

# La Niña

La Niña features the all-new ACCU-Tread™ coverstock. ACCU-Tread™ introduces an entirely new form of particle technology into the marketplace, TDR™ (Thermo Dynamic Response), which creates significantly different performance characteristics than present particle technology balls.

## WHAT'S THE DIFFERENCE?

In keeping with the innovative traditions of Storm Products, ACCU-Tread™ proves to be the most powerful, versatile and durable coverstock to date! ACCU-Tread™ with TDR™ creates a wide, porous footprint that produces more friction throughout the entire lane. As friction produces heat, you can literally feel the molecular ionization of the TDR™ particles creating the porous surface that is ACCU-Tread™. Unlike many of the filler loaded coverstocks being used presently, ACCU-Tread™ polishes, sands and resurfaces with all the ease of conventional reactive urethane. Due to the phenomenon of molecular ionization, ACCU-Tread™ maintains its maximum hook potential longer than any other coverstock available today!

La Niña is powered by an all new Motion Control Core™ design featuring Vertical Dual Density Technology for built-in mass bias. The new Motion Control Core™ is perfectly matched to the ACCU-Tread™ coverstock to produce optimum reaction on medium to heavy oil conditions.

**FACTORY FINISH** – 600-Matte Finish (easily Polished)

**RADIUS OF GYRATION** – 2.518 (Medium)

**DIFFERENTIAL** – .045 (Medium)

**MASS BIAS DIFFERENTIAL** – .006 (Medium)

**HOOK POTENTIAL** – 20/16 Dull/Shiny

**FLARE POTENTIAL** – 6 on a scale of 1 to 10

**LENGTH** – 3 on a scale of 1 to 10

**BACKEND** – 10 on a scale of 1 to 10

**COMPOSITION** – ACCU-Tread™ with TDR™ Particles

**WEIGHT BLOCK** – 12-16 Lbs: Motion Control Core

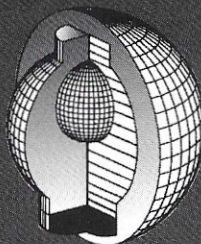
10-11 Lbs: 7-1/2" Multi-Density Core

**MASS BIAS LOCATION** – 5-1/2" from the pin – designated by the MC<sub>2</sub> Locator Pin

**COLOR** – Bruiser Black/Blue

**D-SCALE** – 75-77

**LOGOS** – Storm, La Niña, "Flying S,"  
"Eye of the Storm," MC<sub>2</sub>



## STEP #1

Find the bowler's positive axis point on a previously rolled ball.

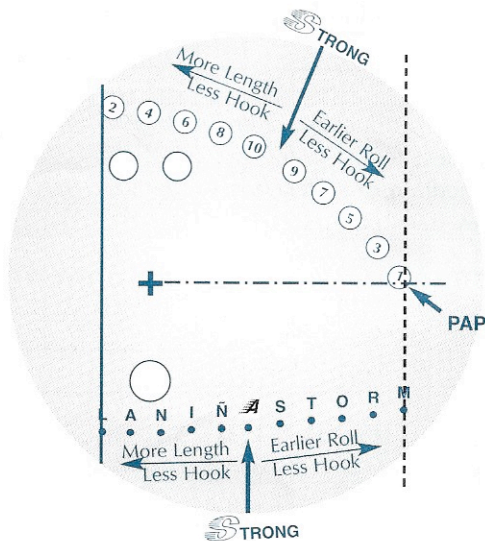
\* If you do not know the bowler's positive axis point, it is difficult to accurately predict the type of reaction that will result. Try to gather information from the bowler as to which type of ball track they have; i.e. High, Average, Low or Full Roller.

★★ NOTE ★★

Due to the composition of the ACCU-Tread™ coverstock, Storm recommends using a #2 lead pencil or scribe when drawing layouts on La Niña. Grease pencil layouts may be difficult to wipe clean!

## STEP #2

(30% of overall ball reaction) – Select a major control pin location by reading the LA NIÑA MAJOR CONTROL PIN LOCATIONS GUIDE (page 5) and using the LA NIÑA BALL REACTION MATRIX (page 6).



