



WEST COAST PLYWOOD CORPORATION

No. 16 in a series of
monographs on the
history of West Coast
plywood plants

Plywood in Retrospect

This monograph, the 16th in a series on the earlier fir plywood mills, is dedicated to the memory of A. R. (Bob) Wuest who in the face of adversity almost single-handedly formed his own company, serving as its president and general manager from its incorporation in 1936 until he sold out and retired in 1966. His whole career was a shining example of what hard work, linked with courage, integrity, and business acumen can accomplish. Bob Wuest was truly one of the great plywood pioneers.

The principal sources of information were the taped interviews with Bob Wuest and Art Welch in April 1953 by Tom Sias, publicity manager for the Douglas Fir Plywood Association. I am also indebted to Ernie Egge, former sales manager and now retired in Hoquiam, Wash., for many details of West Coast Plywood history.

And, once more, my sincere appreciation for American Plywood Association's assistance in printing and to their staff and especially Hugh Love, director of communications, and to Charla Bengel for her secretarial aid.

Nelson S. Perkins

Nelson S. Perkins, Secretary-Treasurer
Plywood Pioneer Association
P.O. Box 11700
Tacoma, Washington 98411



A. R. Wuest

WEST COAST PLYWOOD CORPORATION

The history of the West Coast Plywood Corporation is essentially the success story of A. R. (Bob) Wuest, founder of the company, president and general manager from the starting whistle on June 24, 1936, until the mill was sold in 1966.

Wuest's plywood career was marked with a number of dramatic setbacks, which to a man of lesser character might have been calamitous. Bob overcame the obstacles fate threw at him and eventually fulfilled what must have been a boyhood dream, ownership of his own plywood mill.

As a young man in his teens, Bob Wuest "came back" to the West Coast during the depression of 1907, working for a logging company and several lumber firms before moving to Sedro Woolley, Washington, in 1916. There, in what proved to be a turning point in his life, he met Bill Royce (Cottonwood Bill) and Clyde Lloyd, owners of the Sedro Box & Veneer Company, which had just started making plywood out of cottonwood and some spruce.

Wuest was fascinated by veneer and plywood, believed in its future, and resolved, if the opportunity ever occurred, to get into the plywood business. His opportunity came in 1923 when the box company, rebuilding after a flood and a fire, ran into financial troubles.

Wuest borrowed \$20,000, bought into the firm which continued as the Sedro Box & Veneer Company, and served as general manager.

Welch Joins Wuest

A. R. (Art) Welch became production manager. Art was in his early thirties, with many years experience in various door plants and mills. He stated he had "run the plywood end of it" for the Box Company in 1922, had left when it "folded up," and rejoined in 1923 at the invitation of Bill Royce, senior partner under Wuest and Welch. The plant prospered and its

debts were paid off by midsummer of 1924. That December, fire struck again, completely destroying the plant.

Refusing to quit, Wuest bought out Royce, planning to build another plant in Sedro Woolley. He ended up, however, at Grays Harbor where, with the help of one of his best veneer customers, the Knox and Toombs door plant (Harry Knox, president, and E. W. Daniels, manager), he organized the Harbor Plywood Co. in February 1925. It started production on May 25, 1925, with Knox as president; Wuest, executive vice-president and general manager; Daniels, secretary-treasurer; and Art Welch, mill superintendent.

In October 1928, fire, the ever-present menace, wiped out most of the plant. Within eight weeks, however, a new and even better plant had been built and production resumed.

Harbor Plywood's Progress

In 1929, banking interests gained control, and due to an untimely expansion policy, heavy losses developed. In 1933, a reorganization ensued with Wuest becoming president. He had been a vital factor in Harbor's development during the vicissitudes of the first few years, and during the lean depression years of the early thirties had courageously and competently guided the company into steadily increasing profits.

