

Cutting Edge:

Gene Woloveke & Idaco's Many "Firsts"

by Libby Maurer

Meet the man who pioneered the industry's first automated component saw!

at a glance

- Gene Woloveke started his career at Idaco Machine & Equipment Company in the late 1940s.
- Early on, the company owned a sawmill machinery manufacturing division as well as a lumber division.
- In the 1950s, Idaco ventured into the truss business, selling home packages and manufacturing truss equipment for component manufacturers.
- Gene designed and built the first automated component saw by hand.
- Idaco was among the first companies to partner with A. Carroll Sanford, inventor of the light gauge steel connector plate.

A sharp, articulate man in his mid-80s enjoys a daily round of golf in temperate Danville, CA. Who knew that nearly 60 years ago Eugene Woloveke would design machinery to drastically increase the production capacity of a truss plant? With the dozens of highly automated machines available to component manufacturers today, remember the man who had not only a dream to help component manufacturers become more efficient, but also the vision to make it happen. It may come as a surprise to know that he pioneered many "first" component manufacturing machines for the industry.

Gene left college during his senior year in 1942 at the University of California at Berkeley to volunteer for the U.S. Air Force. He was first trained as an Air Force pilot, but eventually got his wings and an MOS as a navigator. He soon rose to become a B-29 Bomber flight engineer, where he earned another MOS. Following the WWII, Gene finished his degree at Berkeley and sought help from a local unemployment office. With the country recovering from the war's economic suppression, work was scarce. "They pointed me toward a little machinery shop a quarter mile down the street." And it was at that little shop that Gene Woloveke began his near forty-year career with Idaco Machine & Equipment Company.

At the time, Idaco was making primarily sawmill machinery like edgers, gang-trimmers and head saws to service the several hundred lumber mills operating in northern California. Gene quickly learned the equipment manufacturing business, and became familiar with every step of the manufacturing process. Before long, he was designing sawmill machines and building new models by hand. "My shop foreman and I would outline the machine in chalk on the floor, frame it with structural steel, and cut, weld, and assemble the parts."

The company's lumber division, which included several mills of its own, was often a catalyst for original design inspiration as well as a testing laboratory. "The machinery division of Idaco was fortunate to have the lumber division present us

with the challenges to come up with machinery to meet their mass production needs," he said.

With the economy showing signs of new life a few short years after the war, "mass production" was becoming the name of the homebuilding game. Gene recalled a giant leap toward production building in the early 1950s: "The emphasis was suddenly on production; that is, how to get the product out faster while maintaining or even improving quality." With a company-wide commitment to improving the efficiency of its customers, Idaco was well-positioned to supply the booming industry.

From Sticks to Panels: The Start of a Homebuilding Revolution

Idaco's third major revenue source was buying lumber direct from mills and wholesaling it to local retail yards. Business thrived until the market figured out how to cut out the middle man. "Competition got tough, because retailers started buying direct from the mills, and cut us out. So we had to reorganize the company's sales strategy and figure out how to continue to claim our share of lumber sales," Gene recalled. "We got squeezed out of the wholesale market, and we had to come up with a way to squeeze back in." The answer to reclaiming its corner of the lumber market was entering the truss business.

Gene remembers that an Idaco lumber salesman came up with an idea to sell their wholesale lumber directly to the builder. The lumber would be cut to size, prepackaged and shipped directly to the jobsite, suiting the exact needs of the particular project. "That way, the framer wouldn't buy from the lumber yard," he said. The package idea came at just the right time because it allowed the builder to build a better house more quickly. Another reason was that good framers and carpenters were almost non-existent.

Idaco struggled to sell packages at first. "I remember the lumber department having difficulty selling a builder even one house project pre-cut, packaged lumber," Gene said. "But over time [builders] found out that buying components not only saved them a lot of money and time, but also eliminated lumber waste."

