KEGEL

CHALLENGE

KEGEL

LANDMARK PATTERNS

TOWER OF PISA
3541

Also known as the Leaning Tower of Pisa, this pattern is asymmetric in design with a shift to the inside on the left, or if looking at it from another perspective, a shift to the outside on the right. At 41’ in length, this oil pattern retains much of its shape throughout the entire length of the pattern, just like the Tower of Pisa does.

Latitude Ratio Coordinates
22’ 3.5 to 1
39’ 1.9 to 1

Longitude Ratio Coordinates
Outside Taper 7.2 to 1
Inside Taper 9.6 to 1

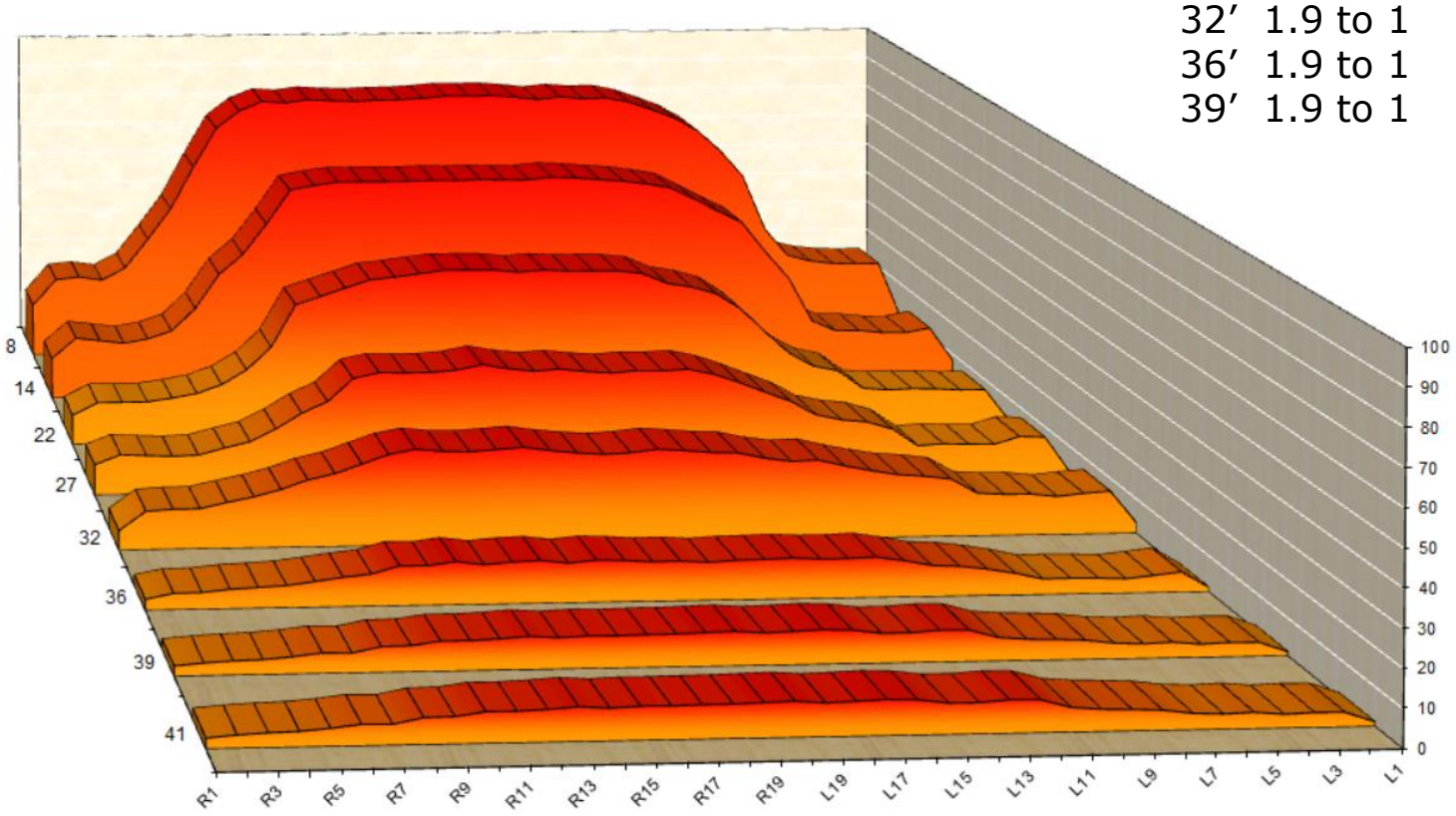
Pattern Distance
41 Feet

Pattern Volume
Forward 14.38 mL
Reverse 10.60 mL
Total 24.98 mL

TOWER OF PISA
3541

Latitude Ratio Coordinates

8′	2.5 to 1
14′	3.3 to 1
22′	3.5 to 1
27′	2.7 to 1
32′	1.9 to 1
36′	1.9 to 1
39′	1.9 to 1



The 2D Chart above was generated by the Lane Reader showing select tapes and ratios at key distances throughout the oil pattern. USBC Sport Bowling ratios are calculated at 22′ and 2′ before the end of the oil pattern. **KEGEL KODE Ratios** are determined by the highest Sport Bowling ratio number for that oil pattern.

KEGEL TIP - *Generally, the lower the ratios towards the end of the oil pattern, the less guidance of the bowling ball and therefore, the more difficult the oil pattern may play. The higher the ratios are towards the end of the oil pattern, the easier it may play.*

KEGEL LANDMARK PATTERNS