Late in 1934, he announced the development of a waterproof, hot-pressed resin adhesive used in a new type of Douglas fir plywood, the famous Super Harbord. Over several years, he had insisted on the company financing the costly preliminary research under Dr. James V. Nevin and staff, despite objections from his Board of Directors. Apparently there had been other disputes and finally in February 1935, at a Board meeting in Chicago, Bob had had enough and abruptly left the company.

When asked in a 1953 interview* why he had left, Wuest replied, "All I can say is 'They threw me out.' I had an agree-



A. R. Welch

ment with them ('the bankers') that they were to give me sufficient stock to control the company through the management, and when it came time to deliver, they threw me out."

Organization of West Coast Plywood

This proved to be the final stepping-stone to realizing his early dream and ambition – his *own* plywood mill. Wuest immediately organized his own company in Grays Harbor, and named it the West Coast Plywood Corporation. It was incorporated on March 21, 1936. He must have anticipated the actions of Harbor's Directors because he had a mill site lined up in Grays Harbor before he went to Chicago, and got construction started under Art Welch almost immediately after leaving the Chicago meeting.

While still in the East, Wuest had ordered modern plywood machinery and equipment to be shipped to arrive at mill site within 8 to 10 weeks. This meant rushing construction to completion, but with Welch as construction superintendent and Wuest on hand to push, guide and look after finances, the job was done with machinery installed on schedule.

On June 26, 1936, production at West Coast Plywood began. Ironically, the carpenter labor for building the enclosing shell of the mill, framing, siding and roofing were provided by union door-fabricators on strike from the local door plant owned by Harbor Plywood.

To finance the operation, Wuest put up his own savings, and sold about 30 percent of the new stock to old employees and business friends, retaining 60 percent of the stock for himself and 10 percent for Art Welch.

As Wuest's reputation for integrity and ability was excellent, both locally and in Eastern plywood circles, he was able to establish credit and borrow additional funds needed to finance his operation. This involved "going on notes" for a few impecunious friends who wanted to participate. In fact, he staked his financial future on the success of his new mill. He had sound judgment, and was decisive in meeting problems.

Glue Controversy

One example which occurred several years later involved the basic question as to whether West Coast would continue to use a blood-extended phenolic resin adhesive in the comparatively new Exterior type plywood or shift, as most mills had already done, to a somewhat more expensive, nearly "straight" phenolic resin.

Plywood made with each had been extensively tested in field and laboratory under matched conditions by the DFPA and charts were submitted by its technical director to Wuest and Welch, at a meeting in Bob's office. The charted results showed the marked superiority of the straight phenolic under long severe exposures.

Art Welch, however, liked the blood-phenolic glue – it was cheaper and easier to spread-and defended it vigorously. A discussion ensued with Wuest quietly attentive. Finally, Art exploded, "Don't you come down here and try to tell me how to make plywood!" The technical director responded with a grin, attempting to ease the situation, "I'm not telling you that, I'm just showing what lousy plywood you make."

Art glared and appeared ready to jump over the desk, but Bob Wuest intervened. "Enough of that! Here's what we're going to do. We'll use up the phenol blood we have on hand. We're not going to buy any more. Then we're going to a straight phenolic resin. That's it! Now, let's have some lunch and go play golf" and they did – Bob, Art, and the technical director. Bob won as usual.

In addition to Wuest's decisiveness, his experiences at Sedro Woolley and Harbor Plywood gave him full confidence in his new project. He had still another valuable asset, the ability to inspire loyalty. When the Sedro Box plant burned and Wuest moved to Grays Harbor, many of his former employees joined him there. When he built West Coast, most of his personnel came from Harbor Plywood. In fact, he didn't have room in the mill for all of his former employees who applied.



