Ahn Woo-jin End of Season Report

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Introduction

Vitals	Pitch Type	Avg MPH	$\overline{\mathrm{Usg}\%}$
Throws: RHP	4-Seam	95	62.4%
Age: 21	Curveball	80.5	19.7%
DOB: 8/30/1999	Slider	86.7	16.8%
Height: 6' 3"	Changeup	85.4	1.2%
Weight: 198 lbs			

Ahn Woo-jin might be the most interesting prospect in the KBO, despite being a reliever. At 21 years old, Ahn sports a power four-seam fastball that he can run up to 99 mph and about 2,500 rpm, though it sat closer to 96 mph over the second half of the season. He pairs that fastball with a hard curveball and slider, which morphs more into a cutter, both of which have been excellent swing-and-miss pitches for him.

He's been one of the best strikeout pitchers in the KBO since he entered the league but has also struggled with walking batters at times, which is the biggest concern I have with him. However, under the tutelage of Kiwoom's pitching coach, former MLBer Brandon Knight, Ahn has decreased his BB% drastically from his rookie season to 2020.

As a 21-year-old, the earliest that Ahn Woo-jin would be eligible to be posted to MLB would be after the 2024 season, although it may be after the 2025 season depending on whether he hit 145 days on the Kiwoom roster as a rookie. He'd be 26 at that point, still very young, but that's a long way away for a pitcher, especially one who was banged up at times in 2020. He began the 2020 season sidelined with right shoulder inflammation, which popped back up in June. He also missed about three weeks from late-August to mid-September due to a sprained back. Both injuries were small blips overall, but, since Ahn has had mechanical issues in the past, dealing with minor injuries like that is a tad worrisome.

While legitimate questions surround Ahn Woo-jin, and he's at least four seasons away from MLB, he's an incredibly enticing pitching prospect who will be able to find a spot on an MLB roster when eligible. It's not often that hard-throwing and high spin fastball pitchers with two strong secondary pitches are available, and every MLB team should be interested in Ahn Woo-jin.

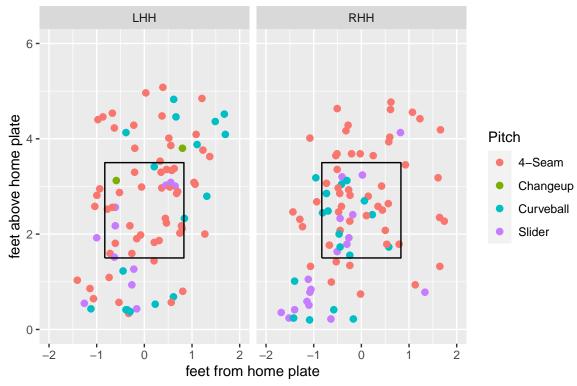
Stats and Graphics

Table 2: Stats from FanGraphs for Ahn Woo-jin

Season	Team	IP	HR/9	K %	BB%	K-BB%	AVG	WHIP	BABIP	LOB%	ERA	FIP
2018	Heroes	41.1	1.31	23.2	14.1	9.1	0.275	1.79	0.348	61.2	7.19	5.70
2019	Heroes	88.1	0.82	20.3	9.1	11.1	0.272	1.51	0.332	64.1	5.20	4.06
2020	Heroes	36.0	0.75	28.7	11.9	16.8	0.159	1.03	0.207	76.2	3.00	3.73

Pitch locations for Ahn Woo-jin. Data for pitches from starts was manually charted from ESPN/Twitch broadcasts.

