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CELEBRATING 80 YEARS

HISTORY
of
NIBA

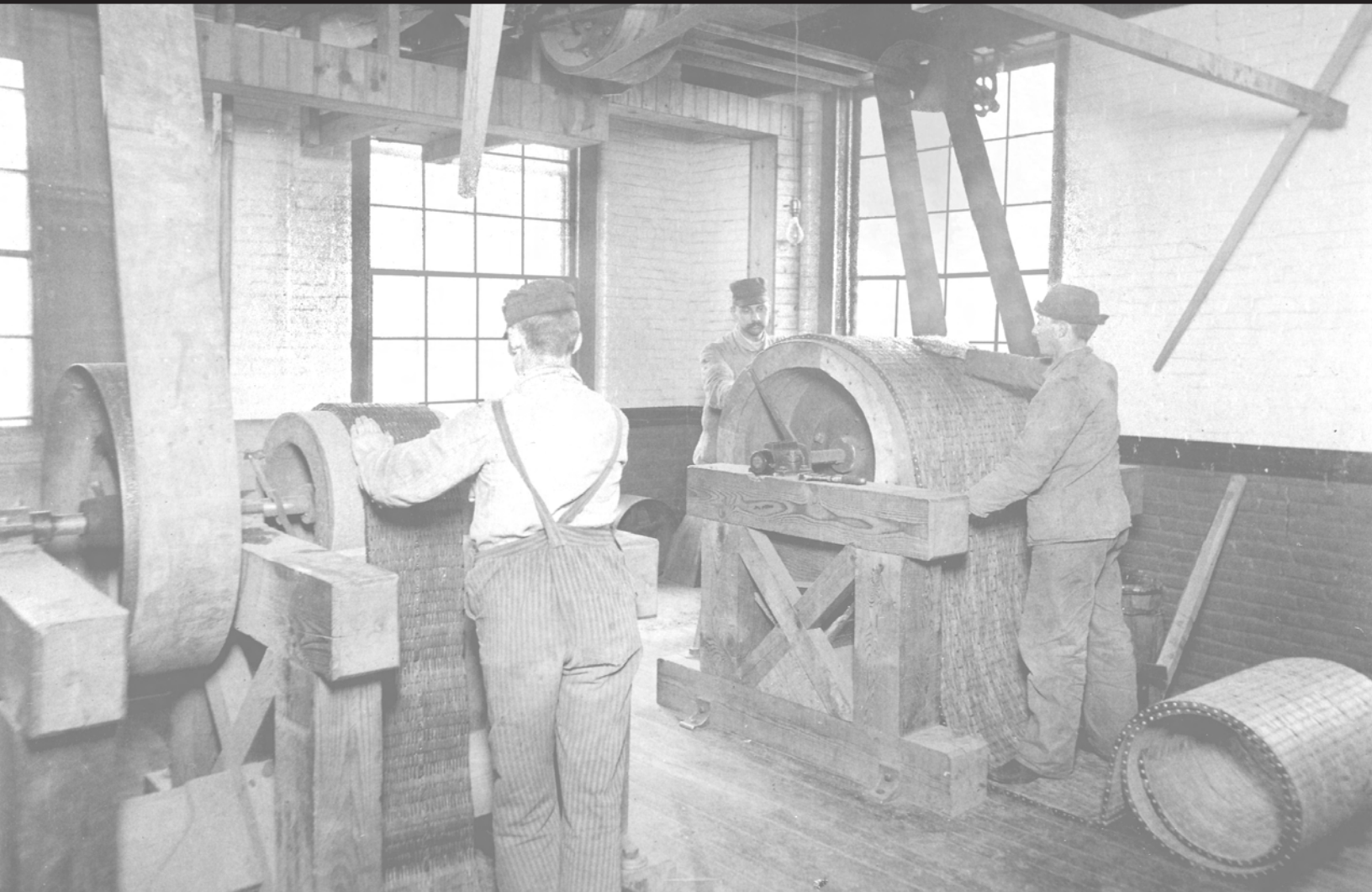
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History of NIBA

NIBA-The Belting Association traces its origins to 1927. Initially organized as the American Leather Belting Association (ALBA), the group was open to “any active or retired manufacturer of flat leather belting.” In 1954, the ALBA changed its name to the National Industrial Leather Association, expanding its membership to include manufacturers of textile and packing leathers. In 1976, it changed its name again, becoming the National Industrial Belting Association, expanding into the realm of rubber and reinforced belting manufacture and distribution. These reorganizations reflect the organization’s flexibility and responsiveness to technological change.



