

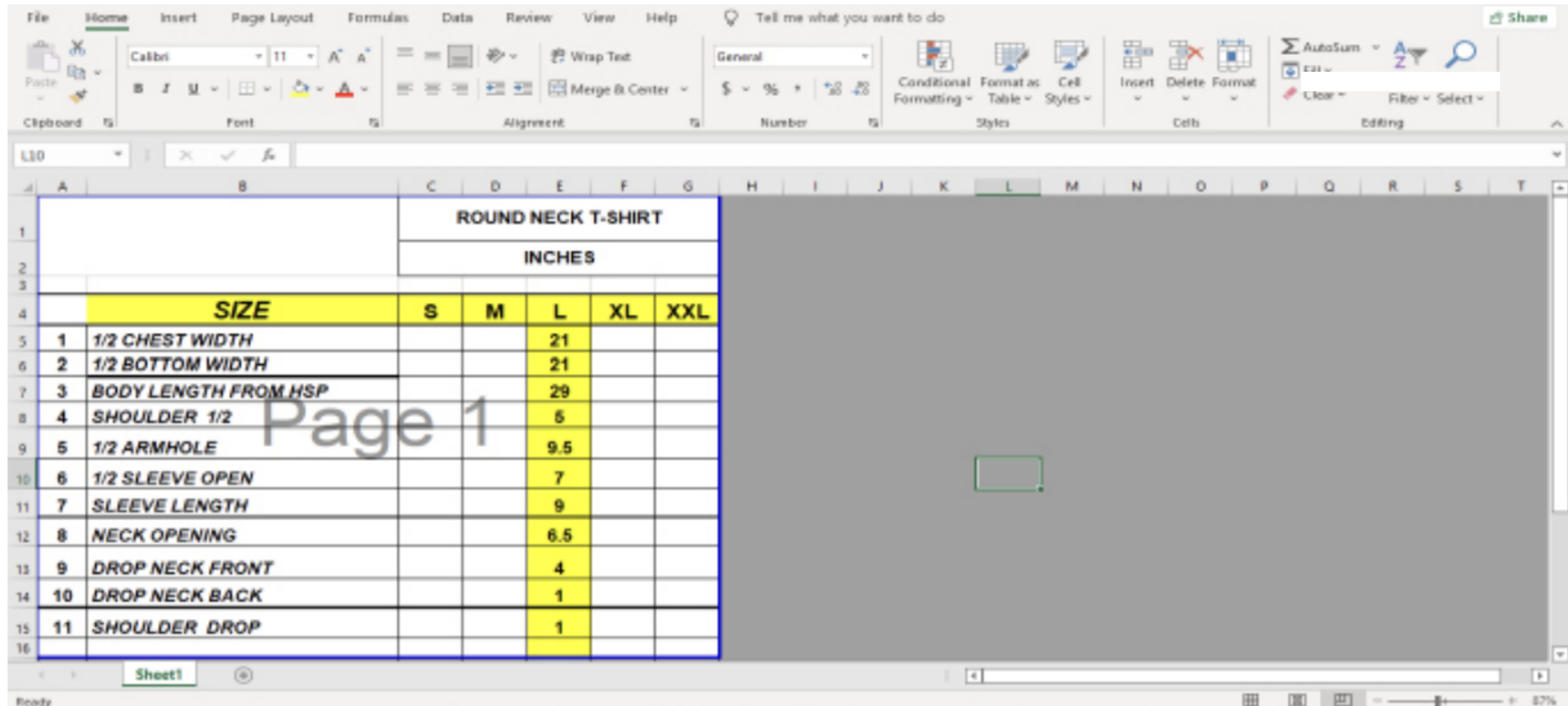


Pattern Design for T-shirt using REACH CAD

STEP 001

MEASUREMENTS OF BASIC ROUND NECK T-SHIRT

REACH CAD

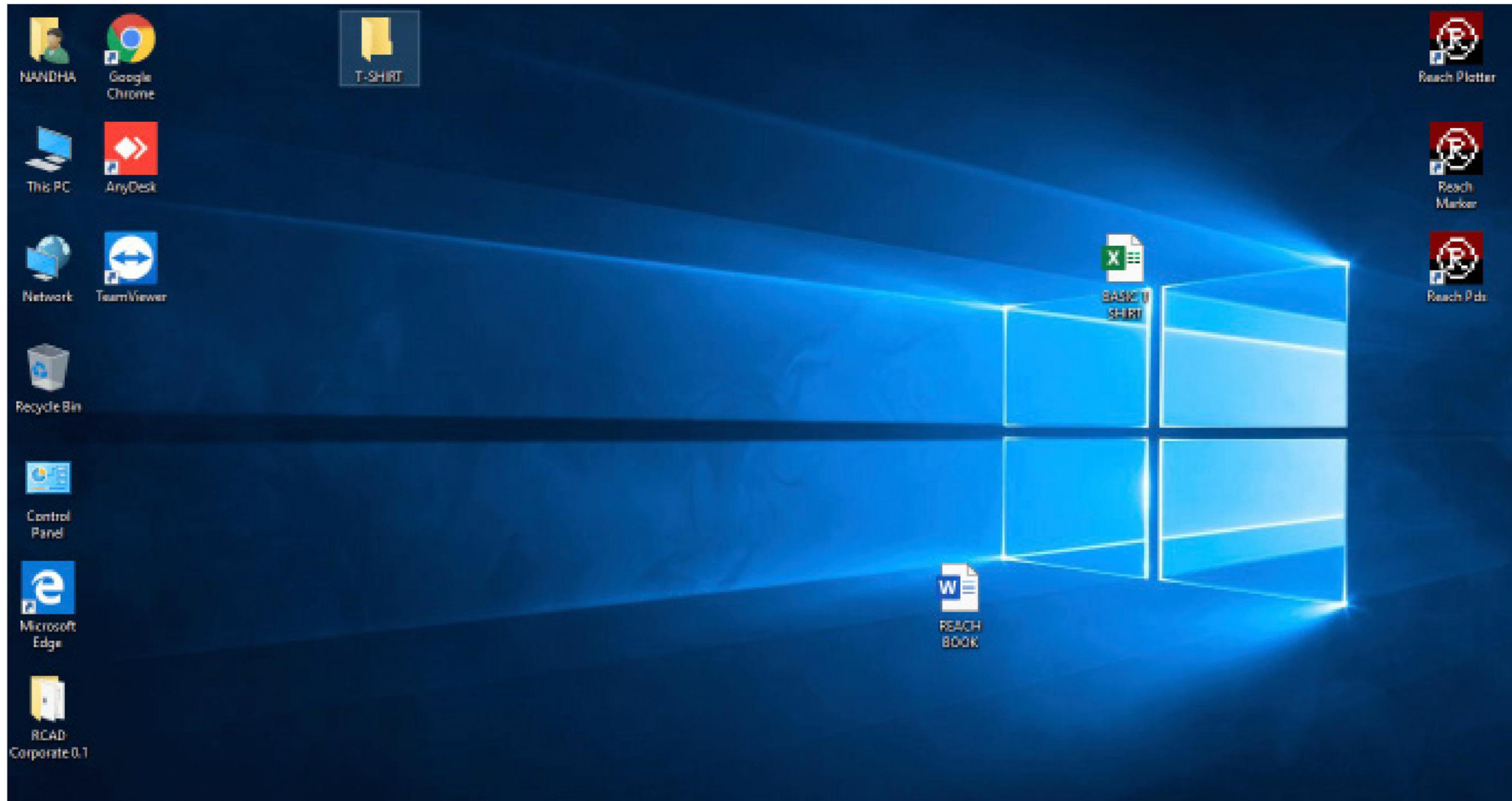


		ROUND NECK T-SHIRT				
		INCHES				
	SIZE	S	M	L	XL	XXL
1	1/2 CHEST WIDTH			21		
2	1/2 BOTTOM WIDTH			21		
3	BODY LENGTH FROM HSP			29		
4	SHOULDER 1/2			5		
5	1/2 ARMHOLE			9.5		
6	1/2 SLEEVE OPEN			7		
7	SLEEVE LENGTH			9		
8	NECK OPENING			6.5		
9	DROP NECK FRONT			4		
10	DROP NECK BACK			1		
11	SHOULDER DROP			1		

STEP-002

CREATE A NEW FOLDER AND NAME IT 'T-SHIRT'

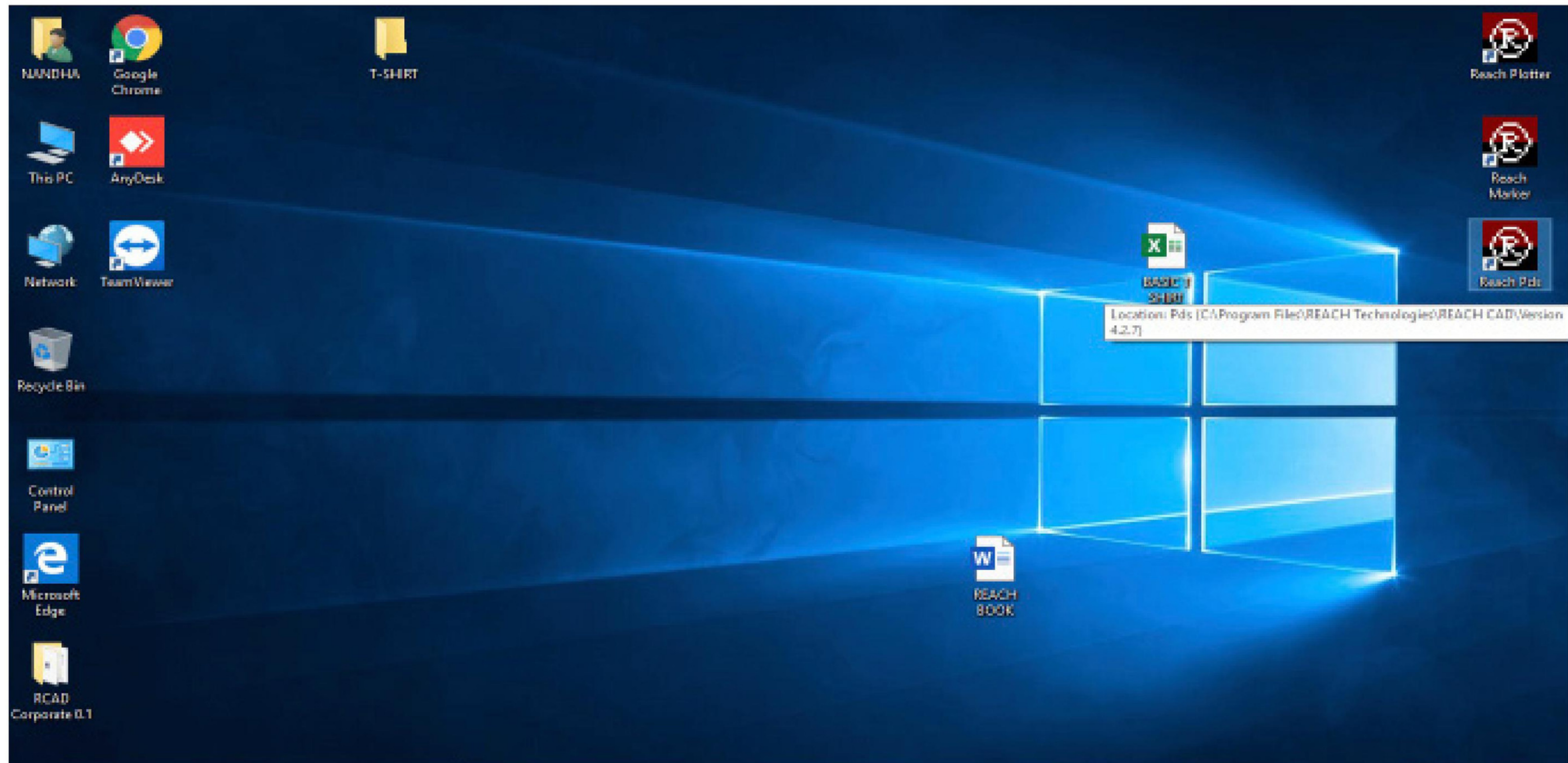
REACH CAD



STEP-003

DOUBLE CLICK ON THE REACH PDS ICON.

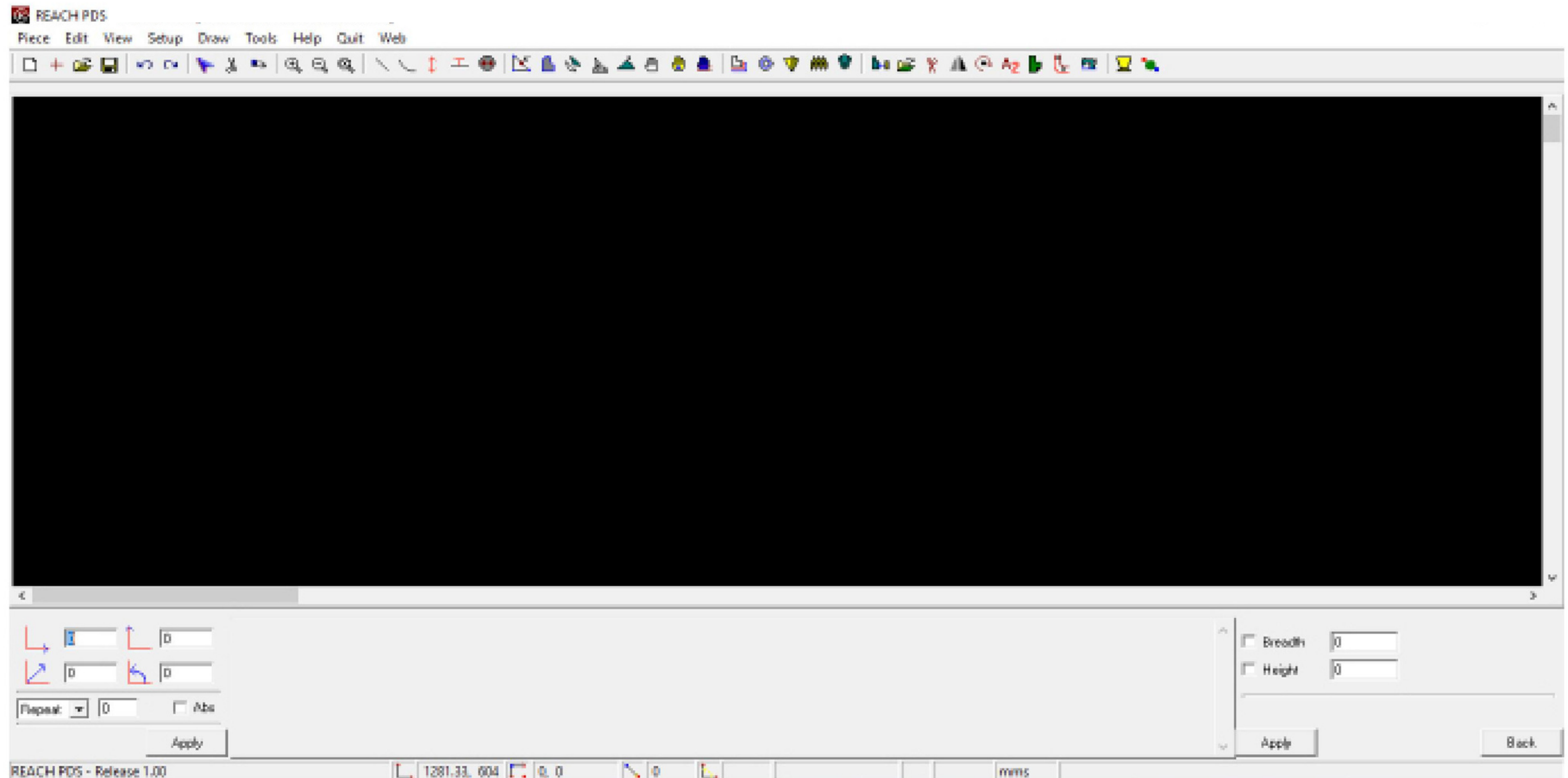
REACH CAD



STEP-004

OPEN REACH PDS

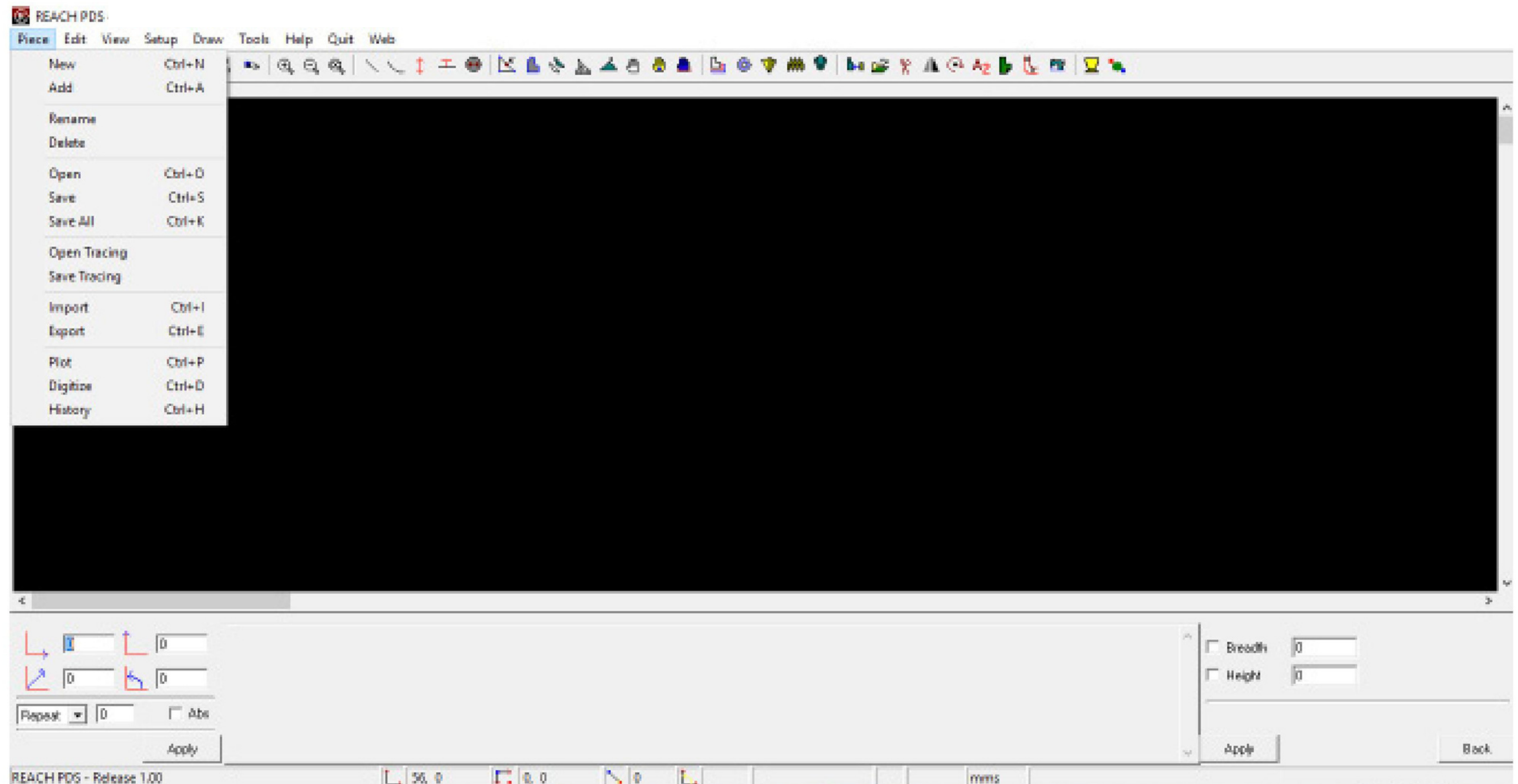
REACH CAD



STEP-005

CLICK ON 'PIECE' MENU IN THE TOP LEFT CORNER.

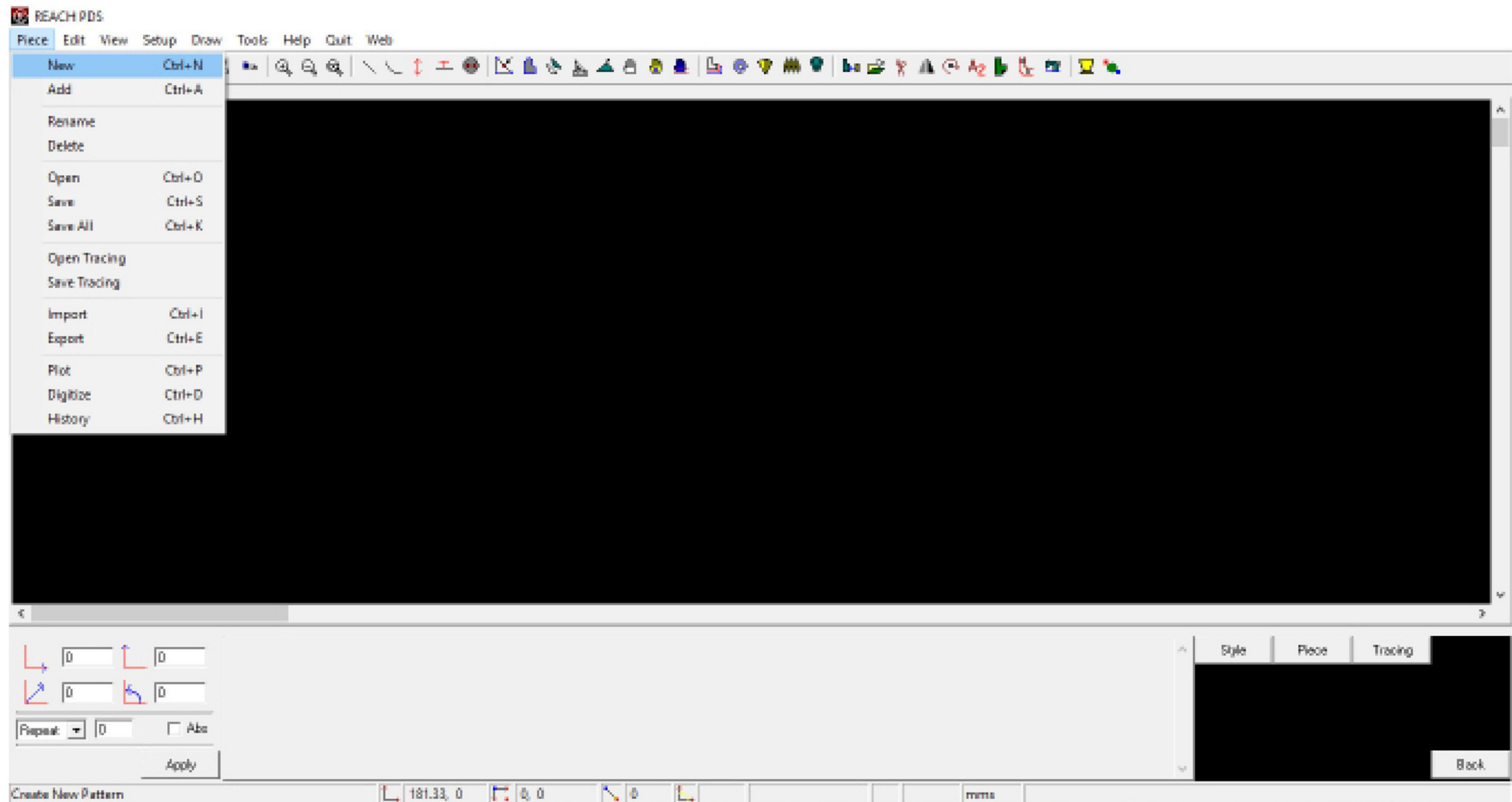
REACH CAD



STEP-006

CLICK ON 'NEW' UNDER THE PIECE MENU.

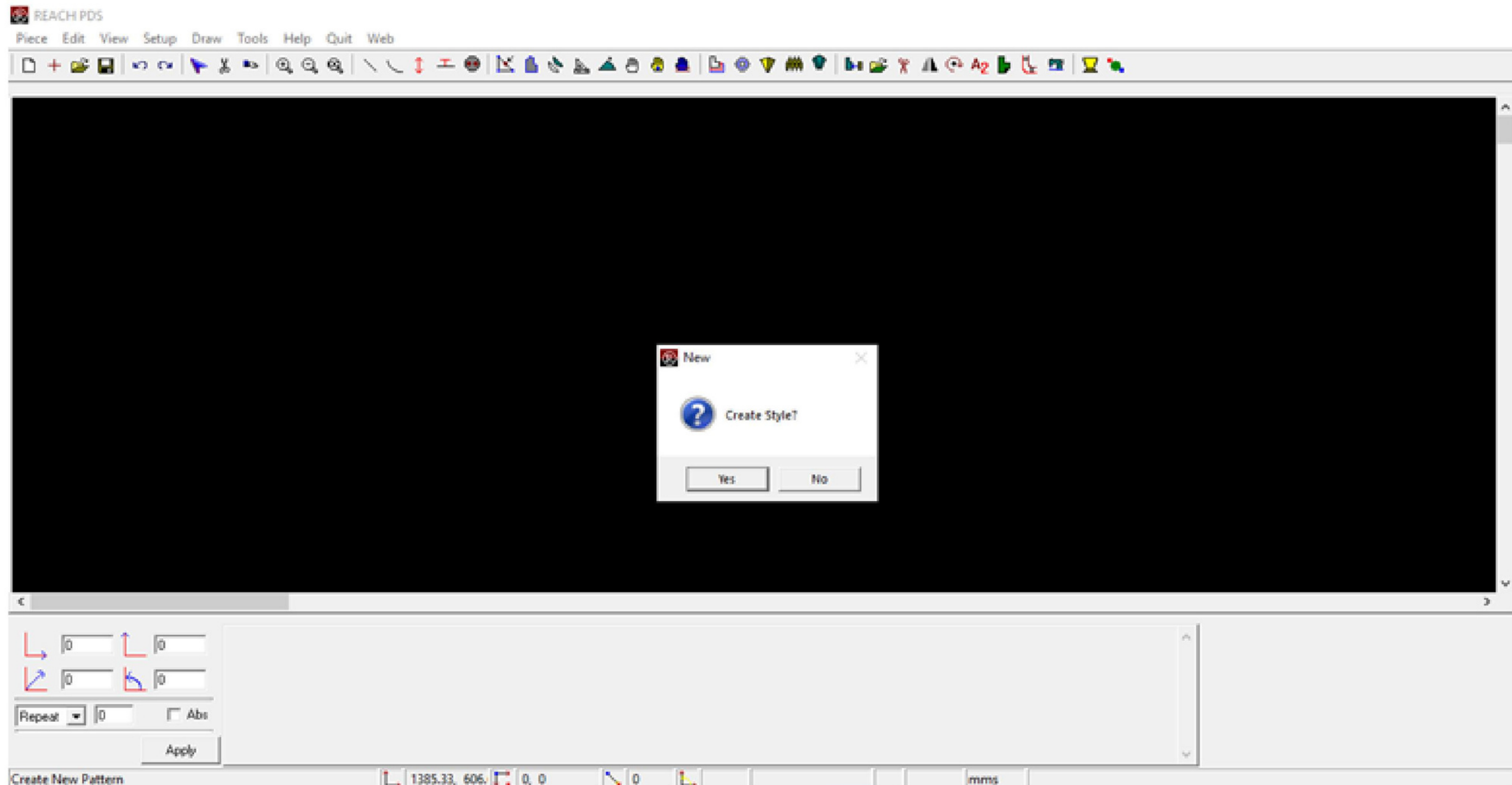
REACH CAD



STEP-007

REACH CAD

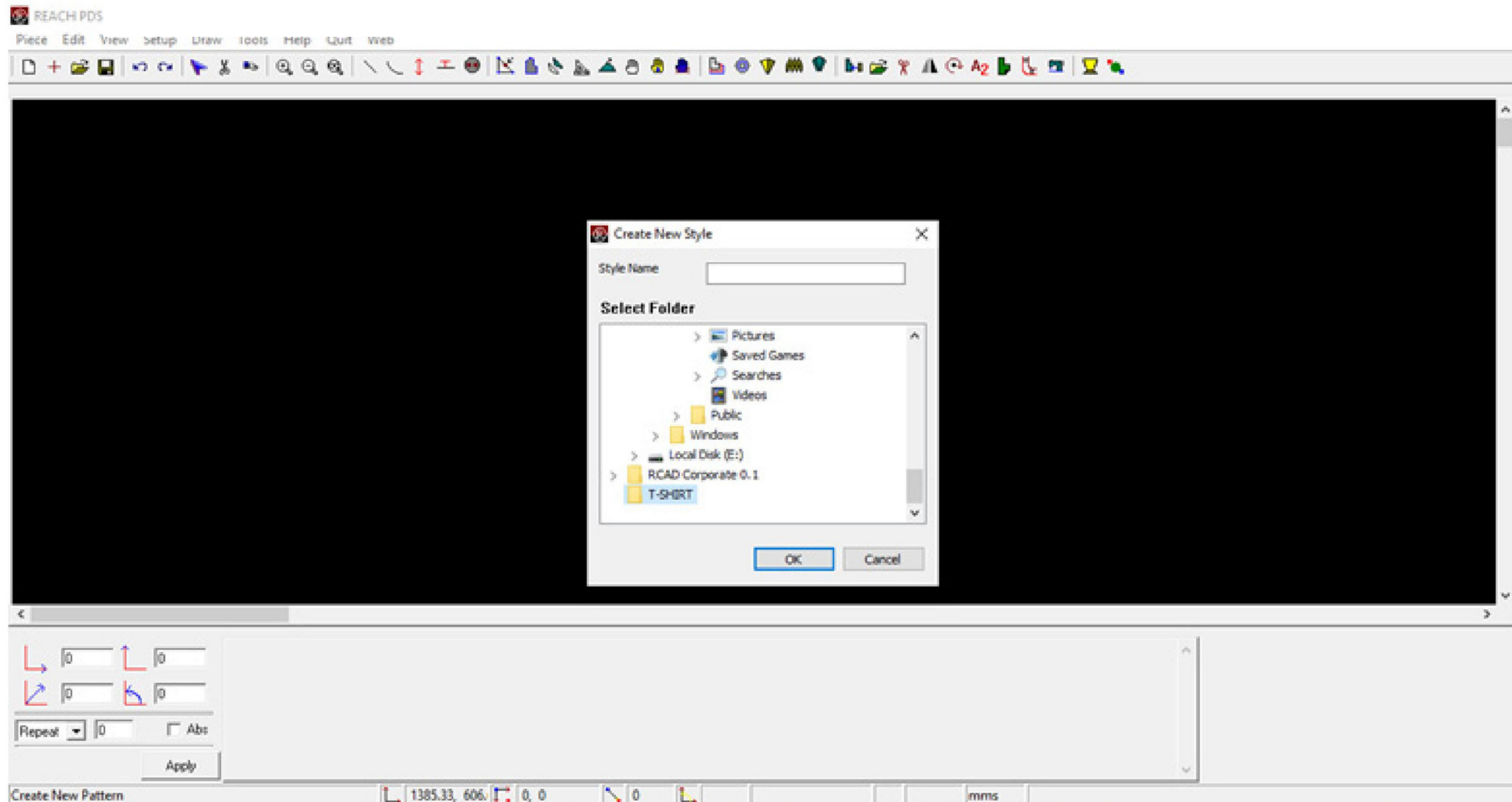
CLICK ON 'STYLE' IN THE BOTTOM RIGHT CORNER. IN THE CREATE STYLE DIALOG BOX CLICK 'YES'.



STEP-008

SELECT THE T-SHIRT FOLDER FROM DESKTOP.

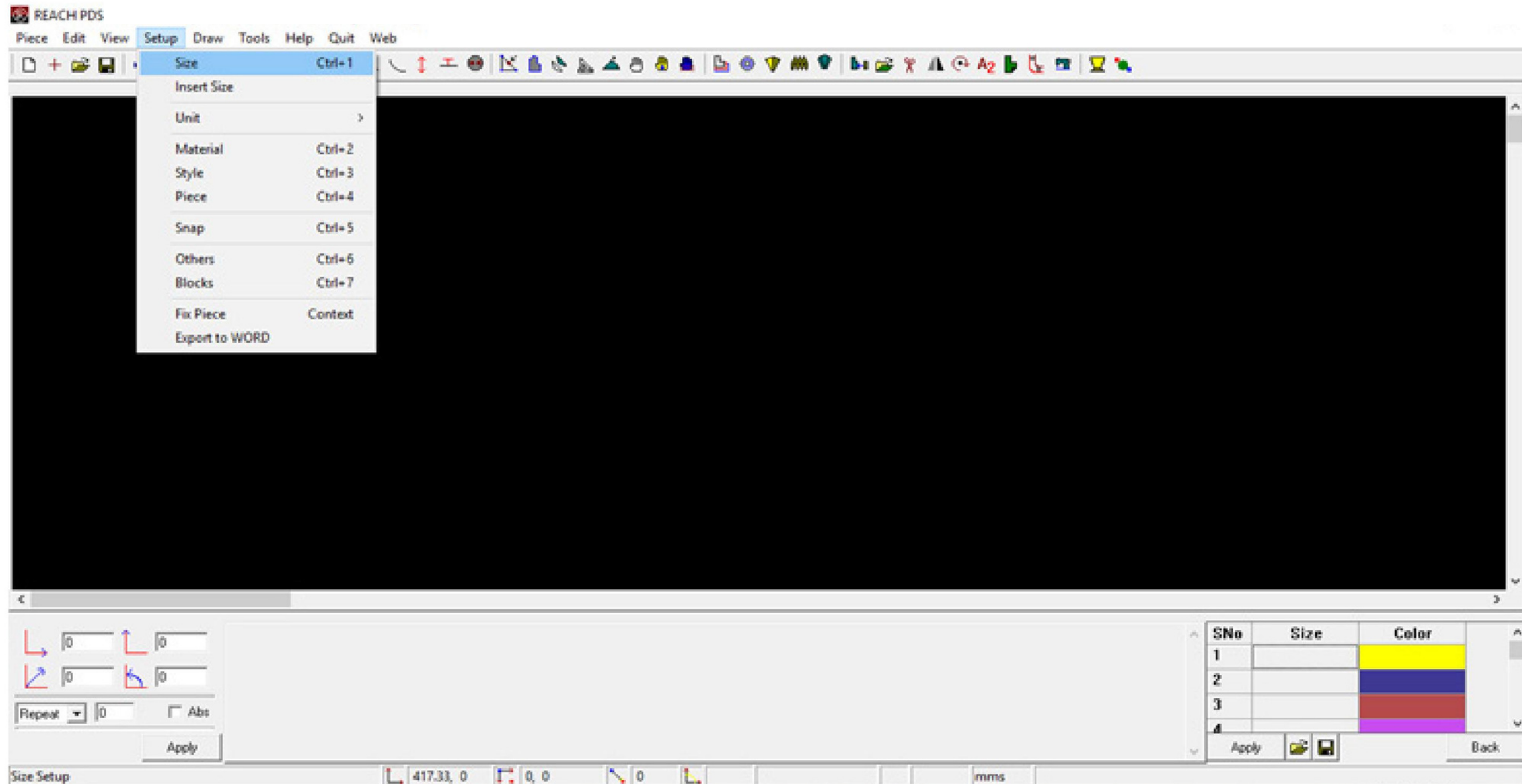
REACH CAD



STEP-009

CLICK ON SETUP MENU AND THEN SELECT 'SIZE'.

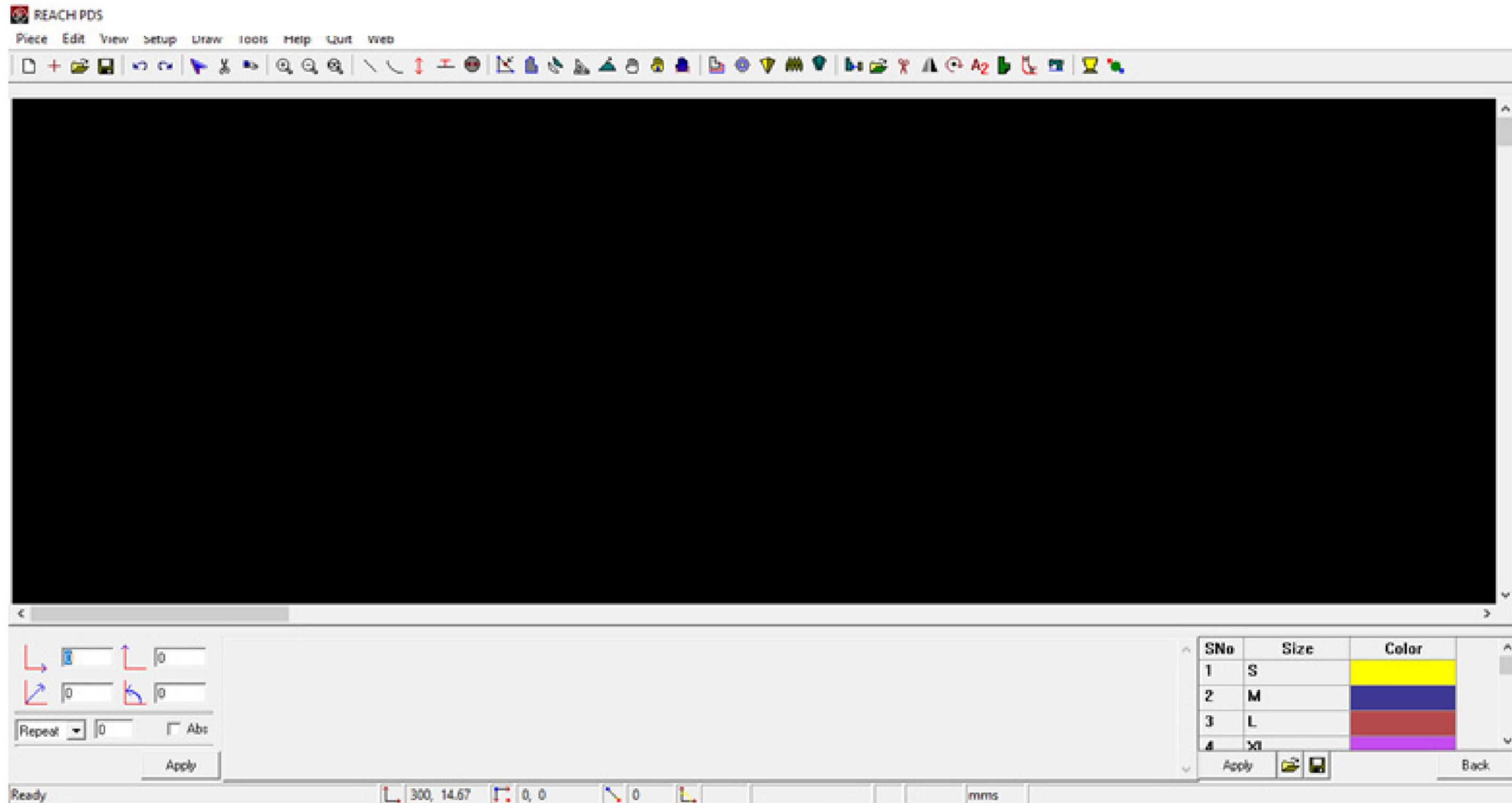
REACH CAD



STEP-010

SIZE TABLE IS CREATED IN THE BOTTOM RIGHT CORNER.

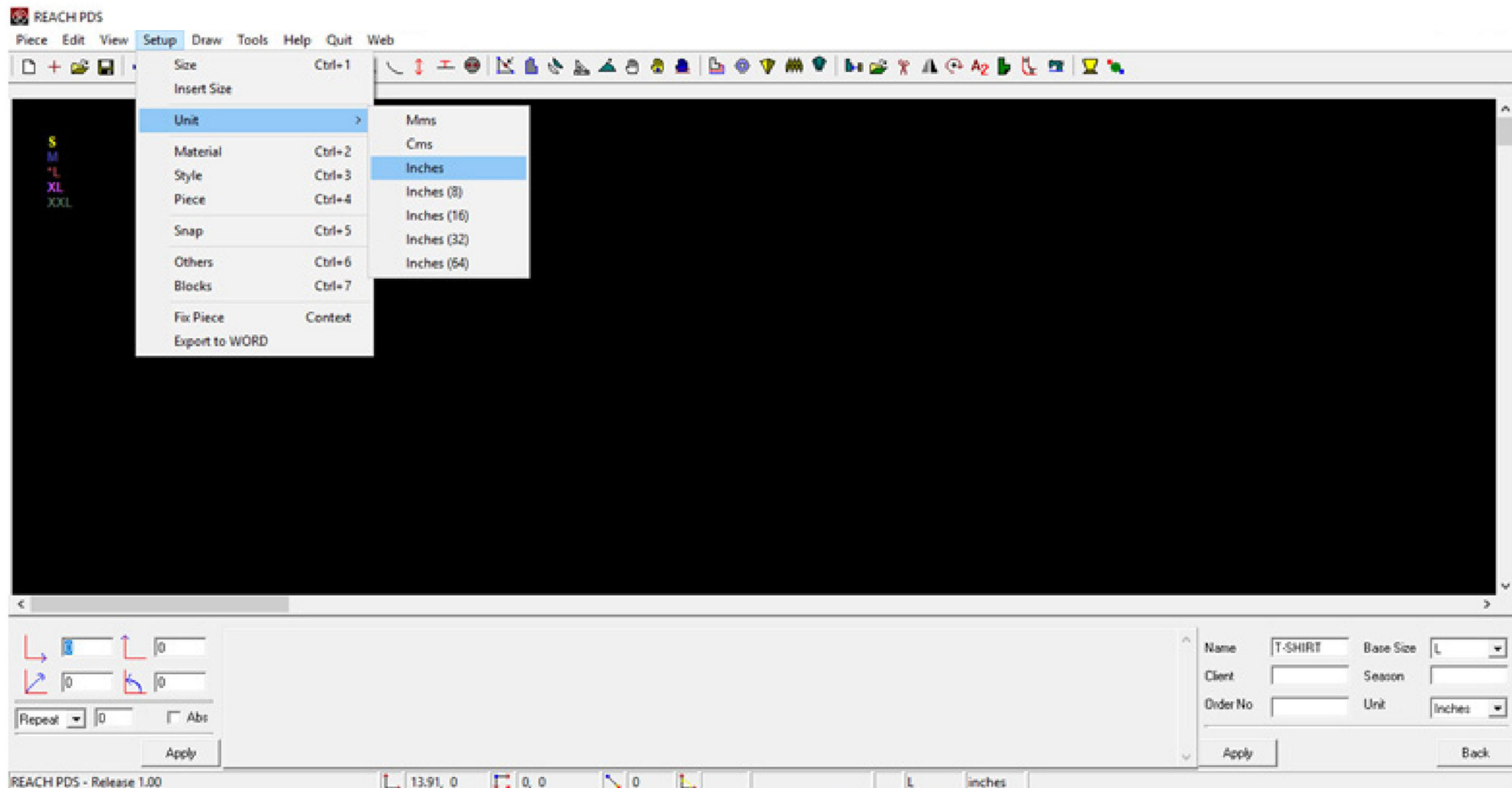
REACH CAD



STEP-01 |

SELECT 'UNIT' IN THE SETUP MENU AND THEN CLICK ON 'INCHES'.

