

# Race Pace & Running Style

## Race Pace

Race Pace is the time taken by the horse that is leading at the 400 meter pole. That is the time he takes from the start, up to but excluding the final section.

The Average of all Race Pace times (RacePacePar) for each Course, Class and Distance is used to compare with the individual Race Pace time (ActRacePace) to determine a Pace Speed Rating (PaceSpr) for the race, as follows

$$\text{PaceSpr} = 80 + (\text{RacePacePar} - \text{ActRacePace}) * 10$$

This Pace Speed Rating is then compared with the following table to derive the textual Pace of the Race. So if the Pace Spr is greater than the first column value and less than or equal to the second column value then the race pace is deemed to be the third column value.

This table has been defined on the basis of approximately 40% of races being run at a Good pace, 20% being run at Good/Fast pace, 20% being run at Good/Slow pace, 10% being run at Fast pace and 10% being run at Slow pace.

_PaceSprGT	_PaceSprLE	_Pace
0	74	Slow
74	80	Good/Slow
80	87	Good
87	93	Good/Fast
93	999	Fast

## Winner Pace

Winner Pace is the time taken by the winner of the race at the 400 meter pole. That is the time he takes from the start, up to but excluding the final section.

The Average of all Winner Pace times (WinnerPacePar) for each Course, Class and Distance is used to compare with the individual Winner Pace time (ActWinnerPace) to determine a Pace Speed Rating (PaceSpr) for the winner, as follows

$$\text{WinnerPaceSpr} = 80 + (\text{WinnerPacePar} - \text{ActWinnerPace}) * 10$$

The average of all Winner Pace Speed Ratings (AvgPaceSpr) for each class of race is deemed to be the optimum Spr for that class. The following table shows current values. Note that C0 represents Group races.

_Class	_AvgPaceSpr
All	81
C0	87
C1	83
C2	83
C3	82
C4	79
C5	78

## Efficiency

I have taken the view that if a horse runs a pace time that results in a Pace Spr that is the same as the Average Winner Pace Speed Rating, then he is running the race 100% efficiently.

So to determine the efficiency rating I calculate the difference between the Average Winner Pace Speed Rating (AvgPaceSpr) and the actual pace Spr for the runner (ActRunnerSpr) then divide by the AvgPaceSpr. Negatives are ignored by using the ABS Excel function, then the result is subtracted from 100%.

$$100 - \left( \frac{\text{ABS}(\text{AvgPaceSpr} - \text{ActRunnerSpr})}{\text{AvgPaceSpr}} * 100 \right)$$

This value is referred to as the Efficiency Rating

## Running Style

The following are my Running Style definitions based on race results

- **Speed** – on average within one length of the leader at the end of each race section, excluding the final section.
- **Stalker** – on average more than one length but three lengths or less behind the leader at the end of each race section, excluding the final section.
- **Closer** – on average more than three lengths behind the leader at the end of each race section, excluding the final section, then winning or within two lengths of the leader at the finish.

The regularly accepted theory is that fast pace races are won by closers and that slow pace races are won by speedsters.

The following table shows percentage totals of different running styles for Sprint, Mile and Middle Distance races, over about five years. The following conclusions are made from this table.

- Speed horses are better over sprint distances when the pace is on the slow side.
- Closers are better in mile and middle distance races when the pace is on the fast side.
- Closers have the best average record, especially as predicting race pace is rather difficult.

_RacePace	_Dist	_SpeedCnt	_StalkerCnt	_CloserCnt	_SpeedPc	_StalkerPc	_CloserPc
Fast	SP	10	14	15	26%	36%	38%
Good/Fast	SP	99	112	115	30%	34%	35%
Good	SP	406	404	232	39%	39%	22%
Good/Slow	SP	196	165	71	45%	38%	16%
Slow	SP	60	53	8	50%	44%	7%
Fast	ML	52	72	151	19%	26%	55%
Good/Fast	ML	92	155	257	18%	31%	51%
Good	ML	141	222	330	20%	32%	48%
Good/Slow	ML	100	181	171	22%	40%	38%
Slow	ML	77	120	91	27%	42%	32%
Fast	MD	4	20	32	7%	36%	57%
Good/Fast	MD	2	10	22	6%	29%	65%
Good	MD	13	13	24	26%	26%	48%
Good/Slow	MD	4	7	17	14%	25%	61%
Slow	MD	4	21	19	9%	48%	43%
Average	All				24%	35%	41%