### AVERAGE TRACK PLAYERS

PAP = 5-1/4" → 1/2" ↑

### PRO'S FAVORITES:

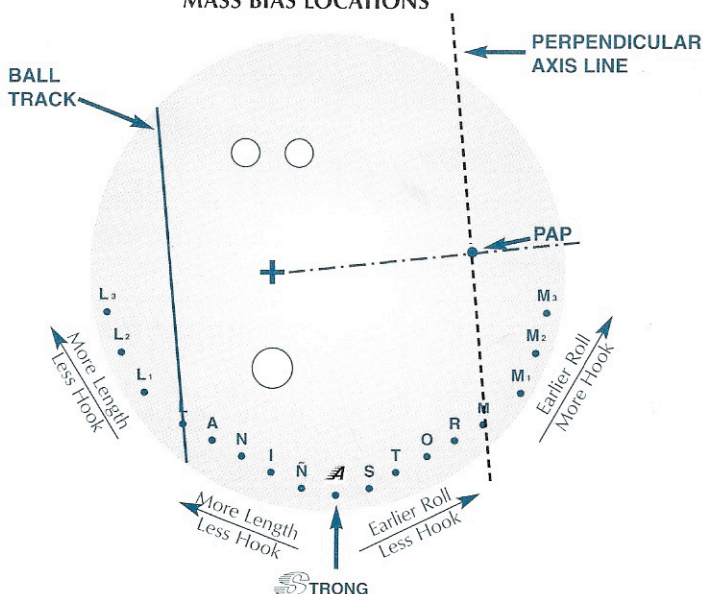
JOHN HRICSINA

Oily - 7S

Medium - 8O

Dry - 4L<sup>2</sup>

### MASS BIAS LOCATIONS



## STEP #3

(10% of overall ball reaction) – Select a MC<sup>2</sup> indicator pin location by reading the MC<sup>2</sup> INDICATOR PIN REACTION GUIDE and using the LA NIÑA BALL REACTION MATRIX (page 6).

By placing the mass bias to the right of the perpendicular axis line, in approximately 1" increments, you will get even less length and more flare. This equates to slightly more hook and works great for players with fewer revs or more ball speed.

By placing the mass bias to the left of the track, in approximately 1" increments, you will get even more length and less flare. This equates to slightly less overall hook! This is an excellent tool for high rev players, or those with slower ball speed.

# STEP #4

(10% of overall ball reaction) – Scale the ball to ensure legal static balance is obtainable. If necessary, select a weight hole location from the LA NIÑA WEIGHT HOLE LOCATION GUIDE (page 4).

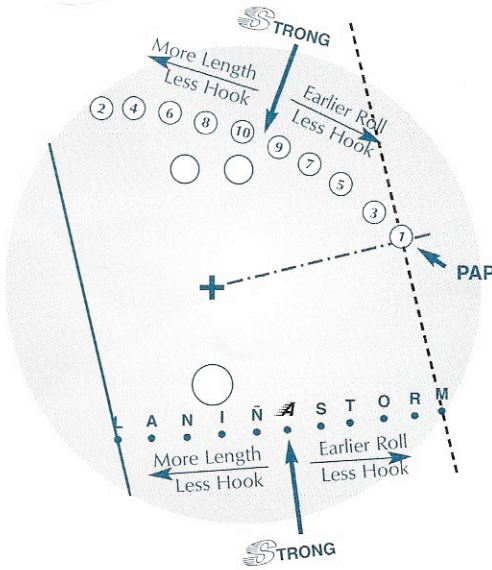
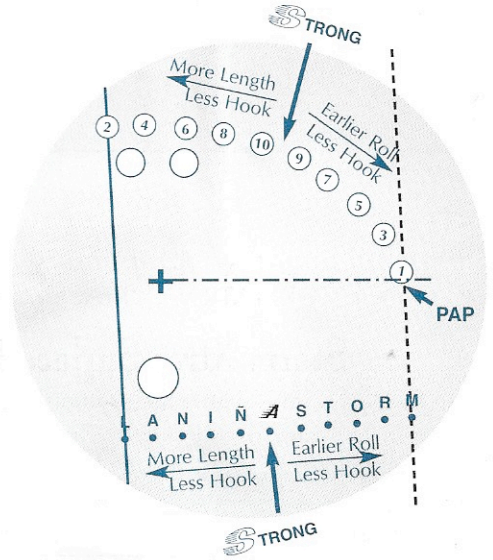
## HIGH TRACK PLAYERS