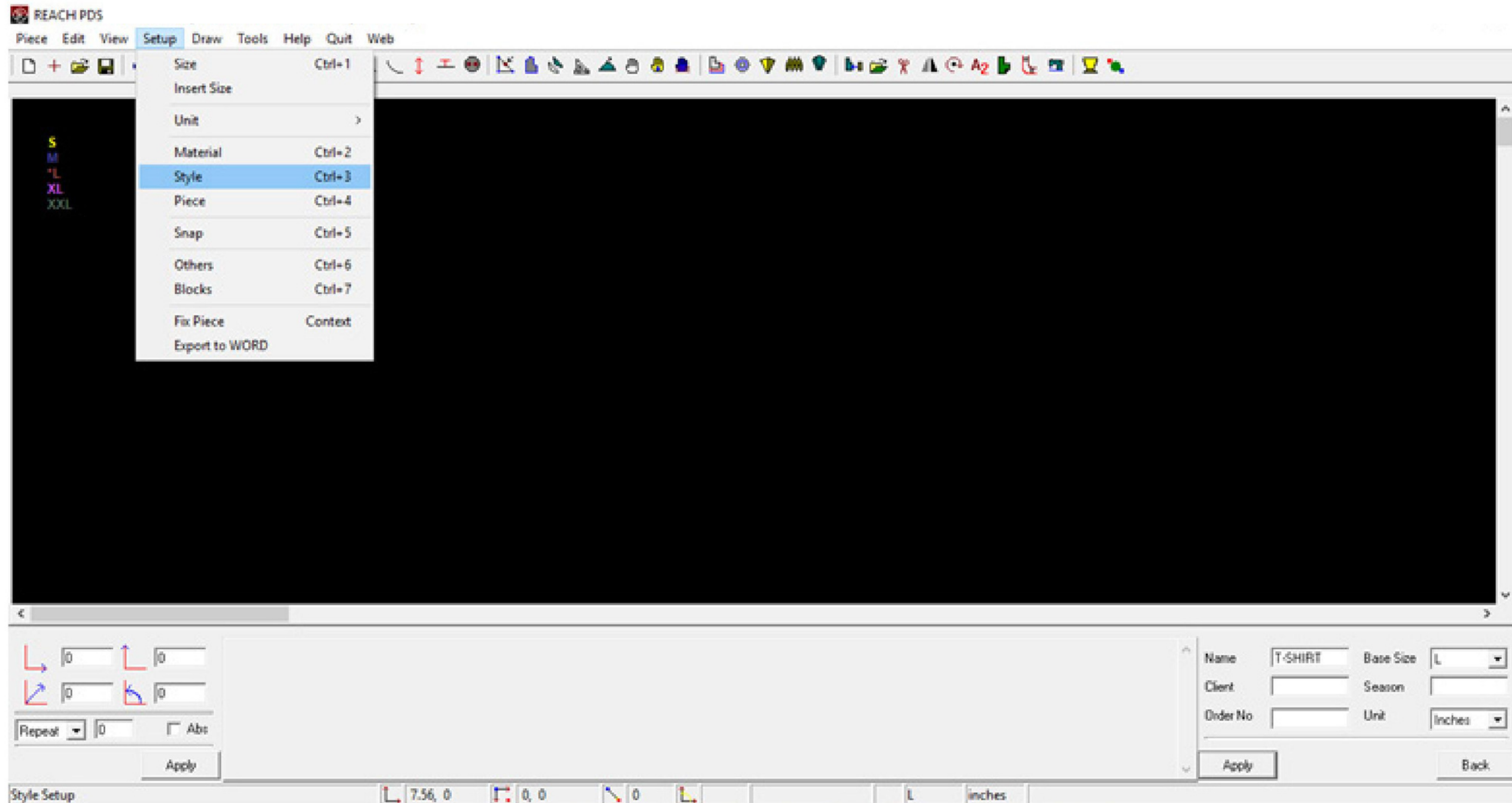
REACH CAD



STEP-012

CLICK ON SETUP AND THEN SELECT 'STYLE'.

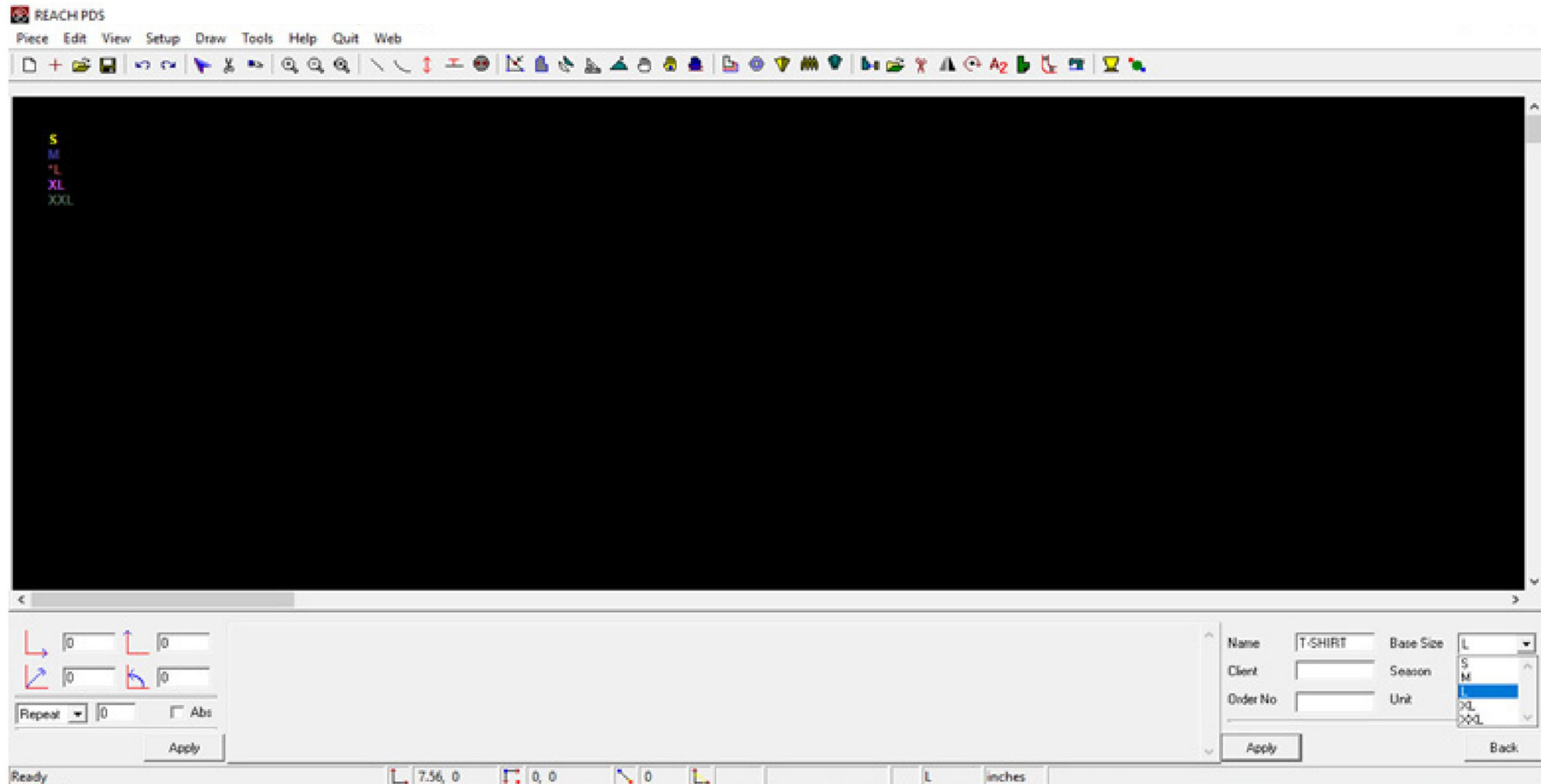
REACH CAD



STEP-013

IN THE BOTTOM RIGHT CORNER CHANGE THE BASE SIZE TO 'L'.

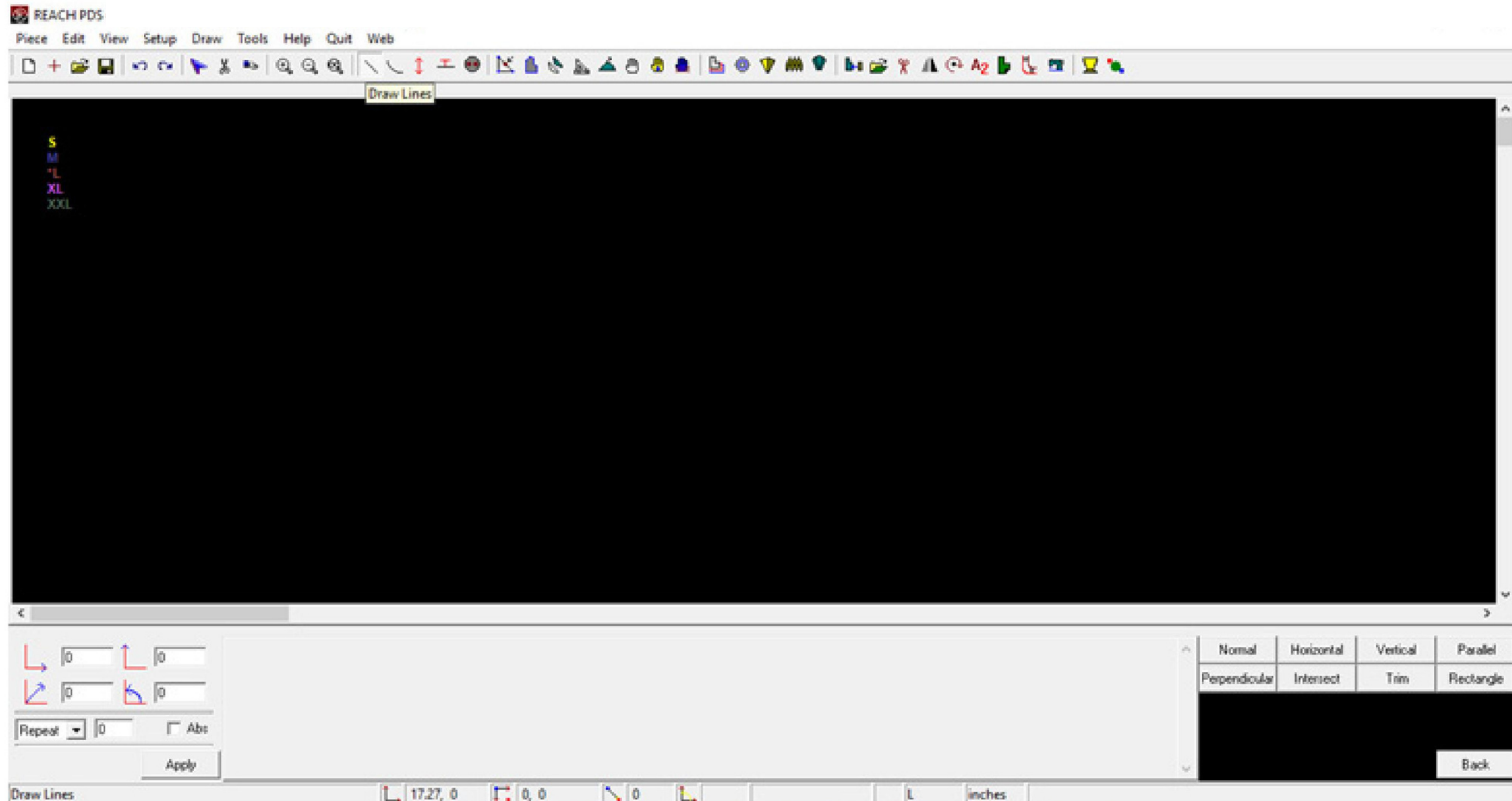
REACH CAD



STEP-014

CLICK ON DRAW LINES IN THE OPEN RECTANGLE IN THE RIGHT CORNER.

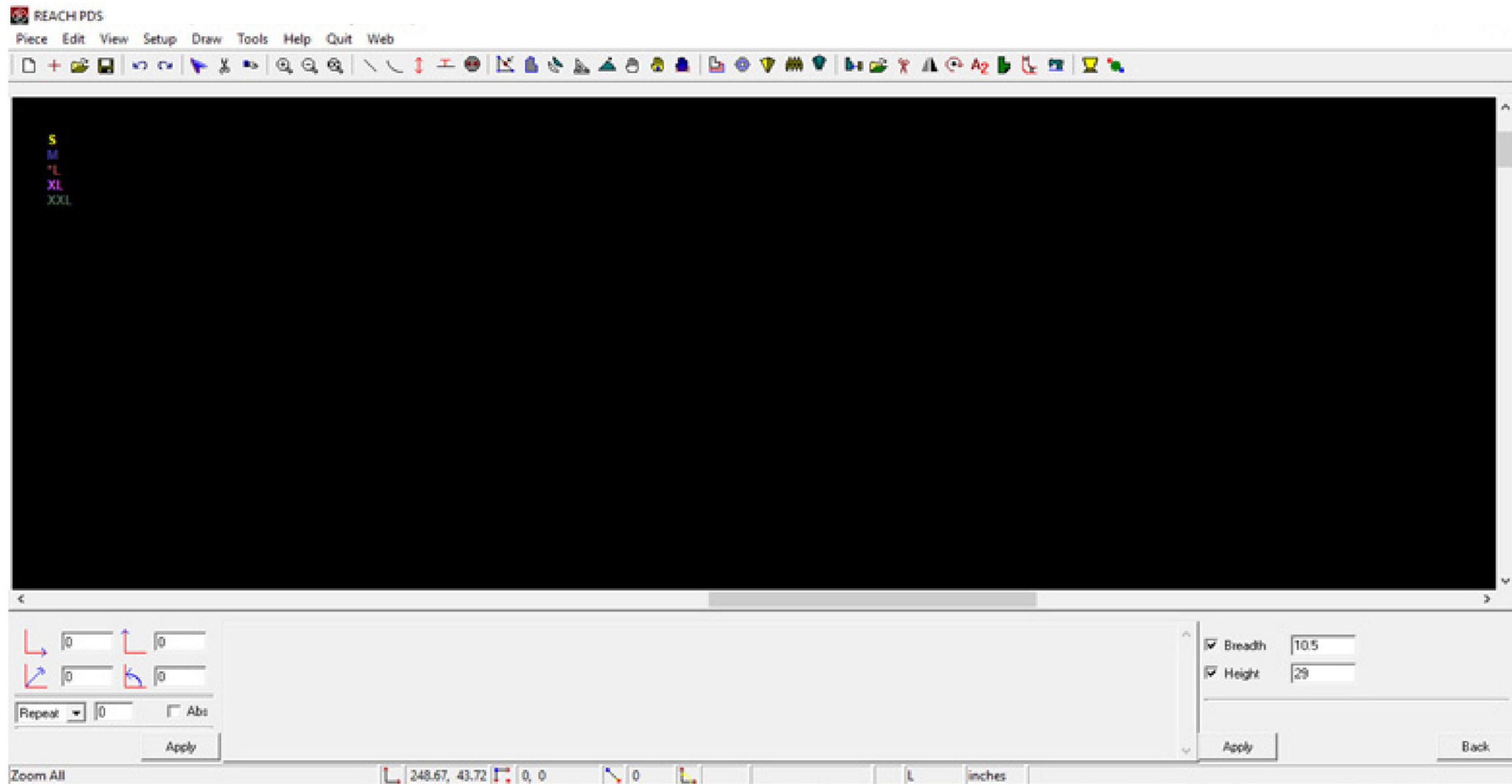
REACH CAD



STEP-015

CHEST 1/2 MEASUREMENT AND LENGTH MEASUREMENT APPLY

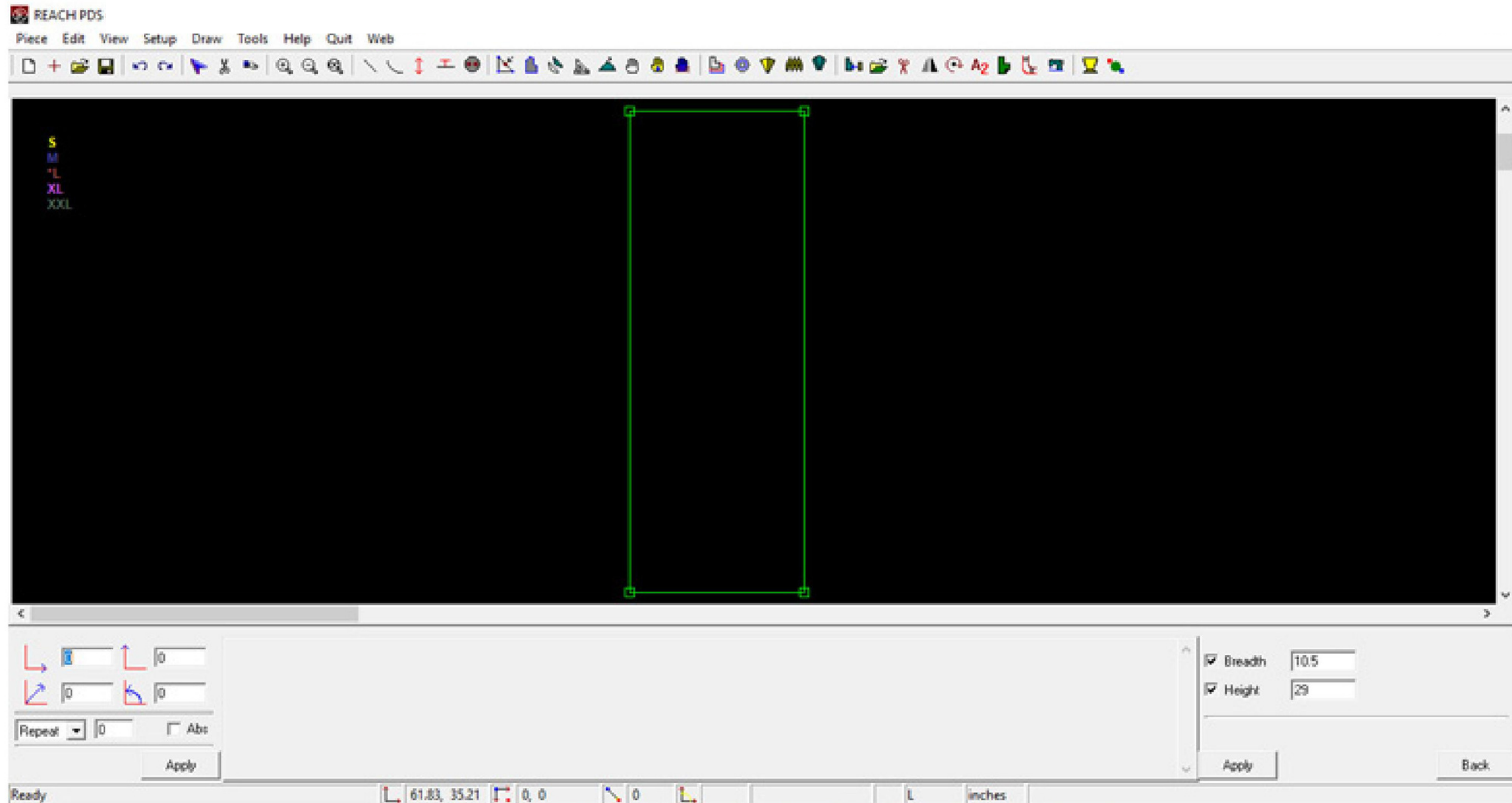
REACH CAD



STEP-016

CLICK ON TRACING LINE ON REACH PDS OPEN

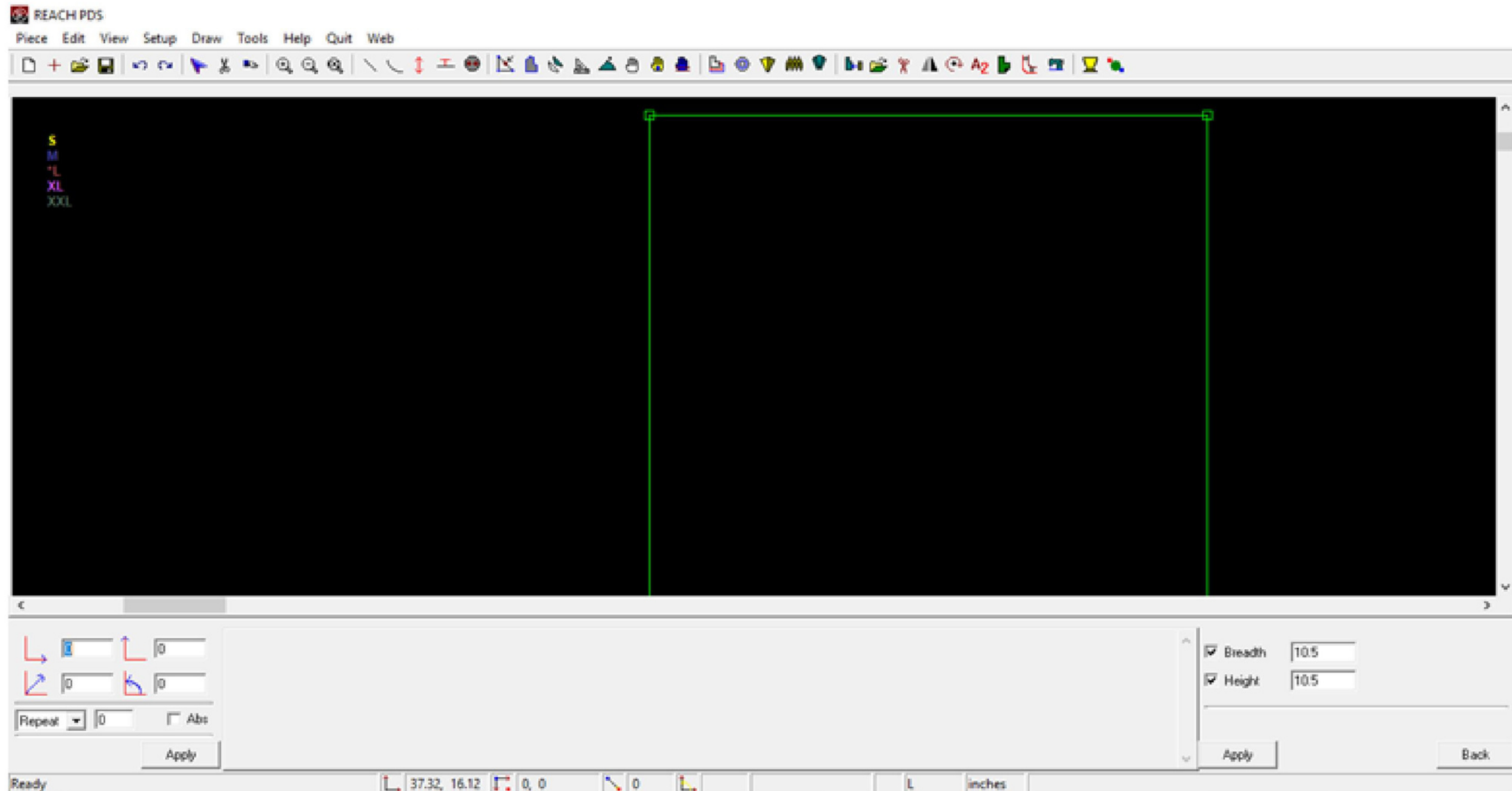
REACH CAD



STEP-017

ZOOM ON TO THE TOP NECK CORNER POINT

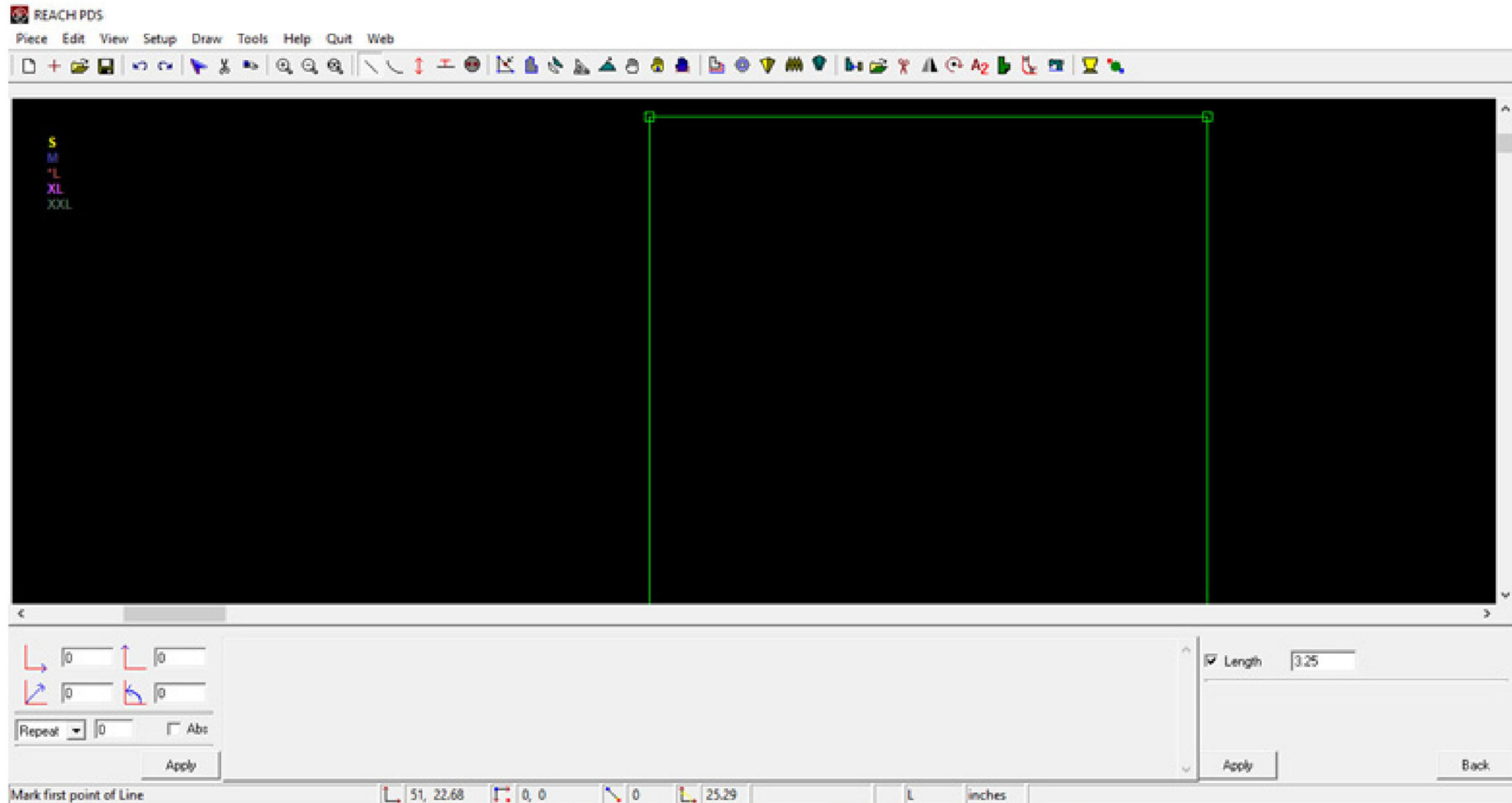
REACH CAD



STEP-018

CLICK ON 'DRAW LINE' AND CLICK ON HORIZONTAL LINE.

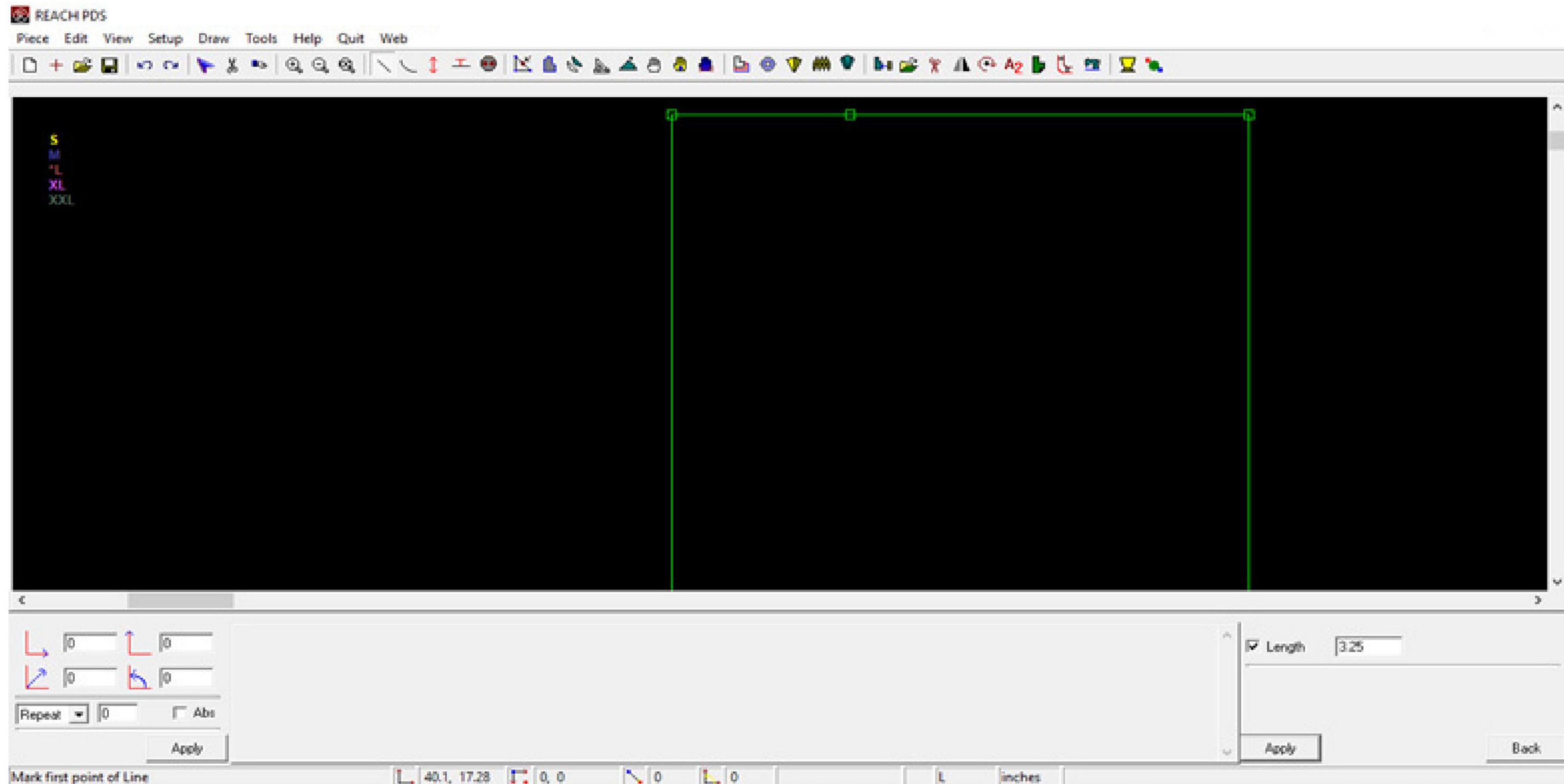
REACH CAD



STEP-019

APPLY ON POINT NECK WIDTH OF MEASUREMENT

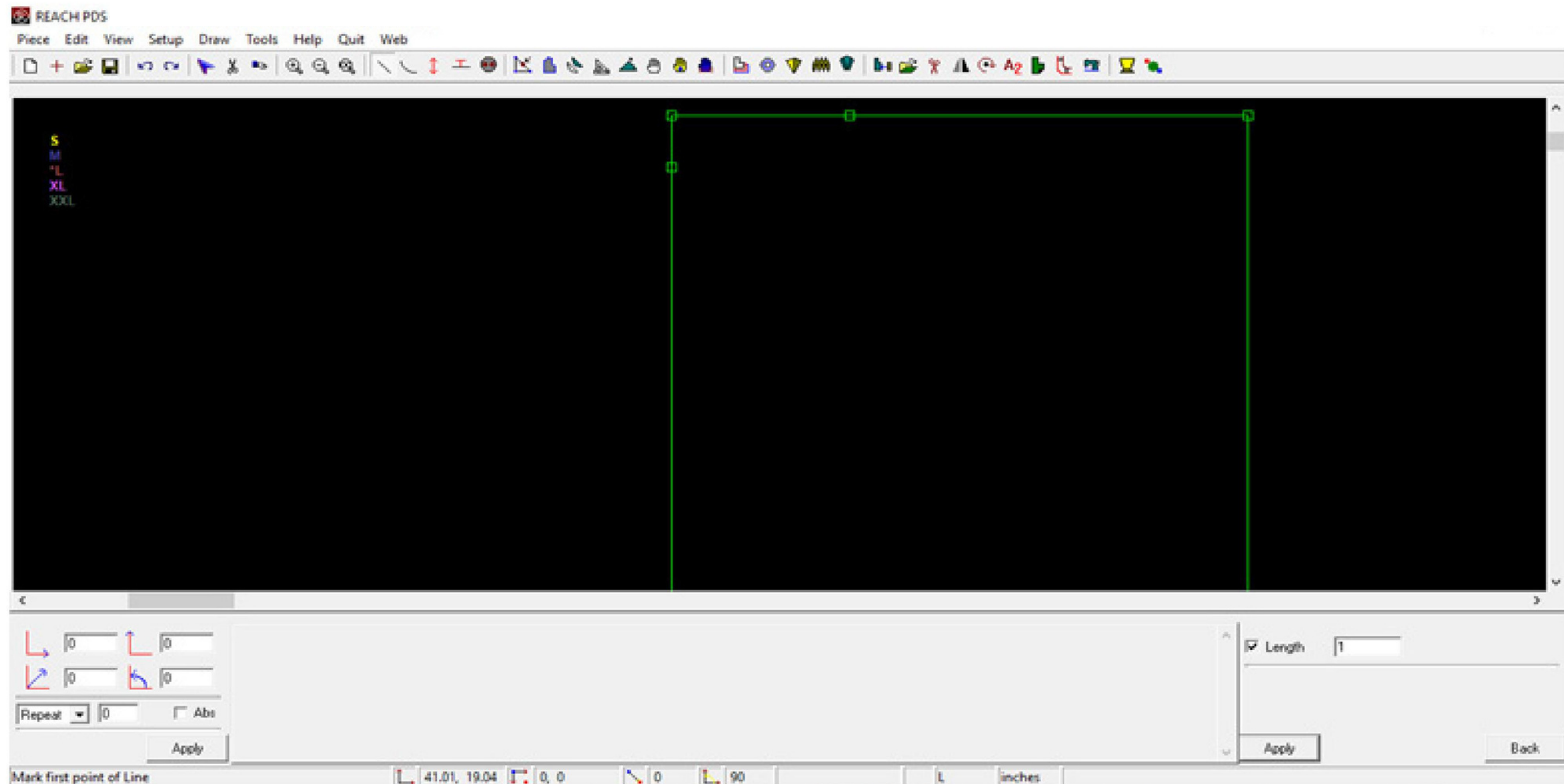
REACH CAD



STEP-020

REACH CAD

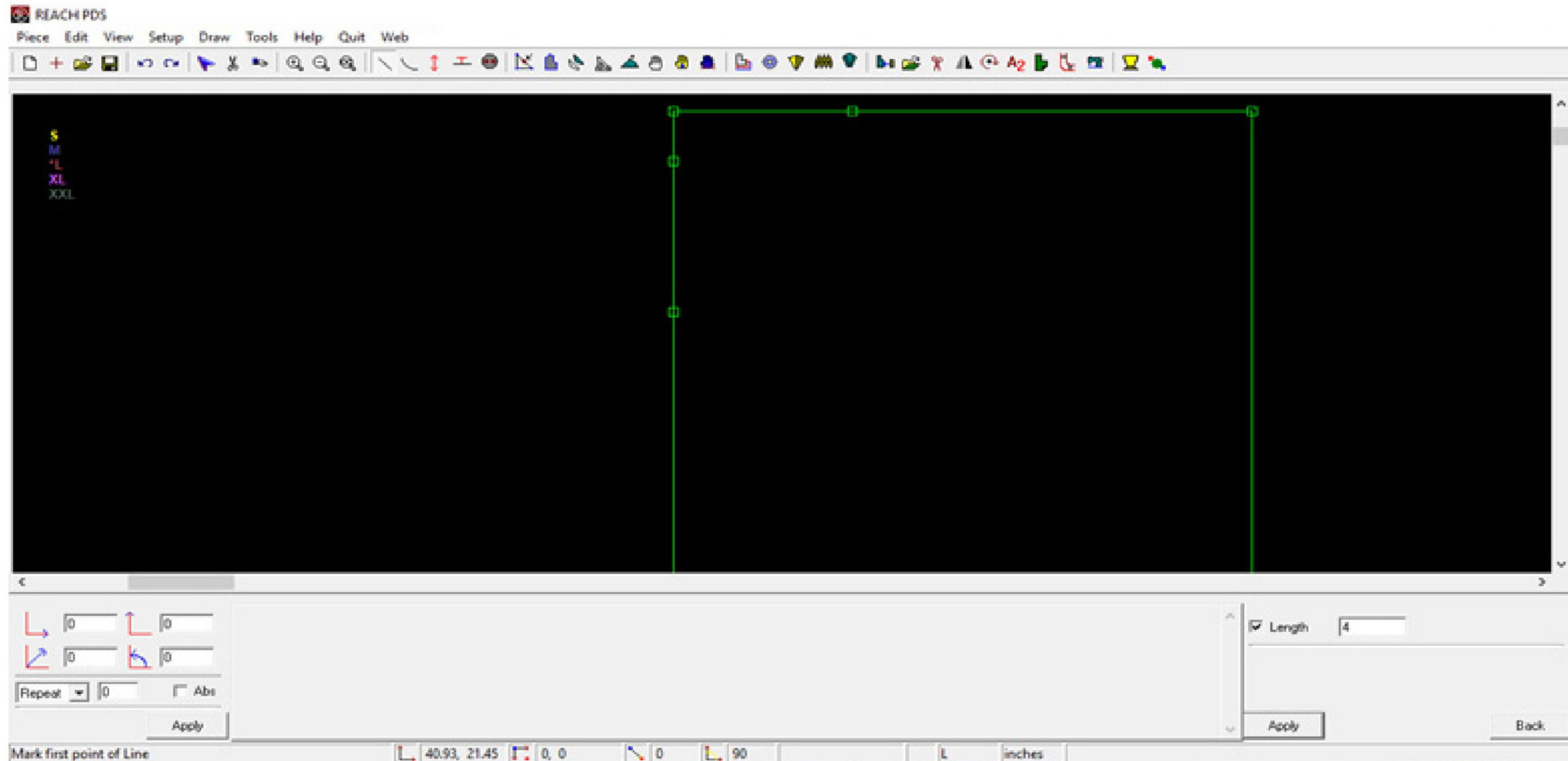
CLICK ON THE VERTICAL LINE AND APPLY THE BACK NECK MEASUREMENT



STEP-021

REACH CAD

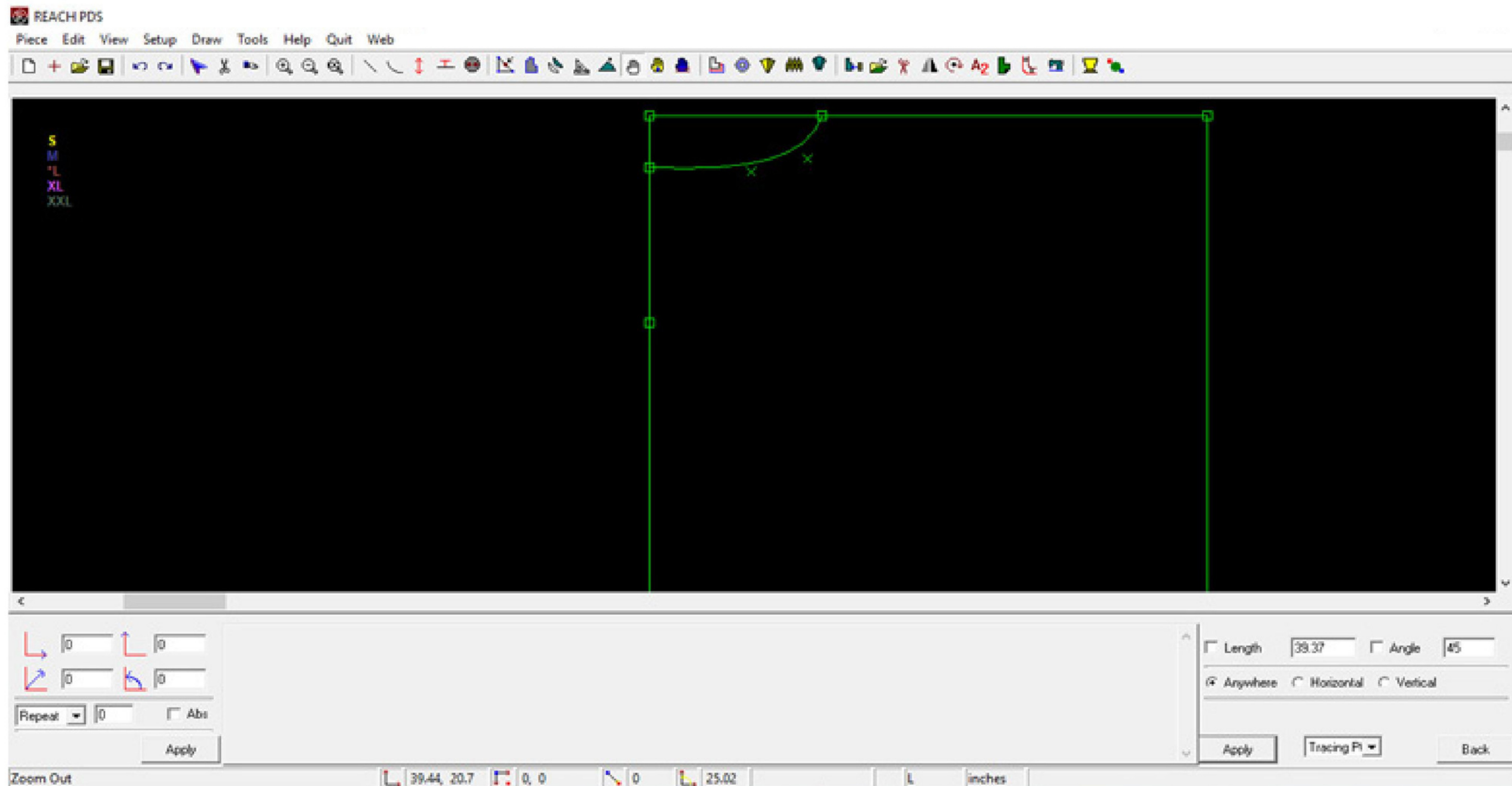
NEXT, TO MAKE THE FRONT NECK DROP, CLICK ON THE VERTICAL LINE AND APPLY MEASUREMENTS



STEP-022

REACH CAD

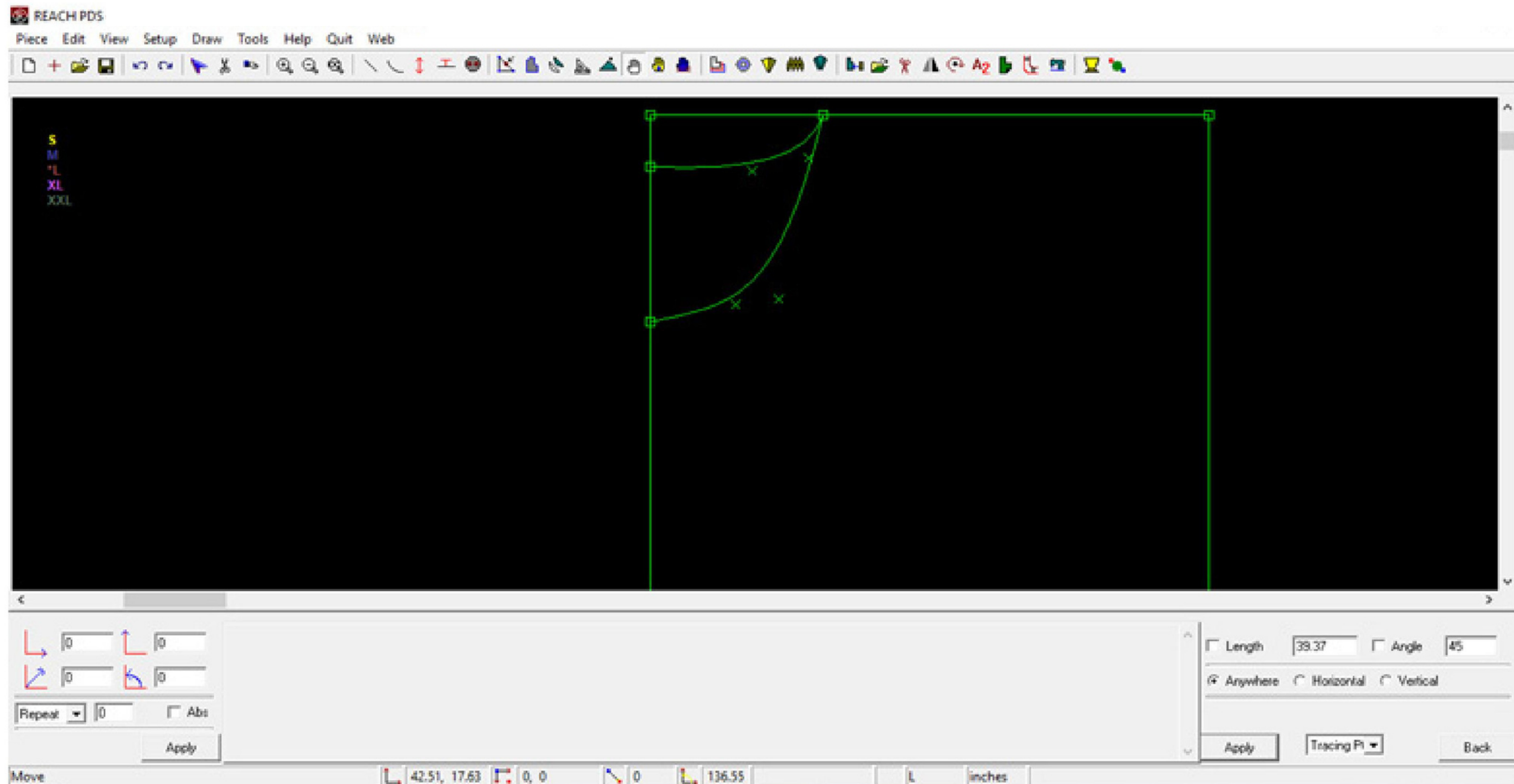
SELECT THE CURVE LINES DRAWN AND THEN SELECT 4 BEZIER POINTS AND DRAW BACK NECK.