Standing left to right: A. R. Welch; A. R. Wuest; Phillip Hill, Chicago; Huber F. Wise; Walter O. Tredupp, Milwaukee; G. A. Whitmeyer, Philadelphia; Donald K. Covington, Baltimore; Harold Nelsn, Kansas City; Frank B. Cole, Dallas; J. C. McCloskey, Los Angeles; E. W. Camp, Indianapolis; Spencer Roberts, Pittsburgh. Front row, left to right: E. W. Daniels; Joseph Wuest, Cincinnati; C. A. Loomis, Chicago; Russell R. Austin, Hoquiam; James V. Nevin, Hoquiam; E. F. Davis, Cleveland; H. B. Wiscomb, Chicago; C. W. Buckner, San Francisco; Jack R. Rehm, Hoquiam.

Personnel

When West Coast Plywood started in 1936, the principal staff at the home office was:

- A. R. (Bob) Wuest, president and general manager
- A. R. (Art) Welch, vice-president and production manager
- Ernest (Ernie) Egge, sales manager
- Bill Reynolds, office manager and accountant
- Mrs. Robert (Dorothy) Kramer, Bob's private secretary, who had been with him for many years at Harbor

In the mill, Frank Wise was superintendent, Elmer Brown, now manager at Astoria, Erik Spangler, and Willard Smith were shift foremen.

Later, when Wise retired, Don Stubberfield, Art's son-in-law, moved up to Wise's position. "Stub," a graduate of Oregon State, had started on the green chain, worked up to purchasing agent, assistant superintendent and finally to superintendent.

Production Equipment

West Coast started with a 12 foot lathe (actually 160 inches) to peel veneer for 12 foot long panels. There were two eight-section dryers. A ten-opening Merritt hot press to take 72 inch x 144 inch panels was installed along with a 4 foot x 8 foot press to make the more conventional size panels. The plant had three glue spreaders, two 50 inch double deck Yates sanders, a 72 inch single decker and, of course, trim and cut-off saws together with other standard plywood mill items.

West Coast Plywood claimed to be the first mill to go 100 percent hot press. At that time I. F. Laucks, who owned the soya bean glue patents, was trying to develop a glue that would set at a temperature lower than that required for Harbor Plywood's Super Harbord panels. Wuest and Welch, through their mill, cooperated with Laucks in developing his "phenol glue," a mixture of blood, mastic, and phenolic resin. This was "a one horse, one rabbit" formula according to some critics, but it was an excellent highly water-resistant plywood adhesive. It became very popular in the industry, but it was not waterproof and so was later abandoned for use in Exterior type plywood.

Manufacturing Improvements

As a production manager, Art Welch rated as one of the best in the industry. His ingenuity in mechanical matters helped him develop a number of significant manufacturing improvements both in door factories and in plywood mills.

Art is credited with changing door panels from 5/16 inch to 1/4-inch thickness. He related how in 1926 he had developed what he believed was the first machine-patch, about 3/8 inch by 2-1/2 inches, used for patching finished panels. "From that," he said, "we jumped up with this veneer patching setup to the patch the whole industry is now using (1953), about 1-1/4 inches x 7 inches."

In trying to develop an efficient production line for making Exterior and other hot pressed panels, Welch devised an "automatic" panel layout. Faces and backs, already trimmed, were fed in a continuous line, end-to-end down a conveyor belt, past the glue spreader and core layer, who placed the core on the backs and, in five-ply, on the centers also. The trick was to load the conveyor with a single "back" (face down to receive the core), then a "face" (up to complete a three-ply panel) and a "back" (on top of the face). Core was laid on this back, then came another face and back combination thus completing a second three-ply assembly with the back on top for a third assembly and so on. The veneer combinations were "automatically" assembled for pressing.

Experimentation

Welch also did a great deal of experimenting with blood glues. "Originally, in 1917 or 1918, I was making a resin glue and didn't know it! I was putting caustic in the blood, along with a little formaldehyde to set the blood up – it was a messy thing and after a few days it would begin to crawl a little. I decided I'd better kill the bugs, so I started putting phenol in it. I then had creosote, formaldehyde, and caustic soda." The blood glue formula was gradually improving. All was cold press, but then Art put the panels in a dryer to get some heat on them and he had a good water resistant panel, without knowing exactly why.