PAP = 6-1/4" →

### PRO'S FAVORITES:

PETE WEBER

- Oily - 5 *A*
- Medium - 10MC<sup>2</sup>
- Dry - 4N



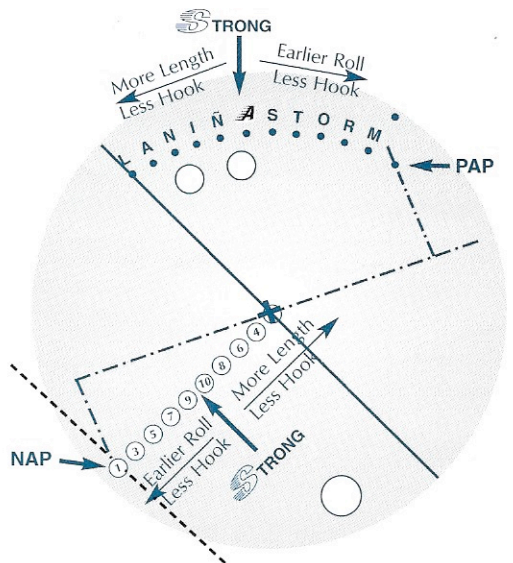
### PRO'S FAVORITES:

PAUL FLEMING

- Oily - 9T
- Medium - 10 *A*
- Dry - 6L<sup>1</sup>

## LOW TRACK PLAYERS

PAP = 4-1/4" → 1" ↑



## FULL ROLLERS (RH)

PAP = 6-3/4" → 2-1/2" ↑

NAP = 6-3/4" ← 2-1/2" ↓

# Legend

① - ⑩ = MAJOR CONTROL PIN LOCATIONS

PAP = POSITIVE AXIS POINT

NAP = NEGATIVE AXIS POINT


 = AREAS CREATING STRONGEST BALL REACTION

 = "EYE OF THE STORM" (CG)

+ = GRIP CENTER LINE

⊗ = WEIGHT HOLE

MC? = MOTION CONTROL CORE INDICATOR PIN

 = PERPENDICULAR AXIS LINE

 = AXIS OF ROTATION LINE

## STEP #5

(50% of overall ball reaction) - Apply the appropriate surface based on the STORM XTRAS SURFACE REACTION GUIDE.

## Storm Xtras Surface Reaction Guide

The La Niña comes with a factory finish of 600 grit, which is best suited for medium to heavy oil conditions. To significantly alter the reaction of the La Niña, follow the chart below:

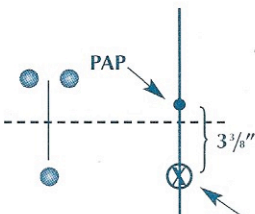
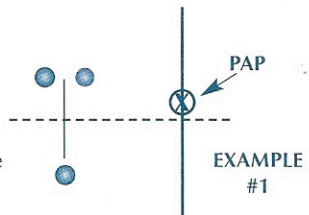
LANE CONDITION	BALL REACTION	PROCEDURE	RESULT
Heavy Oil	Too much skid - not enough hook	Sand ball with a Burgundy Scotch-Brite pad. If this reacts too early, re-sand with Green Scotch-Brite pad.	Earlier roll with stronger hook
Medium to Heavy Oil	Good	Sand regularly with Grey Scotch-Brite pad. Use Reacta-Clean to remove oil every 5-10 games.	Maintain consistent reaction with increased pin carry
Medium Oil	Good with slightly early hook	Polish ball with Storm Xtras #1 for 30 seconds. For more length, polish with Xtras #1 for 90 seconds.	Increased length - increased backend
Medium Dry	Slightly early hook	Polish ball with Storm Xtras #1 for 90 seconds, then Xtras #2 for 30 seconds. For increased length, polish with Xtras #2 for 90 seconds longer.	Increased length - increased backend

★ Please be aware that for conditions characterized as dry, or extremely dry, the La Niña may be too aggressive for some players!