STEP-023

CLICK ON THE SAME 4 BEZIER POINTS AND DRAW THE FRONT NECK DROP.

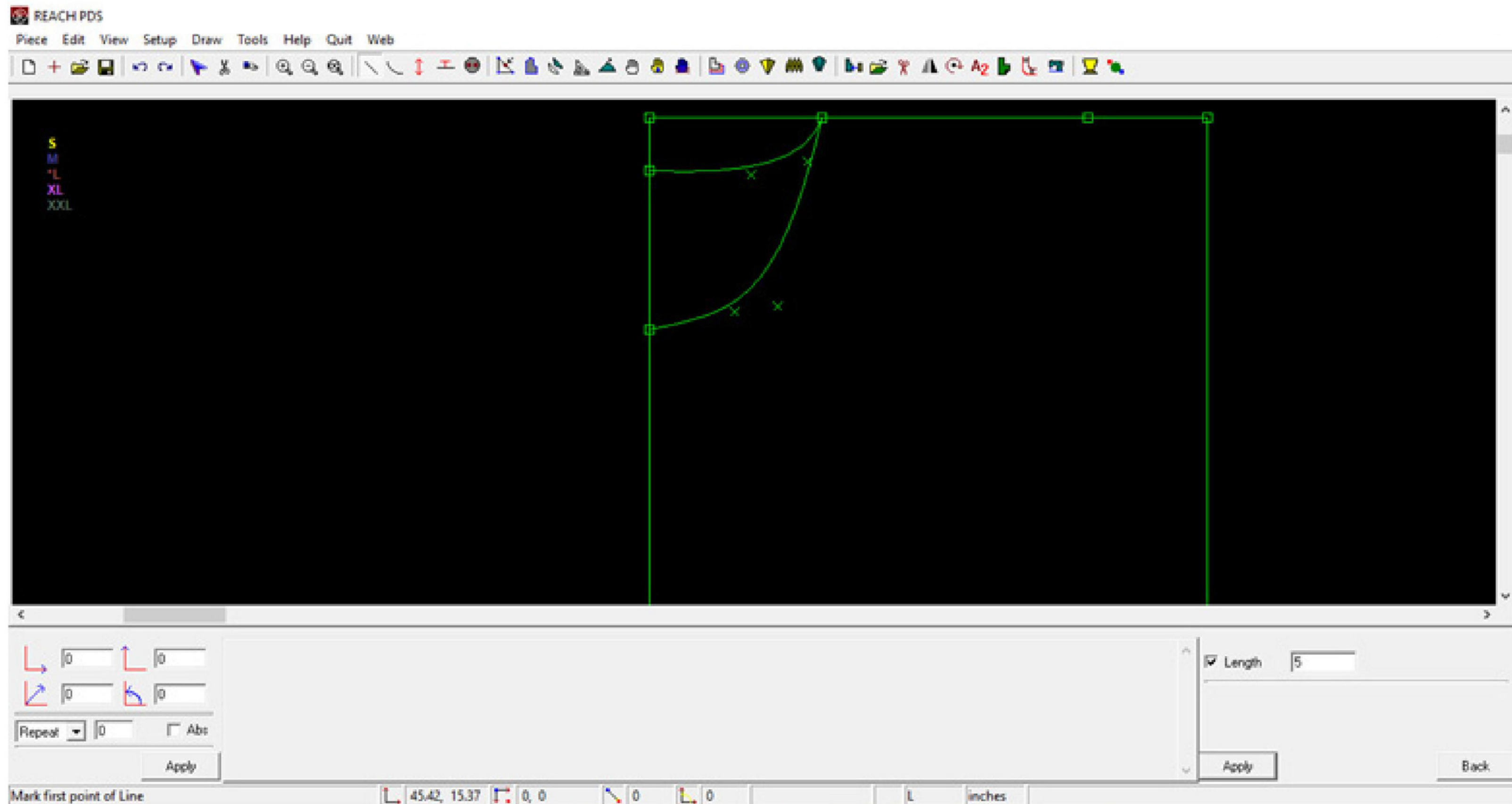
REACH CAD



STEP-024

APPLY THE SHOULDER MEASUREMENTS ON THE HORIZONTAL LINE.

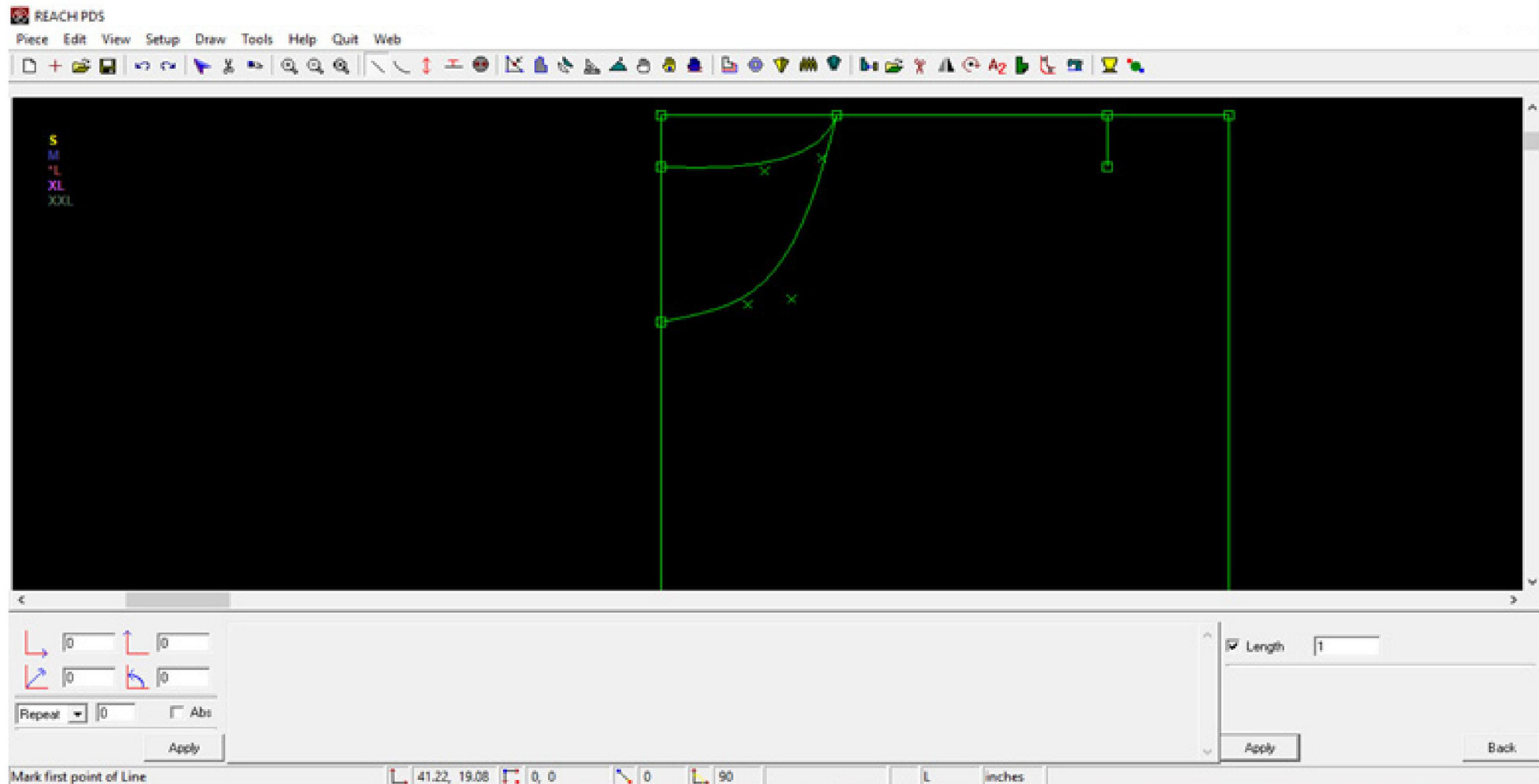
REACH CAD



STEP-025

APPLY THE SHOULDER DROP MEASUREMENT ON THE VERTICAL LINE

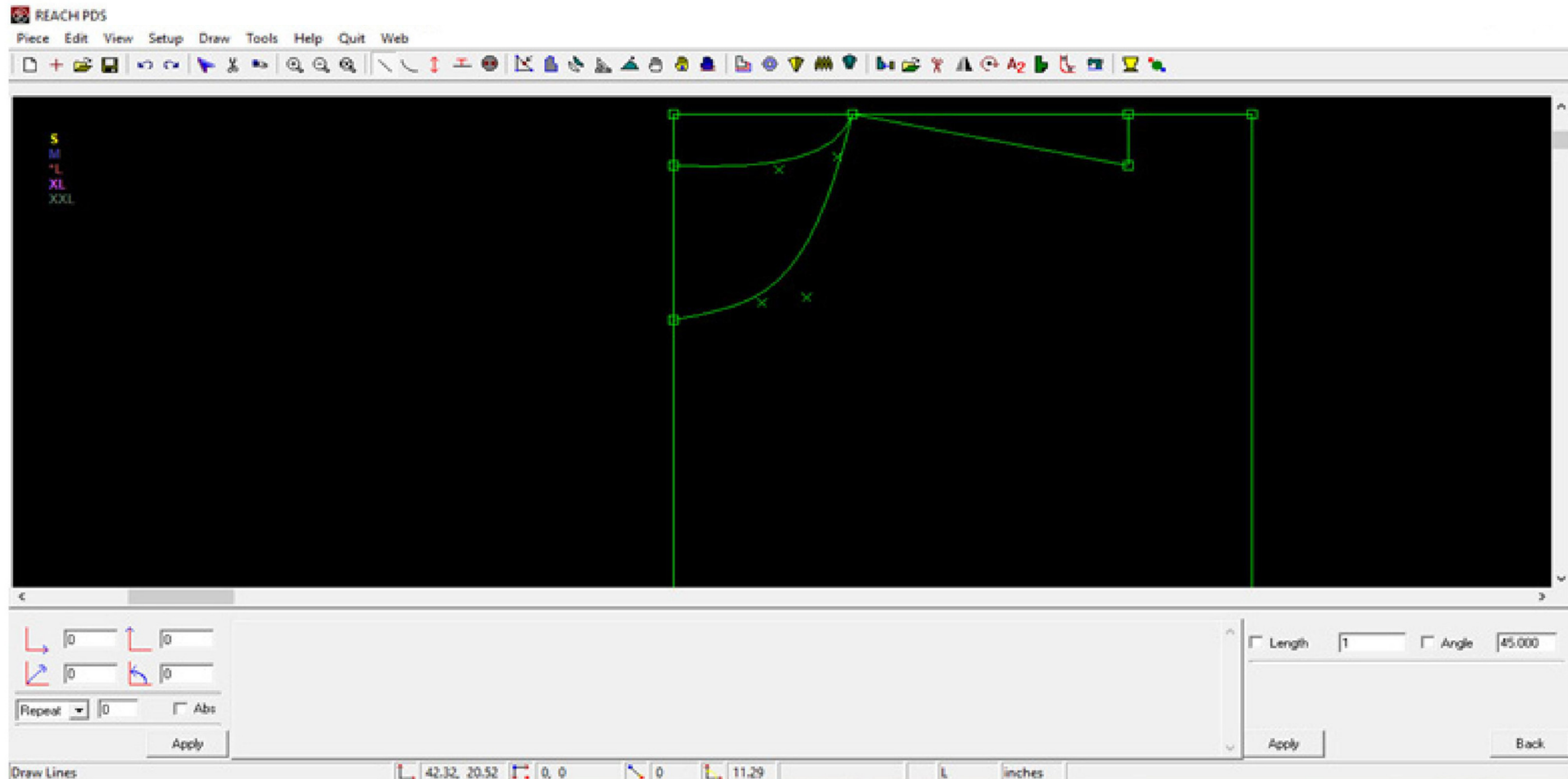
REACH CAD



STEP-026

REACH CAD

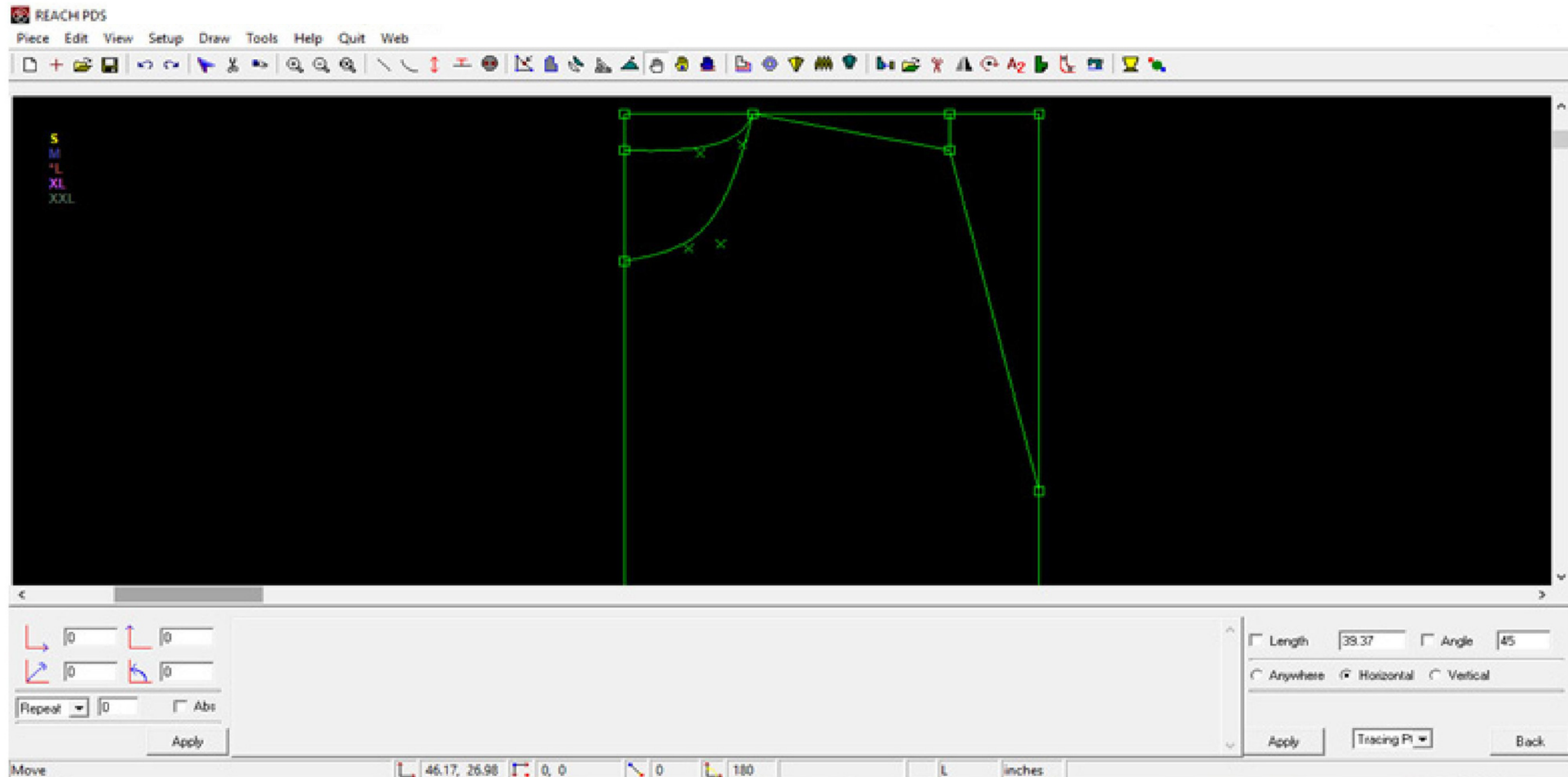
SELECT THE NORMAL LINE AND JOIN NECK POINT TO THE DROPPED SHOULDER POINT



STEP-027

SELECT THE NORMAL LINE AND APPLY ½ ARMHOLE MEASUREMENT

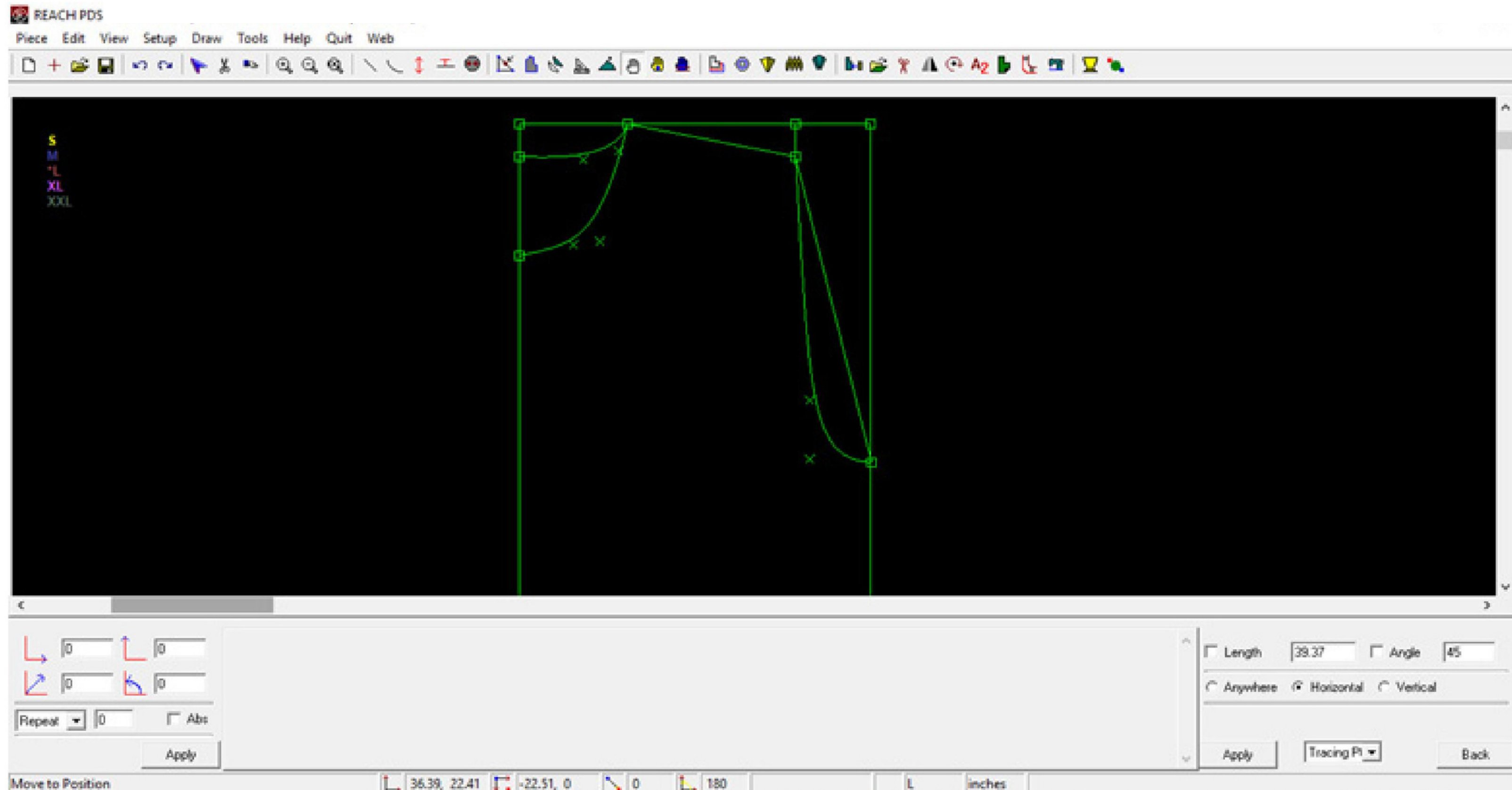
REACH CAD



STEP-028

DRAW CURVE LINES AND 4 POINT BEZIER AND OBTAIN THE ARMHOLE SHAPE

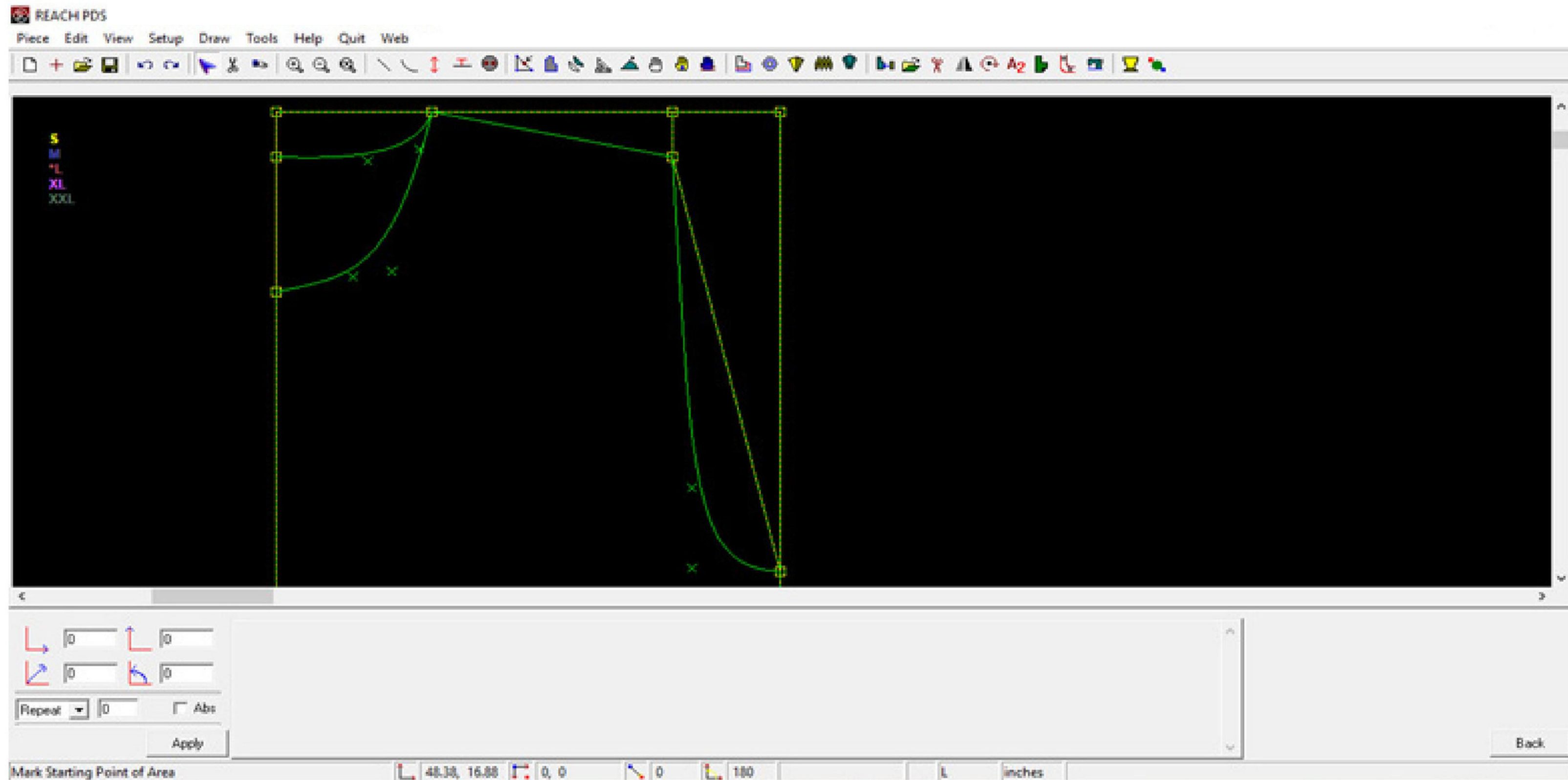
REACH CAD



STEP-029

GO TO SELECT TOOL BAR SELECTION TRACING AREA YELLOW LINES

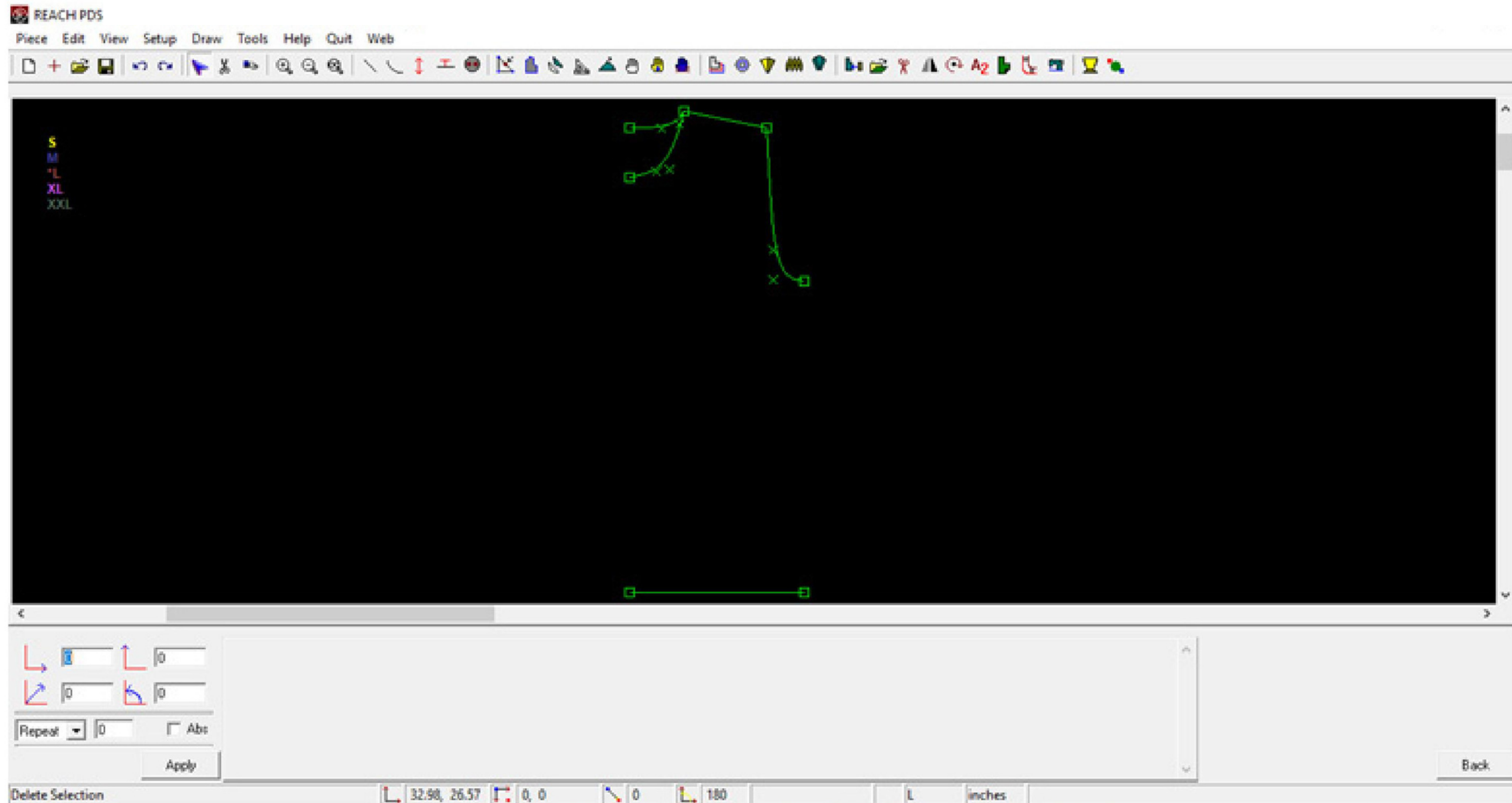
REACH CAD



STEP-030

DELETE THE SELECTION TOOL AND CUT ALL THE YELLOW LINES.

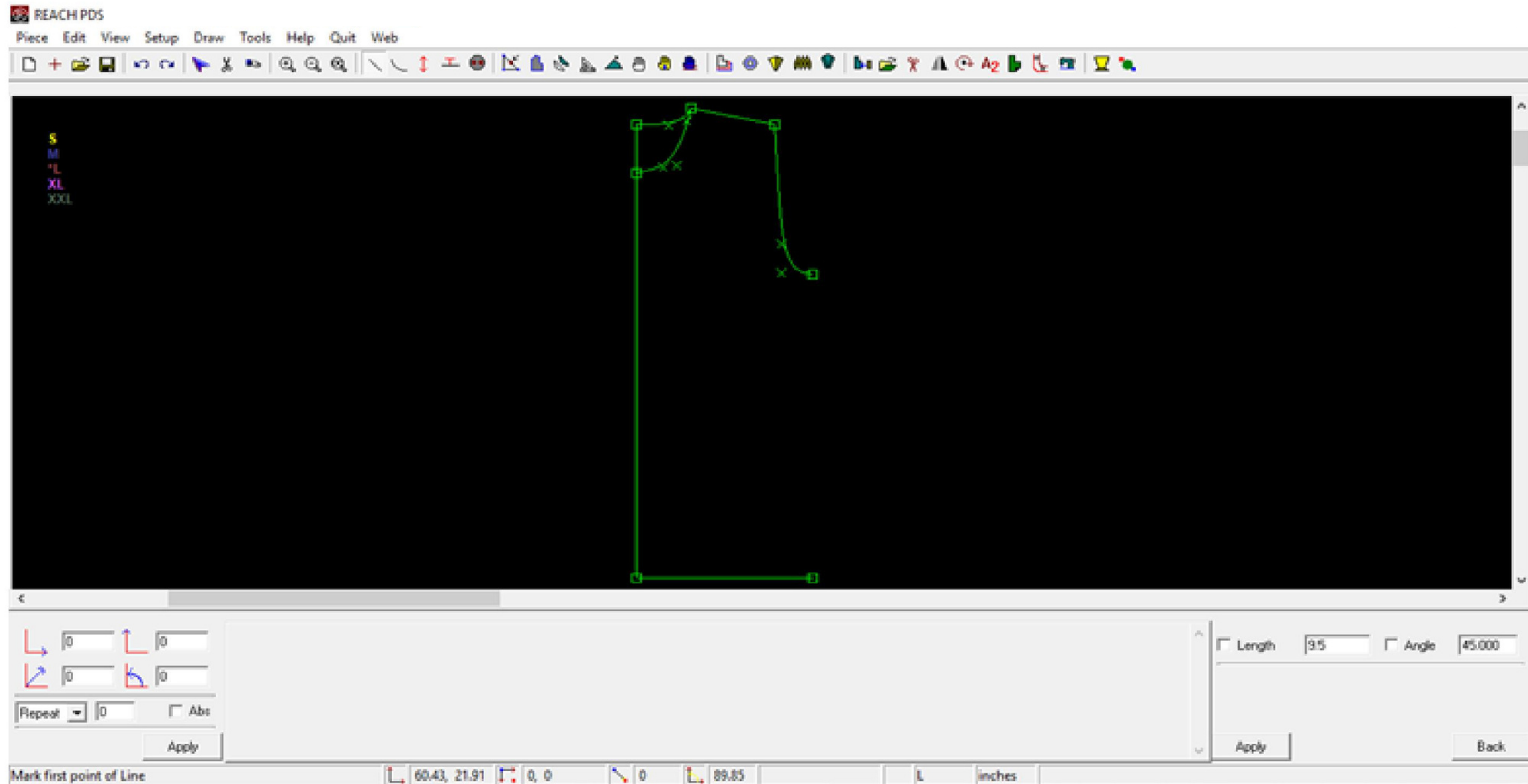
REACH CAD



STEP-03 I

GO TO NORMAL LINE AND JOIN FRONT NECK, BACK NECK TO BOTTOM LINE

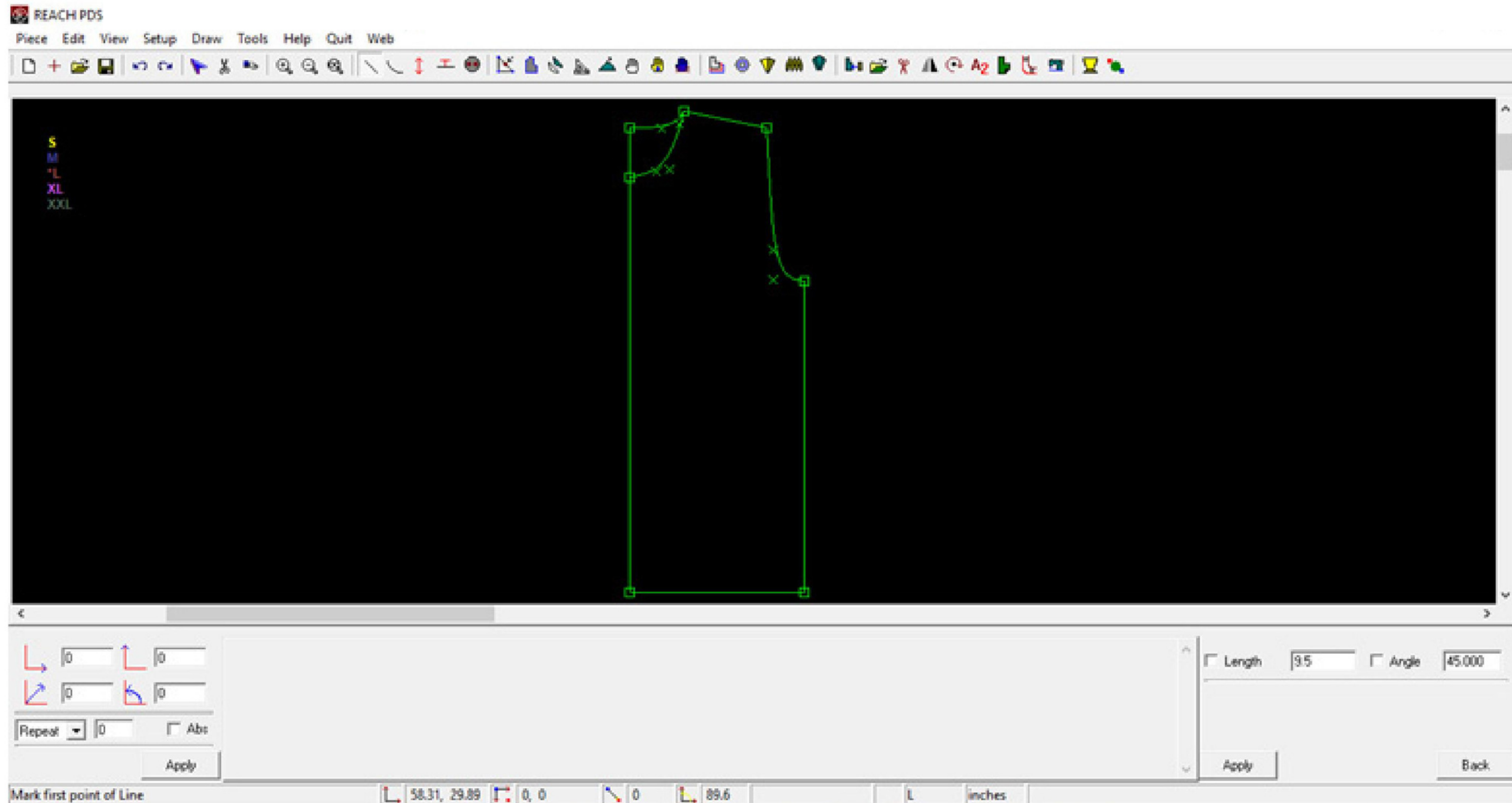
REACH CAD



STEP-032

GO TO NORMAL LINE AND JOIN THE LOWER ARMHOLE POINT TO THE BOTTOM POINT.

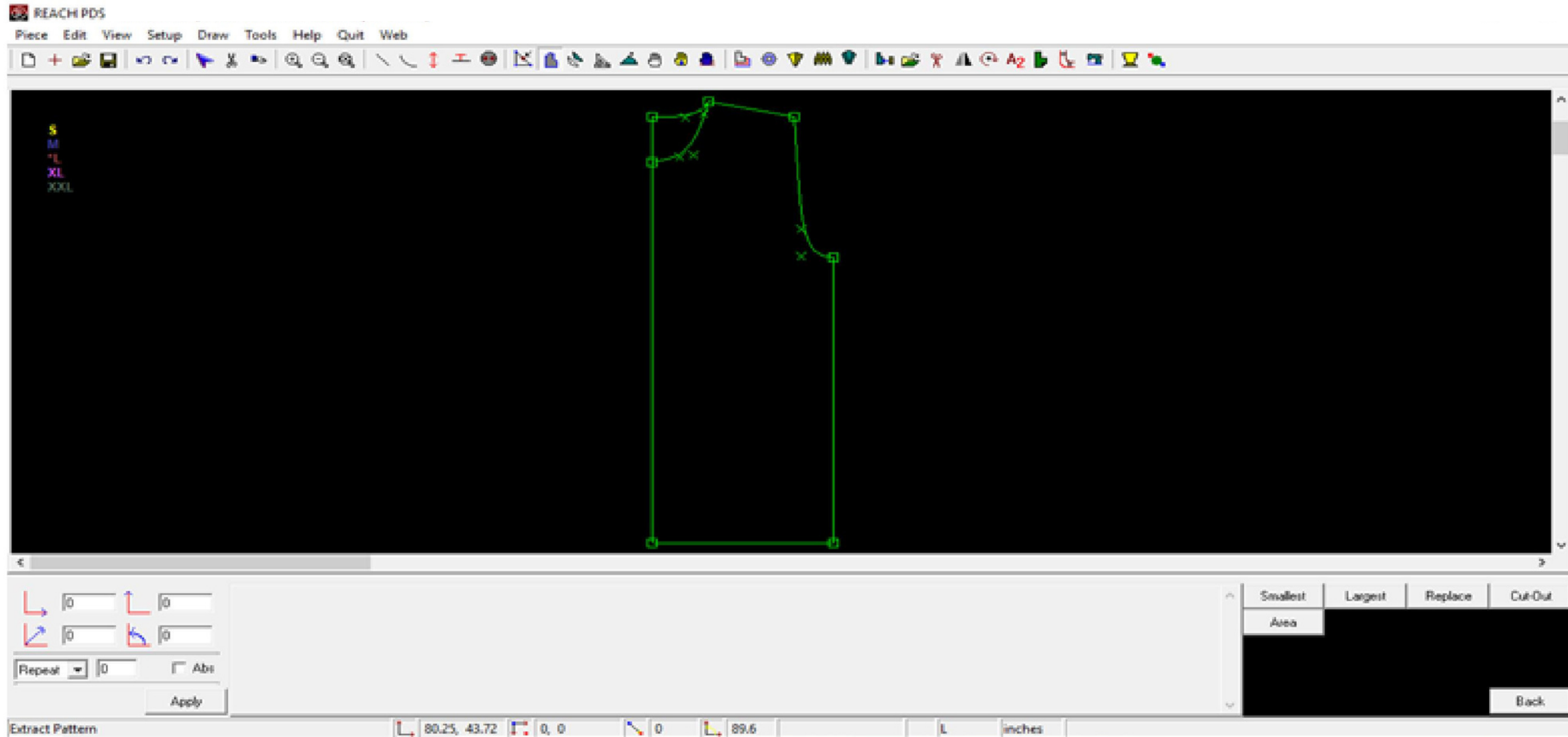
REACH CAD



STEP-033

CLICK ON EXTRACT PATTERN TOOL AND ON RIGHT SIDE SELECT LARGEST AND APPLY.

