

**68-22 Crosspin (Project 02-30) (5/03)**



Crosspin is a model die-pinning system used to fabricate casts with removable dies. The Crosspin system is composed of a regular (10 mm) or long pin (16 mm) with corresponding sleeves, full or quadrant base formers, and a drill bit. Crosspin primarily uses the same fabrication procedures as the traditional Pindex pinning system. The main difference is its utilization of a single-pin per die compared to the traditional two-pin Pindex system. Crosspin is manufactured in a cross-shape and has a shaped plastic sleeve to fit over the pin. This cross-shaped pin and sleeve reportedly improves precision and facilitates work with removable dies while necessitating only a single pin in each die. To use Crosspin, the cast is first trimmed until the

bottom is flat and of appropriate thickness. Next, a single hole is drilled for each projected removable die. Then a Crosspin is cemented into each hole in the cast. This leaves the cross-shaped part of the pin exposed. A corresponding sleeve of proper length and shape is slid over each pin. Separator is then applied, followed by basing the cast with a base former. After the stone base is set the cast is removed and the dies are sawed out and trimmed. The depth of the base formers is the same as the length of the pins. This is said to allow easy die removal from the bottom of the cast and reduces the thickness of the base thus making articulation easier.

**Manufacturer:**

Blue Dolphin Products  
 360 A Cochrane Circle  
 Morgan Hill, CA 95037-2859  
 (408) 776-0433  
 (800) 448-8855  
 (408) 776-0145 FAX  
[www.ptcdental.com/bdp](http://www.ptcdental.com/bdp)

**Suggested Retail Price:**

Item	Item Number	Quantity (1)	Quantity (5-9)	Quantity (10+)
Intro Kit with regular pins (250 pins, drill bit, 2 base formers)	500-100	\$42.95	n/a	n/a
Intro Kit with regular pins (250 pins, drill bit, 2 base formers)	500-105	\$42.95	n/a	n/a
1000 pin refills (regular pins)	500-110	\$106.15	\$96.75	\$90.55
1000 pin refills (long pins)	500-150	\$106.15	\$96.75	\$90.55
1000 pin refills (long pins & short sleeves)	500-170	\$106.15	\$96.75	\$90.55
Drill bit	500-130	\$20.35	n/a	n/a
Model former (full arch) 6 per pack	500-140	\$31.79	n/a	n/a
Model former (quadrant) 12 per pack	500-145	\$31.79	n/a	n/a

**Government Price:**

Same as retail

**ADVANTAGES:**

- + Easy-to-use technique.
- + Slightly reduced fabrication times.
- + Regular-length pins provided thinner base for additional articulation space.
- + Single-pin die is advantageous with narrow dies, such as lower anteriors.

**DISADVANTAGES:**

- Dies not as stable as two-pin dies.
- Does not reduce cost per die.
- Must mark dies to ensure correct placement into base.

**SUMMARY AND CONCLUSIONS:**

Crosspin is a prosthodontic die-pinning system that is compatible with existing technology and is easily utilized due to its similarity with currently-used fixed-cast fabrication techniques. In contrast to double-pinning systems, Crosspin uses a single, cross-shaped pin and plastic sleeve per die. Its use was found to be advantageous in cases with small dies where placement of two die pins is difficult. However, in spite of Crosspin's unique shape, dies were found to be less stable than with the traditional two-pin technique. Furthermore, Crosspin does not provide any cost savings over two-pin systems currently in the USAF inventory. Crosspin is probably best indicated for single-unit cases where die stability may not be crucial and for situations involving small dies where placement of two pins may be difficult. **Crosspin** is rated **Acceptable** for use in the federal dental services.