## Weight Hole Location Guide

### EXTRA HOLE PLACEMENT

- Hole placement on the PAP will make the ball roll earlier than without a weight hole (see example #1).
- An extra hole on the PAP stabilizes the reaction, giving the ball a smooth break point.
- A hole 1" or larger, promotes even earlier role.



EXAMPLE #2

- Hole placement off the PAP will also make the ball roll earlier than without a weight hole (see example #2).
- An extra hole off the PAP will increase flare and hook potential.
- Weight holes have a stronger effect as they are placed further from the PAP, up to 3-3/8" in distance.

\* **WARNING!!**

High Rev players should only use holes on the PAP!

## La Niña Major Control Pin Locations

2

PIN  $6\frac{3}{4}$ " FROM PAP: This layout will produce maximum length with minimum to no backend reaction. (Works best for high track players on extremely dry lane conditions; not recommended for low track players.)

4

PIN 6" FROM PAP: This layout will produce generous length with mild backend reaction. (Works best for high and average track players on semi-dry heads with dry backend lane conditions; not recommended for low track players.)

6

PIN  $5\frac{1}{4}$ " FROM PAP: This layout will produce length with medium backend reaction. (Works well for high and average track players on medium head oil with dry backends, or for low track players on dry lanes.)

8

PIN  $4\frac{1}{2}$ " FROM PAP: This layout will produce medium length with strong backend reaction. (Works best for high and average track players on medium head oil with medium/dry backends, or medium head oil with dry backends for low track players.)

10

PIN  $3\frac{3}{4}$ " FROM PAP: This layout will produce strong mid-lane reaction with strong backend reaction. (Works well for high, average and low track players on medium head oil with medium backends.)

**STRONG**

**WARNING!! - THIS LAYOUT WILL PRODUCE MAXIMUM FLARE. NOT RECOMMENDED FOR HIGH REV PLAYERS.**

PIN  $3\frac{3}{8}$ " FROM PAP: This layout will produce the strongest mid-lane reaction with strong backend reaction. Players of all styles will like this layout when there is a good blend of head oil and backend oil.

9

PIN 3" FROM PAP: This layout will produce slightly early roll with a strong arc on the backend. (Works best for high and average track players on heavier head oil with medium backends, or medium overall lane conditions for low track players.)

7

PIN  $2\frac{1}{4}$ " FROM PAP: This layout will produce strong early roll with medium backend reaction. (Works best for high track players on heavy head oil with oily backends. Average track players will like this best on fresh head oil with dry backends. Low track players will find this layout works for them on the widest variety of lane conditions.)

5

PIN  $1\frac{1}{2}$ " FROM PAP: This layout will produce early roll with mild backend reaction. (Works well for high track players on extremely oily lanes; for average and low track players on oily overall lane conditions.)

3

PIN  $\frac{3}{4}$ " FROM PAP: This layout will produce early roll with slight backend arc. (Not recommended for high track players. Average and low track players will use this layout on short oiled heads with dry backends or extremely oily lane conditions.)

1

PIN ON PAP: This layout will produce the earliest roll possible with little or no backend reaction. This layout should only be used when extreme dry or extreme oil conditions make hooking the ball unplayable. Be sure you have located the pin on the correct PAP or you could experience counter-clockwise flare.