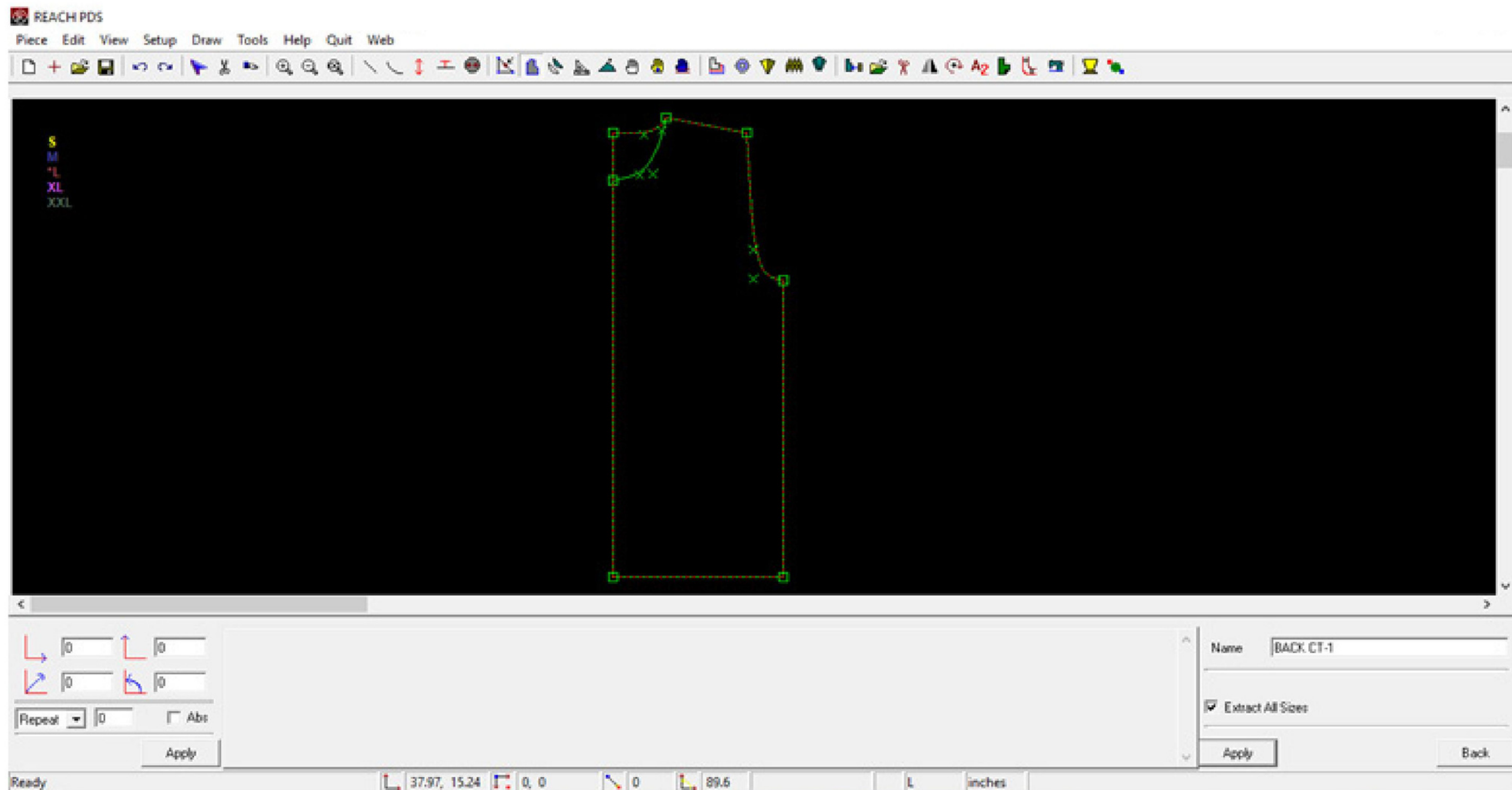
REACH CAD



STEP-034

REACH CAD

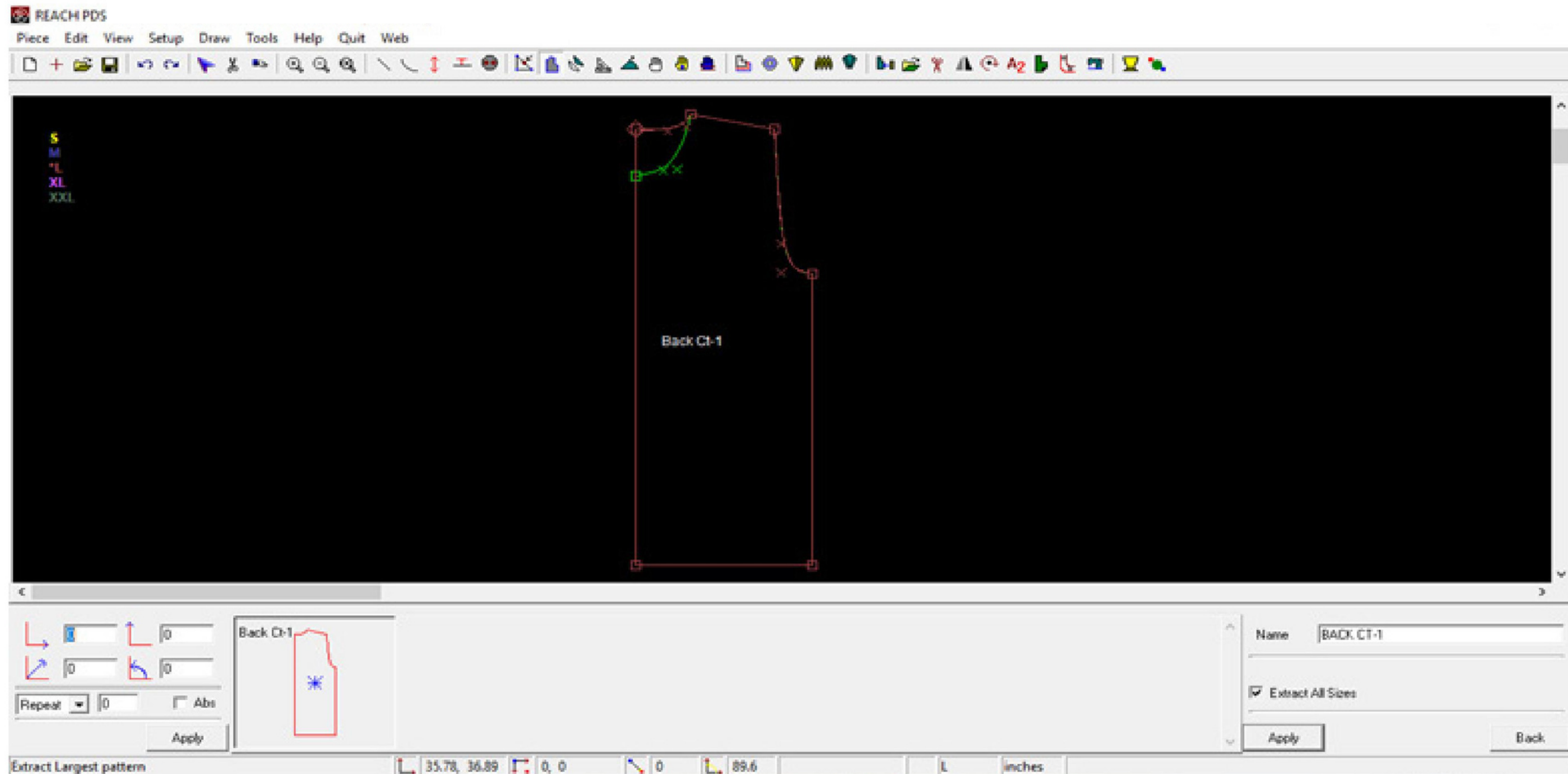
WRITE THE NAME 'BACK CT-1' AND CLICK ON APPLY. THE BACK NECK DROP AND SHOW ON YELLOW LINES CREATE THE PATTERN.



STEP-035

WITH ONE CLICK PATTERN IS CREATED ON THE BACK

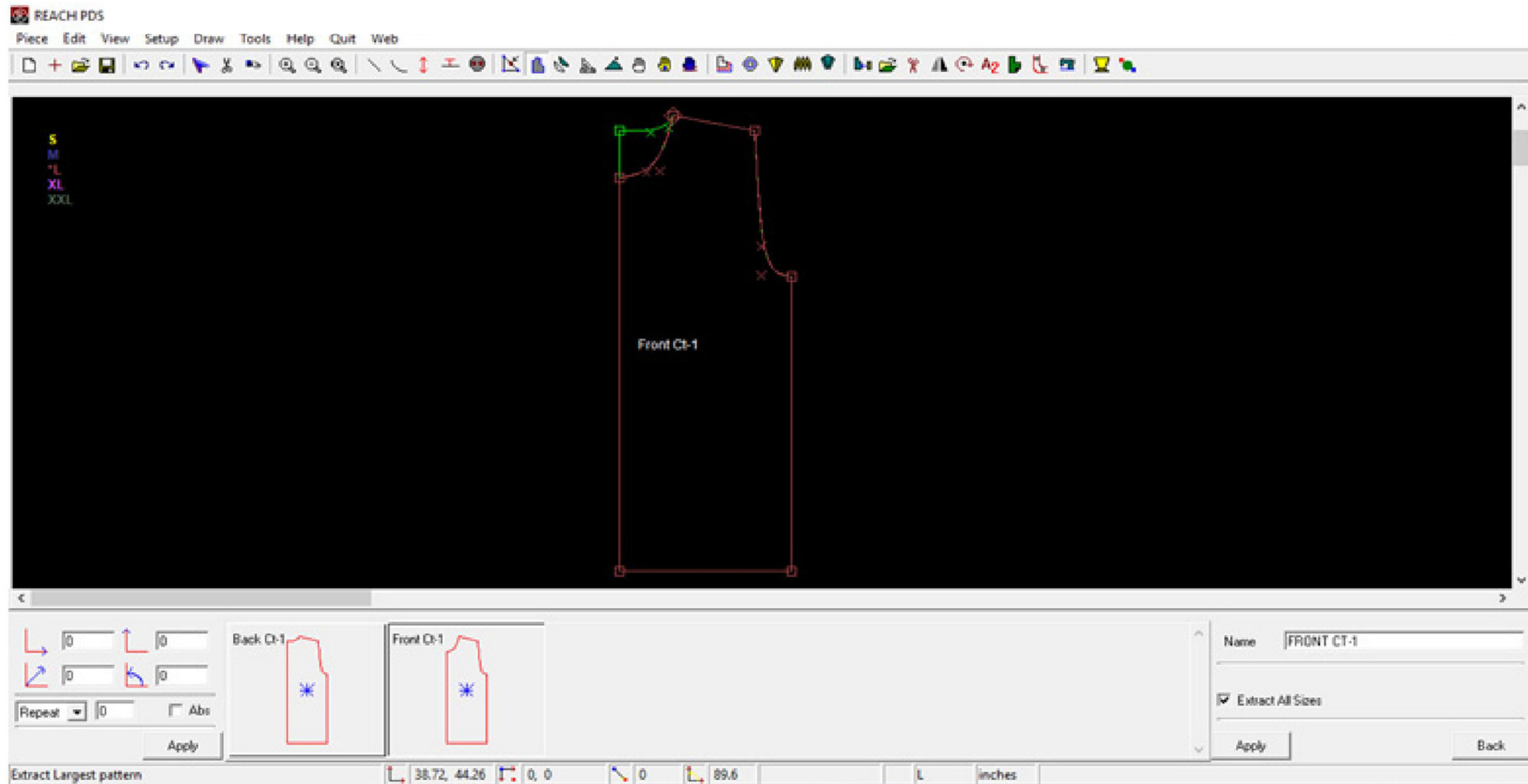
REACH CAD



STEP-036

REACH CAD

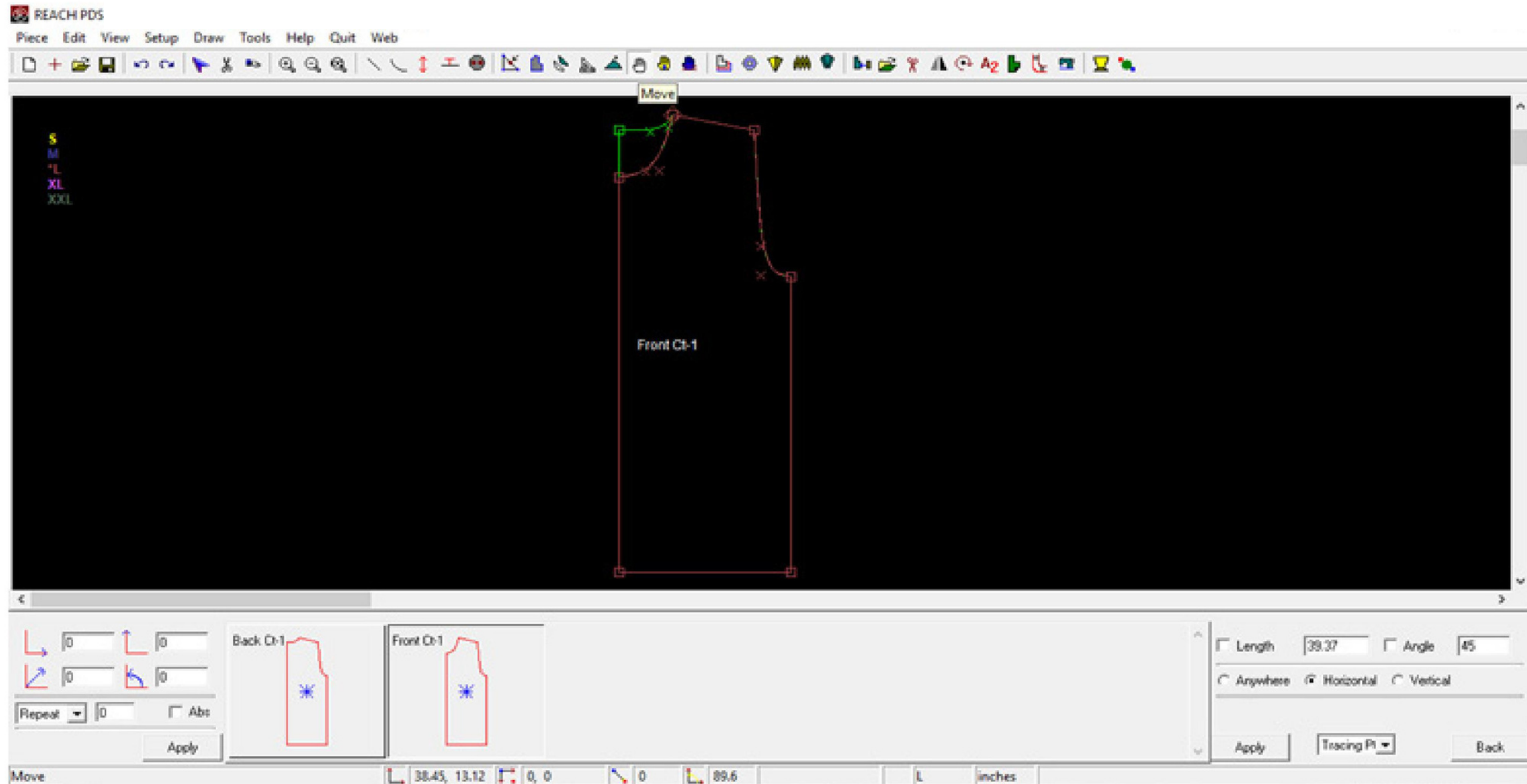
GO TO SAME BOX IN THE CORNER AND CHANGE THE NAME TO 'FRONT CT-1' START ON FRONT NECK DROP SINGLE CLICK



STEP-037

GO TO MOVE TOOL AND CLICK ON 'SEE RIGHT SIDE'

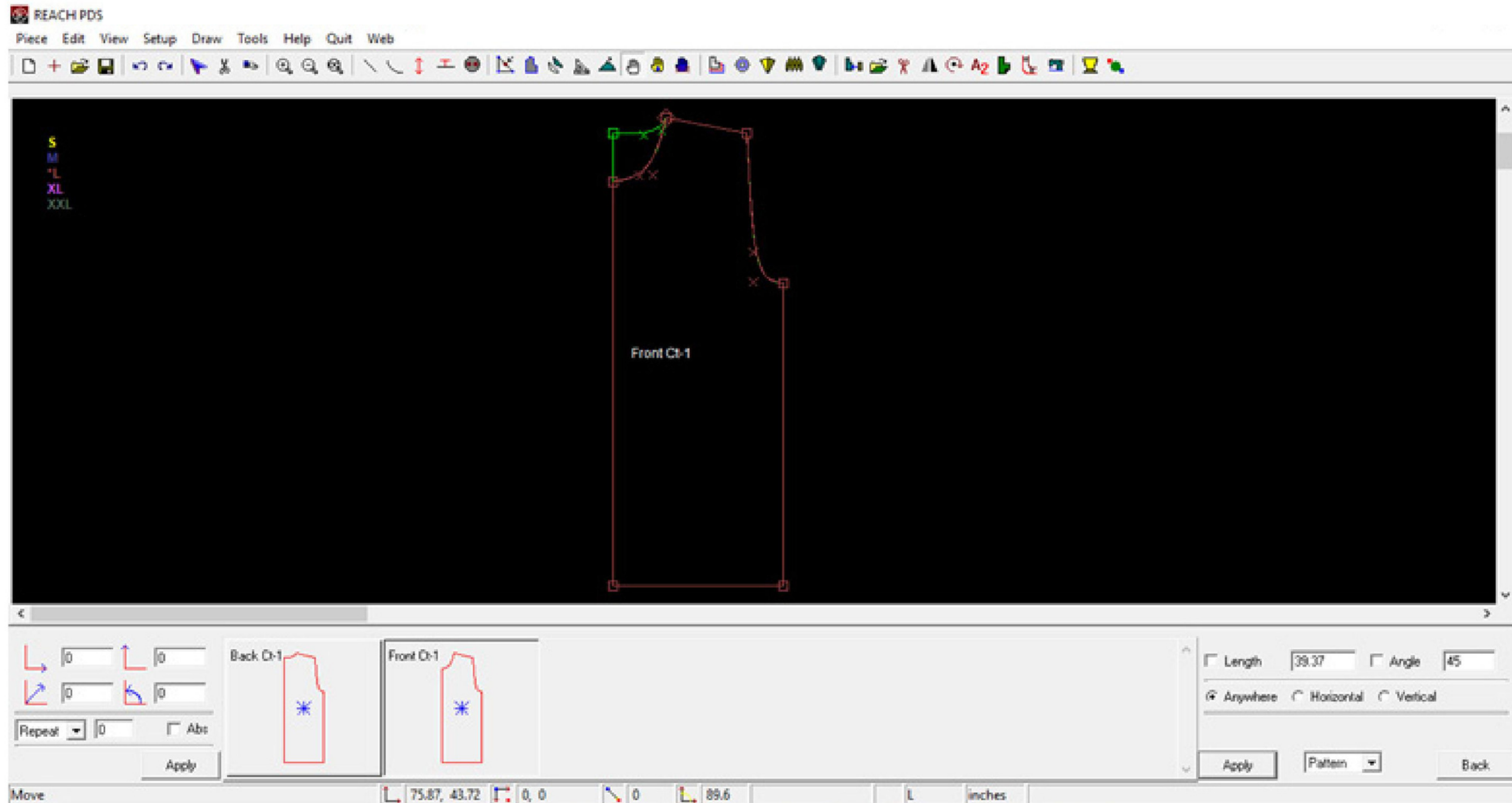
REACH CAD



STEP-038

CLICK AND APPLY PATTERN ANYWHERE.

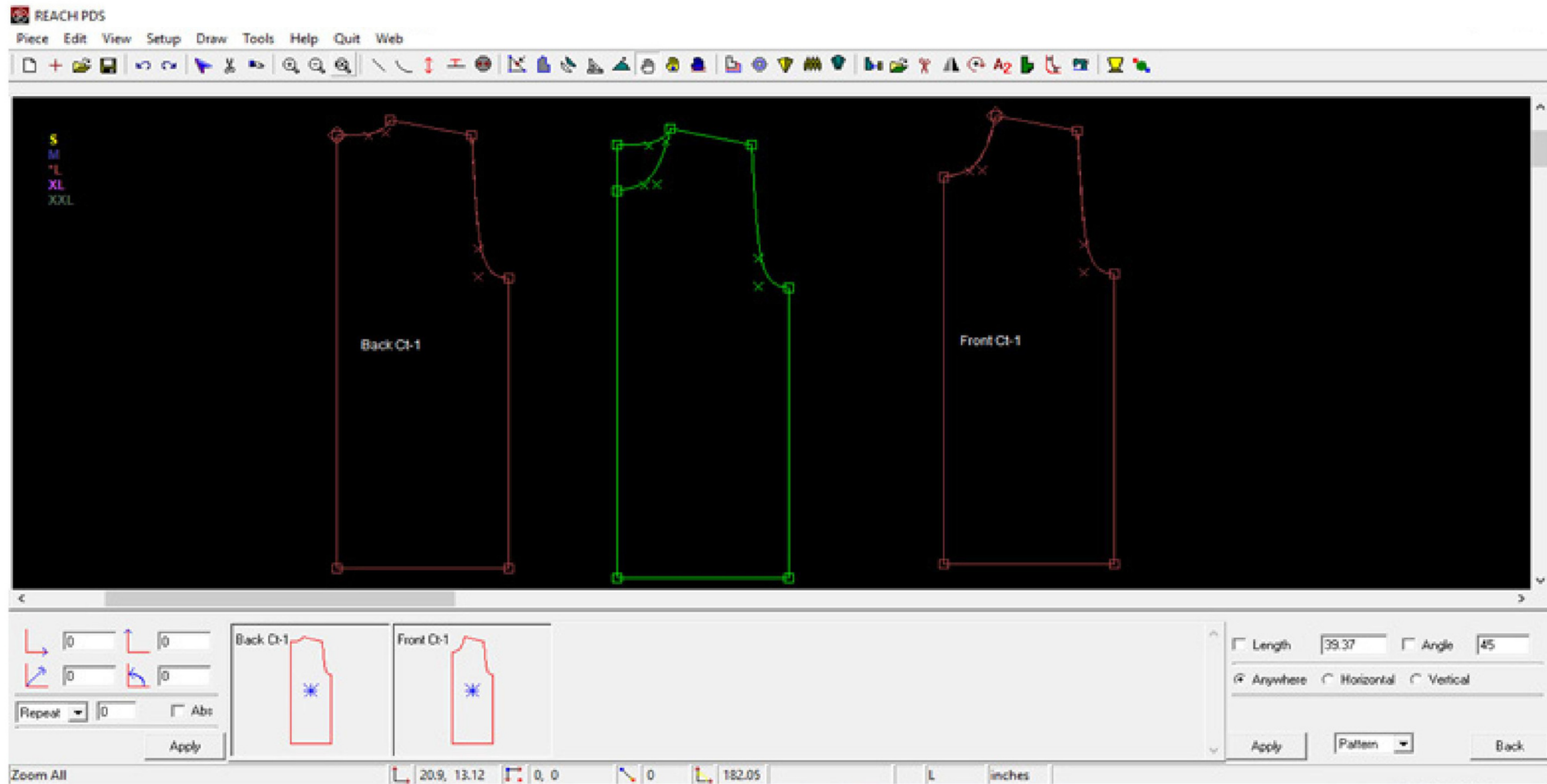
REACH CAD



STEP-039

MOVE TO FRONT AND BACK PATTERN SAVE

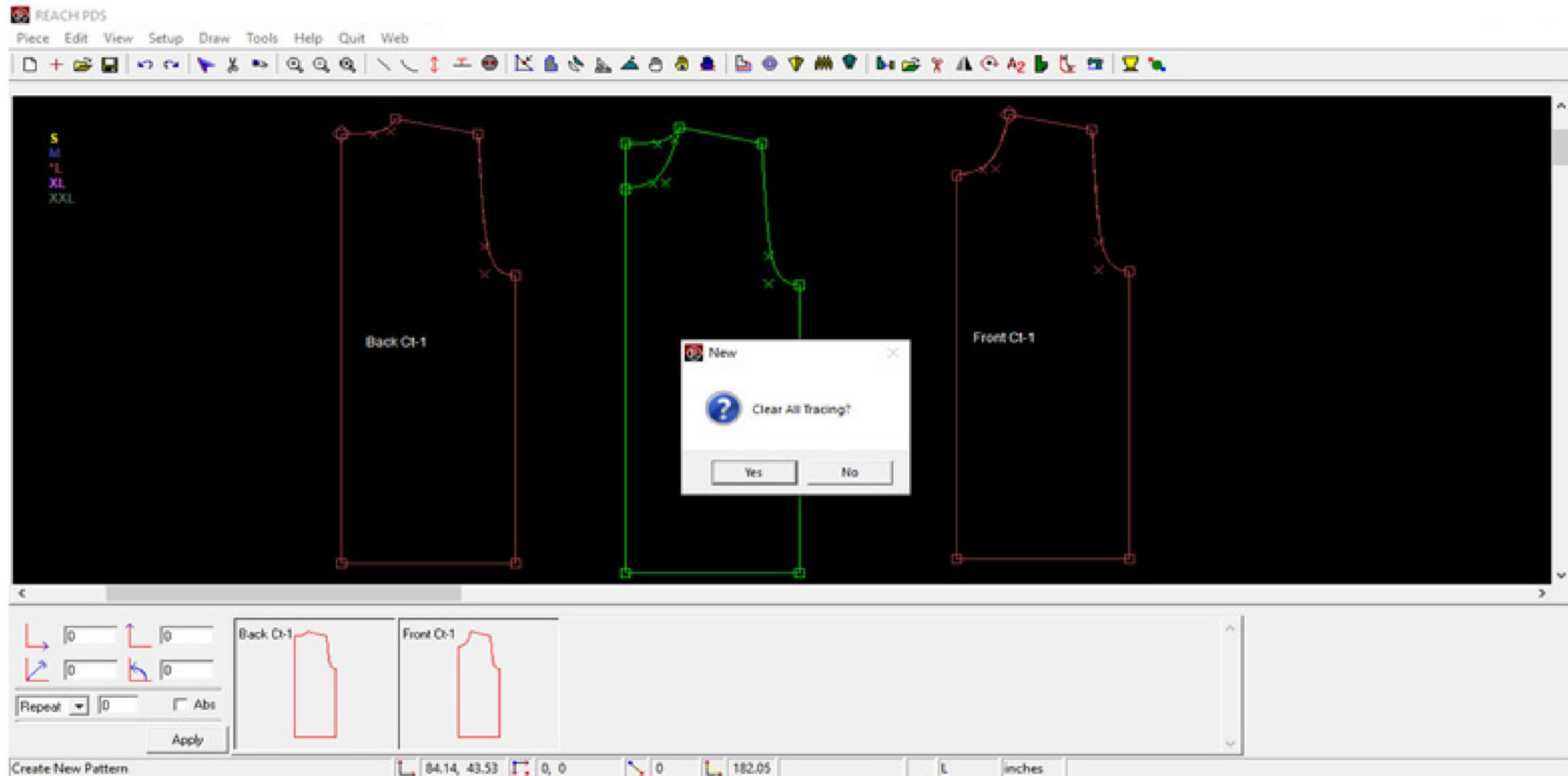
REACH CAD



STEP-040

REACH CAD

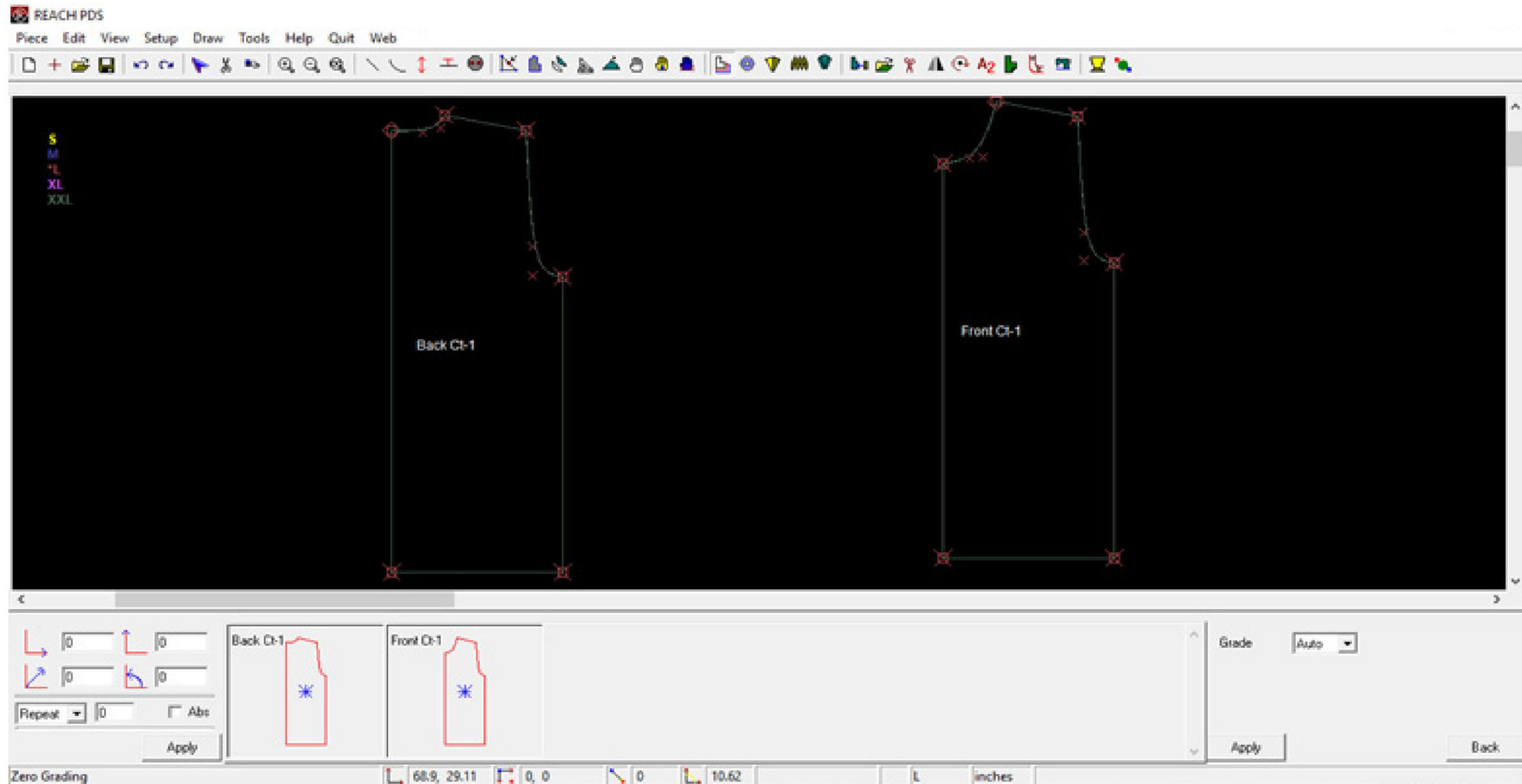
GO TO PIECE TOOL AND NEW CLICK RIGHT SIDE TRACING CLICK TRACING ALL CLEAR YES APPLY



STEP-04 |

REACH CAD

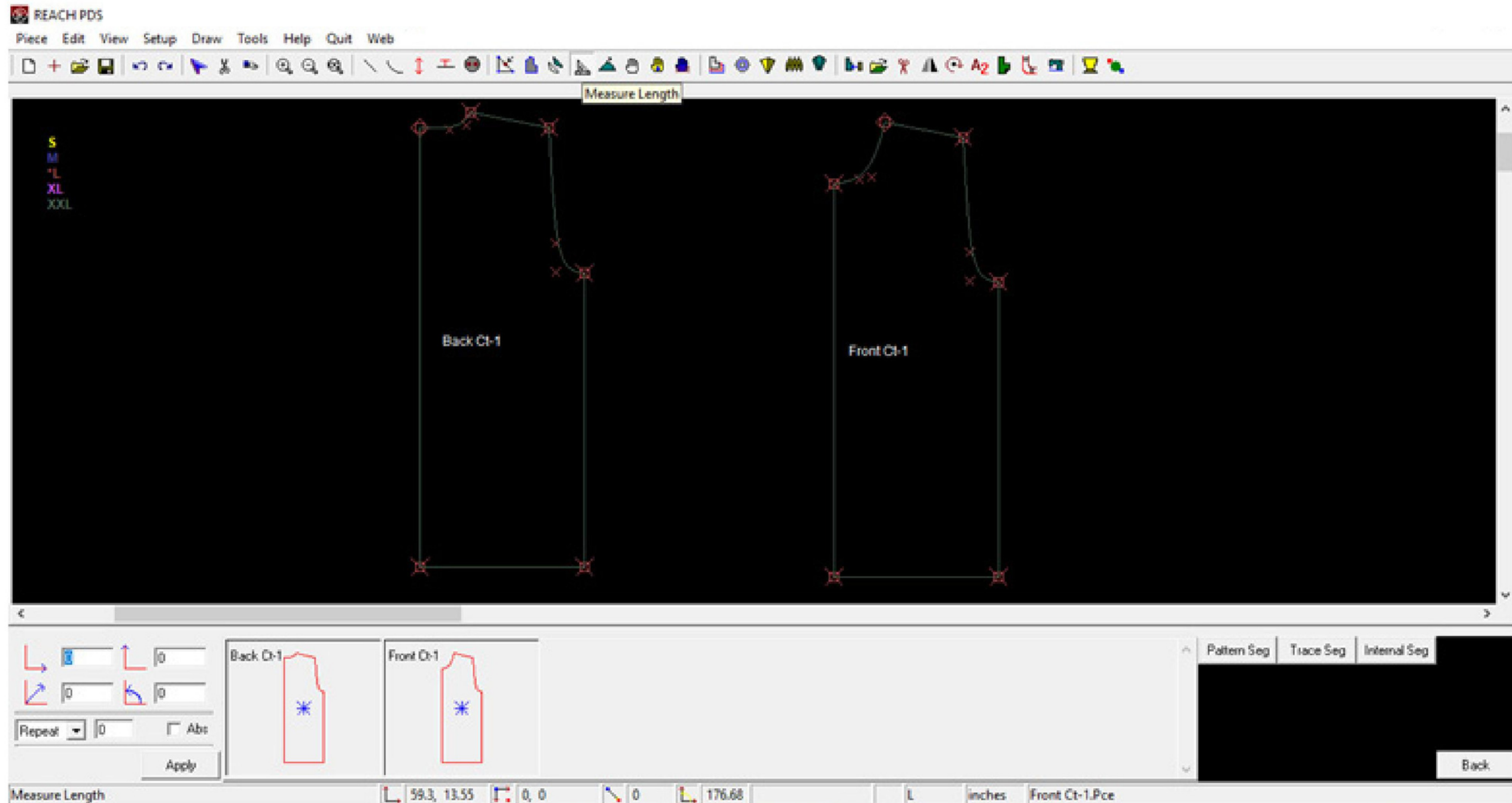
NEXT GO TO GRAD PATTERN TOOL AND CANCEL ALL GRADING POINTS.



STEP-042

ON NEXT SLEEVE PATTERN CLICK ON MEASURE TOOL.

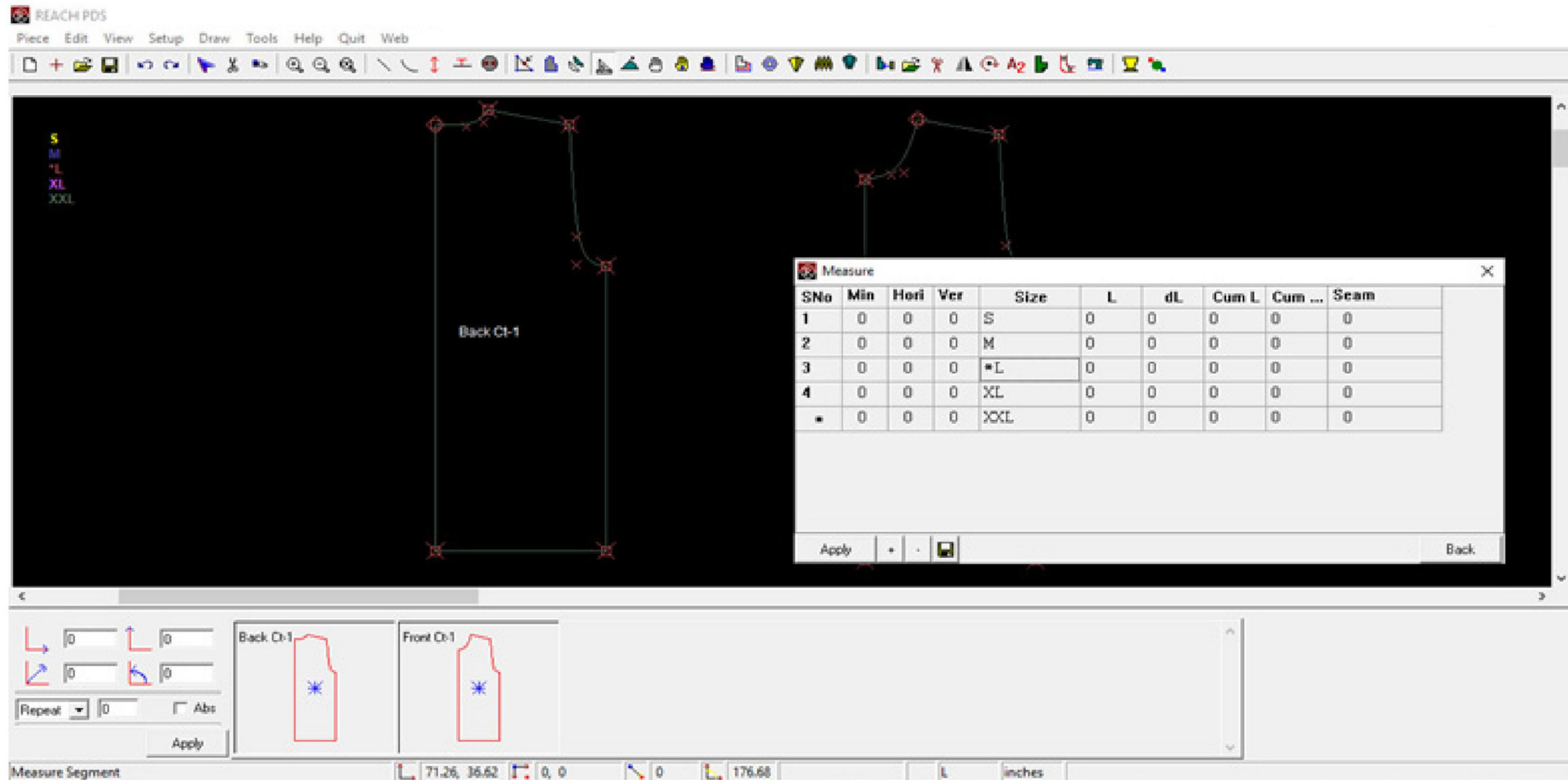
REACH CAD



STEP-043

IN THE BOTTOM RIGHT CORNER, SELECT 'PATTERN SEG'

REACH CAD



STEP-044

REACH CAD

ON EITHER OF THE PIECES, CLICK ON SHOULDER POINT AND THEN ON ARMHOLE POINT TO MEASURE THE DISTANCE BETWEEN THEM.

The screenshot shows the REACH PDS software interface. The main workspace displays a pattern piece labeled 'Back Ct-1'. A green line connects a shoulder point (marked with a red 'X') and an armhole point (marked with a red 'X'). A 'Measure' dialog box is open, showing a table of measurements for sizes S, M, L, XL, and XXL. The table has columns for SNo, Min, Hori, Ver, Size, L, dL, Cum L, Cum ..., and Seam. The measurements are consistent across all sizes.

SNo	Min	Hori	Ver	Size	L	dL	Cum L	Cum ...	Seam
1	9.51	2.25	9.24	S	10.15	0	10.15	0	0
2	9.51	2.25	9.24	M	10.15	0	10.15	0	0
3	9.51	2.25	9.24	L	10.15	0	10.15	0	0
4	9.51	2.25	9.24	XL	10.15	0	10.15	0	0
5	9.51	2.25	9.24	XXL	10.15	0	10.15	0	0

The bottom of the interface shows a status bar with the text 'REACH PDS - Release 1.00' and various measurement values: '36.51, 23.47', '2.3, 9.39', '0', '76.24', 'L', 'inches', and 'Back Ct-1.Pce'.

STEP-045

ARMHOLE MEASUREMENT IS 10.15 INCHES. NOTE THIS MEASUREMENT.

