIVELY THE PROPERTY OF SAMCO MACHINERY AND IS NOT TO BE REPRODUCED, COPIED OR DISCLOSED TO ANYONE WITHOUT SAMCO MACHINERY'S WRITTEN PERMISSION</div></div>	
TITLE: U-SECTION	
SCALE: 1/1	DESIGNED: C.SINGH
DATE: 07-12-2015	CHECKED: C.SINGH
DRAWN: JAIVIR	REVISION:
DRAWING NO.	
9054-PD-03	
SHEET OF	

1		
2		
REV	DATE	REVISION DESCRIPTION

SAMCO DOUBLE DUPLEX PURLINMASTER ROLLFORMING LINE FOR CEE & ZEE W/FLAT WEB. PRE-PUNCH/PRE-CUT ROLLFORMING LINE-- NO CUT-OFF DIES/INSERTS TO CHANGE OR MAINTAIN -- PRE-CUT ROLLFORMING LINE -- MORE EFFECTIVE & ECONOMICAL SOLUTIONS AS COMBINING PUNCH/CUT-OFF IN THE SAME PRESS.

PRODUCTS : CEE (Lipped channel) & ZEE (Lipped channel) (all w/flat web). Upto 3.2 mm Thickness.

PRODUCT WIDTHS: 70 MM to 300 MM Max.

PRODUCT FLANGES: Equal leg heights, 30 MM to 100 MM Max.

PRODUCT LIP RETURN: Equal on both lips, 10 MM to 30 MM depending on the width and flange height combination.

MATERIAL: HOT ROLL STEEL, or GALVANISED STEEL MATERIAL THICKNESS: 0.8 MM to 3.2 MM MATERIAL YIELD STRENGTH: 550 Mpa Max.

FEATURES:

High Speed Pre-Punch/Cut-Off Press System with adjustable punches. We provide the Punch Pattern for all product range.

DOUBLE DUPLEX Type Roll Former with , variable speed up to 30 M/Min Does not require any Roll Tool Changes. Web changes using Handwheels.

Quick Web Width changes via rotation of Handwheel Quick Leg Height changes with Handwheel & Side rolls. CEE to ZEE change by rotation of Lever.

Dedicated High Quality tool steel roll tooling for extended tooling life.

Roll Coolant system for longer tooling life and reduced pick up contaminants on the rolls. Plug and Play capability with electrical quick disconnects for easy installation and maintenance.

Item Description	Qty
SINGLE-ENDED UNCOILER, 5 TON	1
PEELER TABLE & HOLD DOWN ARM	1
POWERED FLATTENER, 9 ROLLS DESIGN	1
LOOP CONTROL SYSTEM, LASER SENSOR	1
THREADING TABLES (PIT COVER)	1
SERVO-ROLL FEEDER, DIGITAL ACCURACY	1
PRE PUNCH/PRE CUT PRESS SYSTEM	1
LENGTH CONTROL SYSTEM	1
LAUNCHING CONVEYOR	1
PURLINMASTER DUPLEX TYPE ROLLFORMER 16 STATIONS	1
ROLL TOOLING, QUALITY TOOL STEEL	1
ELECTRIC INTEGRATION & CONTROLS	1
HYDRAULICS & INTEGRATION	1
TESTING & TRY-OUT AT SAMCO INDIA	1
OPERATORS TRAINING	1

DOCUMENTATION PACKAGE	1
RUN OUT- EXIT TABLE	1
WARRANTY UP TO 12 MONTHS	1

PRODUCT SPECIFICATIONS

PRODUCTS : CEE (Lipped channel) & ZEE (Lipped channel) (all w/flat web)

CEE PRODUCT WIDTHS: 70 MM to 300 MM

CEE PRODUCT FLANGES: Equal leg heights, 30 MM to 100 MM

CEE PRODUCT LIP RETURN: Equal on both lips, 10 MM to 30 MM depending on the width and flange height combination.

Punching Pattern Cee products:

Web slots QTY= 2, Slot sizes-To be provided by us , Slot center distance variable depending upon the Web Size-to be informed by us.