All Charted Pitch Locations for Ahn Woo-jin Pitcher Perspective



Ahn Woo-jin Swinging Strikes Pitcher Perspective

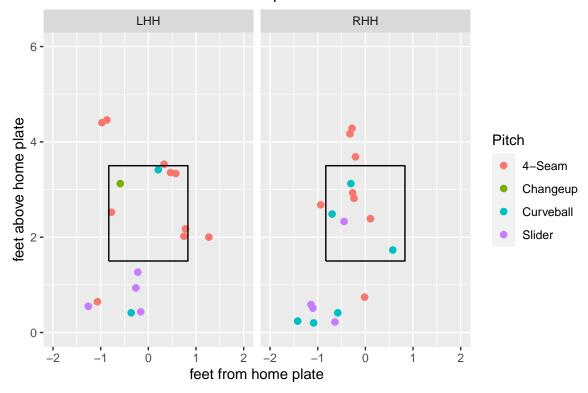


Table 3: Overall Charted Stats for Ahn Woo-jin

Pitcher	Pitches	wOBA	ExwOBA	ExwOBACON	$\mathbf{CSW}\%$	$\mathbf{SwStr}\%$	Whiff%	CS%	$\mathbf{Swing}\%$	Contact%
Ahn	174	0.186	0.256	0.329	30.5	20.1	36.8	10.3	54.6	63.2
KBO	29734	0.337	0.338	0.361	27.6	10.4	22.2	17.2	47.1	77.8

Table 4: Overall Charted Batted Ball Event Data for Ahn Woo-jin

Pitcher	BBEs	GB%	$\mathbf{FB}\%$	LD%	PU%	$\mathbf{Soft}\%$	$\mathbf{Medium}\%$	$\mathbf{Hard}\%$	Pull%	$\mathbf{Straight}\%$	Oppo%
Ahn	22	50.0	27.3	13.6	9.1	27.3	54.5	18.2	40.9	50.0	9.1
KBO		51.2	26.0	14.0	8.7	30.4	40.8	28.7	34.1	42.8	23.1

Ahn Woo-jin Velocity Distribution 4-Seam ~ 95, Curve ~ 80.5, Slider ~ 86.7, Changeup ~ 85.4

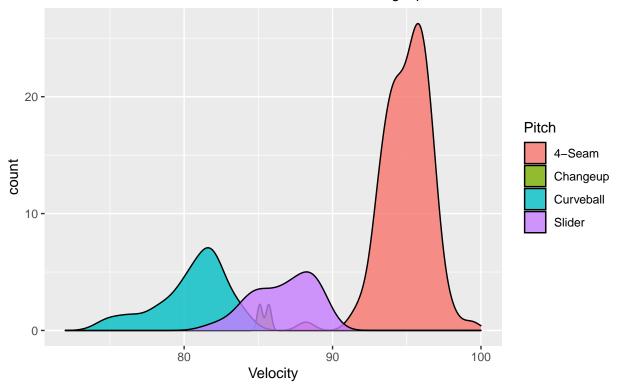


Table 5: Pitch Type Charted Stats for Ahn Woo-jin

Pitch	Velo	Usg %	Pitches	wOBA	ExwOBA	CSW%	SwStr%	Whiff%	CS%	Swing%	Contact%
4-Seam	95.0	62.4	108	0.279	0.317	25.9	16.7	28.6	9.3	58.3	71.4
Curveball	80.5	19.7	34	0.000	0.035	35.3	23.5	61.5	11.8	38.2	38.5
Slider	86.7	16.8	29	0.124	0.315	37.9	27.6	47.1	10.3	58.6	52.9
Changeup	85.4	1.2	2	0.000	0.326	50.0	50.0	50.0	0.0	100.0	50.0

Table 6: Pitch Type Charted Batted Ball Data for Ahn Woo-jin

Pitch	Velo	Usg %	ExwOBACON	BBEs	GB%	FB%	LD%	PU%	Soft%	$\mathrm{Med}\%$	Hard%
4-Seam	95.0	62.4	0.365	15	40	33.3	13.3	13.3	13.3	66.7	20
Slider	86.7	16.8	0.286	4	50	25.0	25.0	0.0	50.0	25.0	25
Curveball	80.5	19.7	0.140	2	100	0.0	0.0	0.0	100.0	0.0	0
Changeup	85.4	1.2	0.326	1	100	0.0	0.0	0.0	0.0	100.0	0

Ahn Woo-jin is the hardest thrower and has the filthiest "stuff" in the KBO, which has allowed him to be an effective high-K guy despite some control issues. He allowed a wOBA of 0.186 and had a 20.1% SwStr% over 174 charted pitches in 2020. He mainly threw three pitches, and his fastball is the main draw. He threw it 62% of the time in 2020, with good reason. His fastball averaged 95 mph on the season, touching 99 mph once towards the end of the season while sitting closer to 96-97 once he returned from a sore lower back injury in September. According to TrackMan numbers released by SpoTV for the 2018 postseason, Ahn's fastball spun around 2,500 rpm and peaked at 2,662 rpm.