REACH CAD

REACH PDS

Measure

SNo	Min	Hori	Ver	Size	L	dL	Cum L	Cum ...	Seam
1	9.51	2.25	9.24	S	10.15	0	10.15	0	0
2	9.51	2.25	9.24	M	10.15	0	10.15	0	0
3	9.51	2.25	9.24	*L	10.15	0	10.15	0	0
4	9.51	2.25	9.24	XL	10.15	0	10.15	0	0
*	9.51	2.25	9.24	XXL	10.15	0	10.15	0	0

Apply * - Back

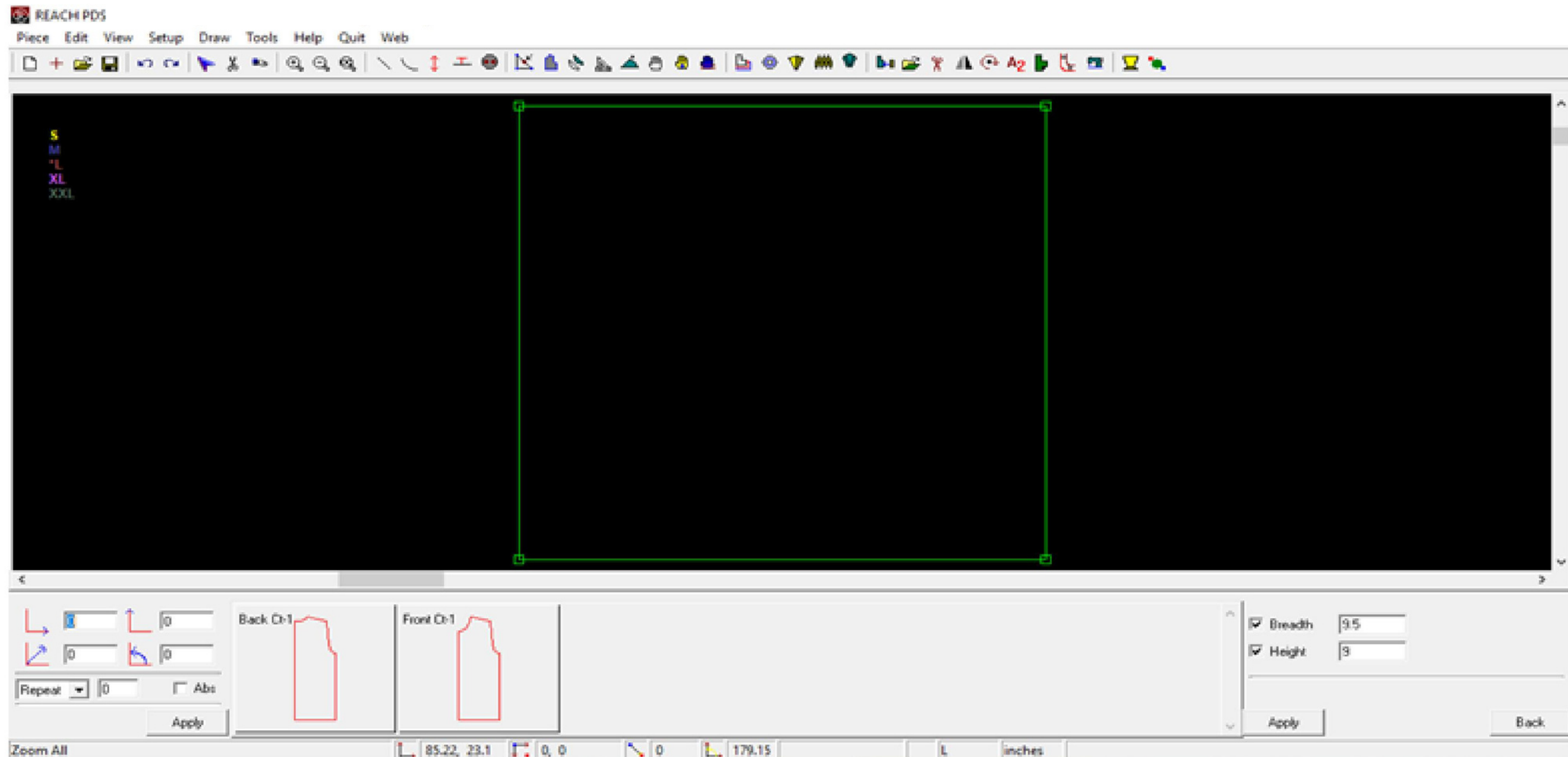
REACH PDS - Release 1.00

65.28, 44.29 0, 0 0 46.69 L inches

STEP-046

REACH CAD

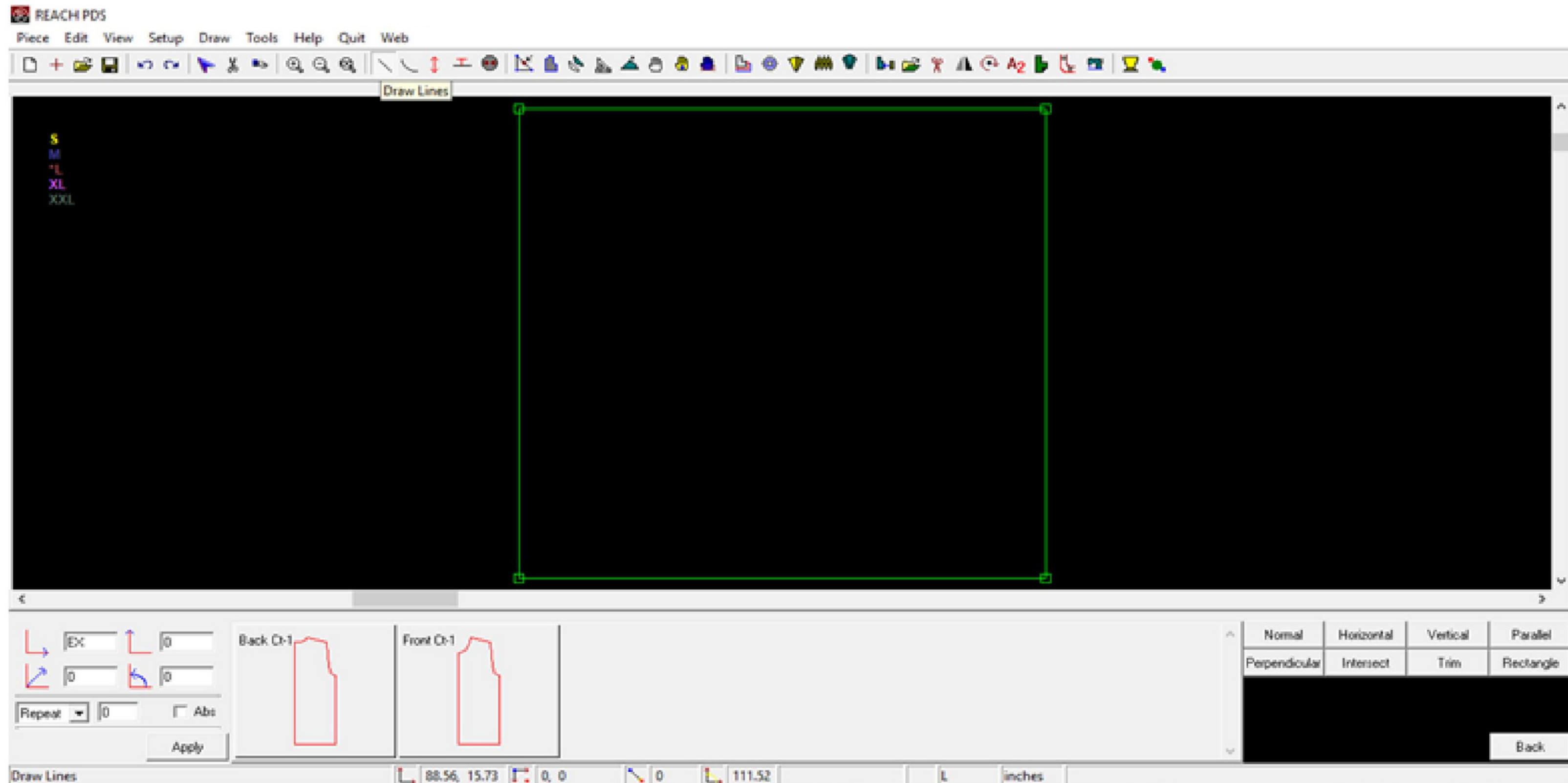
CLICK ON DRAW LINES AND GO TO RECTANGLE. APPLY THE ARMHOLE MEASUREMENT AND LENGTH MEASURE APPLY OPEN THE BOX



STEP-047

NEXT, CLICK ON DRAW LINE.

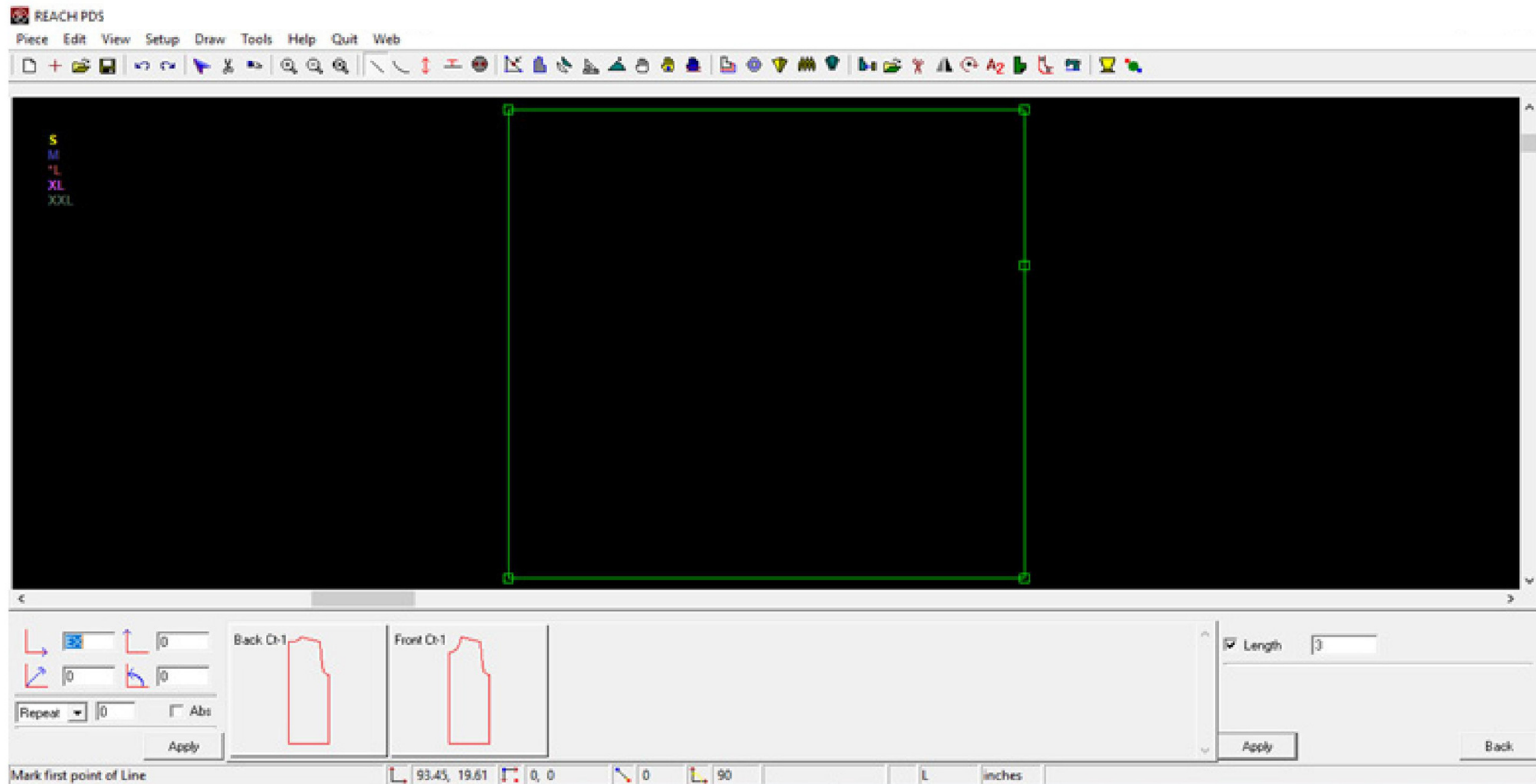
REACH CAD



STEP-048

REACH CAD

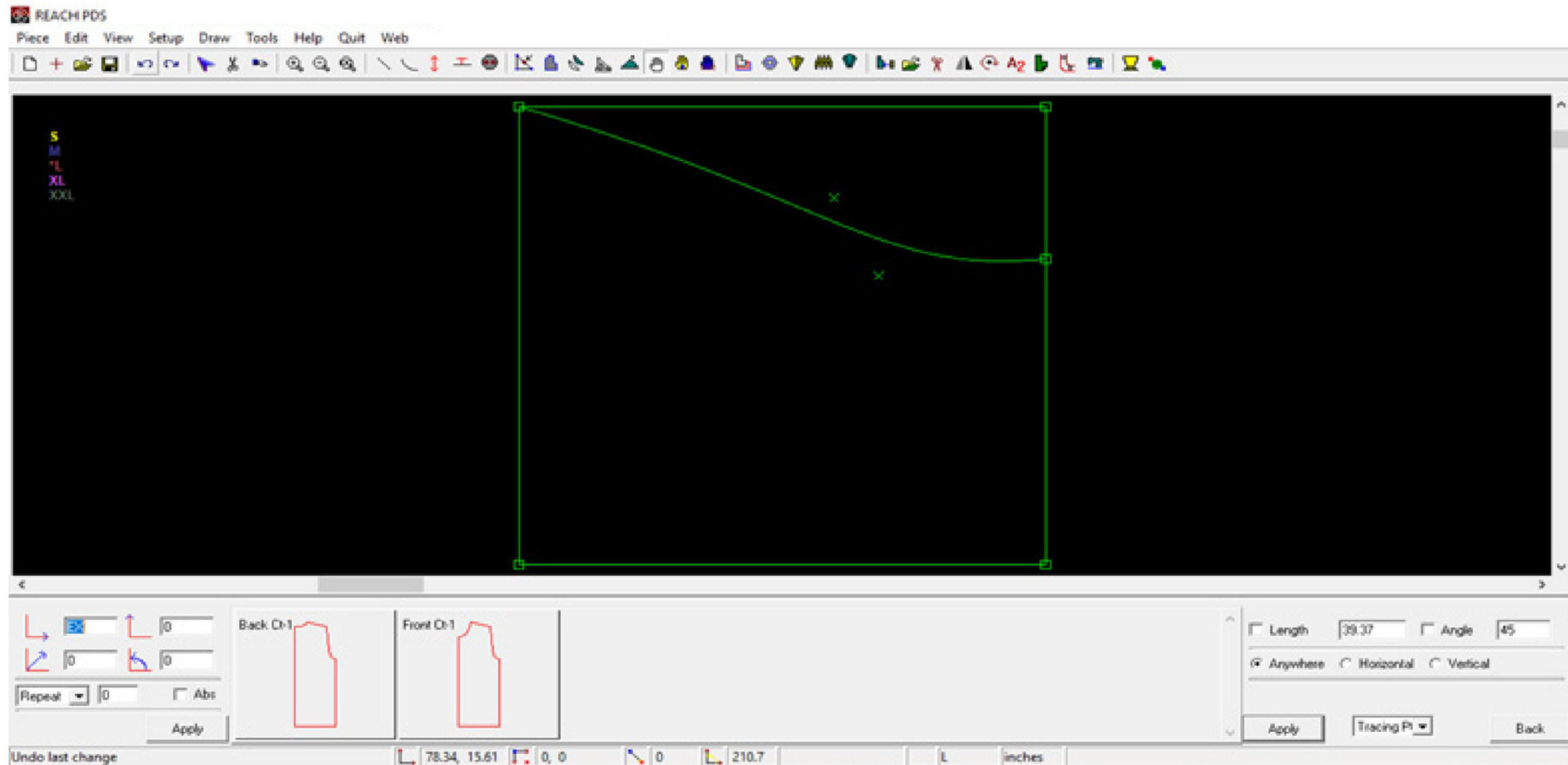
CLICK ON THE VERTICAL LINE AND APPLY A MEASUREMENT OF 3 INCHES IN THE BOTTOM RIGHT CORNER.



STEP-049

REACH CAD

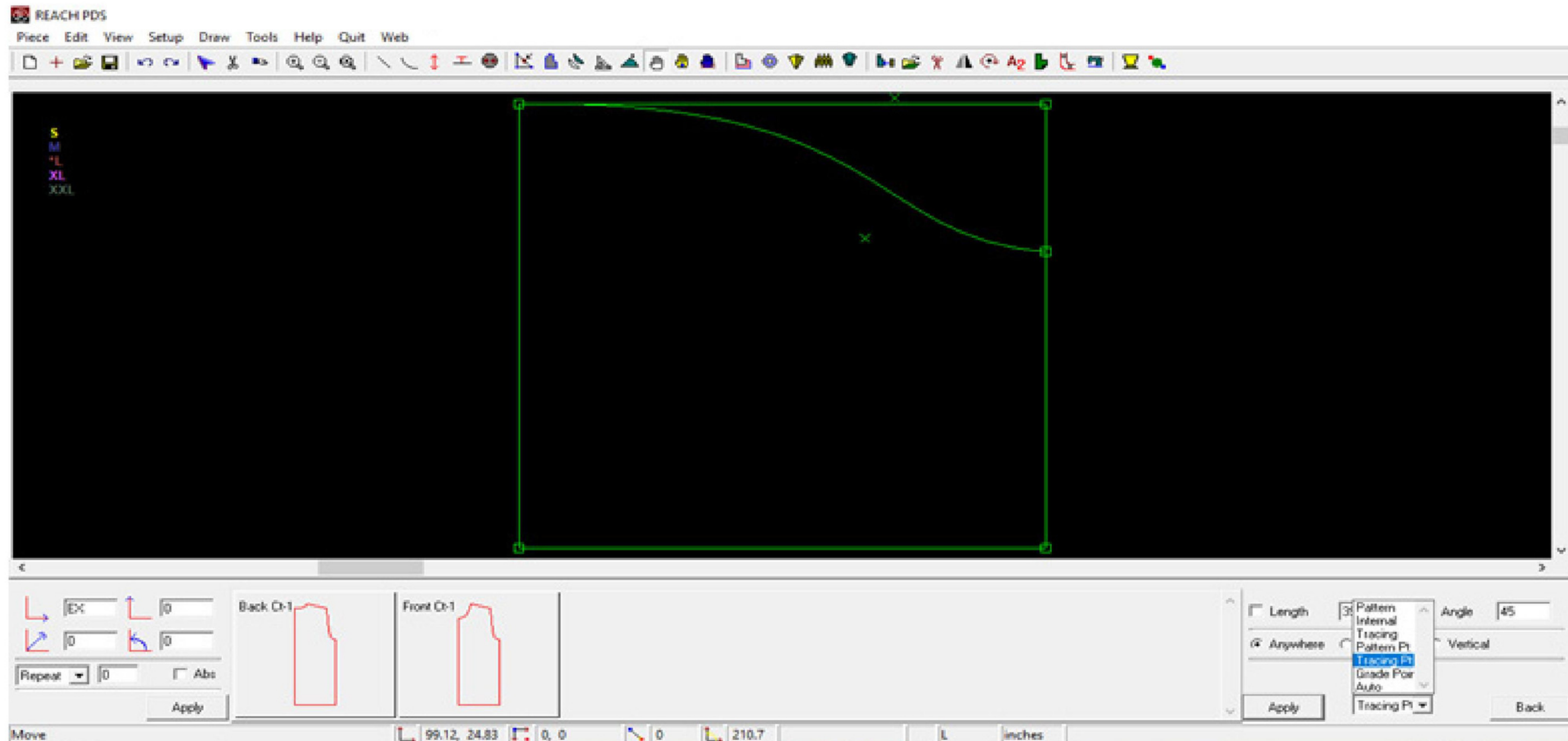
GO TO DRAW CURVE LINE AND CLICK ON 4 POINT BEZIER. APPLY CENTER POINT TO DROP POINT SHAPE CURVE



STEP-050

REACH CAD

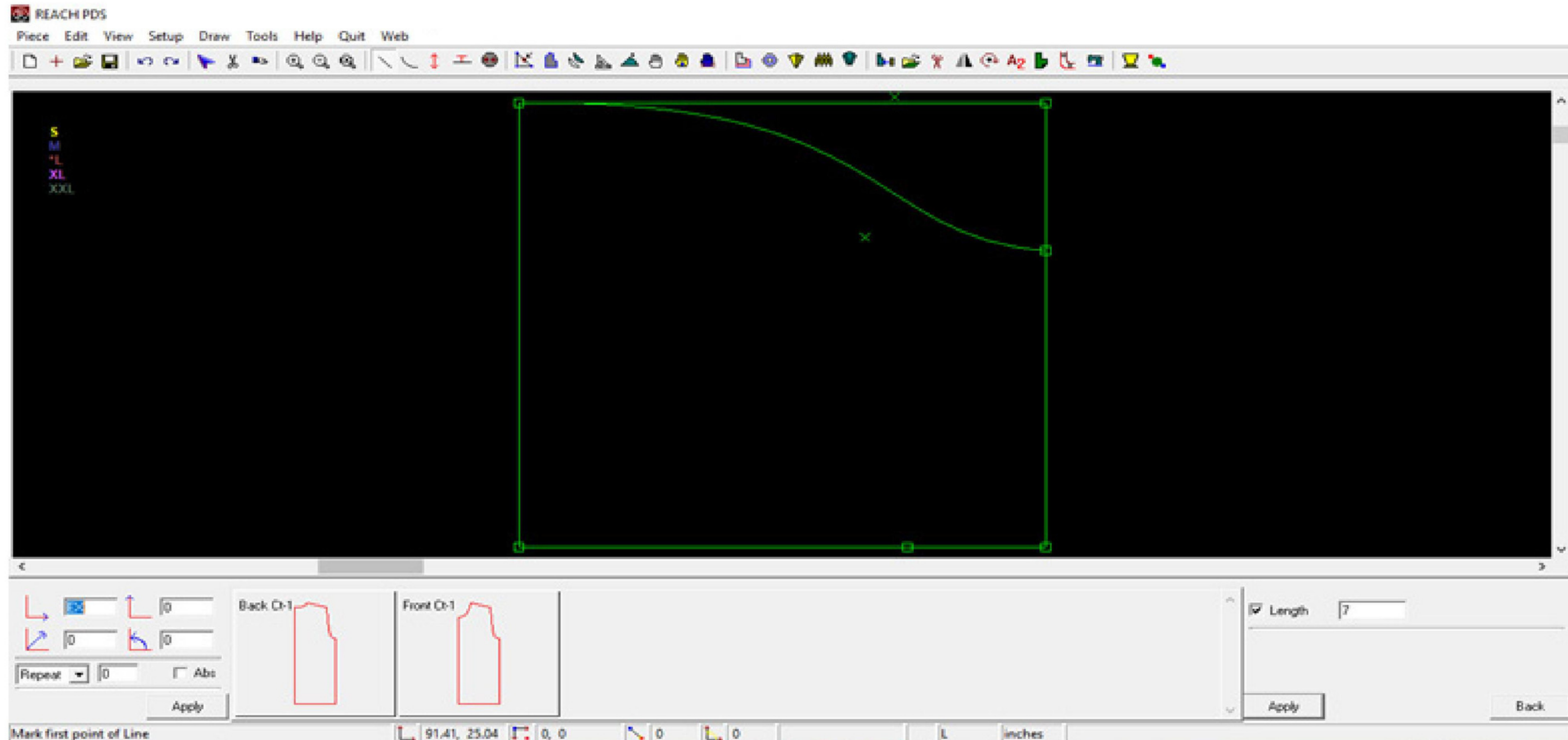
IN THE RIGHT-SIDE BOX, CLICK ON THE MOVE TOOL AND CHANGE TO 'TRACING POINT' AND CLICK ON APPLY.



STEP-05 I

REACH CAD

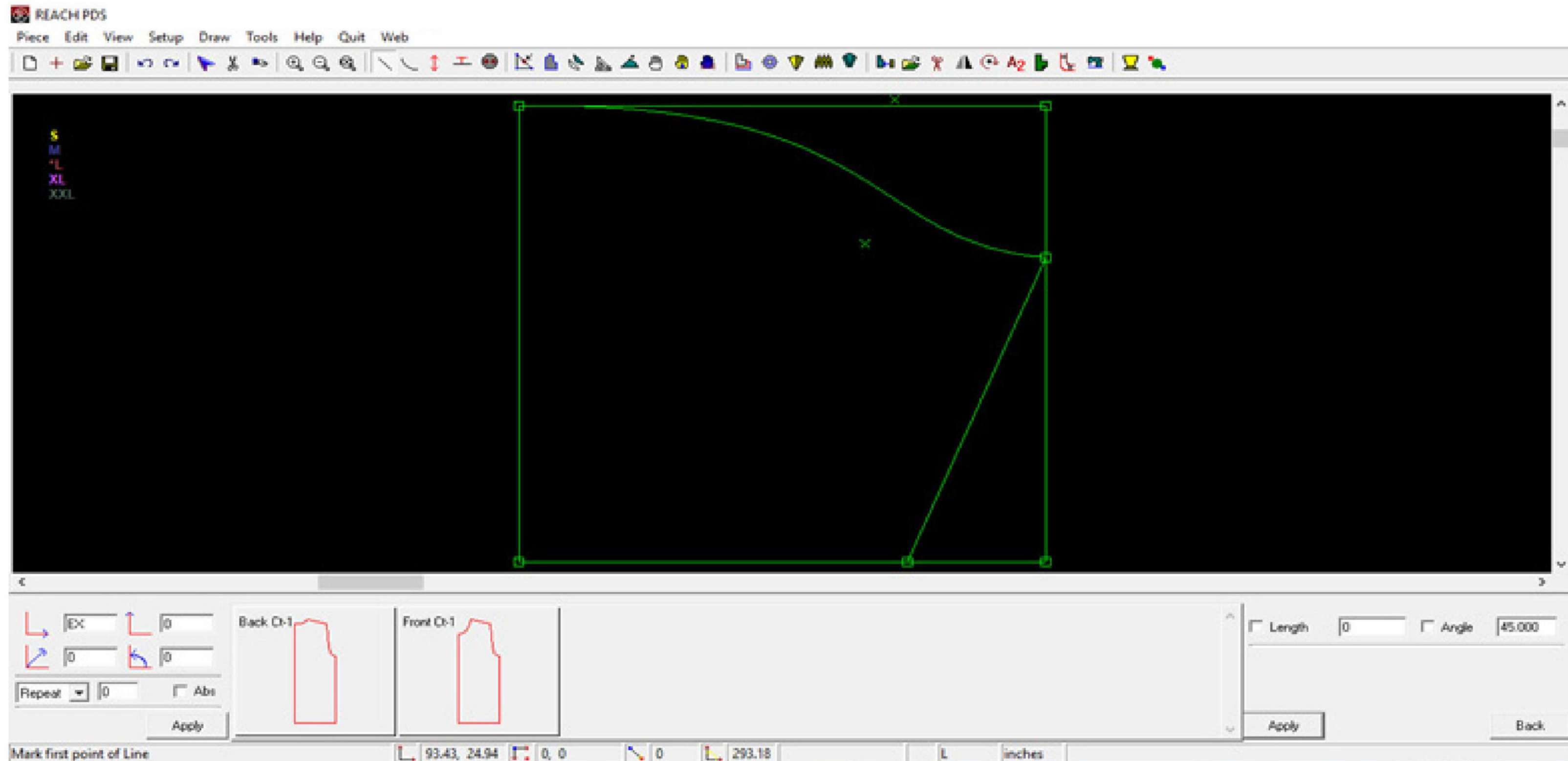
CLICK ON DRAW LINE THEN SELECT HORIZONTAL. APPLY THE MEASURE SLEEVE OPEN MEASUREMENT LEFT SIDE POINT



STEP-052

GO TO NORMAL LINE AND JOIN THE ARMHOLE POINT TO SLEEVE OPEN POINT.

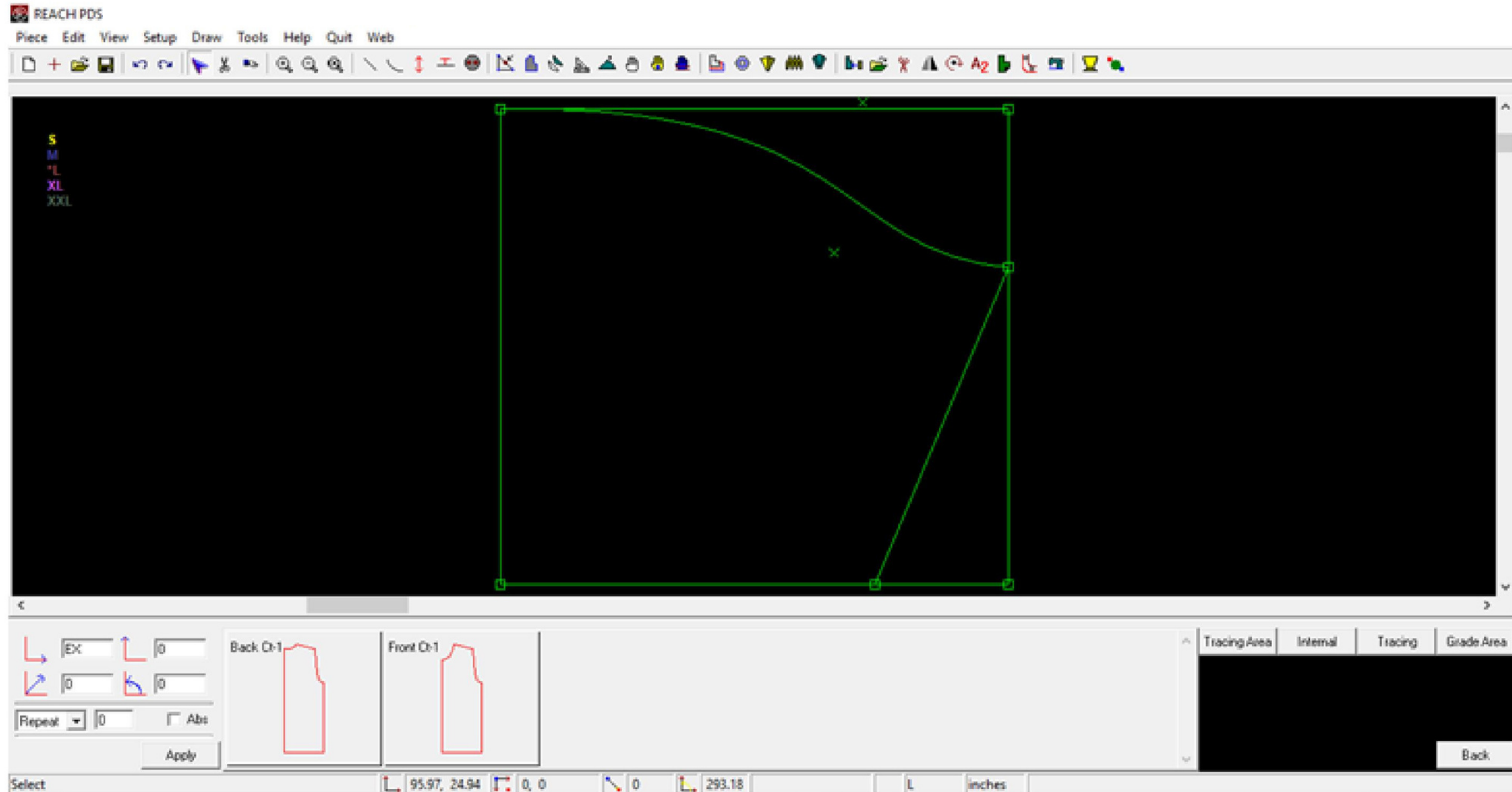
REACH CAD



STEP-054

GO TO SELECTION TOOL AND CLICK ON TRACING AREA

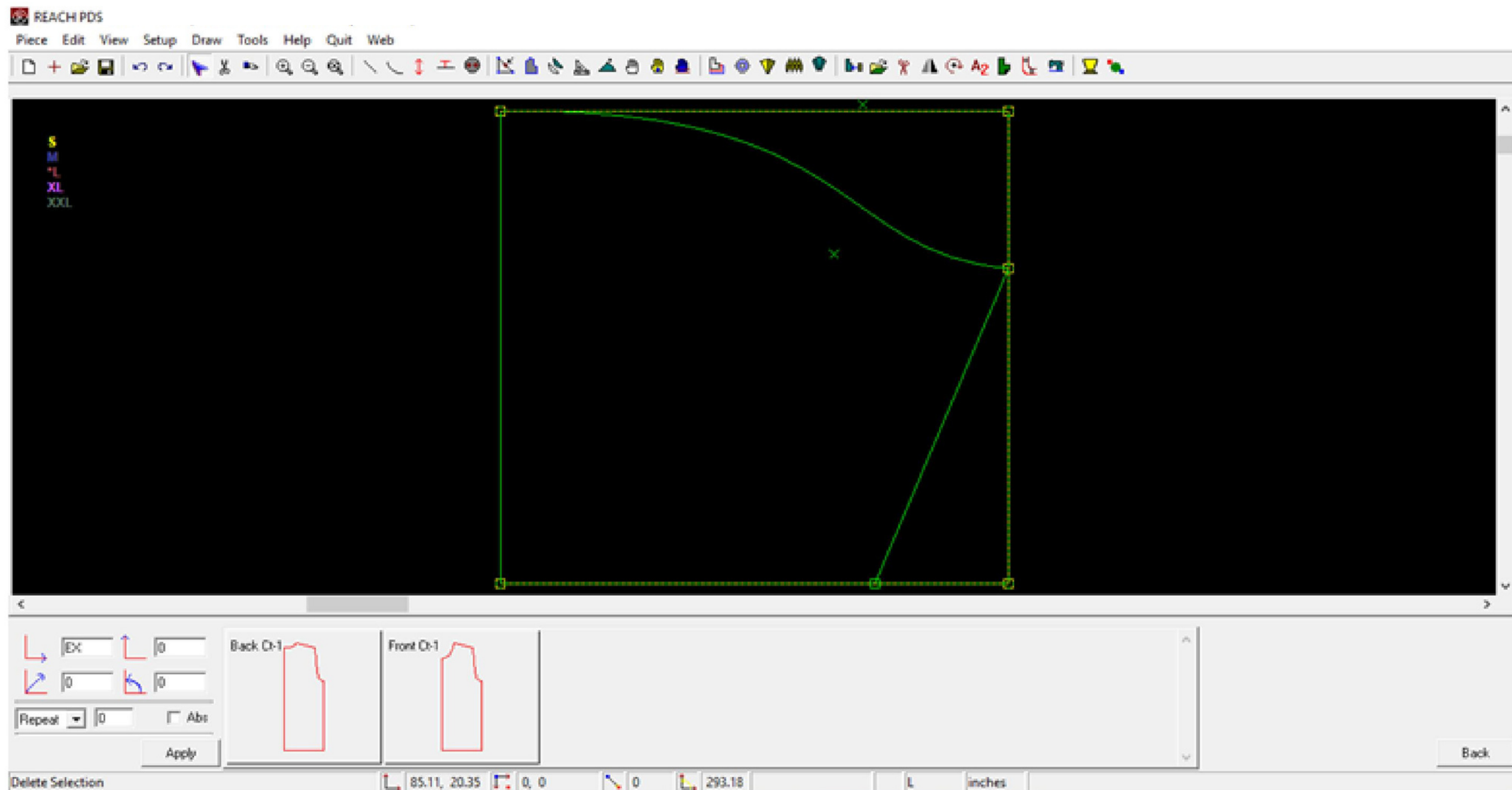
REACH CAD



STEP-055

SELECT THE YELLOW TRACING LINES

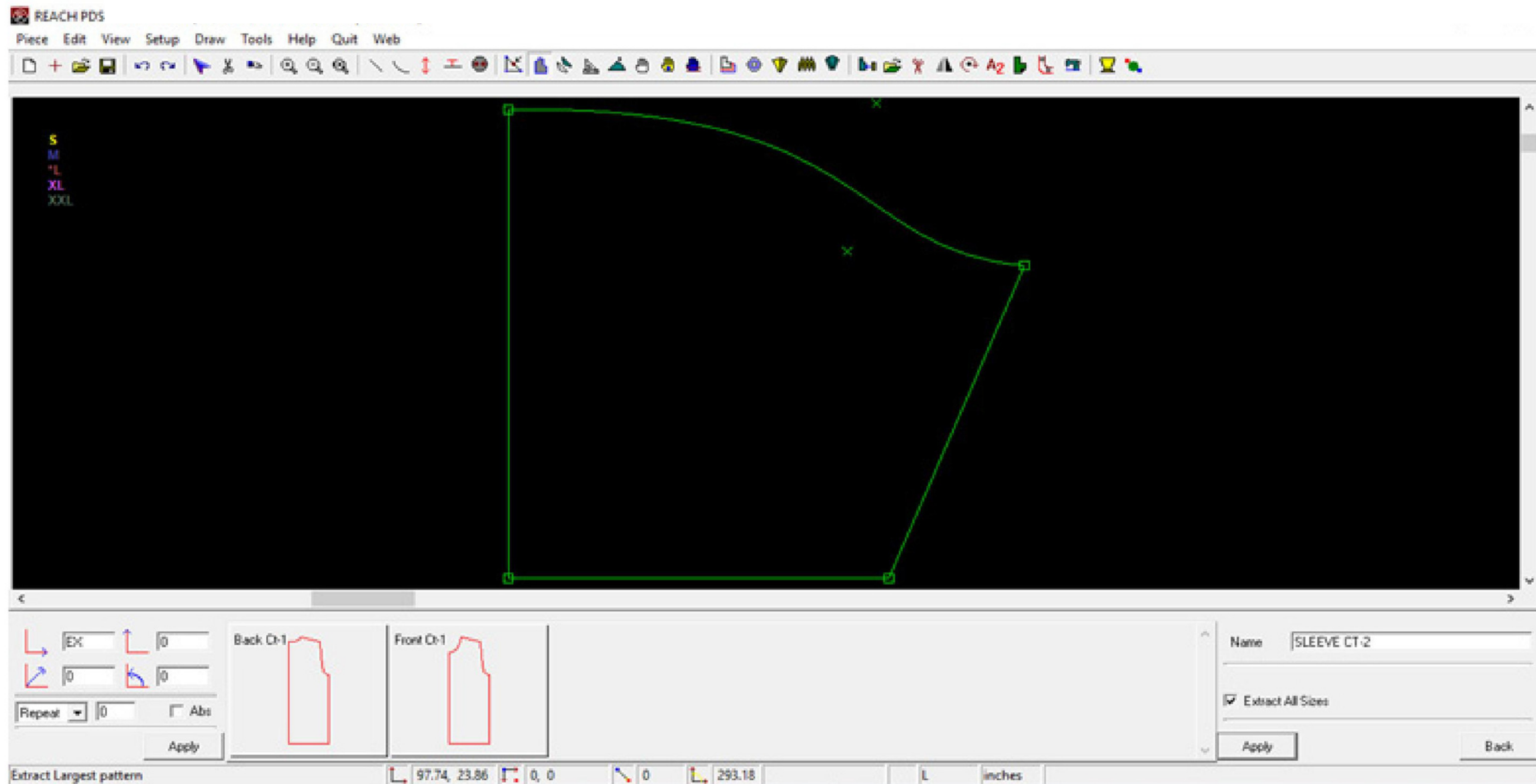
REACH CAD



STEP-057

REACH CAD

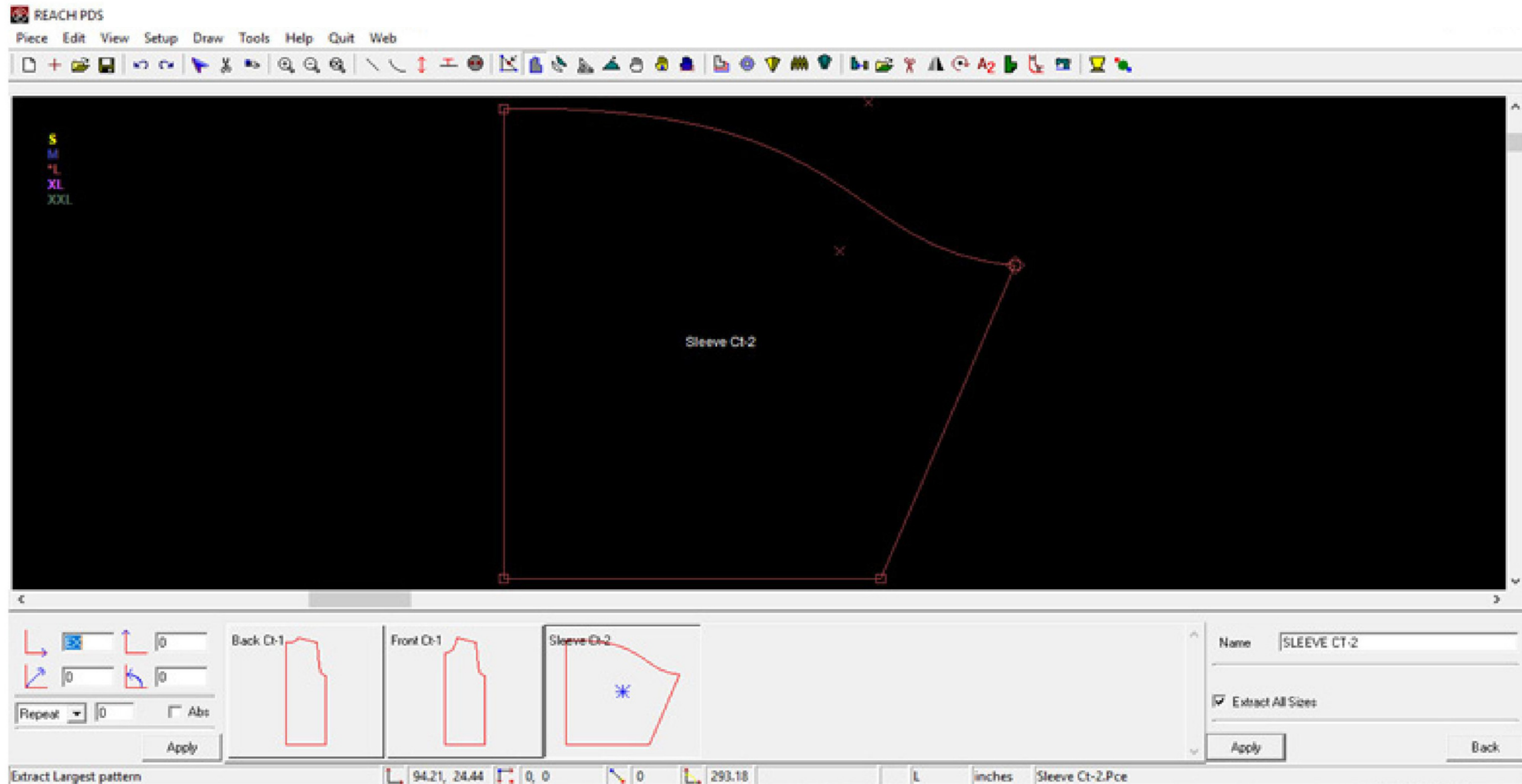
GO TO EXTRACT PATTERN AND CLICK ON 'NEXT LARGEST'. CHANGE THE NAME TO 'SLEEVE CT-2' AND CLICK ON APPLY