# La Niña Ball Reaction Matrix

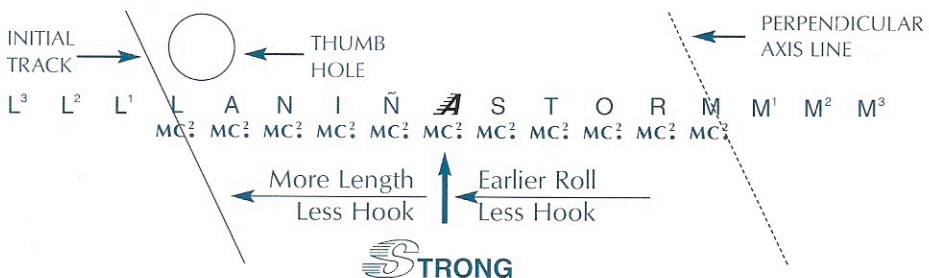
## BACKEND LANE CONDITIONS

		DRY <span style="font-size: small;">→</span> MEDIUM <span style="font-size: small;">→</span> OILY																	
		MC <sup>2</sup>																	
FRONT END LANE CONDITIONS	PIN POSITION #	L <sub>3</sub>	L <sub>2</sub>	L <sub>1</sub>	L	A	N	I	Ñ		S	T	O	R	M	M <sub>1</sub>	M <sub>2</sub>	M <sub>3</sub>	
	DRY	2	2L <sub>3</sub>	2L <sub>2</sub>	2L <sub>1</sub>	2L	2A	2N	2I	2N	2	2S	2T	2O	2R				
		4	4L <sub>3</sub>	4L <sub>2</sub>	4L <sub>1</sub>	4L	4A	4N	4I	4N	4	4S	4T	4O	4R	4M			
		6	6L <sub>3</sub>	6L <sub>2</sub>	6L <sub>1</sub>	6L	6A	6N	6I	6N	6	6S	6T	6O	6R	6M	6M <sub>1</sub>		
		8	8L <sub>3</sub>	8L <sub>2</sub>	8L <sub>1</sub>	8L	8A	8N	8I	8N	8	8S	8T	8O	8R	8M	8M <sub>1</sub>	8M <sub>2</sub>	
		10	10L <sub>3</sub>	10L <sub>2</sub>	10L <sub>1</sub>	10L	10A	10N	10I	10N	10	10S	10T	10O	10R	10M	10M <sub>1</sub>	10M <sub>2</sub>	10M <sub>3</sub>
	MEDIUM																		
		9	9L <sub>3</sub>	9L <sub>2</sub>	9L <sub>1</sub>	9L	9A	9N	9I	9N	9	9S	9T	9O	9R	9M	9M <sub>1</sub>	9M <sub>2</sub>	
		7		7L <sub>2</sub>	7L <sub>1</sub>	7L	7A	7N	7I	7N	7	7S	7T	7O	7R	7M	7M <sub>1</sub>		
		5			5L <sub>1</sub>	5L	5A	5N	5I	5N	5	5S	5T	5O	5R	5M			
	3				3L	3A	3N	3I	3N	3	3S	3T	3O	3R					
OILY	1					1A	1N	1I	1N	1	1S	1T	1O						



## MC<sup>2</sup> Indicator Pin Reaction Guide

Locating the MC<sup>2</sup> Indicator Pin in specific locations will "fine tune" the La Niña Storm reaction (10% of overall ball reaction).



For maximum hook potential, locate the MC<sup>2</sup> at halfway between the initial ball track and the perpendicular axis line. To increase length with controlled backend reaction, move the MC<sup>2</sup> close to **E**, the bowler's initial track. To create early roll with controlled backend reaction, move the MC<sup>2</sup> close to **M**, the perpendicular axis line.

Select a MC<sup>2</sup> indicator pin location by reading the MC<sup>2</sup> INDICATOR PIN REACTION GUIDE and using the LA NIÑA BALL REACTION MATRIX (page 6).

By placing the mass bias to the right of the perpendicular axis line, in approximately 1" increments, you will get even less length and more flare.

By placing the mass bias to the left of the track, in approximately 1" increments, you will get even more length and less flare. This equates to slightly less overall hook!

\* See the LA NIÑA BALL REACTION MATRIX, above, to select the correct MC<sup>2</sup> Indicator Pin position to create your desired ball reaction.