Flange slots: Punching on the Flanges (Punching Pattern will be provided by AIRCON). Slot center distance variable depending upon the Web Size-to be informed by us.

ZEE PRODUCT WIDTHS: 100 MM to 300 MM

ZEE PRODUCT FLANGES: Equal leg heights, 30 MM to 100 MM

LIP RETURN: Equal lip returns, 10 MM to 30 MM depending on the width and flange height combination.

Punching Pattern Zee products:

Web slots QTY= 2, Slot sizes: To be provided by the Customer along with the Sign Off Drawings

Flange slots: Punching on the Flanges as per (drawings will be provided by AIRCON). Slot center distance variable depending upon the Web Size-to be informed by us.

Flange holes location: To be Informed by us.

Products length: minimum length 1500 MM, maximum length 7000 MM

Flange height may not exceed 50% of the web width

MATERIAL: HOT ROLL STEEL or GALVANISED STEEL MATERIAL

THICKNESS: 3.2 MM & Minimum 0.8MM

YIELD STRENGTH: 550 Mpa- Max.

LINE SPECIFICATIONS

PURLINMASTER (DOUBLE DUPLEX TYPE) ROLLFORMER FOR CEE & ZEE PURLINS

RAW MATERIAL SPECIFICATIONS

MATERIAL: HOT ROLL STEEL or PRE GALVANISED STEEL

MATERIAL THICKNESS:0.8 MM to 3.2 MM

MATERIAL YIELD STRENGTH- 550 Mpa Max.

Note: Customer to provide consistent input material for quality parts. This is required to meet drawing tolerances.

COIL SPECIFICATIONS

Coil weight: 5,000 kg

Coil Width: maximum 440 MM

Coil I.D.: nominal 508 MM

Coil O.D.: maximum 1,825 MM

PRODUCT LENGTHS: Minimum length 1500 MM, maximum length 7000 MM

FLOOR PIT: Required -- a floor pit is recommended to reach maximum line speeds

ROLLFORMER SPEED: 0 to 30 M/Min VARIABLE SPEED depending on the punching pattern. Note: Line speed is not the same as production speed. Actual production rate is affected by factors such as number of product size changes, hole pattern selected, product lengths, material thickness changes, coil changes, maintenance and quality checking downtime, factory layout efficiencies, etc.

TOLERANCES :-Length tolerance: will not exceed +/- 2.0 MM (part-to-part)

Other Tolerances:

Flare: 2T per side

Angles: +/- 2 degrees

Twist: 6.35 MM over 3 Meters* as per IS standard

* Twist is measured with the Zee laying on a flat surface under its own weight.

As per Applicable IS Standard

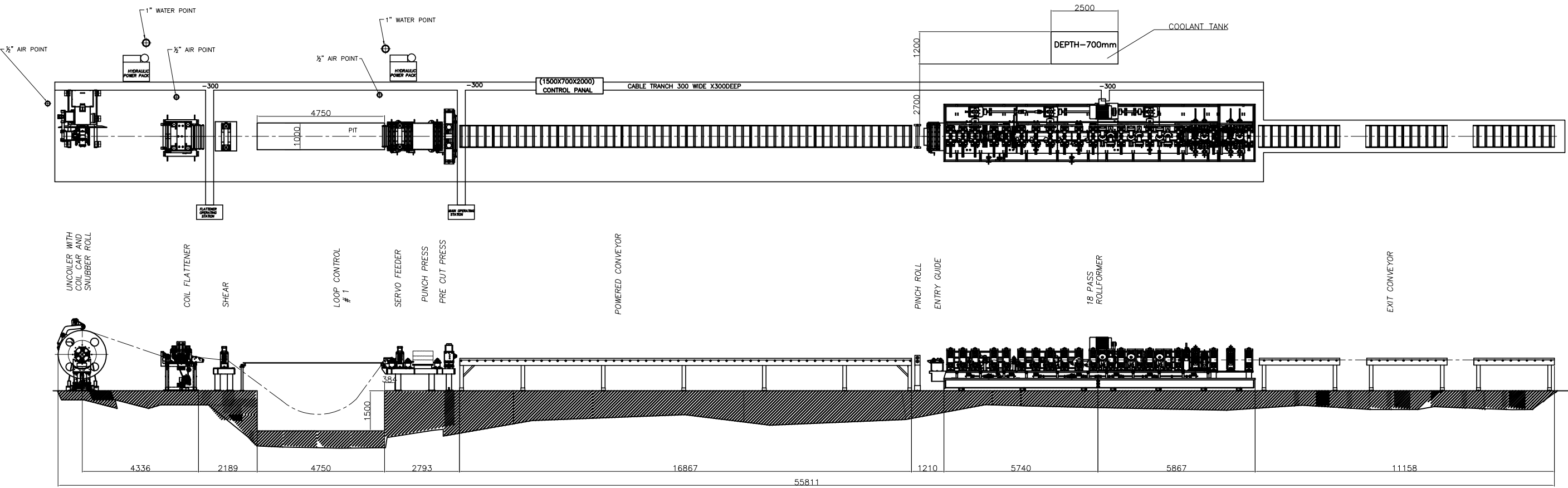
LINE DIRECTION: From Left to Right.