STEP-058

CLICK ON THE TRACING LINE AND CREATE THE SLEEVE PATTERN

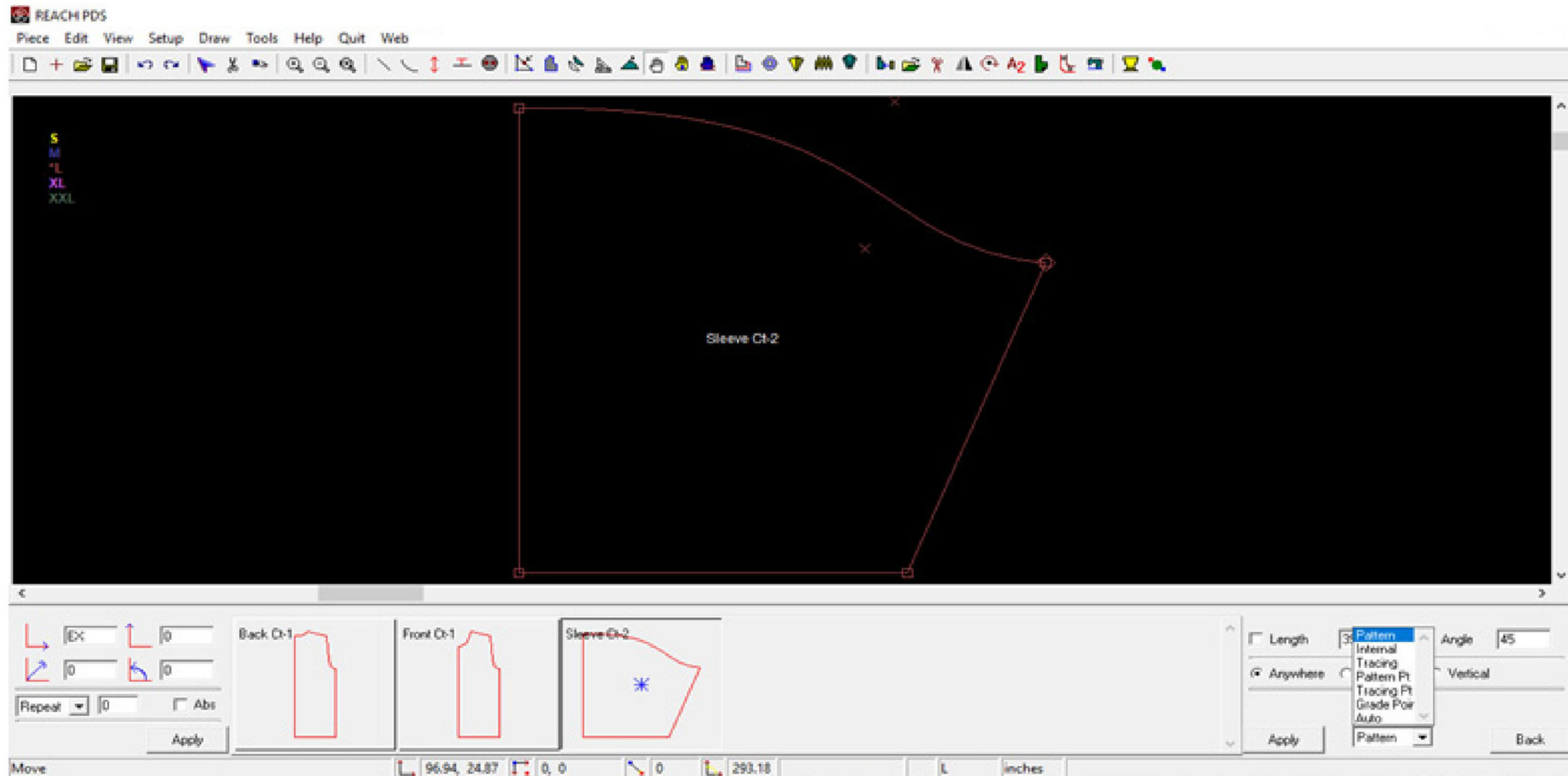
REACH CAD



STEP-060

REACH CAD

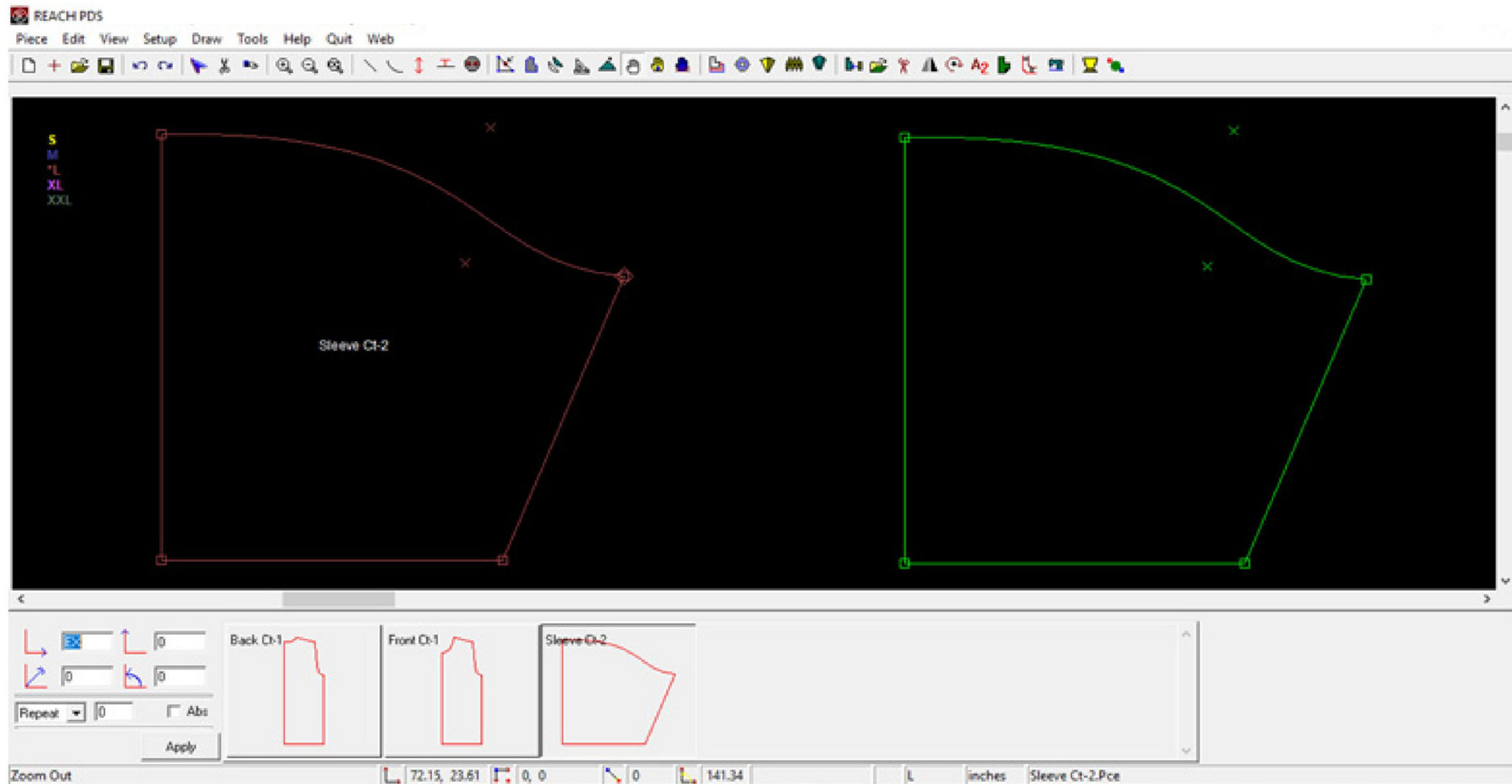
GO TO MOVE TOOL AND SELECT THE PATTERN AND CLICK ON APPLY.



STEP-06 |

MOVE THE PATTERN

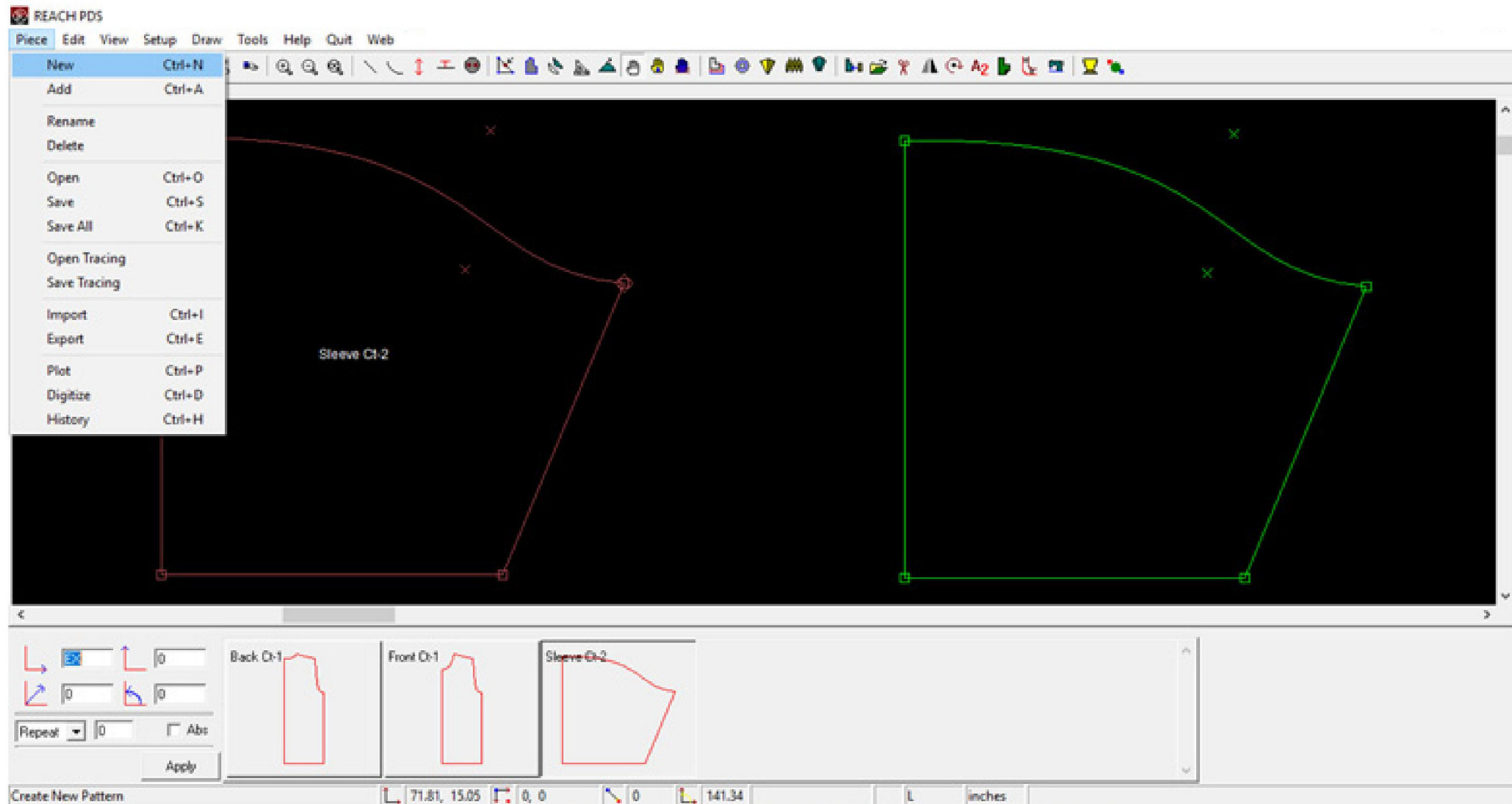
REACH CAD



STEP-062

GO TO PIECE AND CLICK ON NEW.

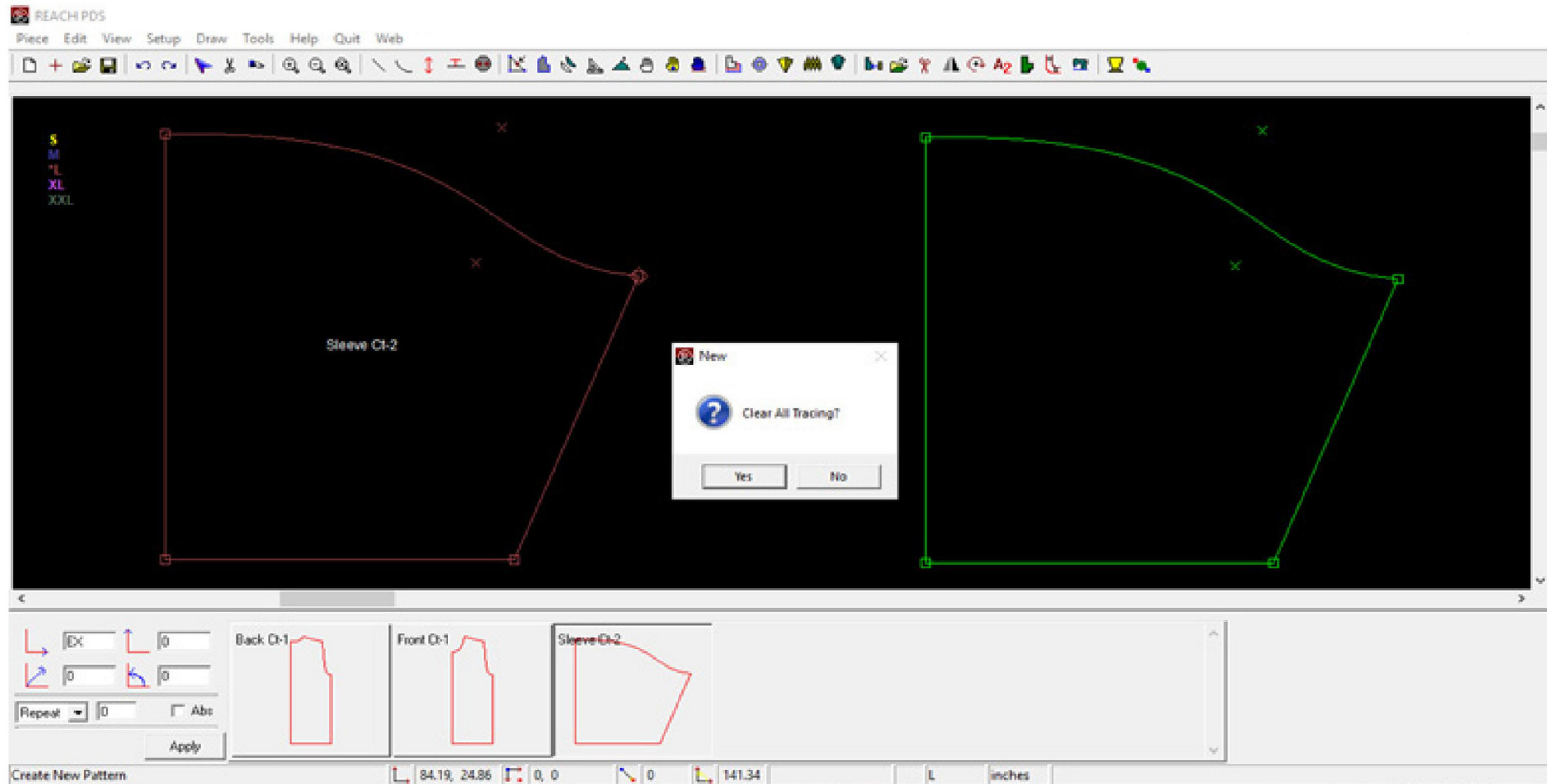
REACH CAD



STEP-063

REACH CAD

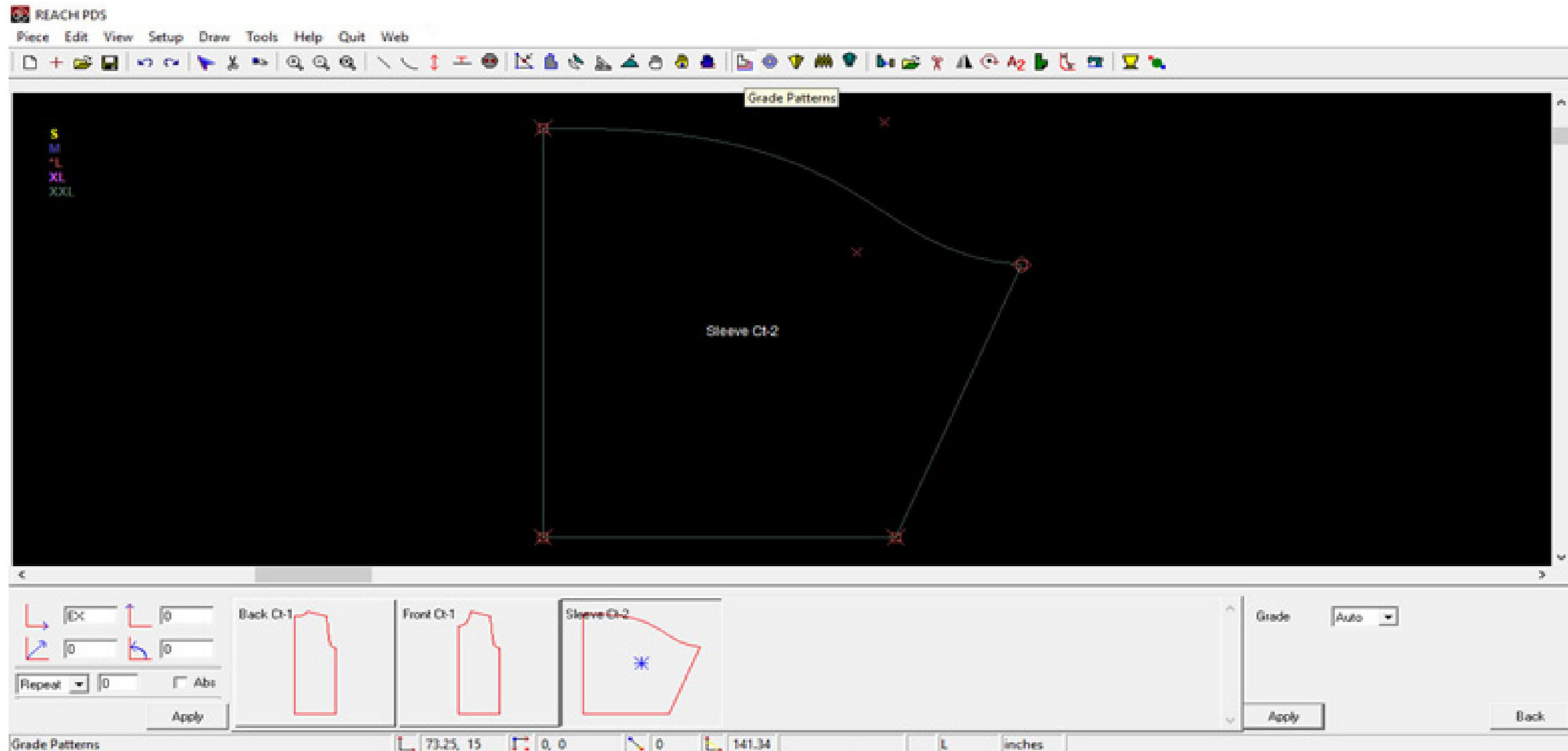
CLICK ON NEW THEN CLICK ON TRACING AND SELECT CLEAR ALL TRACING LINES. SELECT YES AND APPLY.



STEP-064

GO TO GRADE PATTERN AND CLICK ON CANCEL ALL THE POINTS

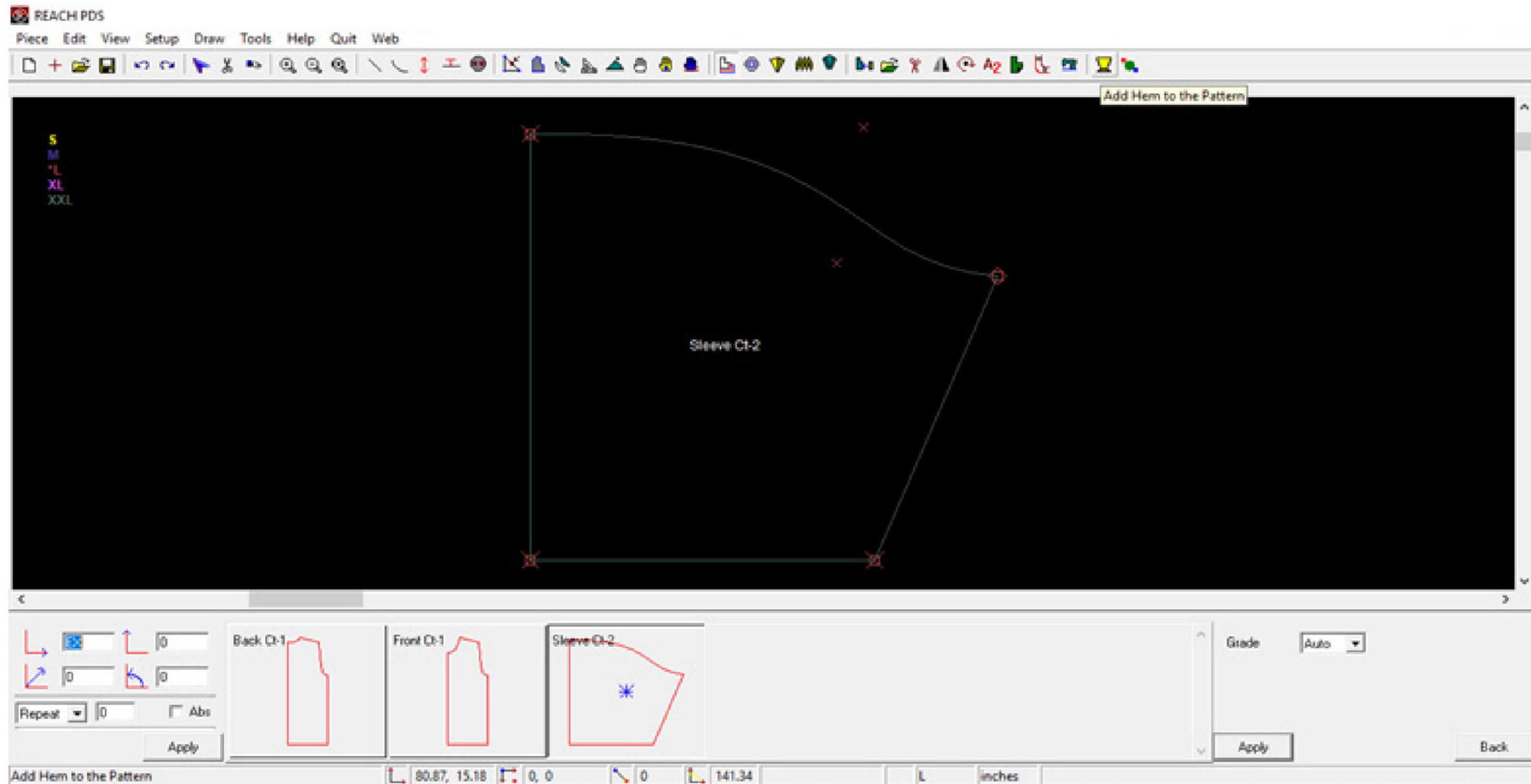
REACH CAD



STEP-065

CLICK ON 'ADD HEM TO THE PATTERN'

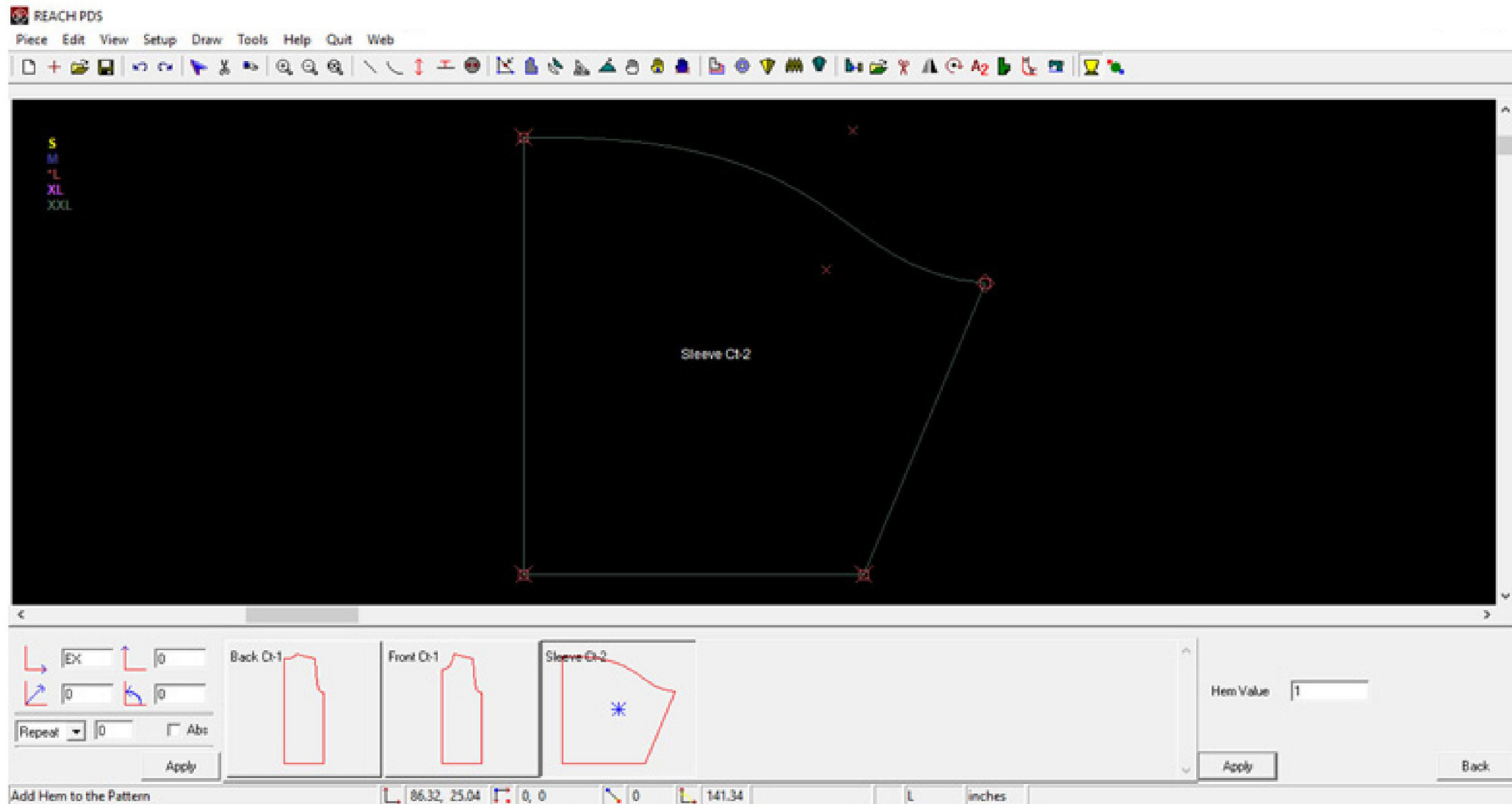
REACH CAD



STEP-066

APPLY HEM VALUE OF 1 INCH.

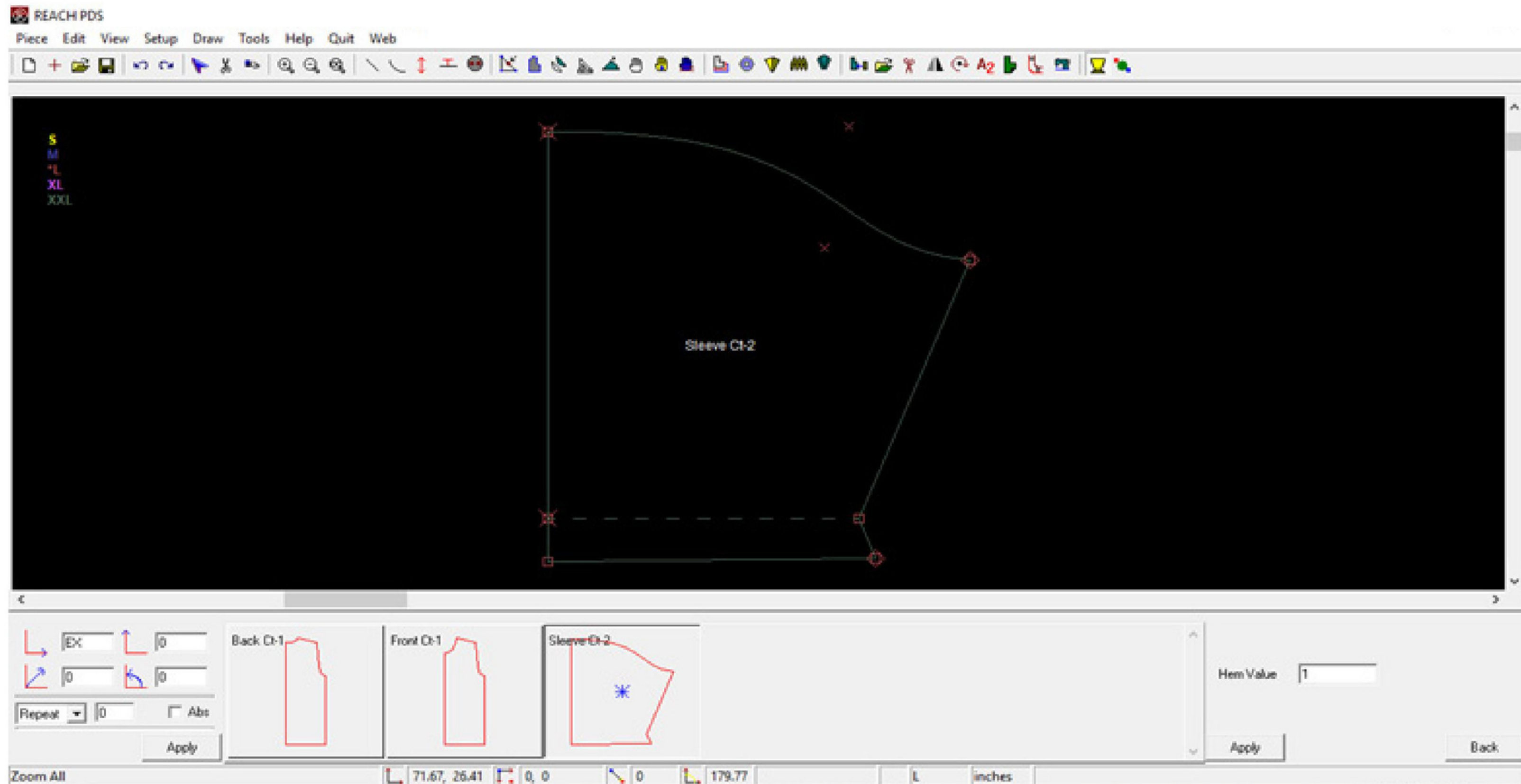
REACH CAD



STEP-067

ADD TO SLEEVE OPEN POINT.

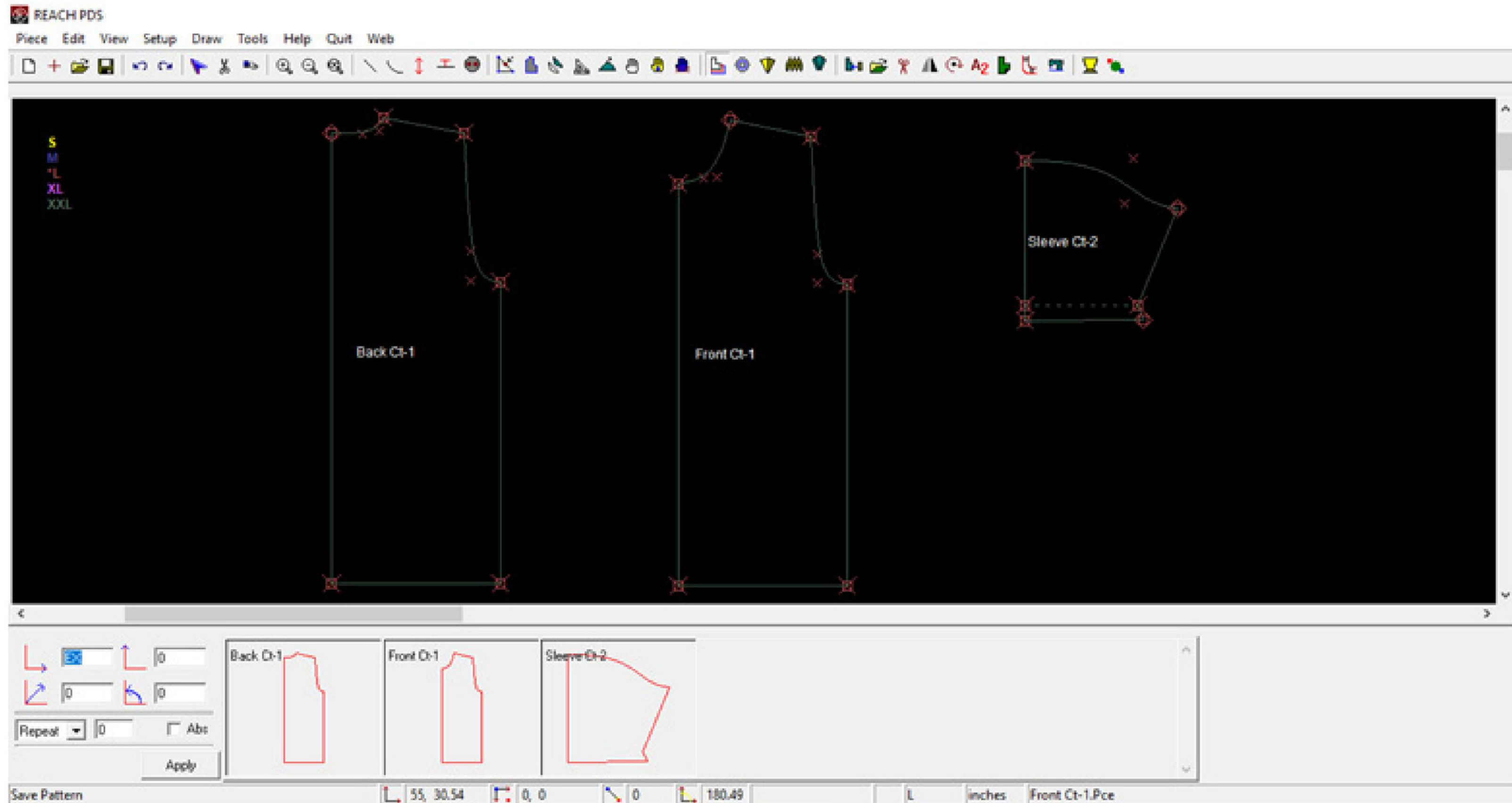
REACH CAD



STEP-068

CLICK ON 'ALL PATTERN SHOW' IN THE WORKING AREA.

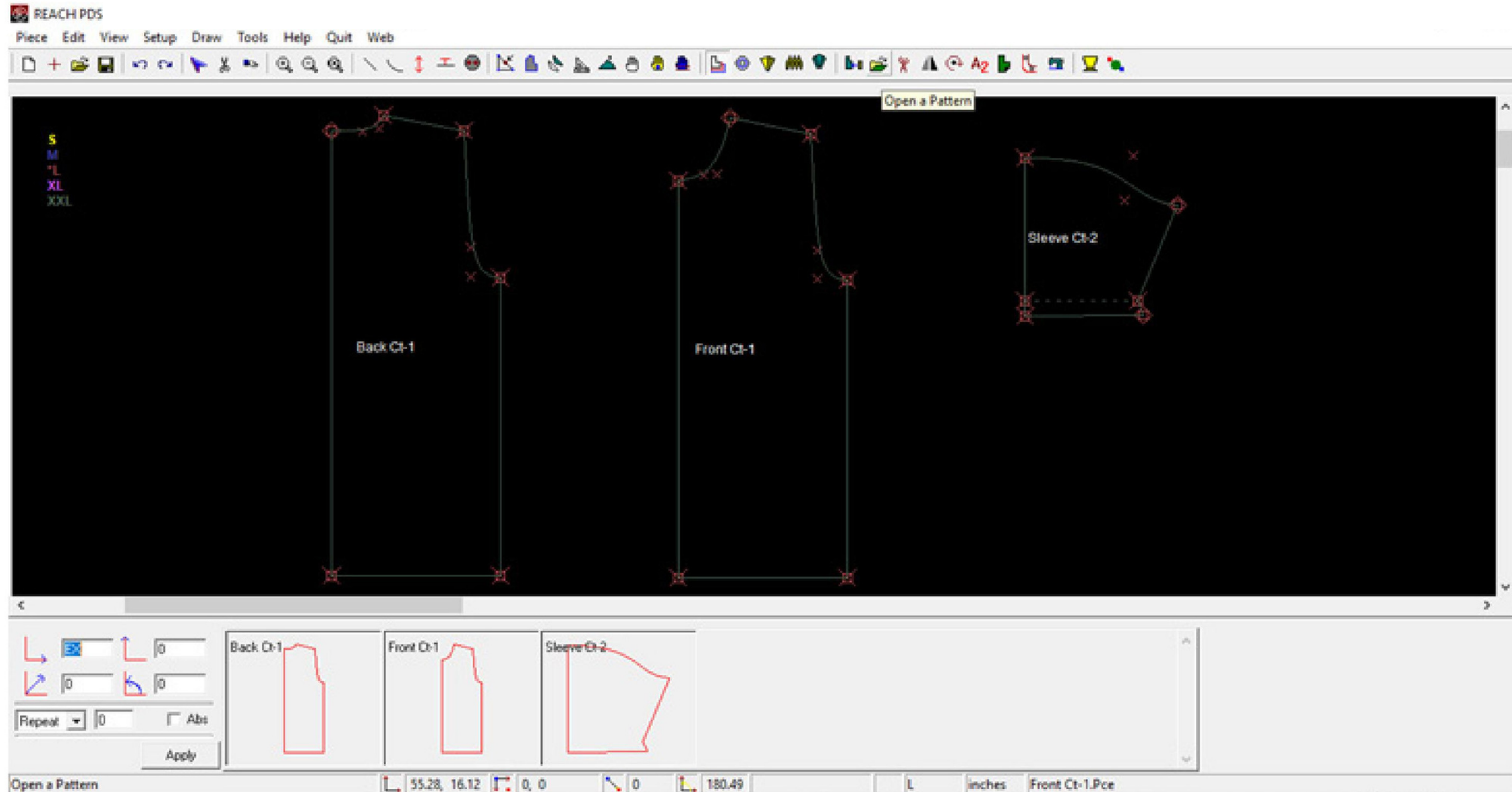
REACH CAD



STEP-069

CLICK ON OPEN TOOL.

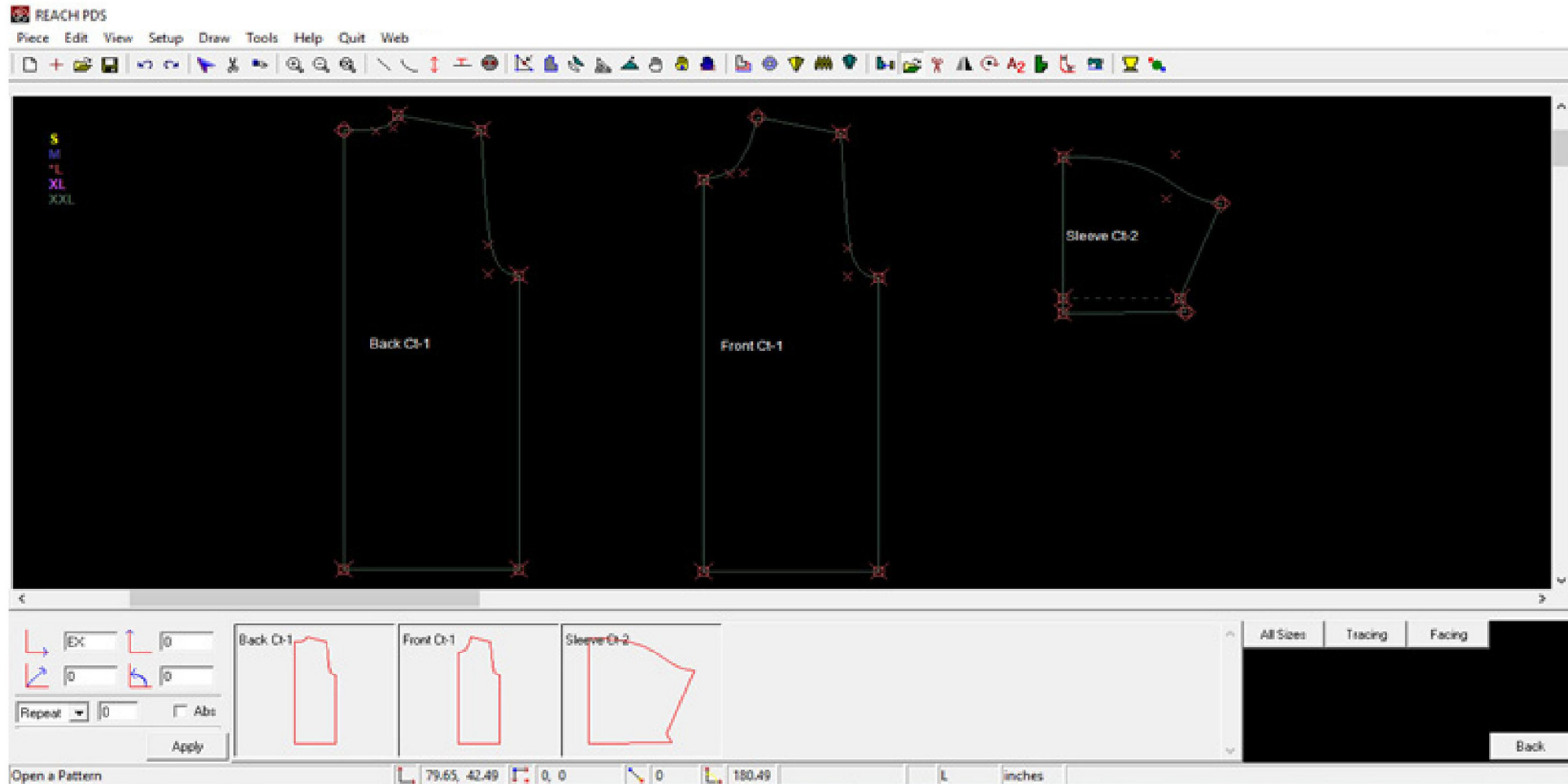
REACH CAD



STEP-070

CLICK ON 'ALL SIZE'.

