





## Drilling Angles shown are for 5" PAP – Adjust for other PAPs

Evil Eye Drilling Chart							
	Layout	Layout Specs	Low RG	Int Diff	Total Diff	Differential Ratio	RG PAP
	Undrilled	-	2.493	0.000	0.045	0.00	
Α	Maximum Performance	Pin Over 70° x 3-1/2" x 20°		0.022	0.057	0.39	2.513
В	Strong Performance	Pin Over 75° x 4" x 30°		0.023	0.053	0.43	2.518
С	Strong Control	Pin Over 80° x 4-1/2" x 40°		0.021	0.046	0.46	2.521
D	<b>Maximum Control</b>	Pin Beside 90° x 2 1/4" x 45°		0.014	0.044	0.32	2.502
Е	<b>Strong Continuous</b>	20° x 3-1/2" x 20°		0.007	0.047	0.15	2.512
F	Versatile Continuous	20° x 5" x 30°		0.009	0.043	0.21	2.527

**Differential Ratio** relates to the reaction to friction, the higher the diff ratio the more responsive the ball will be to friction.

**Performance Enhanced Drilling (PED)** – Placing the center of the thumb 6.5 in. from the pin, on a line drawn from the pin through the CG, yields the highest intermediate differential by **hitting the core protrusion**.

**Performance Control Drilling (PCD)** – Placing the center of the thumb 5.5 in. from the pin, on a line drawn from the pin through the CG, yields a moderate intermediate differential by **hitting part of the core protrusion**.

**Symmetrical Continuous Drilling (SCD)** – Placing the center of the thumb at least 3.75 in. from the line drawn between the pin and CG (see diagram) **misses the core protrusion** and yields the lowest intermediate differential.

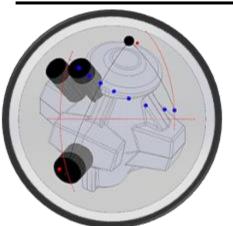


# **Suggested Super Symmetric Layouts**

#### **Performance Enhanced Drilling (PED)**

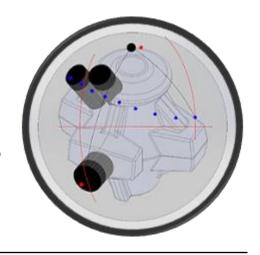
#### A - Maximum Performance

- 70° x 3-1/2" x 20°
- Thumb Center is 6.5" from Pin



### **B – Strong Performance**

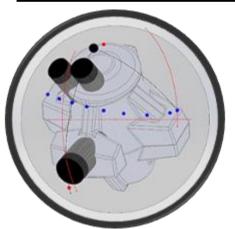
- 75° x 4" x 30°
- Thumb Center is 6.5" from Pin



# **Performance Control Drilling (PCD)**

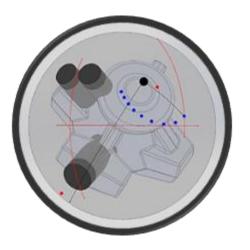
## **C – Strong Control**

- 80° x 4-1/2" x 40°
- Thumb center is 5.5" from Pin



#### **D – Maximum Control**

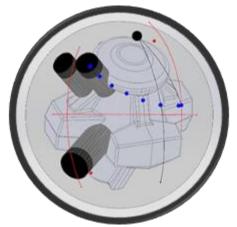
- 90° x 2-1/4" x 45°
- Thumb center is 5.5" from Pin



#### **Symmetrical Continuous Drilling (SCD)**

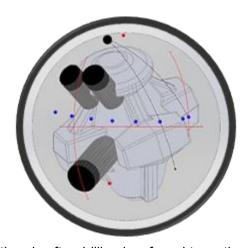
### **E – Strong Continuous**

- 20° x 3-1/2" x 20°
- Thumb Center is 3.75" from Pin-Spin Line



#### F - Versatile Continuous

- •20° x 5" x 30°
- •Thumb Center is 4" from Pin-Spin Line



The Preferred Spin Axis (PSA), also known as the Mass Bias, of the drilled ball is denoted by a dot near the thumb hole. The line that connects the PSA and the pin after drilling is referred to as the "Pin-to-Spin Line." An important feature of the Pin-to-Spin Line is that the ball begins to rev up when the migrating axis crosses this line. Therefore, the sooner the migrating axis crosses the Pin-to-Spin Line, the sooner the ball will begin to rev up.