Lane Conditions ‘101’ Part 5

Tournament Lane Conditions - How it should be done

(It’s not Rocket Science!)

Lane machine maintenance

For weekend tournaments, the buff brush should be in good condition (less than 12 months old).

Where a tournament will run over a week or more, use a new buff brush that has been 'burned in' for more than 400 lanes. This will ensure that the brush doesn't change characteristics during the event.

Remember, lane oil is primarily a lubricant (just like any other oil). If you run high ratio patterns on a continuous basis the outer edges the buff brush will be damaged and its ability to transfer oil to the lane will degrade. This can turn a 5:1 pattern into a 10:1 pattern and even create an unintended ‘out-of-bounds’ as a damaged section of brush will tend to push oil a long way down the lane.

Ensure that the squeegee blades are new or recently ‘flipped’. For the best cleaning performance squeegee blades should be replaced every 12 months and 'flipped' (front blade swapped with rear) every 6 months.

The cushion roller should be in good condition (same diameter over its length) and new cloth covers should be fitted. Cloth covers should be swapped for a new (or freshly washed) set whenever the duster cloth is replaced.

Check all filters & replace if needed.

Check all adjustments.

Run the machine in 'clean only' mode. The lanes should be clean from within a couple of feet of the foul line to the tail plank.

Adjust the cleaner dilution and/or spray settings if lanes are not clean. The first couple of feet of the lane can be cleaned manually before the event. Cleaner testing should be done using the tournament pattern. Some tournament patterns require oil volumes that are +50% (or more) above a normal house pattern so it makes sense to check the lane machine's cleaning efficiency using the tournament pattern.

During the tournament, walk every lane, check every back-end! The one lane you don't check is the lane the machine will have a problem on!!

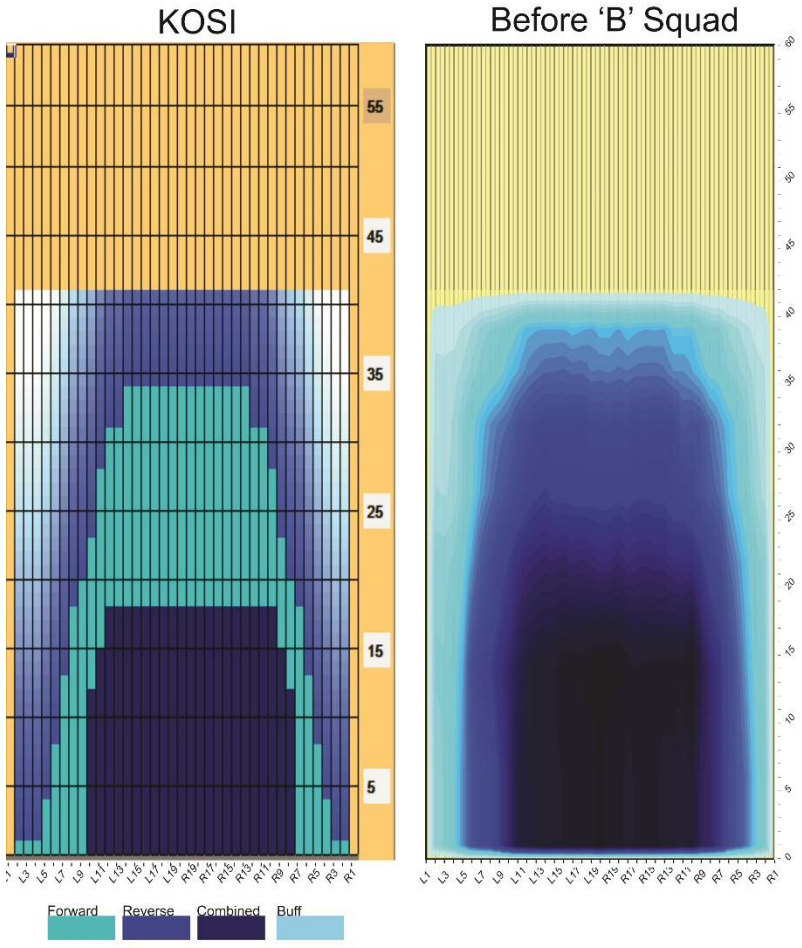
Choosing Patterns

If lanes are new (& hopefully flat), anything goes. The only limitation is the skill level of your competitors. As lanes age and as most lanes aren't flat you should really try to match the pattern up with the host centre's lane surface. If the centre just runs the same pattern day in, day out you may even be limited to patterns that closely resemble the 'house pattern'. It is very easy to create an 'out-of-bounds' area by applying even moderate amounts of oil to the heavily worn surface that can be present outside 8 board in a lot of centres.

Patterns for tournaments should always be tested even if only to make sure that there aren't any unintended consequences of running that particular pattern/surface/oil combination. Ideally patterns should also be tested for 'scoring pace' and durability and this should be reflected in the testing. There is no point testing a pattern for a team event by only bowling 6 games per lane.

Once a pattern has been chosen there is then the question of QC (quality control). Not every centre has access to a CLM kit so the procedure of having the pattern that is loaded into the lane machine checked against the program sheet and performing an oil volume check before every session of lane maintenance is adequate in most cases. A Kegel 'Sport' or 'Flex' machine will remember the last 55 operations performed and will log the month, day, date, pattern#, start & finish lane numbers and the number of lanes of each run making the verification process a lot easier.