CHALLENGE SERIES

This page shows the **KOSI FLEX LANE MACHINE** program sheet.

The **HEADER** shows the oil pattern distance, the reverse brush drop distance, the amount of lane conditioner applied to the lane, the oil per board setting, and the conditioner type in each tank.

Below that is the **FLEX LANE MACHINE PROGRAM** settings which shows the load structure and number of loads, the oil pump setting if using the multi mic stream feature, the speed of the lane machine, the buffer speed, and the tank choice per load screen.

The **OVERHEAD CHART** on the far right shows where the conditioner is applied on both the forward and reverse pass. The gradient area is a calculation of how the conditioner might bleed off the buffer brush.

The **COMPOSITE GRAPH** at the bottom shows the total amount of conditioner applied to every board along with that volume ratio in different zones.

A good way to think about the composite graph is to envision all the conditioner on the lane being pushed back to the foul line. Once all the conditioner is stacked up, this is what it would look like.

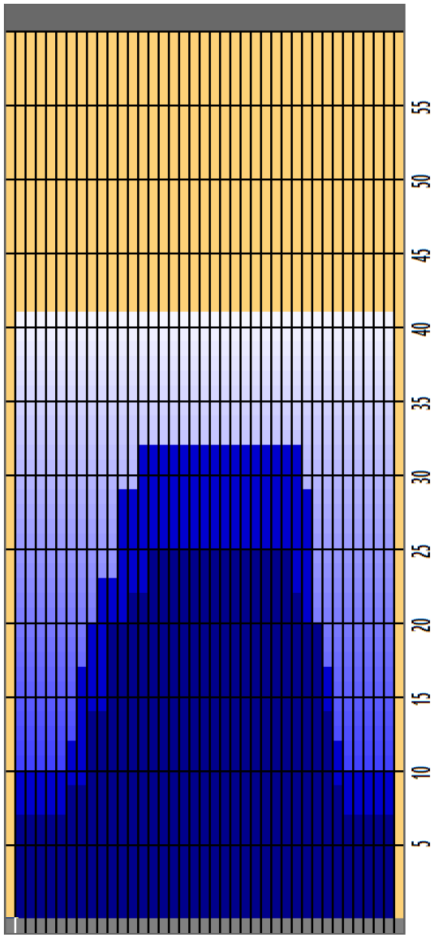
DESIGNED FOR FLEX

C - Tower of Pisa

Oil Pattern Distance	41	Reverse Brush Drop	38	Oil Per Board	Multi ul
Forward Oil Total	14.38 mL	Reverse Oil Total	10.6 mL	Volume Oil Total	24.98 mL
Tank Configuration	N/A	Tank A Conditioner	FIRE	Tank B Conditioner	ICE

