

**Pattern Information**

Date	10-Aug-2021
Pattern Type	CHALLENGE
Pattern Difficulty	MEDIUM
Pattern Volume (ml)	30.75

**Pattern Parameters**

Split Pattern	No
Pattern Name	21JPBA_L47_N
Start Cleaner Spray	0
Start Squeegee	0
Start Oiling	8

**Supplies Information**

Lane Cleaner	
Cleaner Mixture Ratio	4 : 1
Cleaner Spray End Distance	55
Lane Conditioner	

**Surface Information**

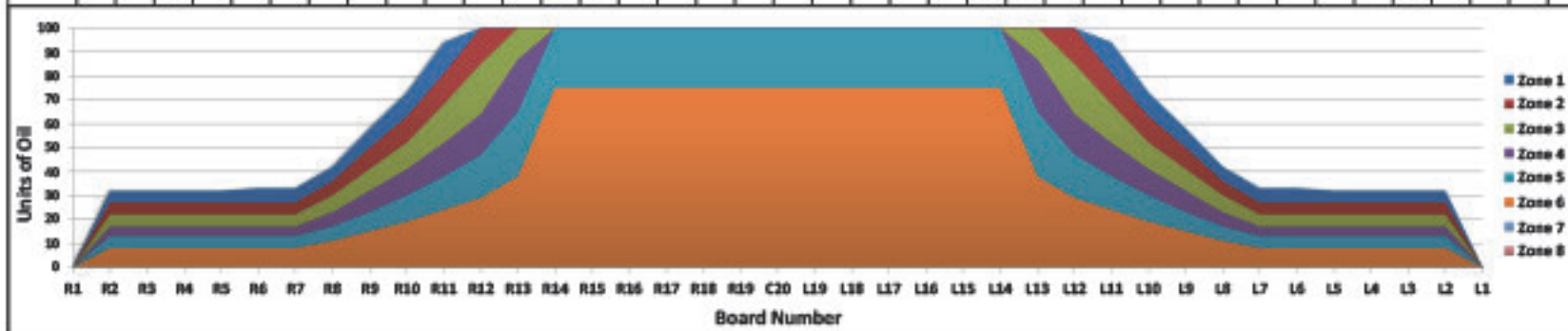
Surface Type	
Surface Brand	
Age	

SPORT	<4 : 1	USBC Ratio Definitions
CHALLENGE	4-8 : 1	
RECREATIONAL	>8 : 1	

**Notes**

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	
Zone End Distance	8	14	18	25	30	33	47		
Zone Ratio	L 3.0 : 1	3.7 : 1	4.5 : 1	6.8 : 1	7.8 : 1	9.3 : 1	:	:	Pattern Ratio by Volume (3-7:18-18)
	R 3.0 : 1	3.7 : 1	4.5 : 1	6.8 : 1	7.8 : 1	9.3 : 1	:	:	
Zone Volume (ml)	8.79	8.25	3.88	8.17	3.97	1.89	0.00		L 4.50 : 1 R 4.50 : 1

ZONE	7 Pin Side														Board Number												10 Pin Side												
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	C20	R19	R18	R17	R16	R15	R14	R13	R12	R11	R10	R9	R8	R7	R6	R5	R4	R3	R2	R1
1	0	32	32	32	32	33	33	42	58	73	94	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	94	73	58	42	33	33	32	32	32	32	0
2	0	27	27	27	27	27	27	36	50	63	81	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	81	63	50	36	27	27	27	27	27	27	0	
3	0	22	22	22	22	22	22	30	41	52	68	85	100	100	100	100	100	100	100	100	100	100	100	100	100	100	85	68	52	41	30	22	22	22	22	22	22	0	
4	0	17	17	17	17	17	17	23	32	41	52	64	87	100	100	100	100	100	100	100	100	100	100	100	100	100	87	64	52	41	32	23	17	17	17	17	17	0	
6	0	13	13	13	13	13	13	17	23	30	38	47	65	100	100	100	100	100	100	100	100	100	100	100	100	100	65	47	38	30	23	17	13	13	13	13	13	0	
8	0	8	8	8	8	8	8	11	15	19	24	29	38	75	75	75	75	75	75	75	75	75	75	75	75	75	38	29	24	19	15	11	8	8	8	8	8	0	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0