So, when and where to use lane tapes?? At the very least a CLM should be used at all National events to verify the integrity of the oil pattern. After the pattern(s) have been tested and any adjustments made, a set of reference tapes should be taken. These can be compared with the 'overhead view' on the pattern sheet, there should be a reasonably good match between the two. (I even created a spreadsheet template that applied a blue gradient to the tape graph to match the overhead view in KOSI). The reference tape graphs can then be compared with any tapes taken during the event.



Remember, lane tapes will never tell you how much oil is on a lane but they will show you shape & ratio.

USBC Sport Bowling Zones - Lateral Ratios

	6	14	22	27	32	36	39
L3-L7	2.80	2.80	2.80	3.00	2.80	2.80	3.00
L8-L17	1.10	1.10	1.00	1.00	1.10	1.10	1.10
L18-R18	1.00	1.00	1.00	1.00	1.00	1.00	1.00
R17-R8	1.00	1.00	1.00	1.00	1.00	1.00	1.10
R7-R3	2.10	2.30	2.10	2.20	2.20	2.30	2.50

USBC Sport Bowling Zones - Front to Back Taper Ratios (from first tape distance)

	6	14	22	27	32	36	39
L3-L7	1.00	0.97	1.29	1.77	1.88	2.67	3.44
L8-L17	1.00	0.98	1.22	1.58	1.81	2.57	3.17
L18-R18	1.00	0.96	1.32	1.68	1.90	2.65	3.19
R17-R8	1.00	0.96	1.30	1.66	1.87	2.70	3.31
R7-R3	1.00	1.05	1.34	1.79	1.99	2.97	3.80

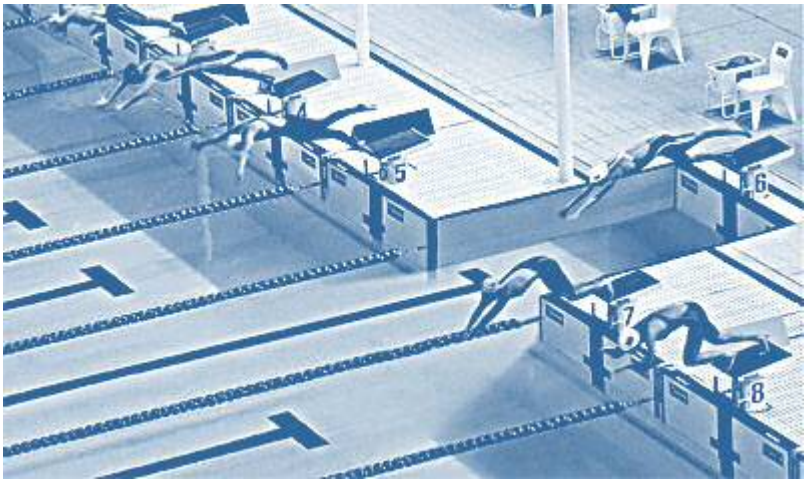
How long before an event should a pattern be laid?

This seems to be the least understood area of lane maintenance. If the lane machine is in good condition and all the maintenance and adjustments suggested in the first part of this article have been carried out, you only need to run the pattern the day before the event. BUT you should run the machine as often as it will be used during the event. So if the tournament requires three lane maintenance runs per day then that is what you should do the day before the event. You may want to do this for a couple of days before the event if you are unsure of variables like cleaner dilution. You may even need to weaken your cleaner mix to get the right balance. It isn't the oil pattern that changes during an event, it is how the cleaner affects the pattern. If you only wash'n'oil once on the day before the event the lanes will get progressively cleaner over the next day or so and if the cleaner mix is too strong the cleaner residue will break down the oil in the pattern. If you want to make sure your lanes are REALLY clean before a tournament, then once the machine is set up correctly and your cleaner mix is OK, run the machine in clean only mode with your usual cleaner mix and then do it again with just water in the tank.

It only takes 6 – 8 lanes to make sure that the pattern is 'on the brush'. Having a pattern 'burn' into a lane takes years and is something that should be avoided. Unfortunately, most older synthetic lanes have the 'house' pattern burnt into them because that is the only pattern used over many years. BIG HINT…. If you want your lanes to stay 'fresh' run a variety of patterns for your leagues and consider a short flat pattern for social play.

Scheduling lane maintenance

During EVERY event sufficient time must be allowed for the oil to settle onto the lane surface. Not doing this is probably the worst thing that a tournament organiser can do (apart from leaving the country with the prize fund). Not allowing the oil to settle can permanently disadvantage any bowlers on the last 6-8 lanes that were washed & oiled FOR THE WHOLE SQUAD. If I was a bowler in this situation I would refuse to bowl on the lanes until a suitable amount of time has passed (20 minutes is all it takes).



Would this be fair?

At least two lanes should be 'burned' at the start of any lane maintenance run. If you are required to change patterns during a tournament then burn as many lanes as time allows. The minimum number of lanes varies depending on machine type. On transfer roller and Flex machines you may get away with only burning a pair. On machines with a transfer brush you should burn at LEAST 8 lanes. To make things easier you should always lay the longer pattern first. Then switching to the shorter pattern will mean that you are adding oil to the edges of the brush rather than trying to remove it. A CLM will give you a definite answer if you have the time to do the testing.

Consideration should be given to using two lane machines at National events. Reduced time spent on lane maintenance, redundancy and the ability to easily run multiple patterns are all advantages.

To minimise the effects of temperature and humidity changes on the lane condition the centre's air-conditioning should be set to run continuously from a day before the event onwards. Temperature changes will affect the viscosity and surface tension of the oil. Temperature & humidity changes can affect the topography of the lanes.