The Compon-a-matic Changes Everything

To keep up with the homebuilding demand, Idaco again serviced itself by developing manufacturing equipment to suit its own needs. "When we were building just a few house packages each day, there was no reason to automate," Gene said. But as product demand grew, so did the company's production needs; Idaco needed a saw to step it up. The first component saw was designed by Gene (having graduated to

Idaco's general manager) and several others in the early 1950s, and had the advantage of four blades instead of one. Cleverly titled the Compon-a-matic, it was the first feed-through component saw on the market, and had the capacity to cut up to 60 pieces per minute (see Photo 1).

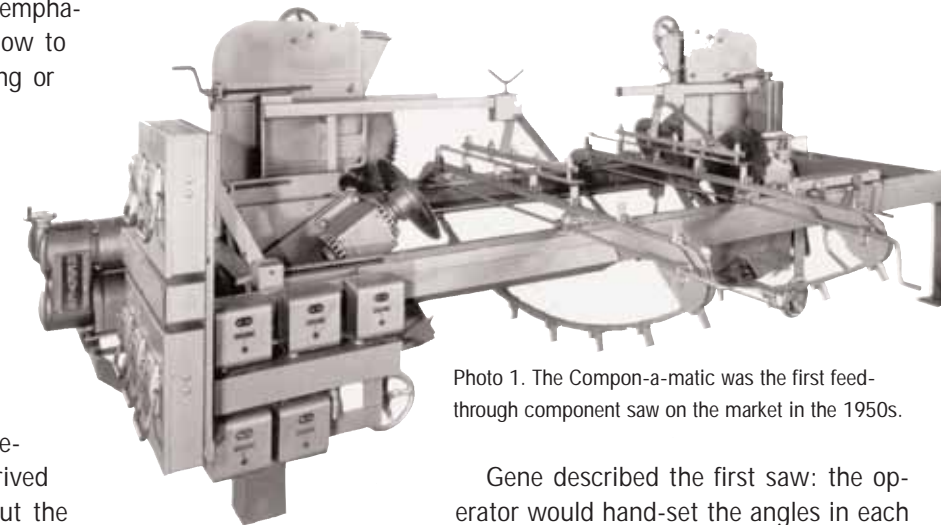


Photo 1. The Compon-a-matic was the first feed-through component saw on the market in the 1950s.

Gene described the first saw: the operator would hand-set the angles in each of the four saws, and push the 2x4 up against a set of lugs on a moving chain, wait for it the pass through the cutting blades, and the machine would deposit the finished piece out on the back side. "The first machine was not much to look at, but it got us started in a whole new industry. It really was exciting now that I look back on it," said Gene.

The Sanford Connection

It's little wonder that a company known best for quality and innovation would eventually partner with the likes of a second industry giant. "We came upon a young fellow named Sanford in the early 1950s, working for H & H Brace Plate in Florida. He had just come up with the idea for a nail plate," Gene remembered. Idaco's homebuilding division soon struck a deal to punch the Sanford metal plates in Oakland before using them to build trusses. "We used to pound them in with heavy mallets," Gene recalled. "It was very physically strenuous." So along came a revolutionary solution: "We manufactured the first plate roller to imbed [Sanford's] plate in the making of a roof truss," which together with the Compon-a-matic, became a staple for component manufacturers throughout the world. (See Photo 2 on page 58.)

Compon-a-matic Production Increases

By the time Idaco broke through the component manufacturing market, Idaco had opened a product showroom and equipment reps were positioned to call on component manufacturers in all U.S. markets. Gene said Idaco built the first Compon-a-matics to "fill our own need, but Sanford started sending manufacturers in from 'Timbuktu.' They'd see what we were doing, and ask us to make them a custom machine." Idaco began to gamble, making ten or more machines at a time to see if they would sell. "That's what happened with the component saws," he said.