His fastball was incredibly effective, and he does a good job of consistently locating it up in the strike zone, maximizing his velocity and spin rate. His fastball produced a 16.7 Swinging Strike% (SwStr%), allowed a wOBA of 0.279, and allowed an Estimated xwOBA (ExwOBA) of 0.317. Despite his stellar 16.7% SwStr%, his fastball only produced a 25.9% CSW% due to his Called Strike% (CS%) of just 9.3%. Some of that is due to his approach and working up in the strike zone, but he doesn't have the greatest command in the world.

In his first season in the KBO, Ahn struck out 23% of batters while walking 14%. He cut that down to a 9% BB% in 2019 but saw his K% decrease as well. The 2020 season saw his K% spike up to 29%, and his BB% rose to about 12%. However, he allowed a WHIP of 1.03, thanks to a batting average allowed of 0.159 on a 0.207 BABIP. While part of that WHIP decrease is luck driven relative to his BABIP, I think a decent percent of it is sustainable.

While Ahn only allowed 22 batted balls that were charted, the type of batted ball that he was allowing fell in line with the KBO averages. He did a good job of limiting hard contact, with an 18% hard-contact%, well below the KBO average of 29%. That's a sign that some of his BABIP luck may be sustainable. I hesitate to make too much of it due to the small sample, but his fastball produced a 13% pop-up%, partially a result of keeping his fastball up in the zone. It's also worth noting that his 2020 HR/9 of 0.75 was the lowest of his career.

Ahn Woo-jin pairs a curveball around 81 mph with his fastball, throwing it about 20% of the time. In its incredibly small sample, it proved to be an effective pitch, allowing a 0.035 ExwOBA, while producing a 23.5% SwStr%, and a 35.3% CSW%. That's an incredible performance by his curveball. He tends to locate his curveball away from right-handed hitters, whether in the zone or the dirt. Against LHH, his curveball was best down in the zone, but he sometimes struggled to locate it. When he misses with his curveball, it usually pops out of his hand early and ends up high and arm side, leading to a low CS% of 12%.

He throws a slider around 87 mph as a third pitch, using it 17% of the time, although I'd argue it morphs more into a cutter with how hard he throws it and its flat shape. From those same 2018 numbers, Ahn's slider was spinning around 2,400 rpm, although he did throw some that spun less. He produced a 28% SwStr% and a 38% CSW% on his slider in 2020. He threw his slider both in the strike zone and down to his glove side, away from RHH and to the back foot of LHH. It's hard to argue with how effective it was, even if its effectiveness is more about its velocity than its movement. Given its reliance on velocity, his slider may not be as effective against MLB hitters.

At the end of the season, he did throw a few changeups around 86 mph, but there's not much to see right now. He did have worse numbers against LHH than RHH, walking 17% of LHH that he faced versus 7% of RHH while his K% was even, so adding a solid changeup could help him take down hitters on both sides of the plate. Right now, it's something that I'm keeping an eye on.

In 2021 and beyond, I'm looking for Ahn Woo-jin to keep cutting down his BB% while seeing how high his average fastball velocity climbs; he does seem to have figured out that fastballs up and breaking balls down is an effective combination. Kiwoom used him out of the bullpen in 2020 after he started 15 games in 2019, so finding him a role and letting him grow with it could be a big help. As it currently stands, Ahn has the velocity and breaking pitches to develop into an MLB-caliber late-inning reliever, even if that future remains a few years away.

Resources

- Ahn Woo-jin FanGraphs page
- Ahn Woo-jin myKBO.com Page
- Ahn Woo-jin Is Ready to Take on the KBO by Sung Min Kim (March 18, 2019)