Unfortunately, this "hit or miss" research wasn't followed up. The experience was helpful later, however, when the water-



proof phenolic resin glue was being developed at Harbor.

That was when Welch converted a cold press at Harbor Plywood into a hot press by inserting several plates that were steam-heated. That homemade press was used first in developing their waterproof resin glue, and afterward for many years in Harbor's production of Exterior plywood.

Introduction of Welchboard

Welchboard was probably Art's best development. It was an Exterior plywood panel smoothly surfaced on one side with a patented hot-pressed mixture of wood-flour and phenolic resin, about 1/16 inch thick, with a uniform cream color. Welchboard, when primed, provides an ideal paint base, "the answer to a painter's dream" said one master painter.* It was a durable material even under severe exposure. With a one-sided surface, it had a slight warping tendency, not significant when well nailed.

Unfortunately, although Art and Bob apparently wanted the industry to produce Welchboard, the propitious time and arrangements never quite materialized. In 1953, West Coast Plywood was producing four carloads of Welchboard a month and was expecting to reach some 15 to 20, but the product was never adequately promoted.

Art Welch remained with West Coast Plywood as vice-president and production manager until his death in 1965, at 75 years of age.

Sales

Wuest had always believed in a straight jobber policy and West Coast generally adhered to that.

They had sales representatives in most parts of the country, most of them formerly with Bob at Harbor. Among those in the larger areas were:

Jack Dalton, Los Angeles

Bruce Wiscomb, Chicago

Jim Skelly, New York

Willard Pangborn, Cleveland

Charlie Goodall, Memphis

Frank Cole, Texas

Jack Leik, Seattle

Ernie Egge, who had been with Wuest at Harbor, was sales manager of West Coast Plywood from start to finish. He kept in close touch, not only with his mill representatives, but also with the plywood distributors throughout the country, and did a conscientious job in screening out orders that would have been unprofitable.

In the summer of 1936, right after the mill was started, conditions were rough, reported Wuest. Business slumped and competition was bitter. A price war broke out in the fir plywood industry and Wuest thought the other mills "were trying to break him before he got started" even though he had been working with industry leaders as chairman of the Plywood Industry Committee trying to establish an effective advertising program.

West Coast Plywood, however, had a modern mill, probably the most efficient on the coast at that time, under the supervision of Art Welch. They also had a good source of high grade logs. Finally, even though just starting, they possessed experienced and loyal mill sales representatives and old customers.

In fact, Wuest later estimated that about 25 percent of his sales were to customers who had bought regularly from him ever since his Sedro Woolley days. In addition, Wuest was a determined fighter. As a result, his mill made money from the start, and continued to do so during its entire operation.

World War II Experiences

During World War II, West Coast, like other mills in the DFPA, was restricted by the War Production Board, but cooperated in the war effort by manufacturing only specified items like Hutment grade and sheathing. Fifty percent of production had to be in sheathing, a severe handicap for a 100 percent "sanded" mill, but Egge stressed 12 foot panels, to utilize the capacities of their 12 foot lathe and 12 foot press.

*Comment made when repainting author's home built in 1950 in Tacoma, Wash., where Welchboard was used for all exterior siding, soffits of roof overhang and patio, all interior ceilings and garage, some 6,000 square feet all in almost perfect condition after 25 years and four or five repaintings.

This helped the mill to stay in the black, despite the unbalanced production schedule.

Prices were set by the OPA,* to curb any would-be “war profiteers.” Some items were priced too low and mills shunned these if possible, but one “good item” was Hutment grade, a water-resistant concrete form panel required to pass the industry test (ten cycles of soaking and drying) without failure. To insure passing, specifications also required dipping panel edges in a clear sealer of a water resistant, wood preservative type. On this, the mills did quite well.

