HANNAN DIAMOND DIES A <u>SUPERIOR</u> DIE. OUR DIES "RULE"

3 Point Steel Cutting
Rule
(50% thicker than

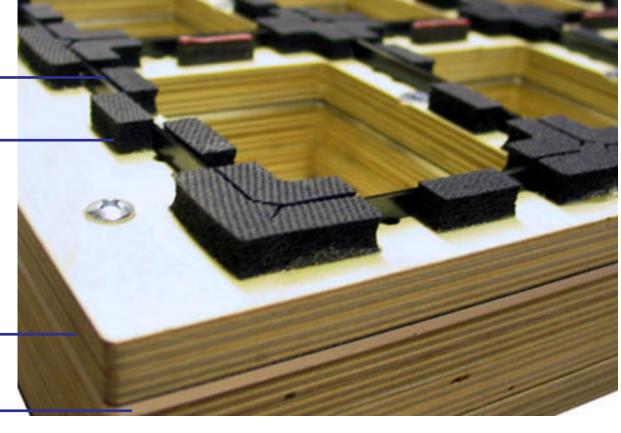
normal 2 pt rule)

High Resilience
Ejection Rubber

Top Quality, 11-Ply
Die Board ——
(Not Plywood)

1/8" Metal Back Up (One Piece, Precision Machined)

Adjustable Registration Springs for Precise Registration





HANNAN® DIAMOND DIES GIVE YOU THE BEST IN EXPERIENCE, KNOWLEDGE, MATERIALS, AND DESIGN.

The HANNAN® Diamond Die

Quality and Craftsmanship is Job One



COPYRIGHT 2006 HANNAN PRODUCTS CORP.

HANNAN® Diamond Dies

The HANNAN position in the die manufacturing industry is special. Not only does HANNAN® make dies, HANNAN also manufactures die cutting machines. This unique position gives HANNAN a true and complete understanding of the relationship between dies and die cutting machines. We have utilized this knowledge to design the best die possible -- the HANNAN® Diamond Die

Diamond Dies are unique in the die cutting industry! The Diamond Die is constructed from interchangeable sections of steel rule die, which interlock with each other to form a rigid, long-lasting die when inserted into the precisely machined base. The base and backup plate are precision machined using our computer controlled technology.

Specific Advantages:

- Repairable.
- Longer Lasting
- Maximum Die Life

In general, steel-rule dies work in extreme environments of pressure, compression, and side-thrust, and HANNAN® Diamond Dies are designed to hold up under these extreme conditions. For a die to survive in this environment, there can be no manufacturing shortcuts or compromises. HANNAN® Diamond Dies represent the best in design, materials and quality manufacturing.

HANNAN dies can help you avoid costly and frustrating downtime and setup problems associated with poorly manufactured dies. Remember that the disappointment of low quality lasts long after the satisfaction of low price is gone.

WHAT'S IN A HANNAN DIE?

- **DIE BOARD** -- The foundation of a steel rule die. HANNAN uses only the best multi-ply, hardwood, 5/8" (15.9 mm) die board. The HANNAN die board can handle the side loads that accompany the die cutting process.
- **STEEL RULE** -- The actual cutting blade of a steel rule die. HANNAN uses 3 point steel rule with a sharpened and hardened edge. The 3 point steel rule is a heavier grade material and tends to hold up better than the thinner material found in 2 point rule dies.
- **BACKUP** -- 1/8" precision machined aluminum. The backup plate must be rigid enough to support the cutting rule under pressure and prevent it from "sinking" into the other wooden boards in the die, however a certain level of flexibility is required to allow for variations in the cutting process. The proper blend of strength and flexibility is <u>very</u> important for extended die life and ease of operation.
- **EJECTION RUBBER** -- This helps "eject" the cut material from the die. All HANNAN dies include ejection rubber. This provides a uniform, resilient bed which provides sufficient force to eject the cut materials.
- **REGISTRATION SPRINGS** -- These springs are very important and hold the material to be cut in the proper relationship to the cutting die. The use of HANNAN's registration springs provides a positive, simple solution to registration setup problems. The HANNAN registration springs are easy to install and quickly adjusted.

EXPERIENCE -- KNOWLEDGE -- CRAFTSMANSHIP You'll find them in every HANNAN die.



HANNAN® STOCK Diamond Dies High Quality – Reduced Cost

To provide the highest quality dies at acceptable prices HANNAN has developed the HANNAN® STOCK Diamond Die and is producing them in a set of "standard" size dies. The Hannan® Stock Diamond Die gives you the best of both worlds -- high quality at a reduced cost. "Stock" dies in the series are prefabricated and can be ordered "off the shelf".

HANNAN_® Standard Diamond Dies

Standard Diamond Dies differ from Stock Diamond Dies in that:

- <u>Standard</u> <u>Diamond</u> <u>Dies</u> conform to the HANNAN standard sizes, but they are not pre-made and "IN STOCK".
- In <u>Stamdard</u> Diamond Dies the length and width of the cutout must conform precisely to the dimentions of the interchangeable sections of rule.
- For other sizes of cutout, you (unfortunately) must use a **Custom Die**.

The steel rule components of a Standard Diamond Dies are mass produced. The dies can be redily constructed by combining these standard components iwth a custom base disigned to fit your application. Since the dies conform to a "standard", your choice of sizes is limited, but the components have been carefully chosen to provide a wide variety of choices, each choice providing minimum waste for the configuration. The steel rule components of these dies are mass produced. The dies can be readily constructed from the standard components .

The Standard and Stock Diamond Dies have many advantages:

- Long Life
- Repairable
- Lower Initial cost
- Lower Maintenance cost
- Available from Stock (STOCK Diamond Dies ONLY.)
- HANNAN has specified a Standard.
- History of HANNAN Standardization
- Replaceable Components since they are standard.

Why a HANNAN Diamond Die?

As a manufacturer of both dies and die cutting machines, HANNAN understands that:

- The die layout must be precise to match the material to be cut and the desired product. The die must accurately cut and leave ample room on the card or gasket. Hannan® Stock and Standard dies are manufactured using computer controlled tools to exacting standards.
- The support for side-thrust must be cut precisely.
- The die rule support must be cut precisely to provide adequate side-thrust support for the rule.
- The steel rule backup must be hard and rigid enough to support the cutting rule under full pressure. However, the backup must be flexible enough to allow for variations in the materials or cutting process. The metal backing HANNAN uses has proven itself to be most effective in providing the strength to withstand the pressures of die cutting while still providing the controlled flexibility to allow for normal pressure variances and load changes.
- HANNAN dies are supplied with resilient ejection rubber. The ejection rubber must be laid out to provide uniform and sufficient force to eject the cut material.
- HANNAN uses only premium die board material in the manufacture of its dies.

Contact Your HANNAN Diamond Die Representative TODAY!

phone: 1-800-954-4266 or 1-951-735-1587

FAX: 1-951-735-0827

email: sales@hannanpak.com

mail: HANNAN Products

220 N. Smith Ave. Corona, CA 92880