Continued on page 58

IDACO TRUSS ROLL PRESS

The BASIC COMPONENTS FOR A HIGHLY PRODUCTIVE ROLLER SYSTEM

LOWEST INVESTMENT • GREATEST FLEXIBILITY • EXPANDABLE

- FASTER SET-UP
- AIR CLAMPING
- AIR EJECTOR
- 3-4 MAN OPERATION
- 85-125 TRUSSES PER TABLE PER DAY
- EXTRA RUGGED CONSTRUCTION

TRUSS ROLL PRESS STANDARD LENGTH 12' OR 14'. Longer Lengths Available.

Balls 18" diameter x 1/2" thick walls • Balls will open to 6" • Frame—all steel (longer roll lengths optional) • Shift and bearing 3/4" diameter • Feed Speed—90 FPM • 7 1/2 HP • Clear Motor (10 HP optional) • Safety Stop Bar • Forward and Reverse Switch • Wood 3-phase-ready to operate • Weight 4400 lbs.

Complete System Consists Of:

- TRUSS ROLL PRESS
- TRUSS ASSEMBLY TABLE
- WALLING HOIST TRANSFER SYSTEM
- ROLLER OUTFEED TRANSPORT SYSTEM
- SEACRANE SYSTEM

IDACO *Engineered Systems for the Home Building Industry*
... component machinery
 1300-7TH STREET, OAKLAND, CALIFORNIA 94607 • AREA CODE (415) 465-3112

Photo 2. An Idaco ad for the Truss Roll Press—the first plate roller to imbed Sanford's plate in the making of a roof truss.

Cutting Edge...
 Continued from page 57

And at a time when product quality is incessantly scrutinized, Gene's machines left little doubt in the minds of consumers. In fact, after a fire leveled Scott Arquilla's suburban Chicago facility in 2003, two Idaco saws (Web-Matic and a chord saw) dating back to 1968 literally helped the company regain its footing. "We were ready to resume production, but our new building wasn't yet complete. So we set up a makeshift cutting and assembly area," Arquilla said. The two vintage Idaco saws, having been stored under a shed for years, were dusted off, and Best Homes, Inc. was back in business. Rust and all, the Idacos saved the day. (See Photos 3 & 4.)

Gene's customers weren't the only fans of the Idaco name. With sales reps in nearly every region of the country, Idaco technology was widely available. Dave Imming was brought on to



Photos 3 & 4. Two Idaco saws (circa 1968) were dusted off and put to work as Best Homes, Inc. recovered from the 2003 fire that destroyed their shop.



Hydro-Air in the early 1963 by a man named George Eberle. Imming remembers that Eberle sold his first Compon-a-matic to Supreme Truss in St. Louis. "At the time," said Imming, "[Hydro-Air] built truss equipment, but not saws. So we would sell Gene's saw with our truss line." Imming remembered Gene's love of ingenuity. "One thing was certain about Gene: he was always ahead of the curve."

"Once we had worldwide demand, [the saws] had to be ship-pable," Gene said. They traveled across the country by rail (bolted to the bottom of a rail car!), and were then transferred to ships setting sail off the east coast. In addition to domestic shipments, Idaco sent machines to South Africa, New Zealand, Australia, Japan, and all throughout Western Europe. Gene warned that Idaco's automated machines weren't for everyone. "You always have to weigh the equipment and maintenance costs with your through-put," he said.

By the late 1970s and early 1980s, Idaco had become a full-service equipment supplier, offering a complete line of component saws, as well as a line of roof, floor truss and wall panel assembly machines. The first generation of Compon-a-matic went under the knife for a major facelift; it was fit with a hydraulic feed drive, a pre-load feeder and a waste conveyor for sawdust and wood scrap. (See Photo 5 on page 60.) The 1981 version offered a "new digital readout system." New saws were added to the repertoire: Anglematic, Floor-Matic, Webmatic, and the Round-Matic. Component manu-

facturers could also invest in the Stack-matic, a "completely self-contained, fully automatic" truss stacker. (See Photo 6 on page 60.)

