



## HOW THE BOHNING® BLOCK WAS DEVELOPED

Bohning Ag is pleased to announce a new hoof block that ensures great adhesion and durability. The Bohning® Block was developed with the cooperation of hoof trimming experts. These trimmers often encountered issues with standard plastic hoof blocks: the blocks did not adhere well to the hoof despite proper preparation, creating extra work for the trimmers and frustration for the farms they serve. Over the course of several months, these hoof trimmers worked with Bohning's in-house team of engineers and material specialists to design and develop the material used in the Bohning® Block. It is manufactured entirely at the Bohning Co. in Lake City, Michigan.

## BOHNING® BLOCK ADVANTAGES

- **STAYS PUT.** Honeycomb pattern creates an ultra-strong bond with the glue and prevents glue waste.
- **NO HEATING NECESSARY.** Our manufacturing process leaves no oily residue, so you don't have to waste time burning it off before application.
- **DURABLE.** Lasts up to 3 months in high-wear environments.
- **BI-DIRECTIONAL USE.** Can be flipped to be used on either side of the hoof.
- **HANGABLE.** Lanyard hole incorporated for easy access.
- **TWO SIZES AVAILABLE.** Small (*White*) & Large (*Purple*).
- **MADE IN USA.**

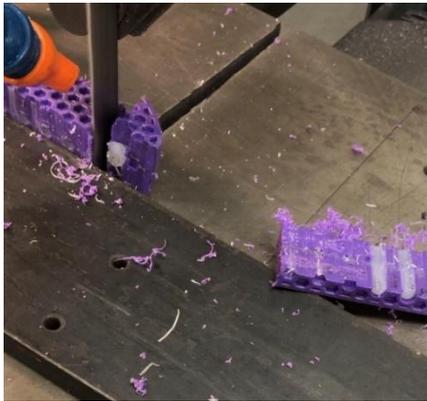
## ADHESION TESTING AT THE BOHNING LABORATORY

### Introduction

Bohning introduced the Bohning Block in 2020 to apply their 75 years of experience in adhesion to bovine hoof care. To better understand the capabilities of this new product line, testing the Bohning Block's compatibility with the most popular hoof epoxies on the market became essential in understanding its strengths and limitations.

## Method

All specimens were prepared using production-quality unpigmented and purple pigmented Bohning Blocks. Blocks were laid out in pairs; 3 pairs were lined up on a table. All epoxies were allowed to acclimate to room



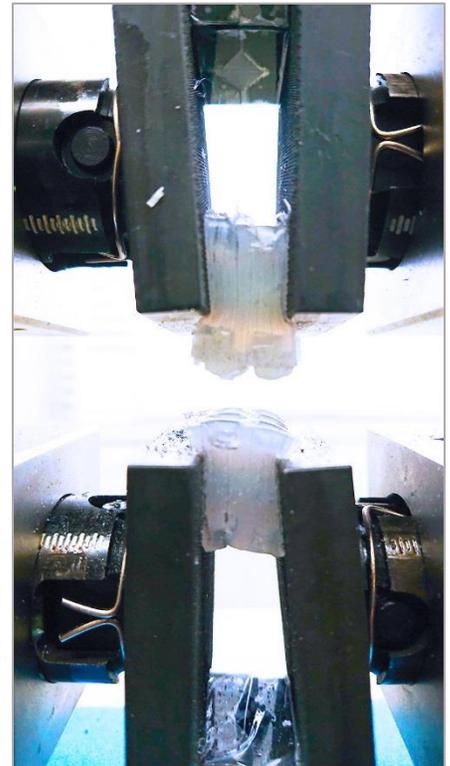
temperature prior to application. Each epoxy bottle was fitted with a mixing tip and applicator gun as specified by the glue manufacturer. Epoxy was applied to only one block of each pair. Within 7-8 seconds of epoxy hitting a block, the top surface of the block was fully covered with epoxy and flipped onto the unglued block lying next to it. Light pressure was then applied as the fast-setting epoxy set up. NOTE: 3 pairs of blocks were bonded at a time as this was found to be a good amount for most brands of epoxy used.

Typically if a fourth pair was attempted, the fast-curing epoxy

would begin setting up inside the mixing tip, and it would become much more difficult to coat the block in the limited window of time allowed. Blocks were allowed to fully cure before cutting.

All epoxied hoof block "sandwiches" were then cut to final size using a custom-built sled jig and a band saw. Sandwiches made with Small Bohning Blocks produced four (4) 1.0" x 0.6" cross-sectional specimens each. Specimens were then bagged and labeled at the band saw to remove any possibility of mixing them up.

All specimens were tested in a dual-column tensile tester with a 5-kN load cell and manually tightened jaws. Data was collected using a data acquisition software.



## Results

The Bohning Company has found that any tensile strength over 750 psi will provide excellent results in most conditions and applications. The tensile strength average per product ranged from 941 psi for one manufacturer to a high of 1427 psi for another manufacturer.

Bovi-Bond, Accu-Bond, PrimaBond, Septicare II Bond Express, Bovibloc, Black Magic Winter, Trimmer's Choice, Hoof-Tite Cold Weather, Hoof-It, Mini Moo Gloop, SureBond 2B, and Hoof-Tite V2 were all tested and passed the 750 psi threshold.

## ABOUT THE BOHNING COMPANY

The Bohning Company has been located in Missaukee County, in Northern Michigan, since its founding 75 years ago. Missaukee County has a long tradition of dairy farming and is ranked 4<sup>th</sup> in the state and 93<sup>rd</sup> in the nation for milk production. With over 400 farms and almost 100,000 acres of farmland, cows outnumber humans three-and-a-half to one. The dairy industry continues to grow in Missaukee County because of the farmers and their associates who are committed to increasing efficiency and productivity and maintaining herd health.

Developing and manufacturing high-quality products that solve problems for local industries, then extending these solutions globally, is a foundation of the Bohning Company. Northern Michigan is home to some of archery's greatest legends, so the area was a natural fit for Rollin Bohning, a chemist and avid archer. Bohning continues to apply its expertise in plastics and adhesives to serve a wide variety of local industries including fishing and golf. We are very proud to continue that tradition with the introduction of a product that solves problems for the numerous dairy farms in our area and around the world.