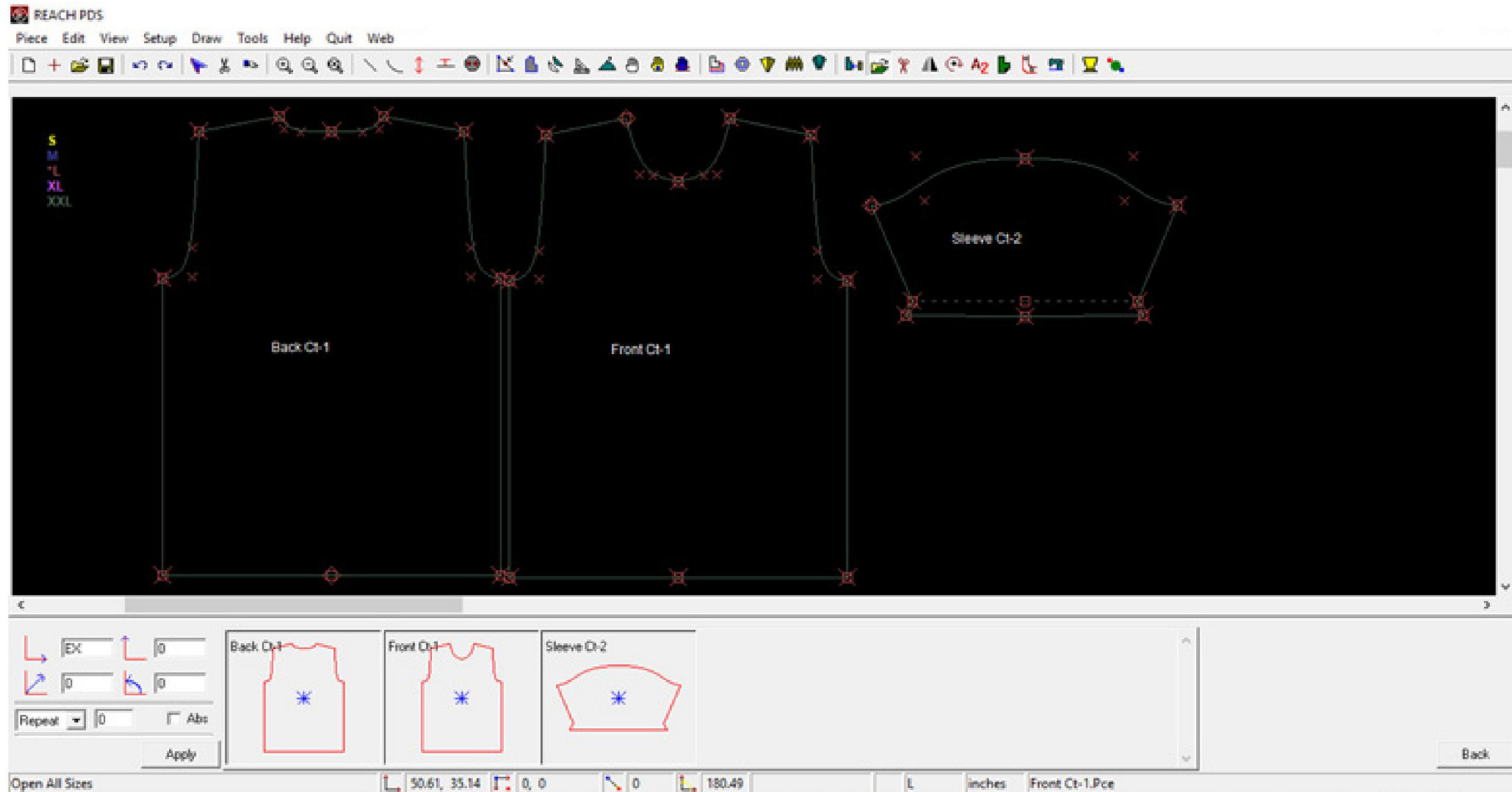
REACH CAD



STEP-07I

SELECT ALL THE PATTERNS CENTER, FRONT, BACK, SLEEVE AND OPEN THEM.

REACH CAD



STEP-072

GO TO MEASURE TOOL AND CHECK THE ARMHOLE MEASUREMENT

REACH CAD

REACH PDS

Piece Edit View Setup Draw Tools Help Quit Web

Back Ct-1

Sleeve Ct-2

Measure

SNo	Min	Hori	Ver	Size	L	dL	Cum L	Cum ...	Seam
1	9.5	9.4	2.5	S	10.15	0	10.15	0	0
2	9.5	9.4	2.5	M	10.15	0	10.15	0	0
3	9.5	9.4	2.5	L	10.15	0	10.15	0	0
4	9.5	9.4	2.5	XL	10.15	0	10.15	0	0
5	9.5	9.4	2.5	XXL	10.15	0	10.15	0	0

Apply + - Back

Back Ct-1 Front Ct-1 Sleeve Ct-2

Repeat 0 Abs Apply

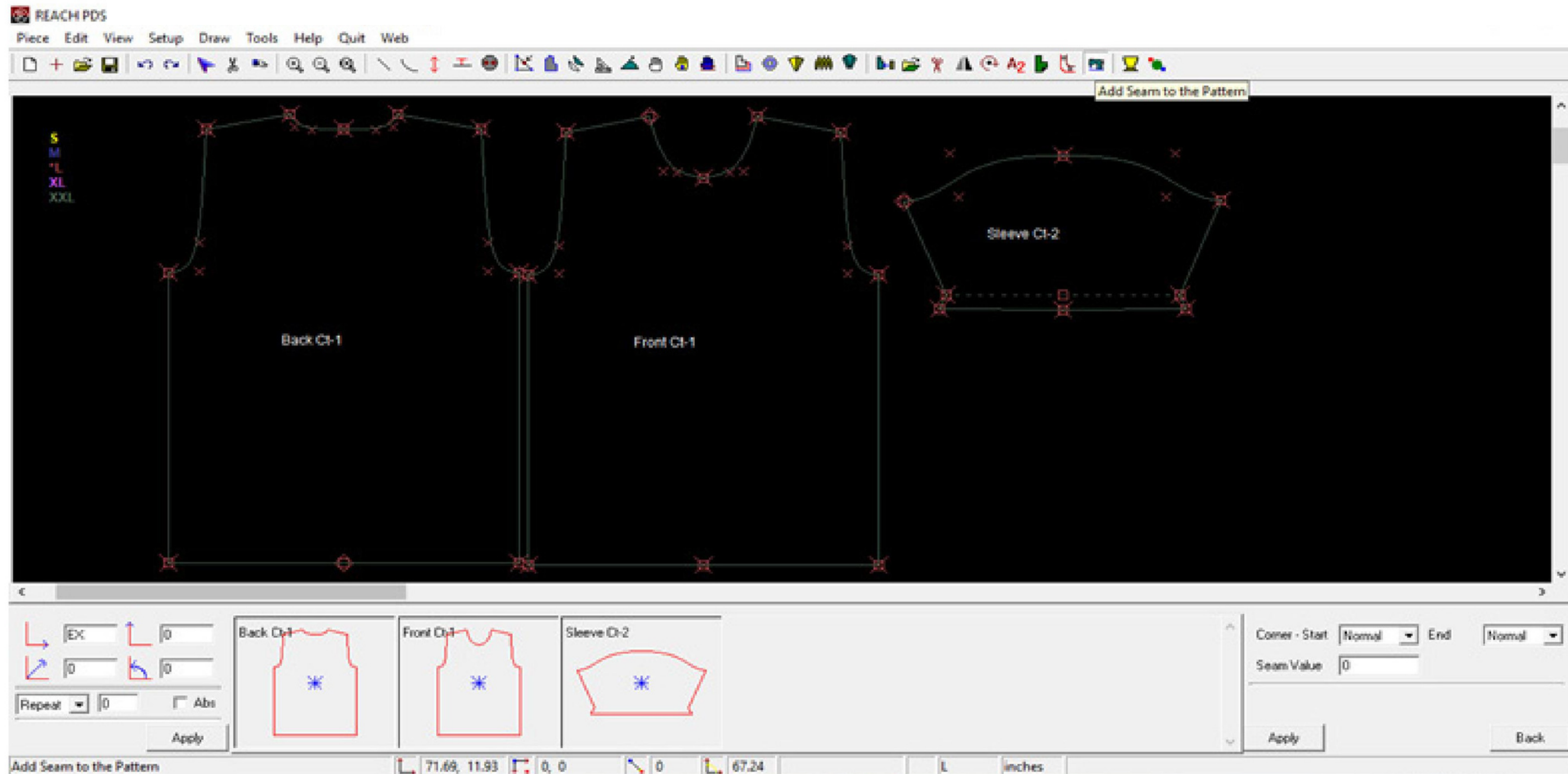
REACH PDS - Release 1.00

78.76, 18.8 9.71, 3.04 0 17.37 L inches Sleeve Ct-2.Pce

STEP-073

CLICK ON 'ADD SEAM TO THE PATTERN TOOL'

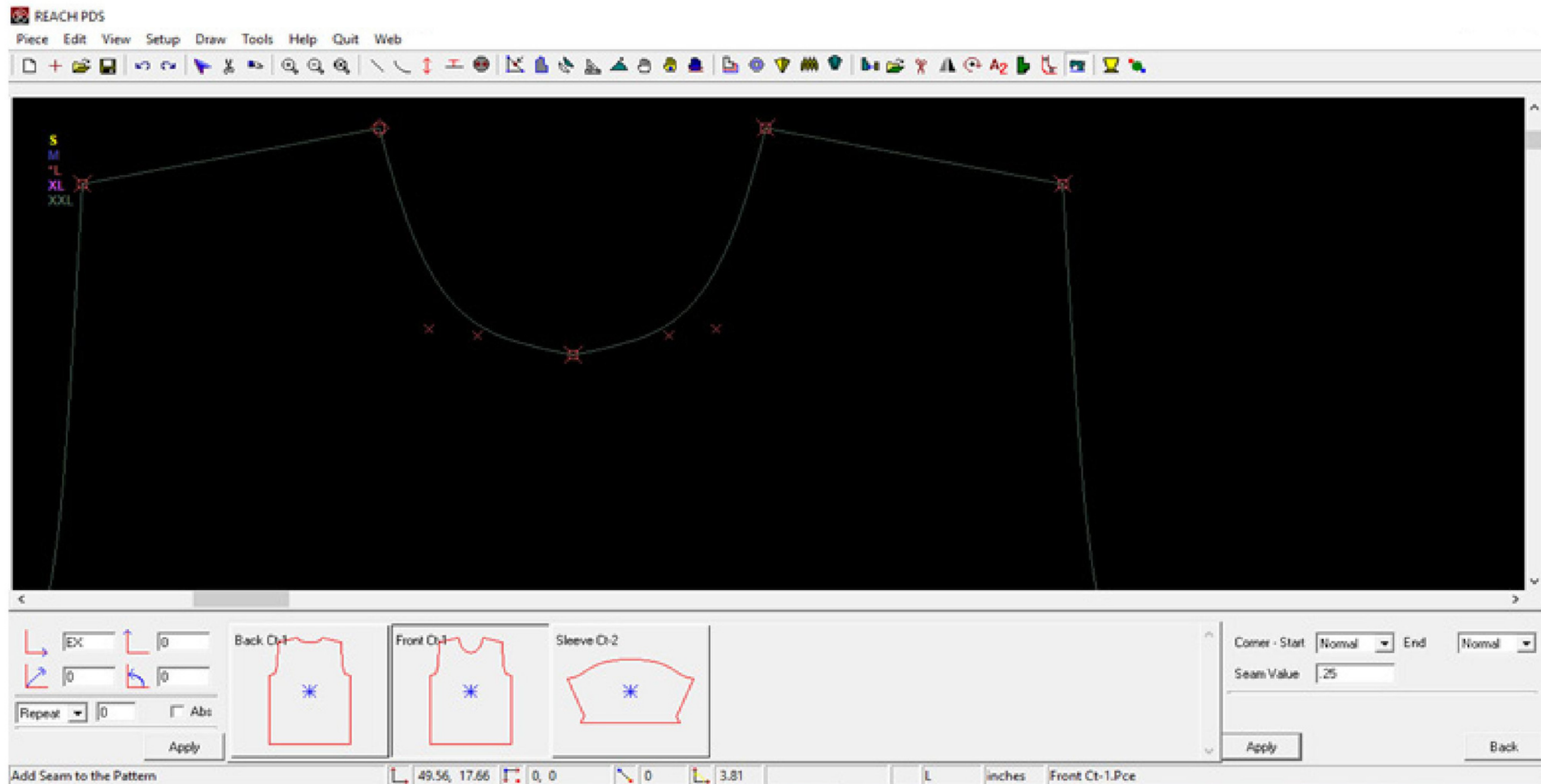
REACH CAD



STEP-074

REACH CAD

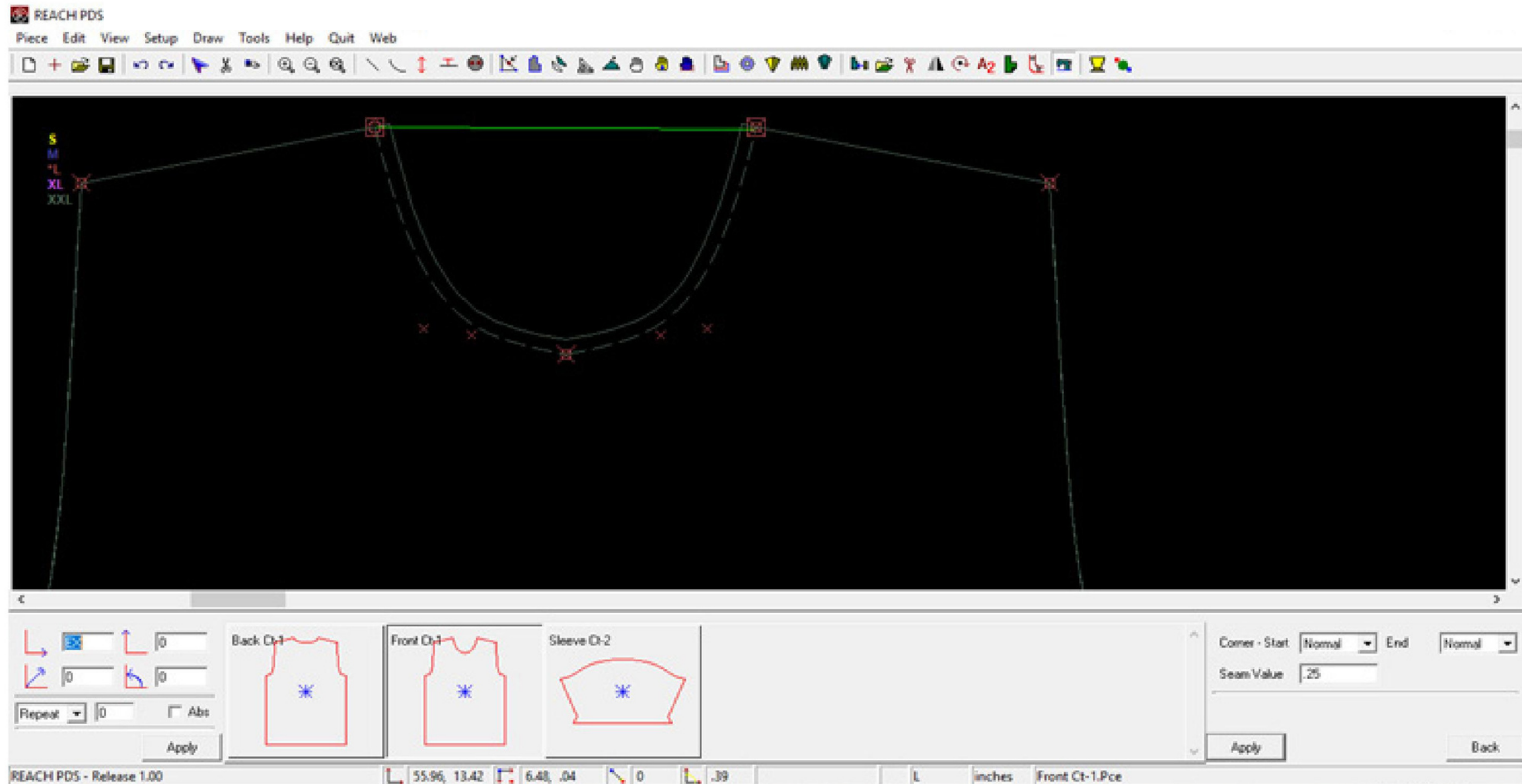
CLICK ON FRONT PATTERN AND ADD SEAM VALUE OF 0.25 INCHES. APPLY AND ZOOM TO NECK.



STEP-075

ADD NECK SEAM

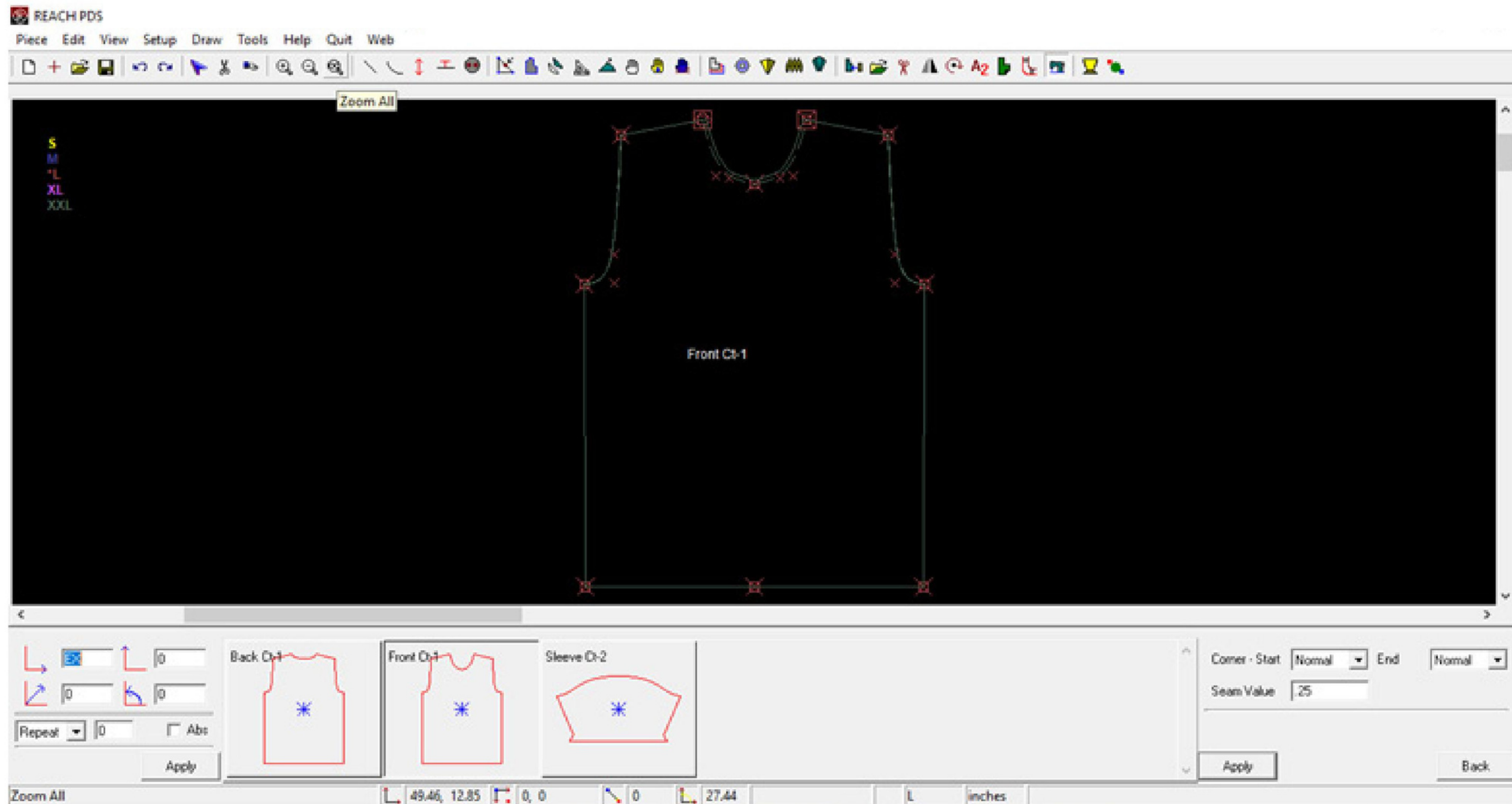
REACH CAD



STEP-076

CLICK ON ZOOM ALL TOOL

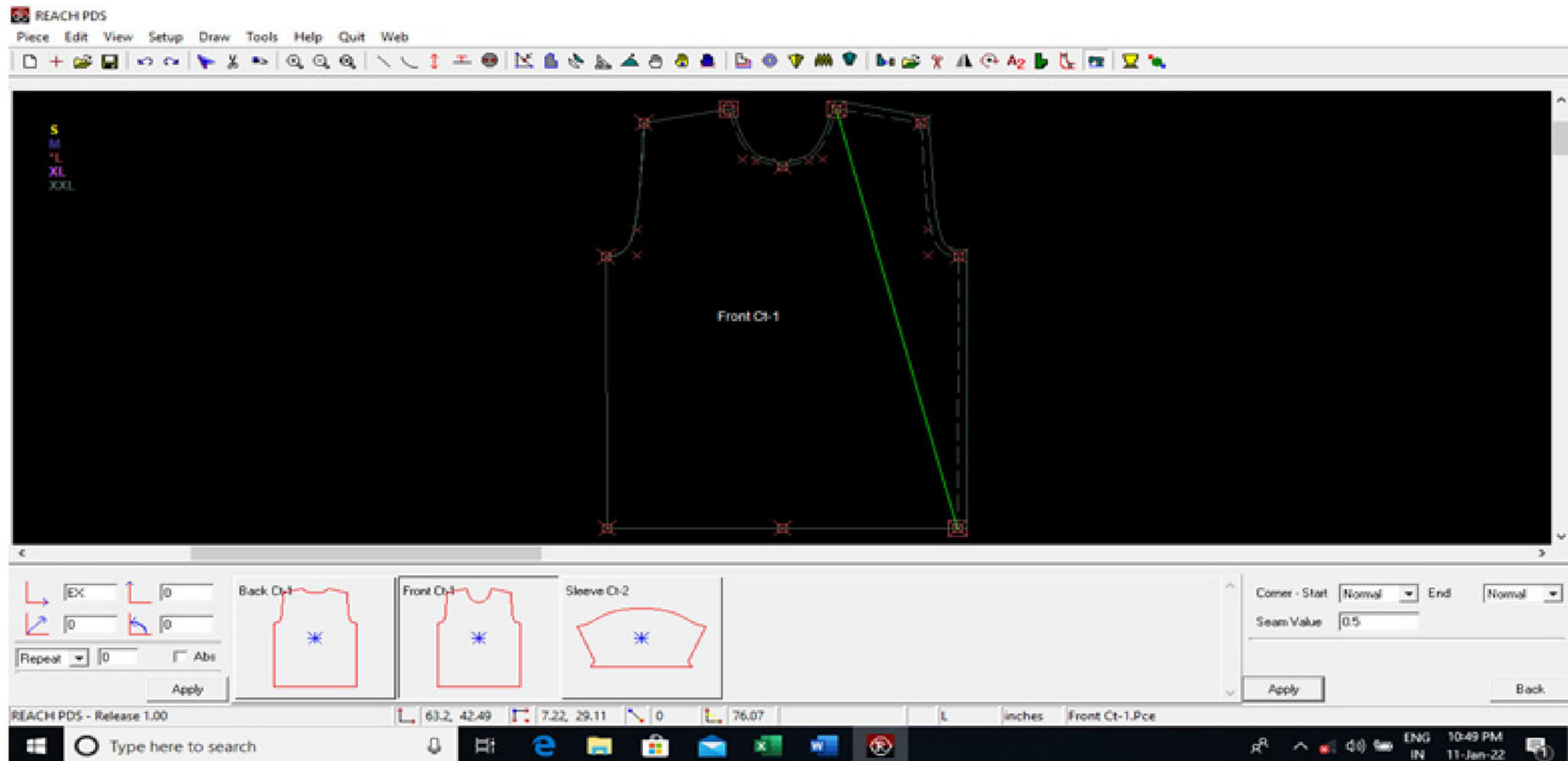
REACH CAD



STEP-077

ADD SHOULDER TO BOTTOM MEASUREMENT SEAM VALUE OF 0.5 INCHES.

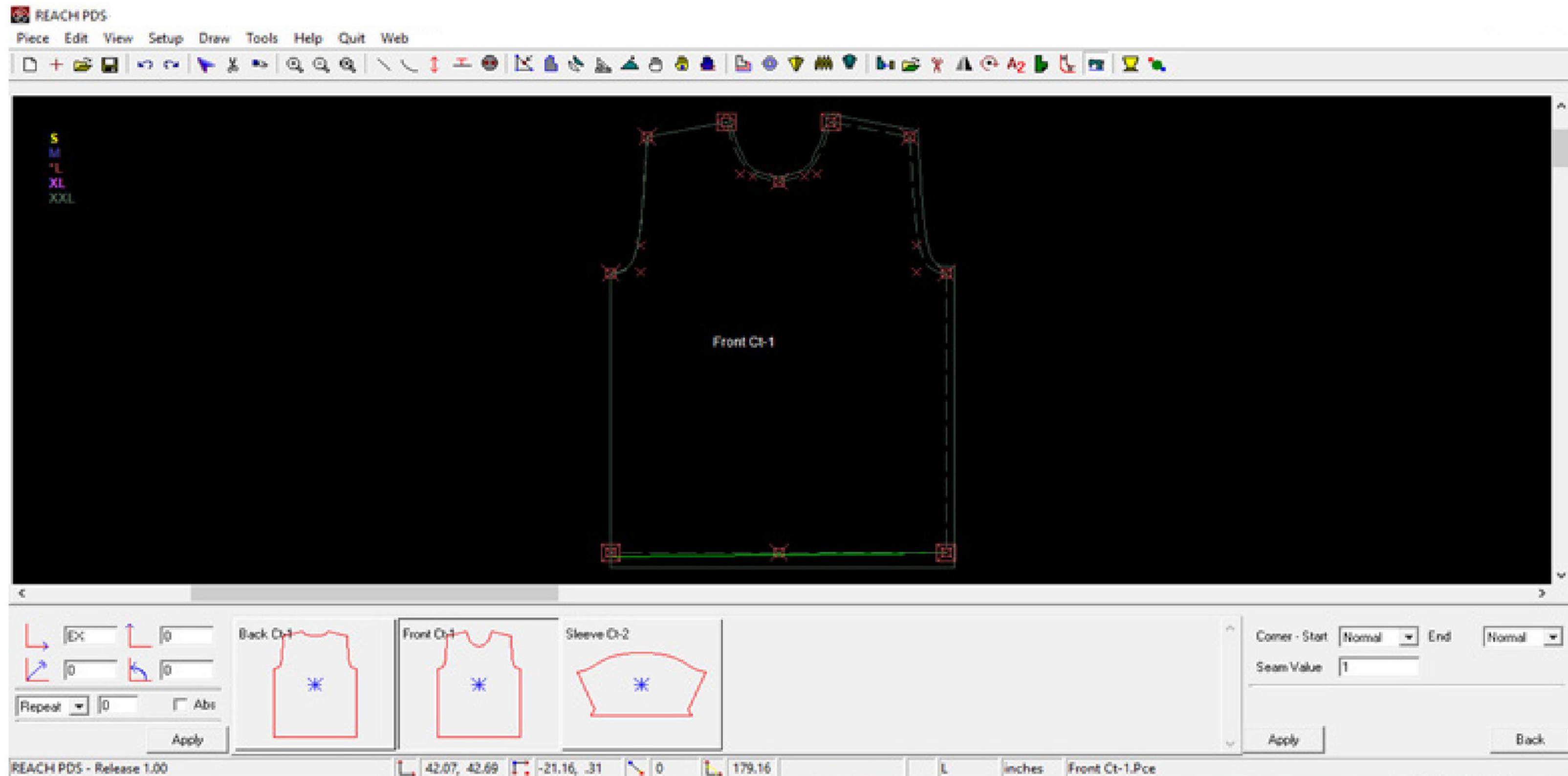
REACH CAD



STEP-078

ADD BOTTOM TO BOTTOM MEASUREMENT SEAM VALUE OF 1 INCH

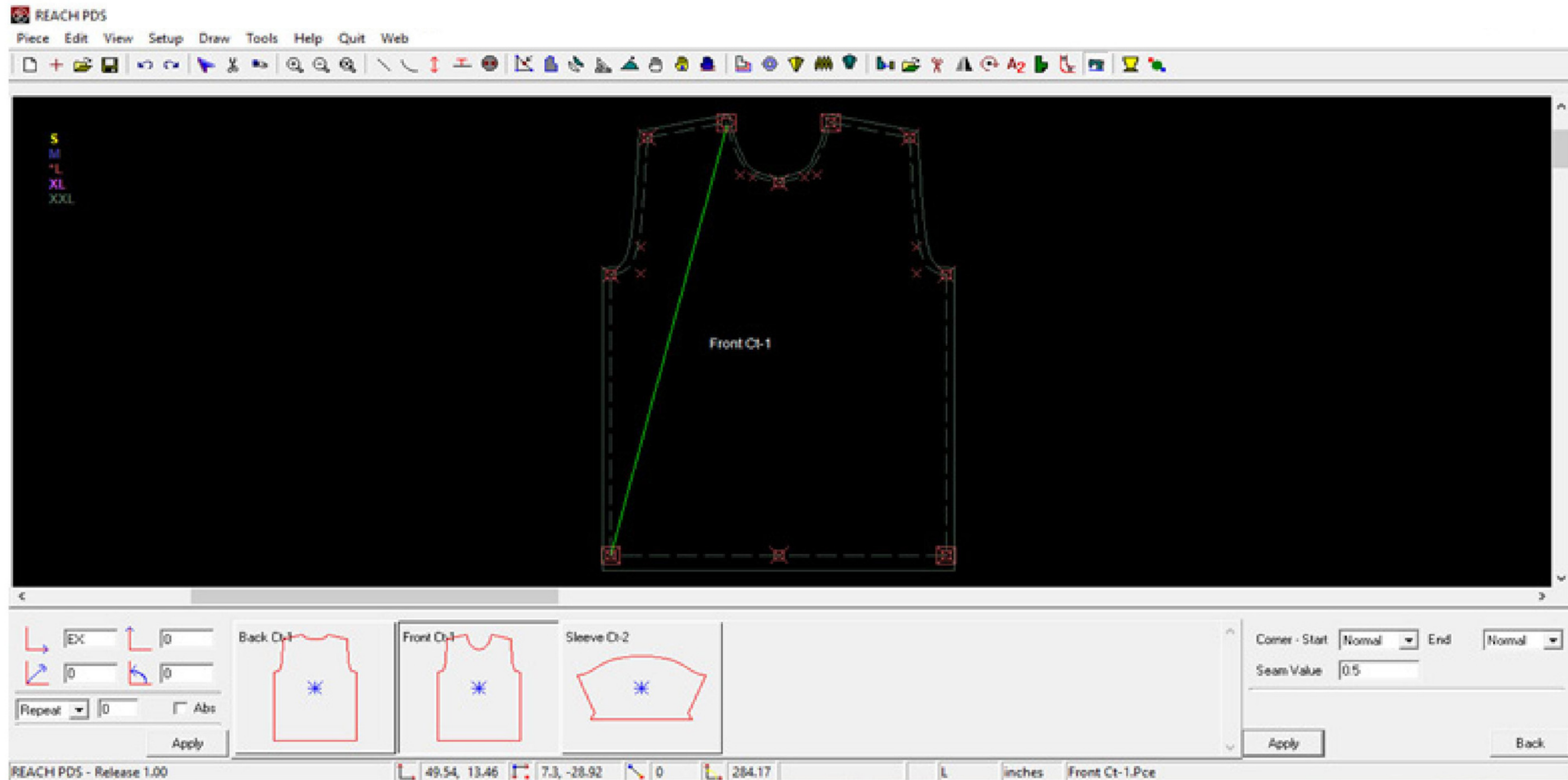
REACH CAD



STEP-079

ADD TO SEAM BOTTOM TO SHOULDER MEASUREMENT 0.5 INCHES ONE CLICK

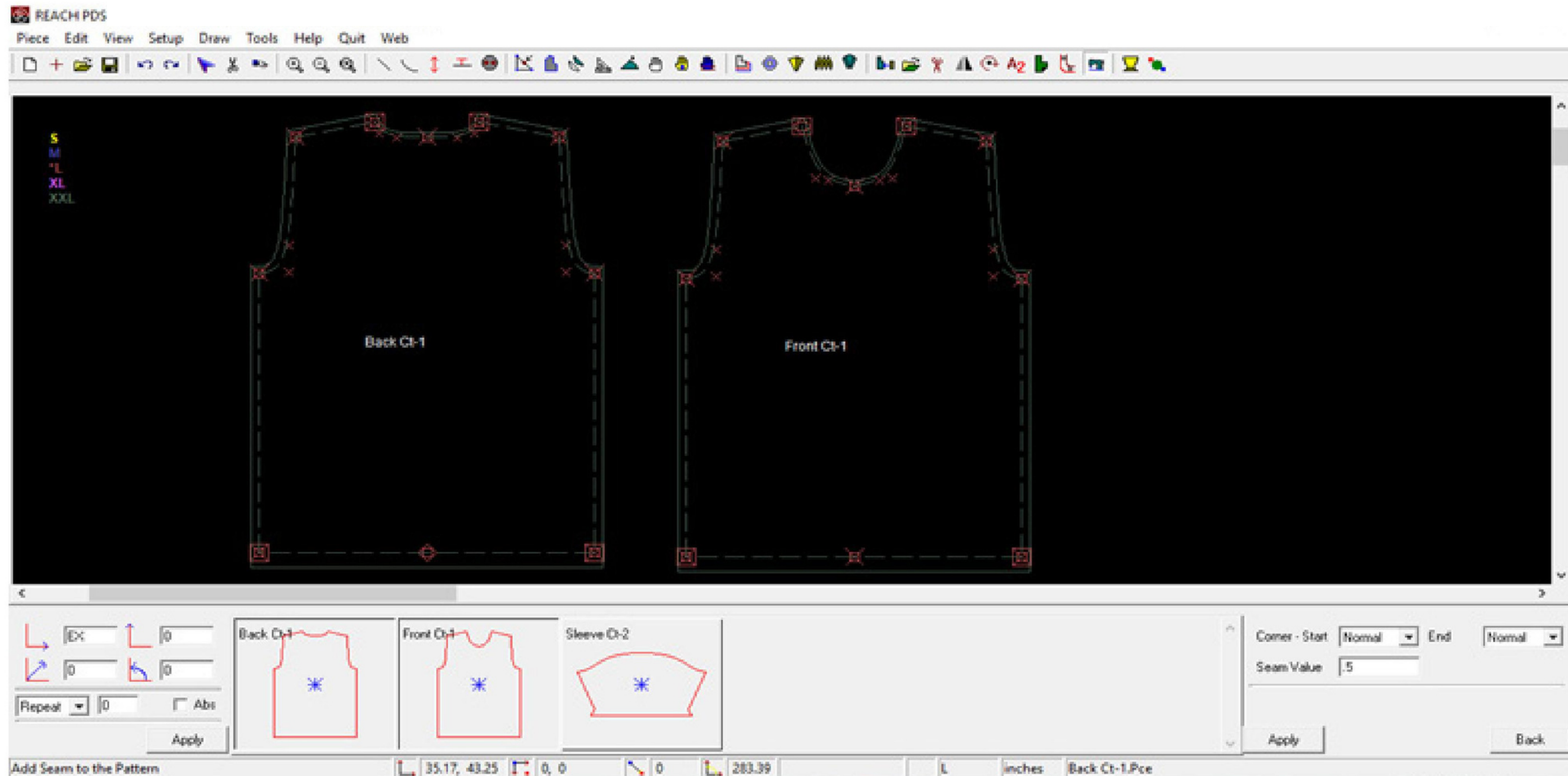
REACH CAD



STEP-080

CLICK ON BACK AND USE THE SAME METHOD ON THE BACK PATTERN

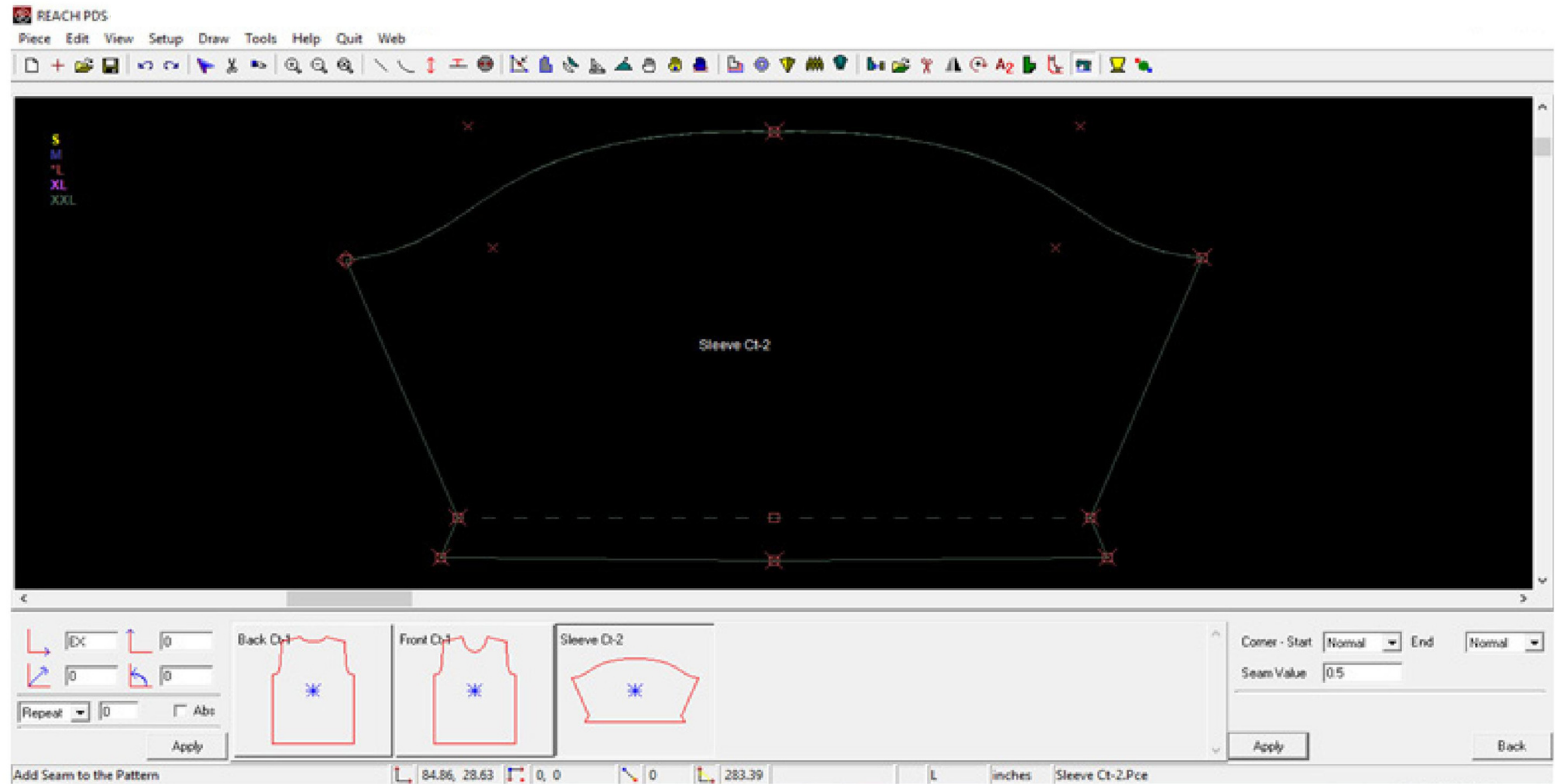
REACH CAD



STEP-08 |

CLICK ON SLEEVE PATTERN .

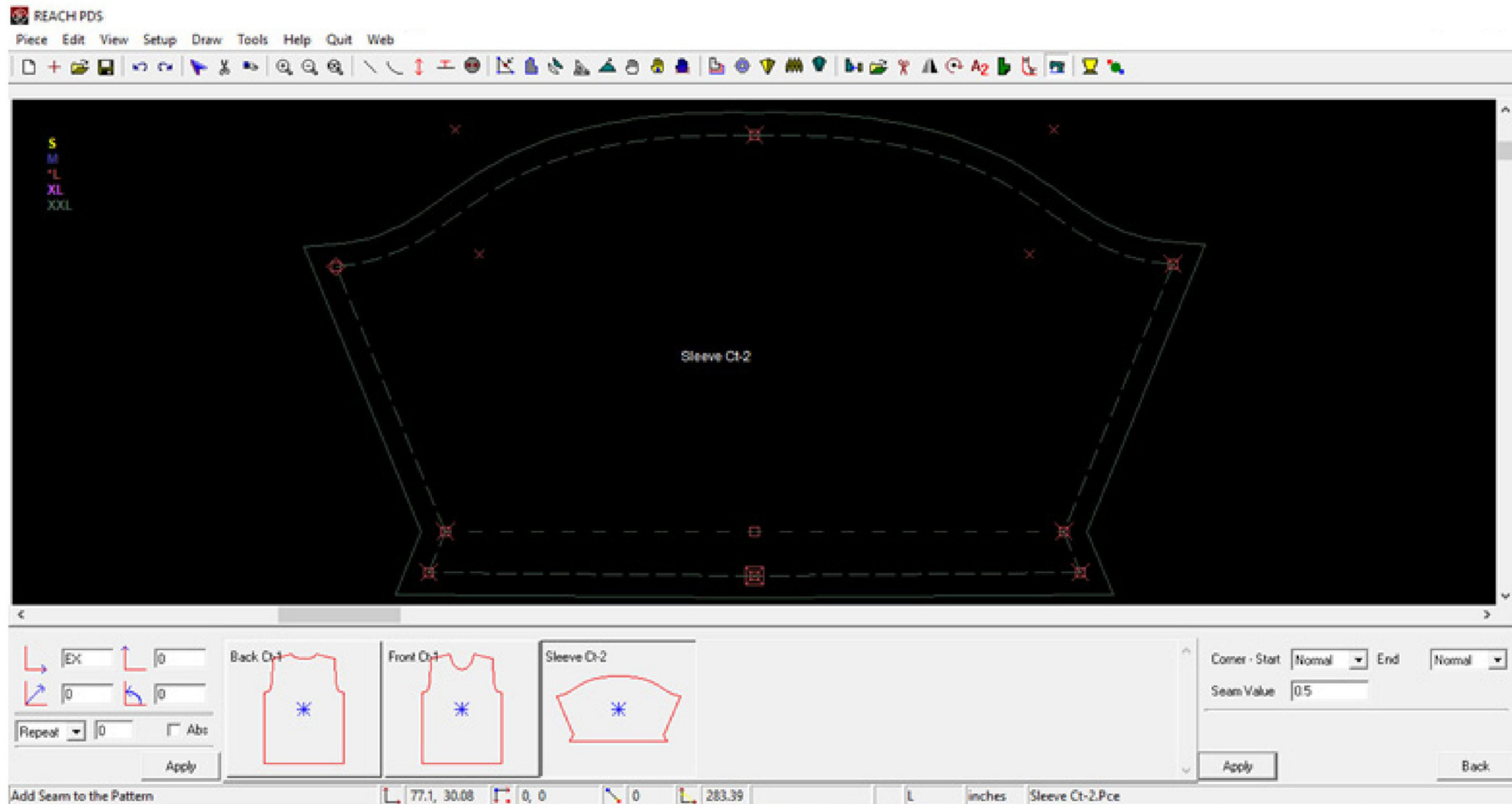
REACH CAD



STEP-082

TOTAL SINGLE CLICK 0.5 INCHES ANY ONE POINT

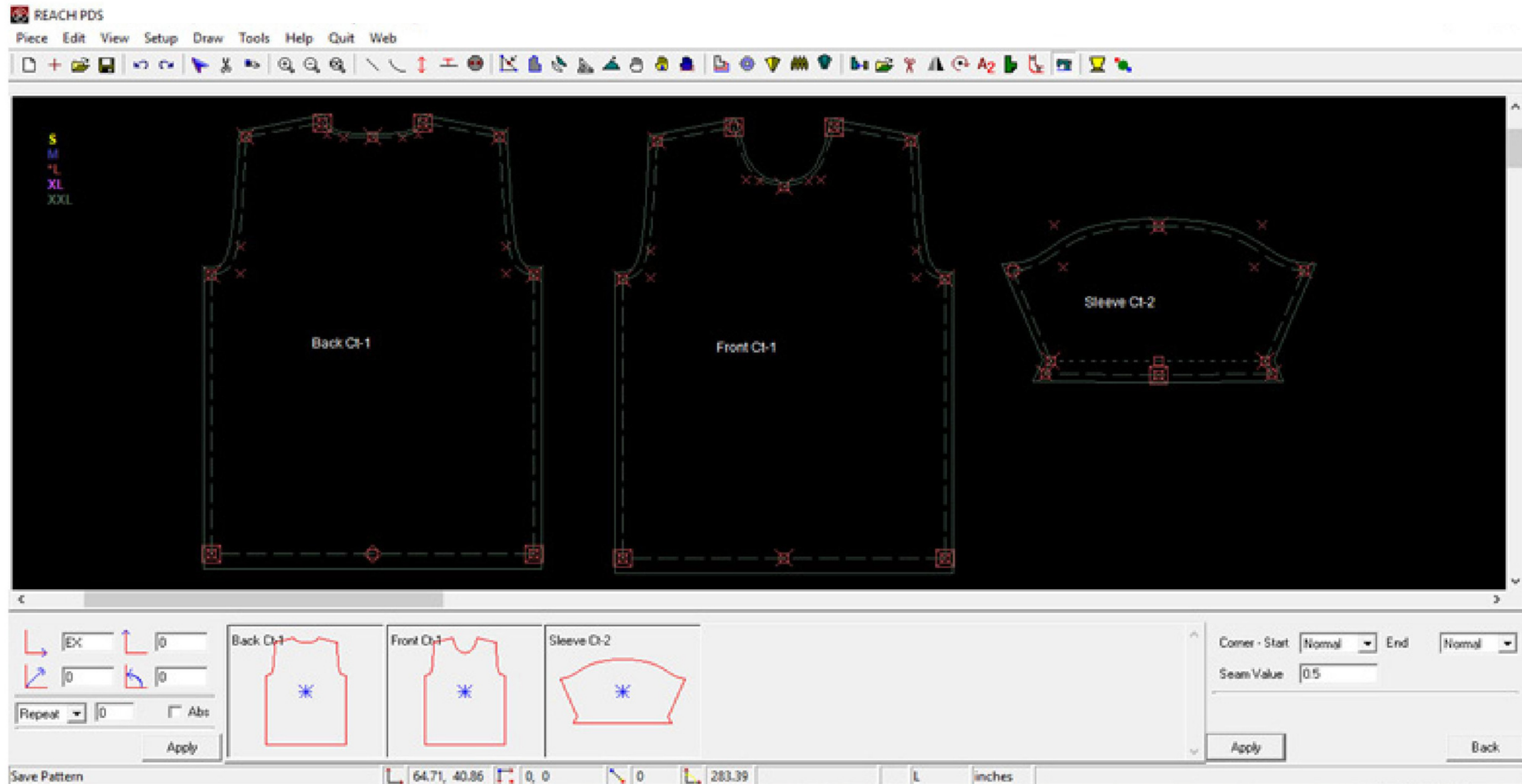
REACH CAD



STEP-083

CLICK ON 'ALL PATTERN' AND SAVE THE FILE.