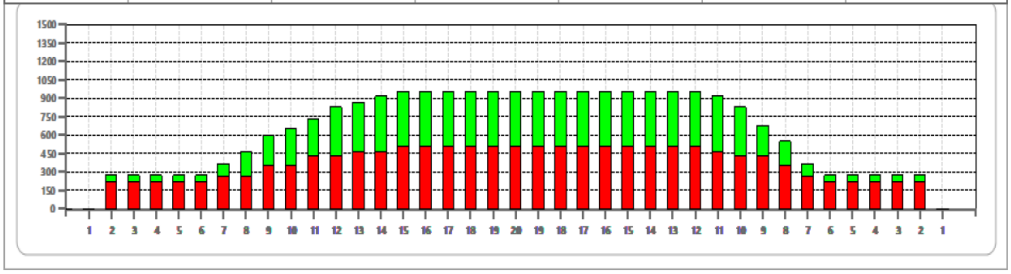
	START	STOP	LOADS	MICS	SPEED	BUFFER	TANK	CROSSED	START	END	FEET	T.OIL
1	2L	2R	5	45	14	3	A	185	0.0	7.9	7.9	8325
2	7L	7R	1	45	14	3	A	27	7.9	9.8	1.9	1215
3	9L	8R	2	40	18	3	A	48	9.8	14.9	5.1	1920
4	11L	9R	2	40	18	3	A	42	14.9	20.0	5.1	1680
5	13L	11R	1	40	18	3	A	17	20.0	22.5	2.5	680
6	15L	12R	1	40	18	3	A	14	22.5	25.0	2.5	560
7	2L	2R	0	40	22	3	A	0	25.0	34.0	9.0	0
8	2L	2R	0	40	30	2	A	0	34.0	41.0	7.0	0

	START	STOP	LOADS	MICS	SPEED	BUFFER	TANK	CROSSED	START	END	FEET	T.OIL
1	2L	2R	0	50	30	1	B	0	41.0	32.0	-9.0	0
2	14L	11R	1	50	22	3	B	16	32.0	28.9	-3.1	800
3	12L	10R	2	50	22	3	B	38	28.9	22.7	-6.2	1900
4	10L	10R	1	50	22	3	B	21	22.7	19.6	-3.1	1050
5	9L	9R	1	50	18	4	B	23	19.6	17.1	-2.5	1150
6	8L	8R	2	50	18	4	B	50	17.1	12.0	-5.1	2500
7	7L	7R	1	50	18	4	B	27	12.0	9.5	-2.5	1350
8	2L	2R	1	50	14	4	B	37	9.5	7.6	-1.9	1850
9	2L	2R	0	50	14	4	B	0	7.6	0.0	-7.6	0



Cleaner Ratio Main Mix 4:1
Cleaner Ratio Back End Mix 4:1
Cleaner Ratio Back End Distance 59
Buffer RPM: 4 = 700 | 3 = 500 | 2 = 200| 1 = 60

Item	3L-7L:18L-18R	8L-12L:18L-18R	13L-17L:18L-18R	18L-18R:17R-13R	18L-18R:12R-8R	18L-18R:7R-3R
Description	Outside Track:Middle	Middle Track:Middle	Inside Track:Middle	Middle:Inside Track	Middle:Middle Track	Middle:Outside Track
Track Zone Ratio	3.27	1.46	1.03	1	1.22	3.27



KEGEL TIP - *Once the amount of conditioner on the corners (outsides) reaches 300 microliters, an oil pattern begins to become "competitive". Less than that amount the ball might see friction and it could play on the easy side.*