It was technological change that prompted the founding of the ALBA. Prior to the 1920s, leather belts were the dominant technology for transmitting power for industrial applications in the United States. First developed for textile mills in the early 19th century, leather belting was combined with high-speed shafting in the 1840s to transmit water and steam power to machinery in a variety of factory settings. By the end of the nineteenth century, leather belting had been widely adopted for power transmission, and the manufacture and sale of leather belts was a major industry.

After World War I, however, two new technologies began to displace leather belting. The first of these, the rubber v-belt, had originally been developed for automotive applications. A direct replacement for the leather belt, it became more common in industrial settings as improvements in its construction were introduced during the 1910s and 1920s. More important in the long run, however, was the second new development, the perfection of the fractional-horsepower electric motor. These new motors were efficient enough that each piece of machinery could have its own power source, eliminating the need for line shafting and leather belts. Moreover, machines that had their own motors could be more easily re-arranged to make the flow of work more efficient. The combination of v-belts and fractional-horsepower motors proved to be too much for the leather belting industry, and sales began to decline steeply during the 1920s.

By 1927, the situation had become sufficiently alarming to motivate leading leather belting manufacturers to set up an organization to deal with the problem. On October 20, 1927 thirteen industry representatives met and drew up a constitution and by-laws. After electing officers, they organized a general meeting of the trade for the evening of December 6, 1927 at the Hotel Ambassador in New York City. The individuals that attended that meeting represented over eighty percent of the leather belting manufacturing capacity in the United States. They approved the new constitution and bylaws, and called for increased cooperation to meet the problems of outside competition.

The ALBA replaced two previous organizations, the National Association of Leather Belting Manufacturers and the Leather Belting Exchange. Both organizations disbanded themselves upon the founding of the ALBA and turned their remaining funds over to the new organization. The simultaneous dissolution of the older organizations and the founding of the ALBA, along with the transfer of funds, has led to some confusion as to the age of

the present-day organization. Although there was considerable continuity in membership between the old and new associations, the ALBA was clearly intended as a new and distinct organization, and its founding represents the origins of NIBA.

In the years following the formation of the American Leather Belting Association (ALBA) in 1927, the primary focus of the association was finding a way to combat the decline in the use of leather belting by industry. The ALBA commissioned engineering studies to support the continued use of leather, advertised the benefits of leather belting in industry publications, and worked to set industry standards for quality and pricing. However, the industry's share of the power transmission business continued to decline as sales of rubber V-belts increased.

According to some association members, the reason for this continued decline was not the inferiority of their product, but the continued lack of cooperation between ALBA members. Despite the efforts of the association, the manufactures and distributors of leather belting continued to view one another with suspicion. They focused their efforts on competing with one another, ignoring the threat posed by v-belts and direct-drive distributors. Although some ALBA members called for greater cooperation, the general prosperity of the late 1920s led to a focus on price-cutting and attempts to steal away customers from competing firms.

The attitudes of members began to change with the onset of the Great Depression. The general economic collapse motivated businesses to seek alternative solutions. By early 1933, the ALBA's members were ready to attempt closer cooperation with their fellow manufacturers. At the March 22, 1933 General Meeting, the ALBA met jointly with Mechanical Power Engineering Associates (MPEA). The MPEA had been recently founded with the objective of selling power transmission equipment on the basis of rational engineering practice.

The MPEA's work was seen as crucial for ALBA members, since they needed a way to counter the sales of individual electric motors. These motors were normally linked to machinery by rubber v-belts, drastically reducing the market for leather belting. The electrical industry had been very successful in promoting the advantages of their motors through the use of an organized campaign. In addition to direct sales, they commissioned engineering studies and encouraged the widespread publication

of test results favorable to electric power in engineering and management journals.

Of equal concern to ALBA members was that machinery manufacturers would become the primary suppliers of motors, since the electrical industry's efforts were directed at persuading machinery makers to incorporate electric motors at the factory. Since leather belting distributors normally sold line shafts and motors as well, built-in motors would cut out the distributors as middlemen and repair service suppliers.

The success of the electrical manufacturers led many ALBA members to despair. The comments of J. R. Hopkins of the Chicago Belting Company were typical. At the 1933 meeting, he pointed out that "the handwriting is on the wall - there are alternatives to leather belting out there, and belts and line shafts will be dead in ten years if we do nothing." Several other members pointed out that the industry's problems were due to leather belting manufacturers and salesmen falling down on the job. In their view, manufacturers weren't paying attention to the customer's needs, and they didn't provide a quality product. The earlier monopoly had made the industry arrogant, and it was now paying the price.

All was not gloom and doom, however. At that same meeting, ALBA members were encouraged by MPEA studies that showed that belting systems could be competitive with v-belt systems, as long as they used properly engineered subsystems, such as low-friction bearings, sorter shafts, and properly sized belts. In particular, group drives based on line shafts and leather belts were actually more economical than individual motors in most applications. This was welcome news, since it provided ammunition that ALBA members could use in their sales campaigns.