Very early on, Idaco machines had earned a reputation for high quality and optimum performance. "Our equipment was always known to be rugged and dependable," Gene said. But it was the company's emphasis on developing custom-built machines that would improve efficiency and raise productivity that helped to establish a loyal and diverse customer base.

Imming, who continued to sell Idaco equipment after his career at Hydro-Air, said Gene was the go-to guy for ideas on how to improve an existing machine. "People would consult him: 'what do you think about adding this or streamlining that?'" Gene was always up for the challenge." Gene was never afraid to take chances, knowing full well that they might not necessarily mean an innovative new product. "Back then, we always took opportuni-

Continued on page 60

HH Hundegger

Defining our industry!

Flex·i·ble: flek'sə bəl
adjective

A ready capability to adapt to new, different, or changing requirements

Today's market requires the **flexibility** to handle bevel and compound cuts quickly and safely, not manually or at a stand alone unit. Hundegger offers the capability to adapt more than any other saw. Fabricators are buying the SC-1 because it is more **flexible**.

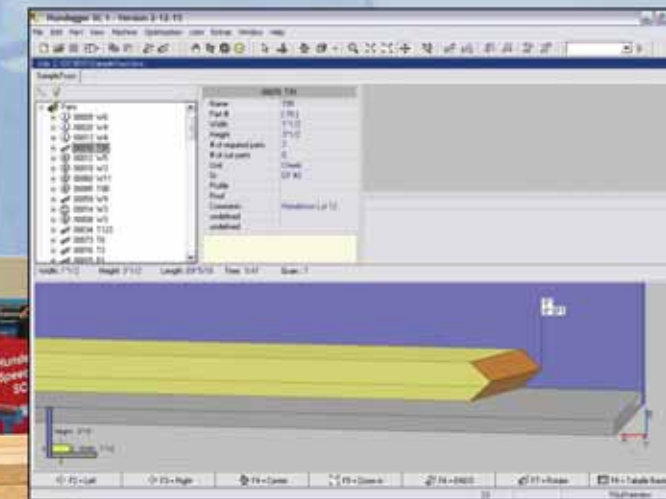


Hundegger's unique built-in angle and bevel control is cutting 3 custom cut packages a day instead of 1 every 3 days.

- 8 hours
 - 1 man
 - 3 custom cut packs
- Imagine what we can do with simple cuts!



Hundegger's SC-1



SC-1 screen shot
 Microsoft Windows XP based

Hundegger is also the only saw in the industry that can cut 4 boards at one time. With a 6" x 18" cutting envelope and a 26 3/4" diameter saw blade the SC-1 can cut four parts in the time of one. With Hundegger's optimizing program your operator will know how many boards he needs to stack. Whether it's 4 high, 3 high, 2 high or 1, Hundegger has more flexibility than any saw on the market. From standard truss components to I-joists...the leader in lineal saw technology offers flexibility to a rapidly changing industry.

Hundegger USA LC - Defining our industry!

Tel: 435-654-3028 • email: info@hundeggerusa.com • www.hundeggerusa.com

For reader service, go to www.sbcmag.info/hundeggerusa.htm



BEAMS • HEADERS • JOISTS • LINTELS • RAFTERS

KRB GLULAM

BEAMS & HEADERS

2400 F_b- 1.8 E

- Optimized strength using Norway Spruce machine stress rated (MSR) laminates
- I-Joist compatible sizes
- Full 3-1/2" and 5-1/2" widths available to match lumber sizes
- Also available in typical glulam sizes (3-1/8", 5-1/8" & 7" widths)
- Over 20% lighter weight than Southern Yellow Pine glulam
- Industrial grade (of high quality)
- Easily installed (No TOP/BOTTOM)
- No camber — always straight & true
- Each beam is individually shrink-wrapped
- Several ports of entry — we can service East, Southeast & Gulf port customers
- Available in lengths up to 51'



finnforest Finnforest USA
Engineered Wood Division

www.finnforestus.com • 800/622-5850 • Fax: 586/296-8773

For reader service, go to www.sbcmag.info/finnforest.htm

Photo 6. Idaco's Stackmatic, a completely self-contained, fully automatic truss stacker, was one of many items added to their line in the 1980s.

lumber division is still in operation today, but no longer under the Idaco name.

