

## OOTL Pitching Grade Determination

### *CMBA Control & Home Run Grading System*

Compute the following, using the stats for the league in which a pitcher played during the season in question:

a.  $AHR = (HR/BFP-IBB)*100$        $A2B = (2B/BFP-IBB)*100$   
 $ABB = (TBB-IBB)/(BFP-IBB)*114.3$   
 $2BC = A2B/36$

b. For the individual pitcher, compute the following control ratings as follows:

$$BBA = ((TBB-IBB)/(BFP-IBB))*100$$

If BBA is less than ABB, Control Rating =  $((ABB-BBA)/ABB)*36$   
This is a + rated pitcher for control.

If BBA is greater than ABB, Control Rating =  $(ABB-BBA)*6.48$   
This is a - rated pitcher for control.

c. For the individual pitcher, compute power ratings as follows:

$$HRA = (HR/BFP-IBB)*100$$

If HRA is less than AHR, HR Rating =  $((AHR-HRA)/(AHR))*36$   
This is a + rated pitcher for power.

If HRA is greater than AHR, HR Rating =  $(AHR-HRA)/2BC$   
This is a - rated pitcher for power.

After determining ratings, convert to an APBA dice roll. For example, 1 = 11, 2 = 12, 24 = 46, 36 = 66, etc.

STEP 1      Base Grade from ERA

a.  $((League\ ERA - Pitcher\ ERA) * 5) + 9.5$

*For pitchers appearing in both leagues, determine control, power and base grade based on the percentage of total innings pitched in each league.*

## STEP 2 Control Rating Adjustments

*All numbers represented below are before converting to APBA dice rolls.*

PLUS (+) rated pitchers:

+1	to	+7	=	$-.08 + \text{RATING}$
+8	to	+14	=	$(\text{RATING} - 7) * -.09 + -.56$
+15	to	+21	=	$(\text{RATING} - 14) * -.10 + -1.19$
+22	to	+28	=	$(\text{RATING} - 21) * -.11 + -1.89$
+29	to	+36	=	$(\text{RATING} - 28) * -.12 + -2.66$

MINUS (-) rated pitchers:

-1	to	-6	=	$.09 + \text{RATING}$
-7	to	-10	=	$(\text{RATING} + 6) * .11 + .54$
-11	to	-15	=	$(\text{RATING} + 10) * .13 + .98$
-16	to	-20	=	$(\text{RATING} + 15) * .15 + 1.63$
-21	to	-25	=	$(\text{RATING} + 20) * .17 + 2.38$
-26	to	-30	=	$(\text{RATING} + 25) * .19 + 3.23$
-31	to	-36	=	$(\text{RATING} + 30) * .21 + 4.18$

### STEP 3 Power Rating Adjustments

*All numbers represented below are before converting to APBA dice rolls.*

#### PLUS (+) rated pitchers:

+1	to	+7	=	RATING * -.07
+8	to	+14	=	(RATING - 7) * -.08 + -.49
+15	to	+21	=	(RATING - 14) * -.09 + -1.05
+22	to	+28	=	(RATING - 21) * -.10 + -1.68
+29	to	+36	=	(RATING - 28) * -.11 + -2.38

#### MINUS (-) rated pitchers:

-1	to	-3	=	RATING * .08
-4	to	-6	=	(RATING - 3) * .09 + .24
-7	to	-9	=	(RATING - 6) * .10 + .51
-10	to	-12	=	(RATING - 9) * .11 + .81
-13	to	-15	=	(RATING - 12) * .12 + 1.14
-16	to	-18	=	(RATING - 15) * .13 + 1.50
-19	to	-21	=	(RATING - 18) * .14 + 1.89
-22	to	-24	=	(RATING - 21) * .15 + 2.31
-25	to	-27	=	(RATING - 24) * .16 + 2.76
-28	to	-30	=	(RATING - 27) * .17 + 3.24
-31	to	-33	=	(RATING - 30) * .18 + 3.75
-34	to	-36	=	(RATING - 33) * .19 + 4.29

STEP 4 Hits/IP Adjustments

*When using this equation, round all fractions down to the nearest hundredth.*

For pitchers with more than 1.00 hit per inning pitched, use this equation:

$$(1.00 - H/IP) * 5 = H/IP \text{ Adjustment}$$

For pitchers with less than 1.00 hit per inning pitched, use this equation:

$$(1.00 - H/IP) * 7 - .07 = H/IP \text{ Adjustment}$$

STEP 5 Final Adjustments

Add/Subtract results from STEPS 1-4:

If result is 0.00 to 7.99, ADD .50

If result is 8.00 to 12.49, ADD .33

If result is 12.50 or greater, do not add anything

Round result to the nearest whole number.

This is the final OOTL grade.