POWER REQUIREMENTS :

SAMCO will build Electrical Package to suit customer's standard 24VDC on controls

Air Supply 6-8bar (100 PSI) clean & dry.



PRELIMINARY LAYOUT FOR AIRCON GUARD RAILS



LINE DIRECTION LEFT TO RIGHT

NOTE:
-POWER REQUIREMENTS: 440V/3PH/50HZ/24VDC
-MAXIMUM LINE SPEED: 20M/MAX,
-MAX STRIP WIDTH 610 MM

ALL DIMENSIONS ARE IN MM.

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ALL DIMENSIONS ARE IN MM AND MASS IN KGS UNLESS OTHERWISE SPECIFIED ISO 2768-2:1989 STANDARD TOLERANCES ARE										315 NANTUCKET BLVD, SCARBOROUGH, ONTARIO, CANADA M1P 2P2																																						
<table><tr><td>FROM</td><td>3mm</td><td>6mm</td><td>30mm</td><td>120mm</td><td>400mm</td><td>1000mm</td><td>2000mm</td><td>ABOVE</td><td>10deg</td><td>50deg</td><td>above</td><td rowspan="2">FINISH 3.2</td></tr><tr><td>UPTO</td><td>6mm</td><td>30mm</td><td>120mm</td><td>400mm</td><td>900mm</td><td>2000mm</td><td>4000mm</td><td>4000mm</td><td>50deg</td><td>120deg</td><td>120deg</td></tr><tr><td></td><td>±0.1</td><td>±0.2</td><td>±0.3</td><td>±0.5</td><td>±0.8</td><td>±1.2</td><td>±2.0</td><td>±3.0</td><td>±0°'30'</td><td>±0°'20'</td><td>±0°'10'</td></tr></table>										FROM	3mm	6mm	30mm	120mm	400mm	1000mm	2000mm	ABOVE	10deg	50deg	above	FINISH 3.2	UPTO	6mm	30mm	120mm	400mm	900mm	2000mm	4000mm	4000mm	50deg	120deg	120deg		±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2.0	±3.0	±0°'30'	±0°'20'	±0°'10'	TITLE: LAYOUT FOR PURLIN LINE	
FROM	3mm	6mm	30mm	120mm	400mm	1000mm	2000mm	ABOVE	10deg	50deg	above	FINISH 3.2																																				
UPTO	6mm	30mm	120mm	400mm	900mm	2000mm	4000mm	4000mm	50deg	120deg	120deg																																					
	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2.0	±3.0	±0°'30'	±0°'20'	±0°'10'																																					
MTRL TYPE:										SCALE: N.T.S.		DESIGNED: JAIVIR																																				
MTRL SIZE:										DATE: 20-11-2015		CHECKED: P.SINGH																																				
COM CODE:										DRAWN: JAIVIR		APPROVED:-																																				
MFG PART ID:										MASS: N/A		SHEET 1 OF 1																																				
MTRL PART ID:										SIZE A2		DRAWING NO. PL-00-01																																				