Maintaining “A Small Business”

After the war, West Coast Plywood continued its business on a conservative and fairly profitable basis, without any great expansion ideas, except perhaps those engendered by prospects for Welchboard. Reminiscing in 1953, Bob Wuest explained, “This mill made more money than any of the mills from 1936 to 1940 (naming several of the largest), but since that time we haven’t done so well because I have decided there is no use building up a big business.” With Harbor, he admitted, he had wanted to expand, but the fact that he had no sons undoubtedly influenced this decision to keep West Coast Plywood \$I “a small business.”

Labor Relations

One factor that helped West Coast operate smoothly over the years was the harmonious relationship between labor and management. Mitchell Tesia was the mill’s liaison man who kept in touch with the employees, understood their problems and showed a sincere interest in helping them solve them. When differences or real disputes arose, where Tesia was unable to resolve them himself he reported the circumstances to Wuest who seemed always able to settle matters realistically and fairly to everyone’s satisfaction.

Use of Western Hemlock

Early in the sixties, Western hemlock came into popular use to help supply the huge demand for plywood sheathing.

*Office of Price Administration.



In general, hemlock plywood, although adequate for most plywood uses, is not quite as strong or as stiff as Douglas fir, so that to satisfy FHA and various standard building codes, a revised U.S. Commercial Standard provided for slightly thicker face veneers in hemlock to make it interchangeable with Douglas fir in structural uses. West Coast was one of the first mills to produce large volumes of hemlock and by 1966, the mill had gone to nearly 100 percent hemlock production.



Wuest Decides to Retire

That was the year Bob Wuest, then 77 years old, decided to sell out. His old friend and right hand man, Art Welch, had passed away one year earlier and Bob was getting a bit weary of the daily problems at the mill.

He had led an eventful life during most of his 45 years in plywood. Starting at Sedro Woolley in 1923, he had built the Sedro Box Company into a profitable situation when fire wiped him out. Rebuilding in a new location, he was the guiding light at Harbor Plywood from 1925 to 1935, leaving at a time when it had attained a highly profitable position. While there, he pioneered a number of promotional ventures that later proved significant. Through jobbers he distributed several hundreds of thousands of small plywood samples to manual training classes all over the United States.

Advertising Recognized

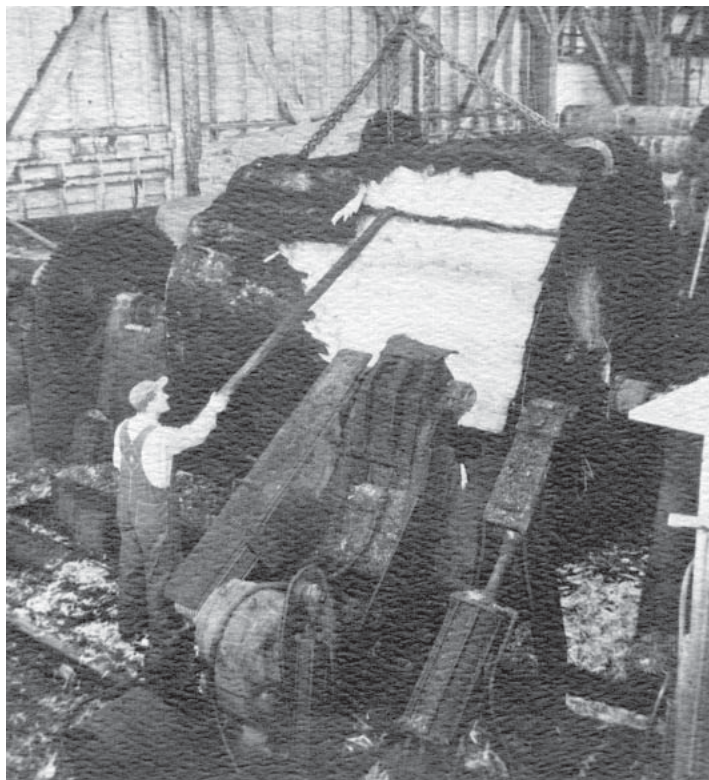
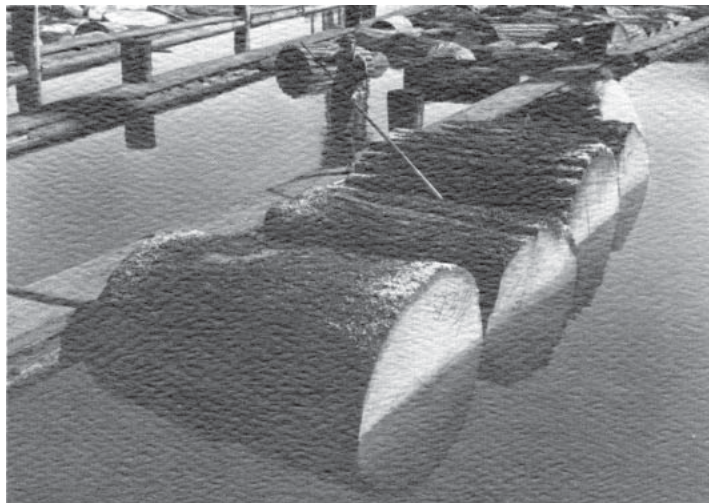
He insisted on an industry advertising program for Douglas fir plywood and helped develop it. As a student of manufacturing costs, he instructed a number of his competitors on how to figure their costs on a 3/8 inch basis, a result that was beneficial to all.