### 21JPBA\_L47\_N

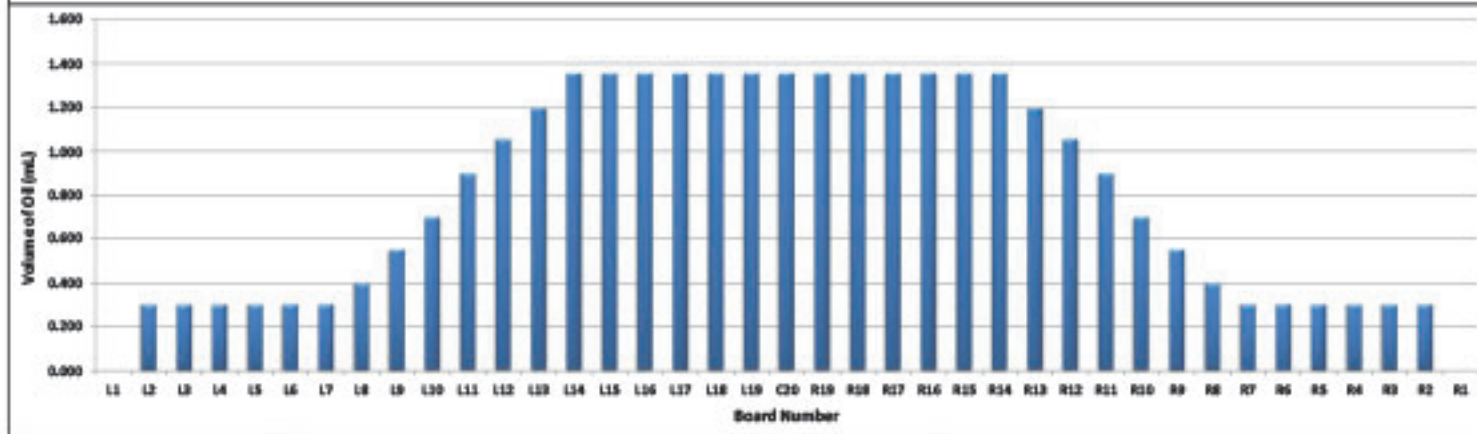
Crosswise Ratios (by units)

Zone 1 Average Ratio			Zone 5 Average Ratio		
3L-7L	Left = 32.4	3.8	3L-7L	Left = 13.0	7.8
3R-7R	Right = 32.4	3.8	3R-7R	Right = 13.0	7.8
18L-18R	Center = 100.0		18L-18R	Center = 100.0	
Zone 2 Average Ratio			Zone 6 Average Ratio		
3L-7L	Left = 27.9	3.7	3L-7L	Left = 8.0	9.3
3R-7R	Right = 27.9	3.7	3R-7R	Right = 8.0	9.3
18L-18R	Center = 100.0		18L-18R	Center = 75.0	
Zone 3 Average Ratio			Zone 7 Average Ratio		
3L-7L	Left = 22.9	4.5	3L-7L	Left = 9.0	
3R-7R	Right = 22.9	4.5	3R-7R	Right = 9.0	
18L-18R	Center = 100.0		18L-18R	Center = 9.0	
Zone 4 Average Ratio			Zone 8 Average Ratio		
3L-7L	Left = 17.9	5.8	3L-7L	Left = 9.0	
3R-7R	Right = 17.9	5.8	3R-7R	Right = 9.0	
18L-18R	Center = 100.0		18L-18R	Center = 9.0	

Crosswise Ratios (by ml)

Zone 1 Average Ratio			Zone 5 Average Ratio		
3L-7L	Left = 0.109	3.8	3L-7L	Left = 0.027	7.8
3R-7R	Right = 0.109	3.8	3R-7R	Right = 0.027	7.8
18L-18R	Center = 0.335		18L-18R	Center = 0.249	
Zone 2 Average Ratio			Zone 6 Average Ratio		
3L-7L	Left = 0.096	3.7	3L-7L	Left = 0.019	9.3
3R-7R	Right = 0.096	3.7	3R-7R	Right = 0.019	9.3
18L-18R	Center = 0.251		18L-18R	Center = 0.064	
Zone 3 Average Ratio			Zone 7 Average Ratio		
3L-7L	Left = 0.037	4.5	3L-7L	Left = 0.069	
3R-7R	Right = 0.037	4.5	3R-7R	Right = 0.069	
18L-18R	Center = 0.168		18L-18R	Center = 0.069	
Zone 4 Average Ratio			Zone 8 Average Ratio		
3L-7L	Left = 0.050	5.8	3L-7L	Left = 0.069	
3R-7R	Right = 0.050	5.8	3R-7R	Right = 0.069	
18L-18R	Center = 0.250		18L-18R	Center = 0.069	

The above crosswise ratios are calculated by the average units of oil for boards 18L - 18R and divided by the average units of oil for board 3 - 7 left and right.



3L-7L:18L-18R	8L-12L:18L-18R	13L-17L:18L-18R	18L-18R:17R-19R	18L-18R:12R-8R	18L-18R:7R-3R
Outside Track: Middle	Middle Track: Middle	Inside Track: Middle	Middle: Inside Track	Middle: Middle Track	Middle: Outside Track
4.49	1.88	1.02	1.02	1.88	4.49



Lengthwise Ratio By Area			
	3L-7L	18L-18R	3R-7R
	Left	Center	Right
Zone 2	1.2	1.0	1.2
Zone 3	1.4	1.0	1.4
Zone 4	1.9	1.0	1.9
Zone 5	2.4	1.0	2.4
Zone 6	4.0	1.3	4.0
Zone 7			
Zone 8			

## 21JPBA\_L47\_N

### Lengthwise Ratio By Board (units & ml)

Zone	7 Pin Side										Board Number										10 Pin Side																	
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	C20	R19	R18	R17	R16	R15	R14	R13	R12	R11	R10	R9	R8	R7	R6	R5	R4	R3	R2
2		1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
3		1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	
4		1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.6	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.6	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	
5		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.5	2.1	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	2.1	2.5	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
6		4.0	4.0	4.0	4.0	4.1	4.1	3.8	3.9	3.8	3.9	3.4	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.6	3.4	3.9	3.8	3.9	3.8	4.1	4.1	4.0	4.0	4.0	
7																																						
8																																						

The lengthwise ratios are calculated from the volumes in the first zone.

21JPBA\_L47\_N



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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32