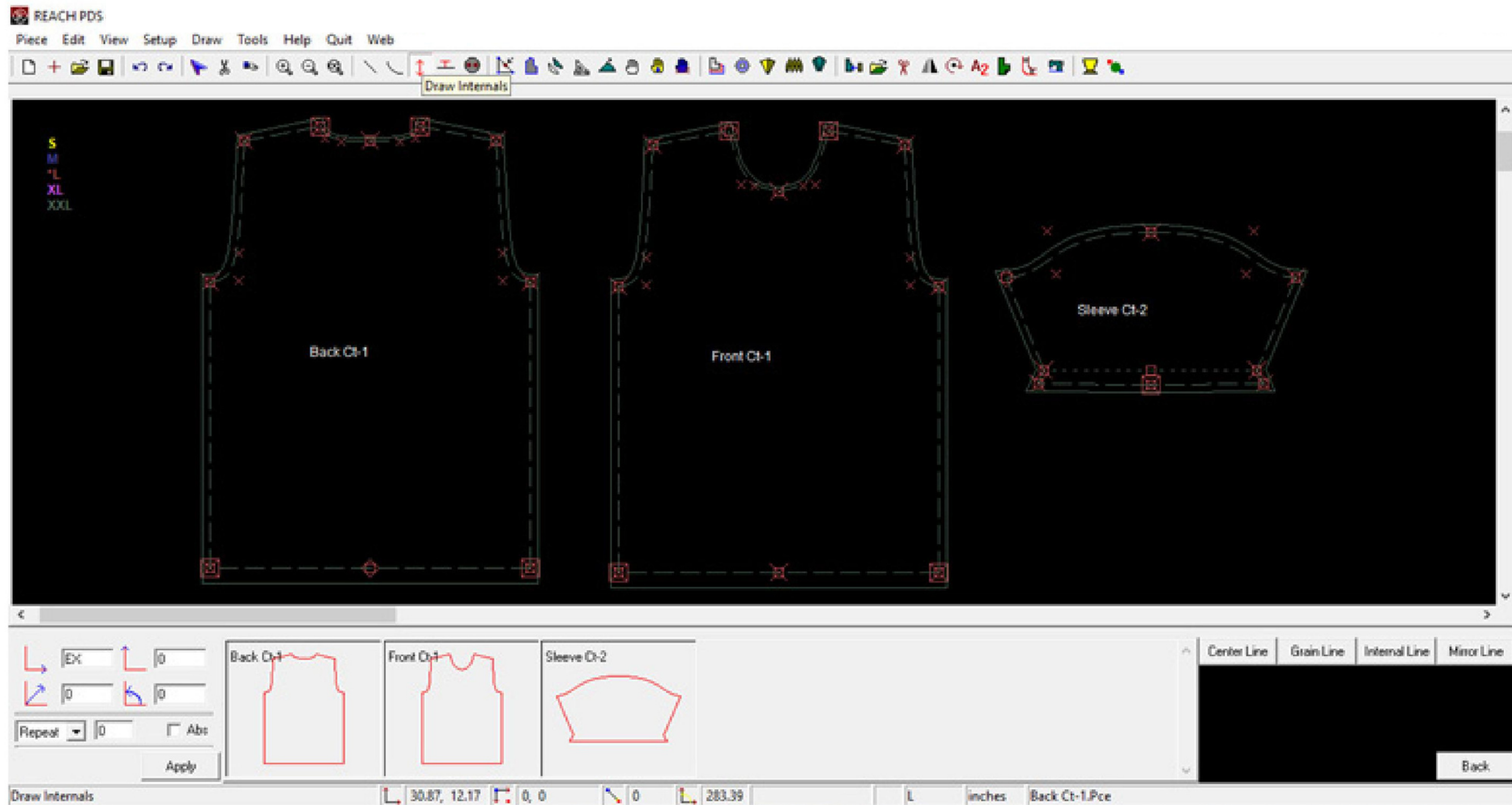
REACH CAD



STEP-084

CLICK ON 'DRAW INTERNALS' OPTION AND THEN SELECT 'GRAIN LINE'

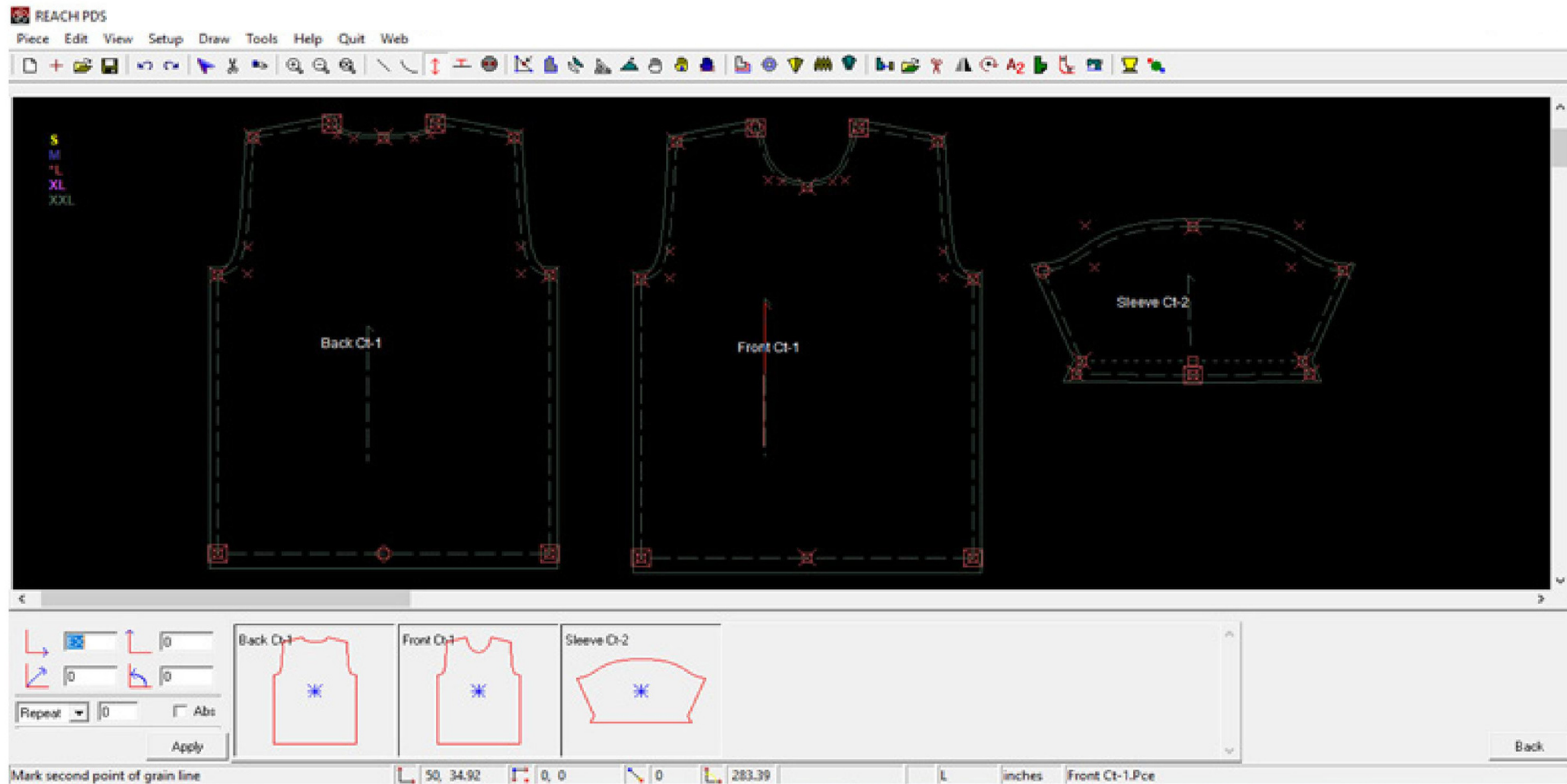
REACH CAD



STEP-085

ADD FRONT, BACK AND SLEEVE TO GRAIN LINE.

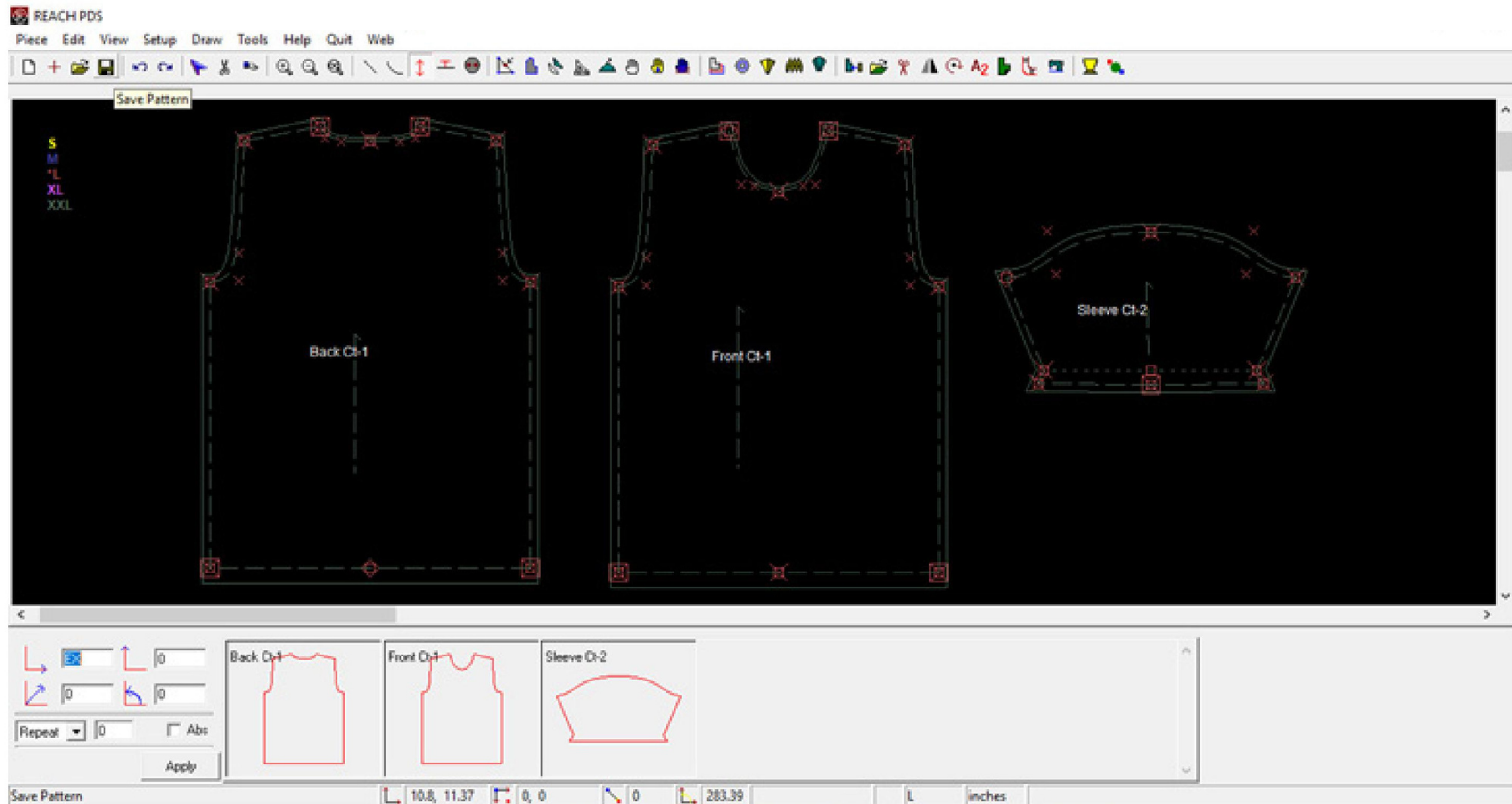
REACH CAD



STEP-086

SAVING PATTERN REGULARLY IS IMPORTANT SO THAT YOU DON'T LOSE ANY WORK.

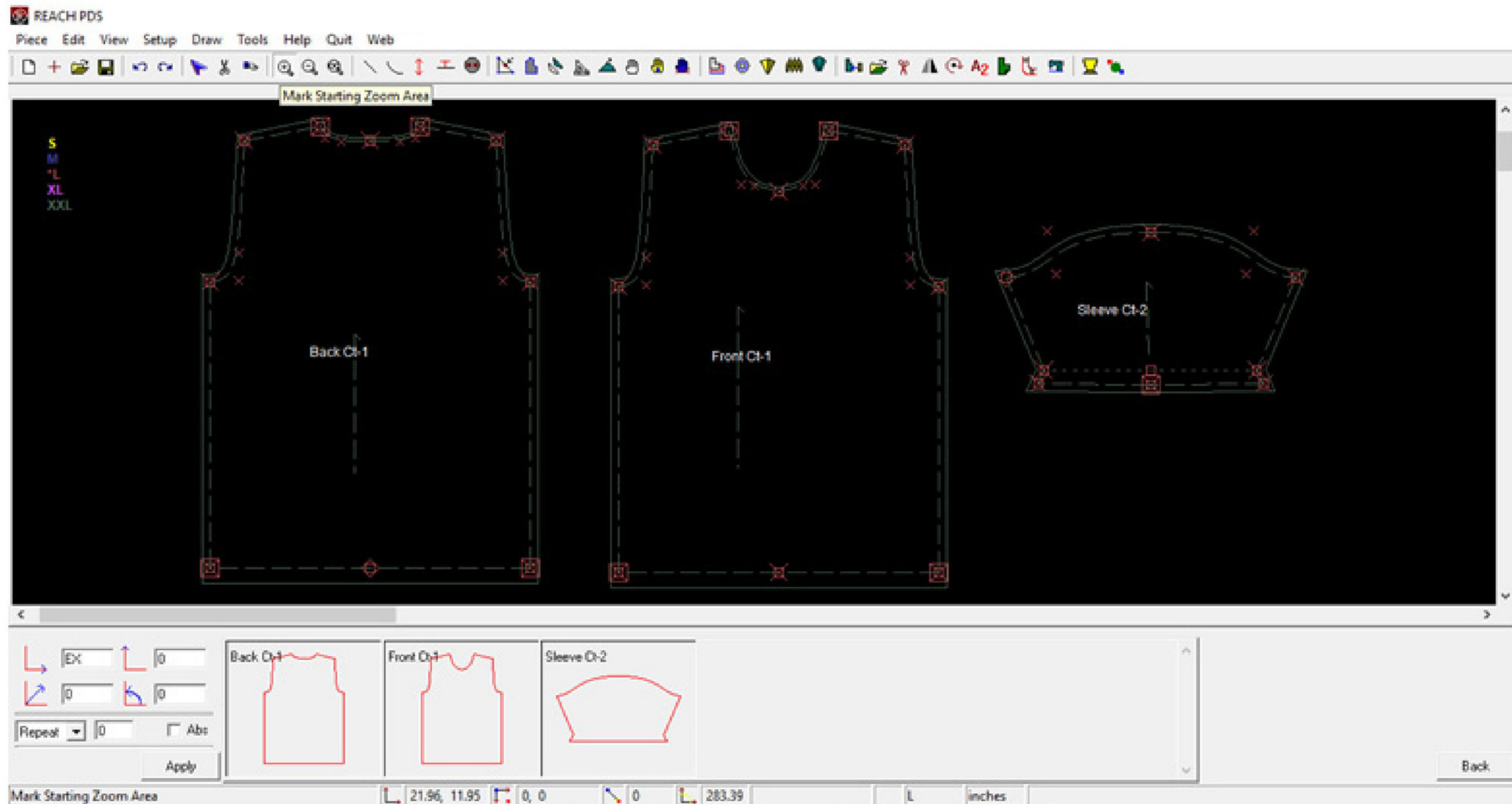
REACH CAD

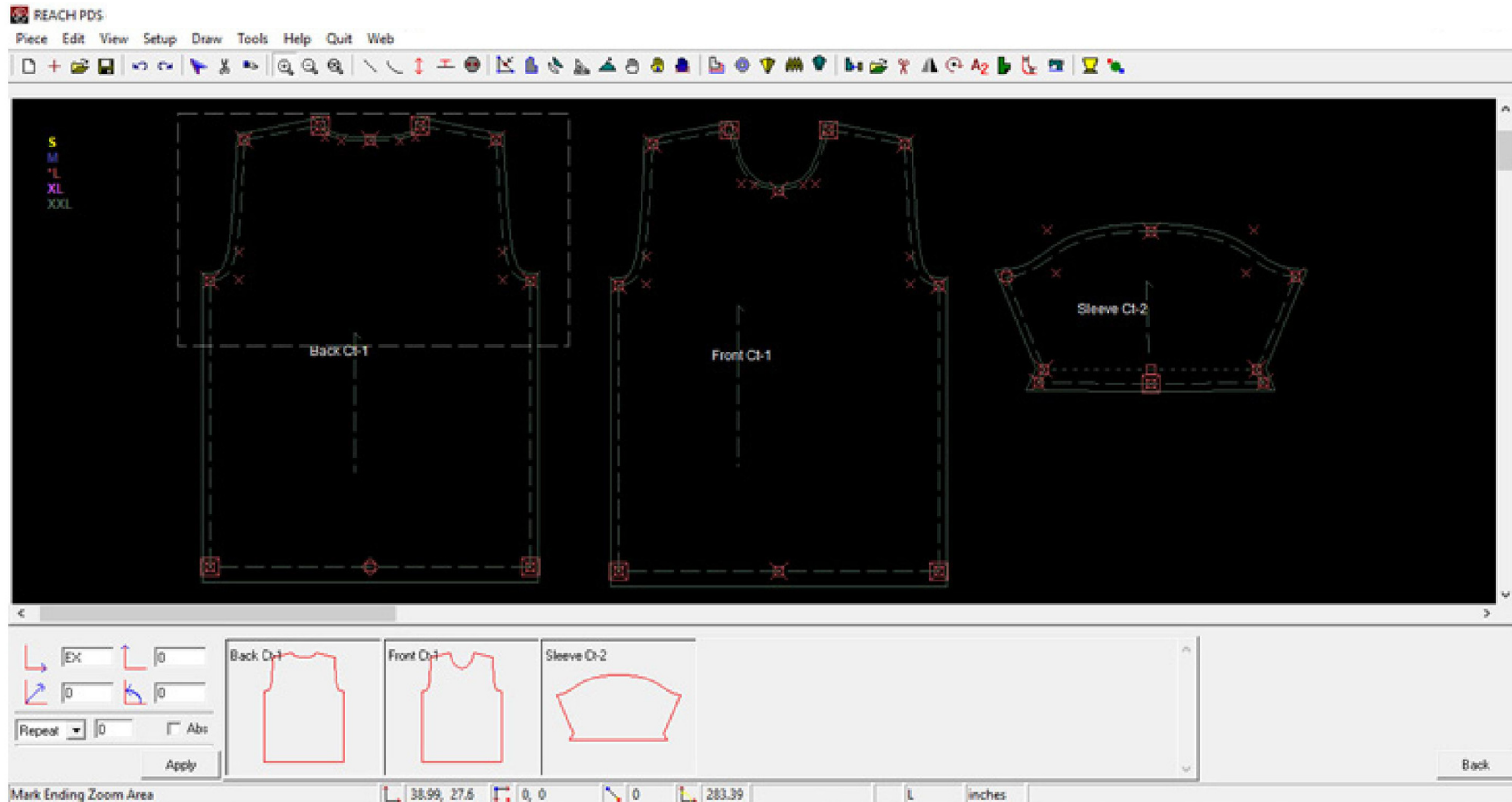


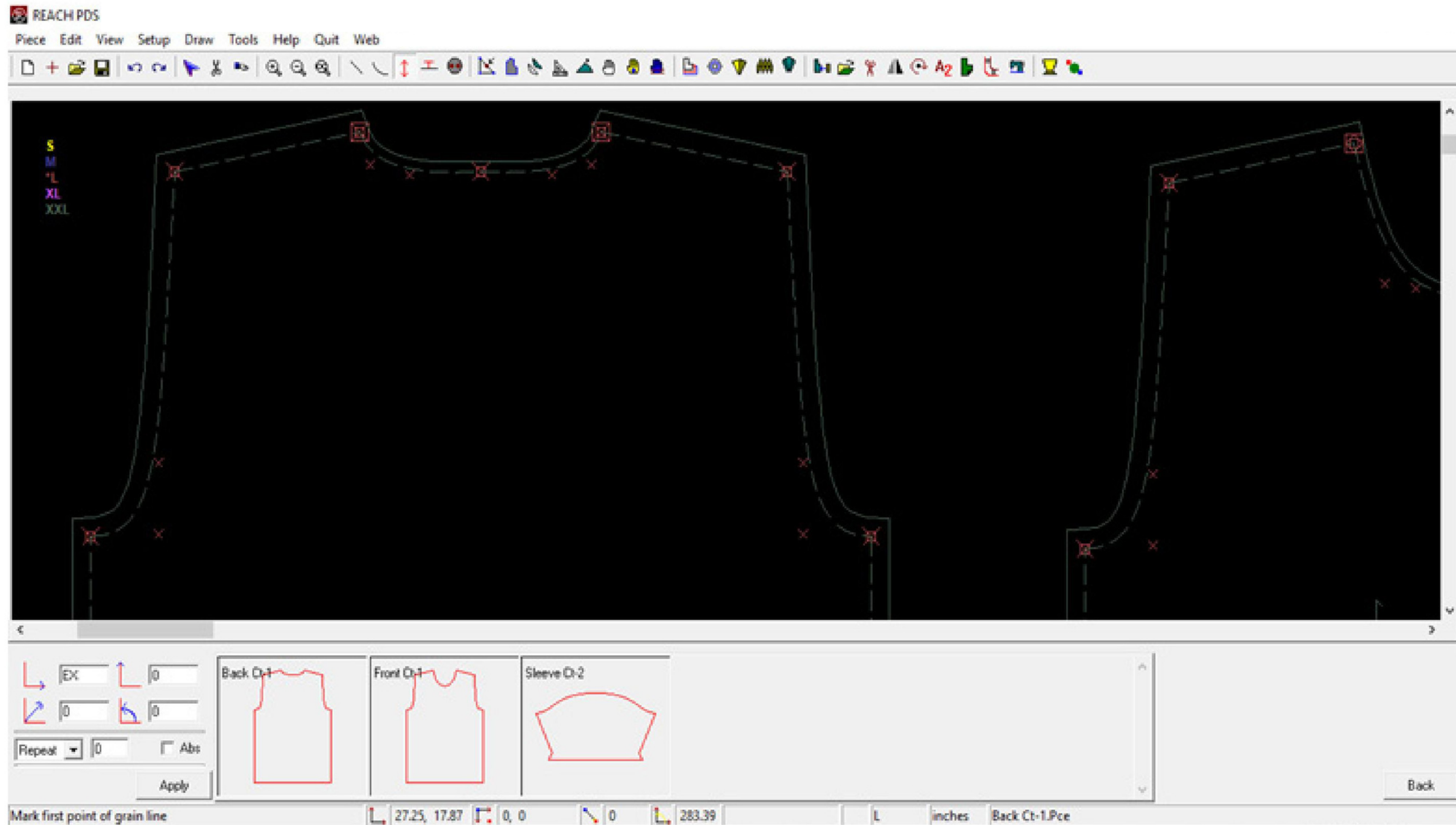
STEP-087

ZOOM AREA

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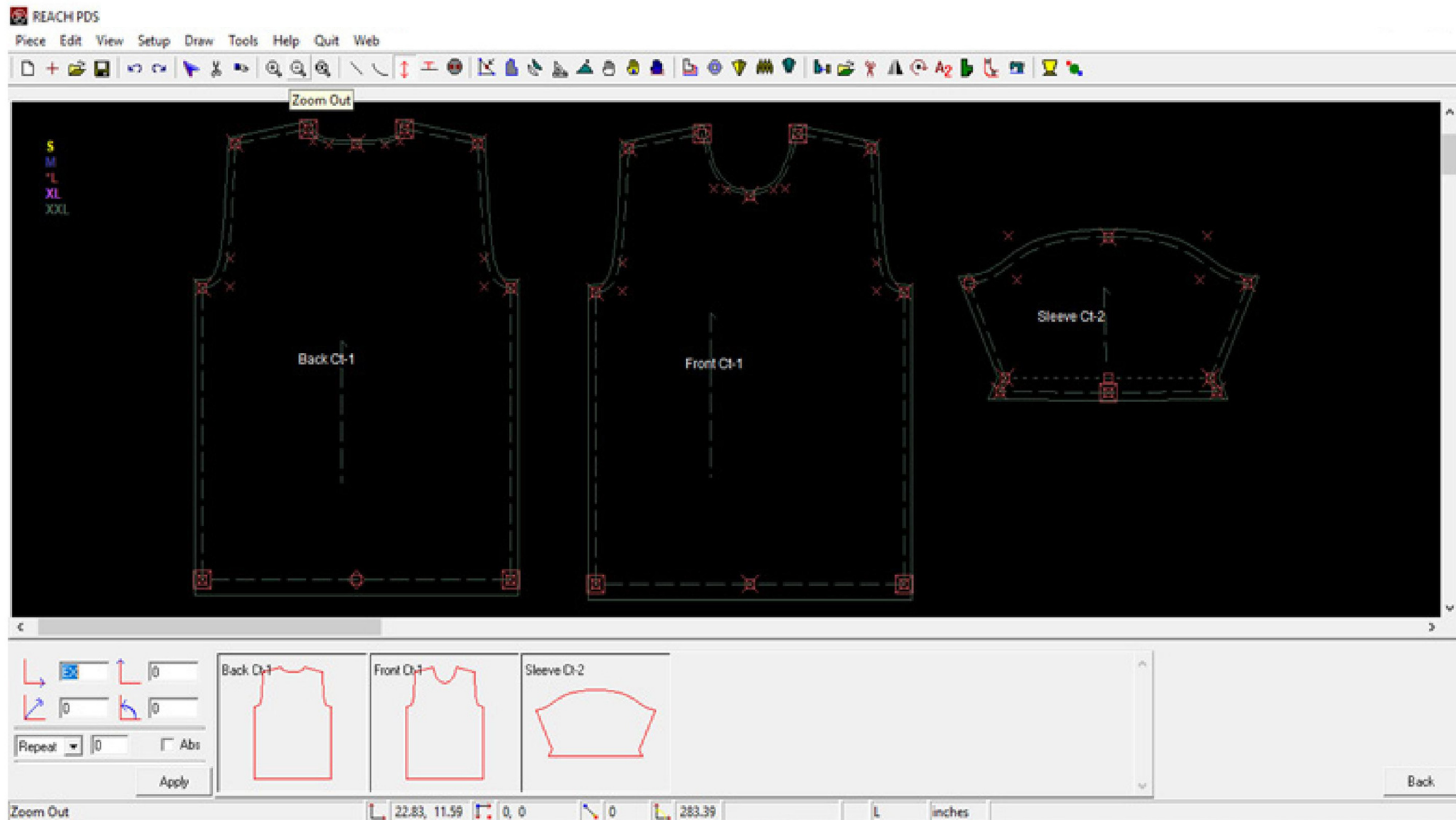




STEP-088

CLICK ON ZOOM OUT

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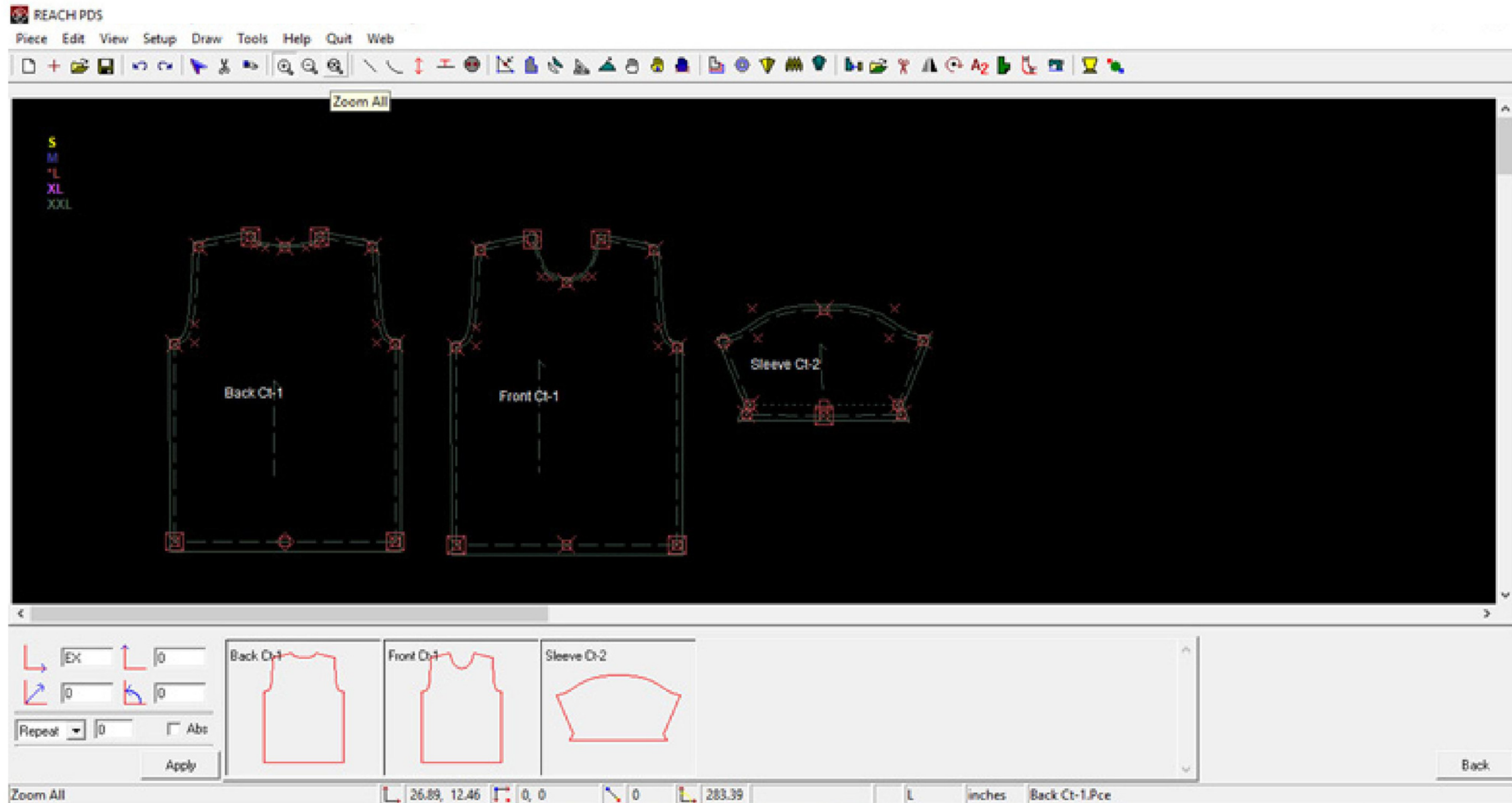
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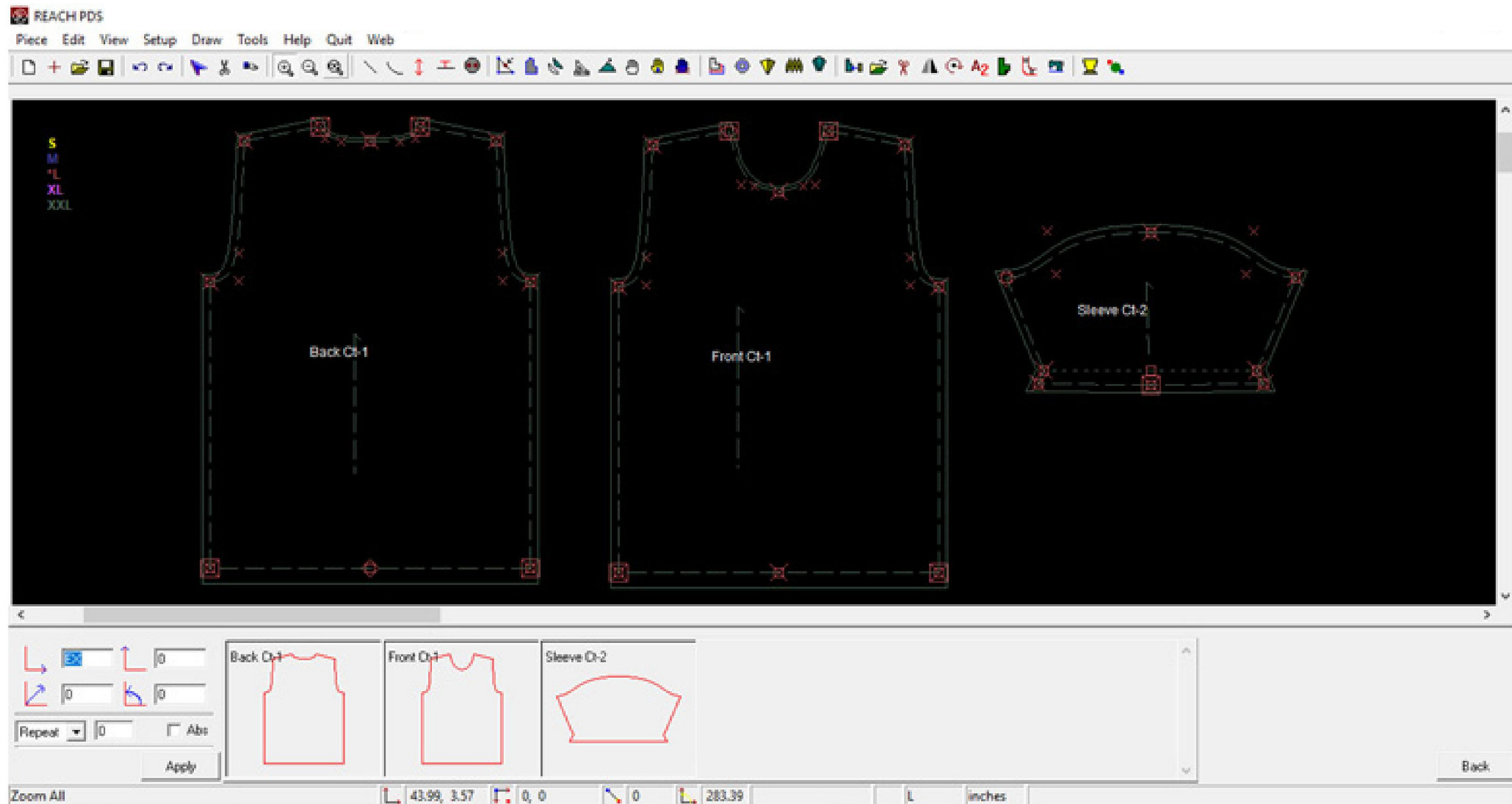


STEP-089

CLICK ON ZOOM ALL TO ENLARGE ALL THE PATTERNS.

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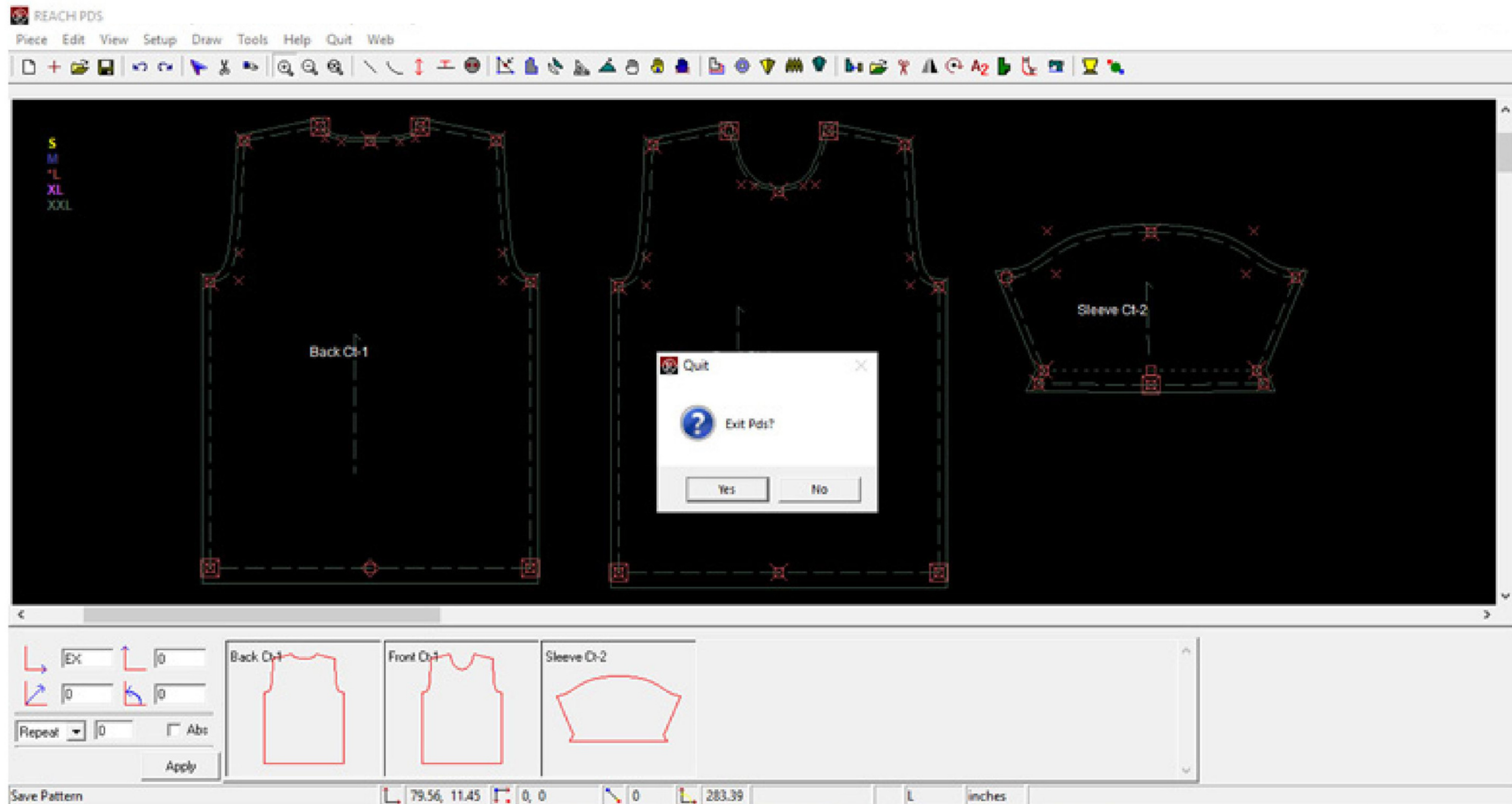




STEP-090

SAVE ALL PATTERNS TO CLOSE.

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REACH CAD is a best in class apparel pattern design, grading and marker planning software.

REACH CAD enables fabric and time savings in apparel product development and manufacture. About 70% of apparel manufacturing cost is fabric cost. Fabric usage optimization is critical to building competitive apparel ventures.

REACH CAD enables that.

Additionally, by reducing fabric wastage, REACH CAD contributes to a greener environment.

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