

WORLD HANDICAP SYSTEM (WHS) TECHNICAL ARTICLE 5, CAPS

This is the fifth technical article on the calculations for the new World Handicap System. We have seen how the score on each hole is adjusted (Article 1), how the Score Differential is calculated (Article 2), how the differential is calculated (Article 3) and how the average is calculated (Article 4). Now we will see how we cap the increase in handicaps.

1. NEED FOR CAPS

The new World Handicap System (WHS) will have two different caps on handicap increase. In the current system this is not necessary because increases are gradual, and the handicap is only increased by one tenth when we do not play well. However, the WHS is a more dynamic system and one of the objectives of the new system is to better reflect the player's real playing level, so we need caps.

The WHS is based on averages. As explained in the previous article, the best 8 scores from the last 20 returned (or a smaller proportion if we have less than 20 results) are used. The calculation of averages is a system that has no "memory". This means that a new set of 20 scores could produce a completely different handicap from the previous one without some kind of cap. This could cause unjustified handicap increases which do not reflect the player's real level. For example, a player who is changing his swing and whose results are temporarily worse can later return to his previous level or even better. Capping the increase of handicaps also makes it more difficult to manipulate handicaps.

With this in mind, the WHS will have two levels: the Soft Cap and the Hard Cap. The player's lowest handicap in the last 365 days will be taken as a reference for their use.

2. LOWEST HANDICAP IN THE LAST 365 DAYS

The reference is taken from the player's lowest handicap in the previous 365 days to the last score returned. Therefore, the first thing we have to remember is that it is not 365 days prior to the result being returned but rather 365 days since the previous result was returned. The 365 days rule is maintained in leap years.

Example 1

A player submits a score on 13th August 2021. The date of his previous result is 31st July 2021. What is the period of time used to calculate his lowest handicap?

To calculate the new handicap of the player on 13th August 2021, we have to look at the date of his previous returned score. This is 31st July 2021. Therefore, the period to determine his lowest handicap is from 1st August 2020 to 31st July 2021.

3. CAPS

A soft cap is applied when the average (see Article 4) produces a result that is 3 strokes higher than the Lowest Handicap. In this case, everything above this Soft Cap (Lowest Handicap + 3 strokes) is halved.

Example 2

A player has a handicap of 12.7 and her lowest handicap in the last 12 months is 9.1. She submits a score and the average of the best 8 of her last 20 scores is 13.135. What is her new handicap?

HANDICAP:	12.7
LOWEST HANDICAP:	9.1
AVERAGE:	13.135
SOFT CAP (9,1 + 3):	12.1
AVERAGE + SOFT CAP:	12.6175

Once the average has been calculated, we must calculate the Soft Cap which is 3 strokes above the Lowest Handicap. This Soft Cap is 12.1 (9.1 + 3). As the average (13.135) is above the Soft Cap (12.1) anything over this cap ($13.135 - 12.1 = 1.035$) is halved ($1.035/2 = 0.5175$) and the handicap increase will be limited to this ($12.1 + 0.5175 = 12.6175$). Her new handicap is 12.6

Example 3

A player has a handicap of +0.9 and his lowest handicap in the last 12 months is +3.8. He returns a score and the average is calculated at 2.3. What is his new handicap?

HANDICAP:	-0.9
LOWEST HANDICAP:	-3.8
AVERAGE:	2.3
SOFT CAP (-3.8 + 3):	-0.8
AVERAGE + SOFT CAP:	0.75

The Soft Cap for this player is +0.8 ($-3.8 + 3 = -0.8$). As the calculated average is above this cap, the excess ($2.3 - (-0.8) = 3.1$) is halved in line with the WHS ($3.1 / 2 = 1.55$) and this will be the increase allowed in the handicap ($-0.8 + 1.55 = 0.75$). The new handicap is rounded up to 0.8.

4. HARD CAP

The Hard Cap comes in when the result of applying the Soft Cap to the calculated average is 5 strokes more than the Lowest Handicap. In this case, the player's handicap cannot be increased more.

Example 4

A player has a handicap of 13.6 and his lowest handicap in the last 12 months is 8.2. He returns a score and the average of the best 8 of the least 20 scores is 14.788. What is his new handicap?

HANDICAP:	13.6
LOWEST HANDICAP:	8.2
AVERAGE:	14.788
SOFT CAP (8.2 + 3):	11.2
AVERAGE + SOFT CAP:	12.994
HARD CAP (8.2 + 5):	13.2
NEW HANDICAP:	12.994

The soft cap for this player is 11.2 which is the result of adding 3 strokes to his Lowest Handicap (8.2). As the average is higher, the cap is applied, reducing the excess by half ($14.788 - 11.2 = 3.588 / 2 = 1.794$) which would give us a new handicap of 12.994. This number is below the Hard Cap and therefore is rounded up to 13.0.

It must be noted that the calculated average (14.788) is more than 5 strokes higher (namely 6.588) than the Lowest Handicap (8.2), the new handicap is not the Hard Cap (13.2) as the soft cap was applied thus reducing the increase by more than would correspond without caps.

Example 5

The player in the previous example returns a new score. His Least Handicap is still 8.2 but now the calculated average is 15.324. What is his new handicap?

HANDICAP:	13
LOWEST HANDICAP:	8.2
AVERAGE:	15.324
SOFT CAP (8.2 + 3):	11.2
AVERAGE + SOFT CAP:	13.262
HARD CAP (8.2 + 5):	13.2
NEW HANDICAP:	13.2

As the lowest handicap has not changed, the soft cap is still 11.2 and as the average is higher, anything in excess of this cap is halved ($15.324 - 11.2 = 4.124 / 2 = 2.062$), the calculation following the soft cap comes to 13.262 ($11.2 + 2.062$). This value is now above the Hard Cap (13.2) which is calculated as the Lowest Handicap (8.2) plus 5 strokes. Therefore, his handicap cannot go above the Hard Cap, so the new handicap is 13.2

Example 6

The player in the previous example returns another score keeping the average at 15.324 (the score returned does not affect the 8 best results and therefore the average is the same), but on checking his lowest handicap in the last 12 months, this is now 8.5. What is the new handicap?

HANDICAP:	13.2
LOWEST HANDICAP:	8.5
AVERAGE:	15.324
SOFT CAP (8.5 + 3):	11.5
AVERAGE + SOFT CAP:	13.412
HARD CAP (8.5 + 5):	13.5
NEW HANDICAP:	13.412

Although the score returned does not affect the average, the player's new Lowest Handicap does affect the calculation of his handicap. The cap is now 11.5 ($8.5 + 3$) and what is over that value is halved ($15.324 - 11.5 = 3.824 / 2 = 1.912$) and the calculation following the cap will be ($11.5 + 1.912$). This value is now lower than the Hard Cap and therefore the player's handicap is calculating rounding off this value. The new handicap is 13.4, which is two tenths more than the

previous calculation.

This is the last step in calculating the handicap in accordance with the new World Handicap System. The next articles will deal with other aspects that may affect the calculations such as 9 hole and Better Ball scores.