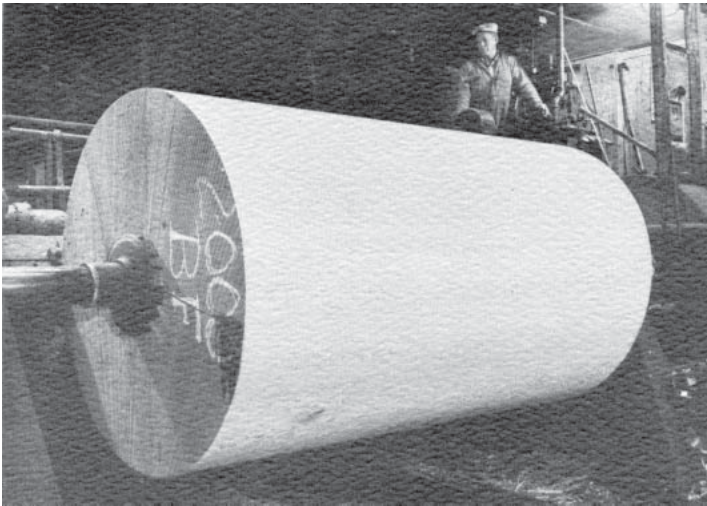
He was instrumental in furnishing nearly a million feet of plywood, all pre-primed, to contractors for the Hall of Science Building at the Chicago World's Fair in 1929. Although less than one percent of these panels had to be replaced, Wuest realized a 100 percent waterproof adhesive was needed in the industry.

This experience led to the hiring of Nevin and other chemists and the development of Harbor Plywood's waterproof type of phenolic resin glue, an achievement that revolutionized the entire fir plywood industry.

A year later, Wuest had built his own plant, the West Coast Plywood Corporation. Again, he overcame the financial hazards of a new operation, at a time when the country was struggling to recover from a worldwide depression. He was eminently successful over the years, but finally at age 78, Bob was ready to quit.

U.S. Plywood was a willing buyer. Evidently one of the attractive features was West Coast's capacity to make 12 foot





panels for trailers, a market that was absorbing most of its production. After a few years, however, the operation proved less successful than hoped for; the plant was closed down and dismantled. The last vestiges of the West Coast Plywood Corporation plant completely disappeared.

On September 7, 1969, two years after selling out, Wuest passed away at the age of 80, one of the most respected men in the industry. Those who knew him well always will carry a warm spot in their hearts for A. R. (Bob) Wuest.

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