Gene continued to run a sales and service business from his home for old Idaco customers. "I continued to offer some of the smaller lines after the move," he said. Gene retired for good in 2001, a move that has allowed the 84-year-old to work on his golf swing and become a daily lap-swimmer.

Says Gene with pride, "Looking back, I lived through an amazing time." Although years removed from the machine building industry, innovation runs through Gene's blood.

"I'd be interested to see where the industry is in terms of efficiency now," he says. No matter where component manufacturing equipment currently falls on the efficiency scale, we are grateful to Gene for setting the stage for the kinds of innovations the industry has seen since Idaco's reign. **SBC**

Thanks to Dave Imming of Truswal Systems Corporation and Scott Arquilla of Best Homes, Inc. for contributing to this piece.

Photo 5. After many years of success, Idaco's Compon-a-matic underwent a face-lift in 1972.



Over 20 years of product innovation for the structural component industry.

SIMPSON
Strong-Tie



THGQ/THGQH
High Capacity Girder Truss Hangers



TJC37
Skewable Jack Truss Connector



LGT3
3-Ply Girder Truss Tiedown



GU Series
High Capacity Girder Hangers

Cutting Edge...

Continued from page 58

ties to make new machines. That's how we grew," Gene said.

Consolidation Takes Idaco

A series of acquisitions and mergers between the late 1960s and mid-1970s ended with Gang-Nail purchasing the company. The Idaco equipment manufacturing division in Oakland closed by November 1982, and Gang-Nail moved production of the original Compon-a-matic to Miami. Gene said the

Since the 1980's, when we introduced our THA double-shear nailed hanger to address truss connection concerns, Simpson has been offering products designed specifically for connecting trusses. Today, we offer more than 100 plated truss products, and continue to develop products for the plated truss and structural component industry.

Each year sees more innovations – like our easy-to-install jack truss connector that is field-skewable to 67.5 degrees; the new 3-ply girder tie-down with over 3500 lbs. of uplift capacity; or the new high capacity girder truss hangers that install with Strong-Drive® screws and eliminate the need for bolts. We also continue to add options – like sloped, skewed, concealed flange, etc. – to keep up with ever-changing needs.

These products are engineered to meet or exceed the IRC/IBC codes and reflect our commitment to serve the building industry. Check our current catalog or website for details.

Better Connections for Component Systems.

800-999-5099
www.strongtie.com

For reader service, go to www.sbcmag.info/simpson.htm

STRUCTURAL BUILDING COMPONENTS™

THE FUTURE OF FRAMING

www.sbcmag.info

Dear Reader:

Copyright © 2006 by Truss Publications, Inc. All rights reserved. For permission to reprint materials from **SBC Magazine**, call 608/310-6706 or email editor@sbcmag.info.

The mission of **Structural Building Components Magazine (SBC)** is to increase the knowledge of and to promote the common interests of those engaged in manufacturing and distributing of structural building components to ensure growth and continuity, and to be the information conduit by staying abreast of leading-edge issues. SBC will take a leadership role on behalf of the component industry in disseminating technical and marketplace information, and will maintain advisory committees consisting of the most knowledgeable professionals in the industry. The opinions expressed in SBC are those of the authors and those quoted solely, and are not necessarily the opinions of any of the affiliated associations (SBCC, WTCA, SCDA & STCA).



6300 Enterprise Lane • Suite 200 • Madison, WI 53719
608/310-6706 phone • 608/271-7006 fax
www.sbcmag.info • admgr@sbcmag.info