The ALBA hired their own expert, the engineer Robert W. Drake, to prepare a series of reports to help members demonstrate the economic advantages of leather belting as a power transmission system. Drawing on the work done by the MPEA, Drake put together a series of pamphlets on the design and costing of leather belting installations. In order to distribute them, ALBA members set up local clubs, informal meetings in large cities, where information on how to use these new engineering studies to sell drives was distributed. Over twenty clubs were established by mid-1933.

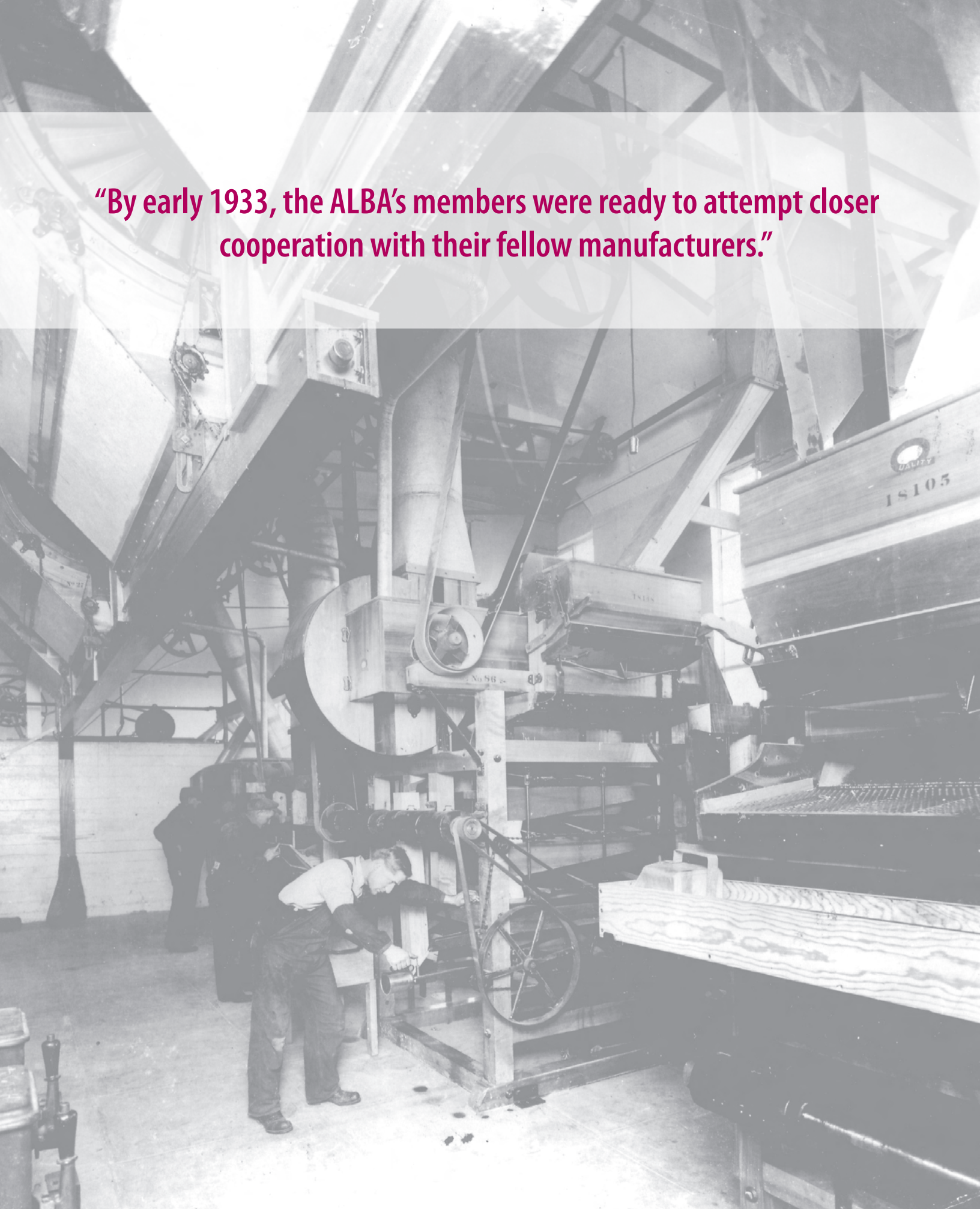
These voluntary efforts to improve the position of their industry were soon swept aside by the coming of the New Deal. At the June 2, 1933 General Meeting members began to discuss ALBA participation under the National Industrial Recovery Act (NIRA). Initially there was a great deal of concern about the impact on work hours and wage rates, but after some discussion members decided that this was not as thorny an issue as they had first thought. The prospect of setting up an industrial organization that would allow for cooperation normally forbidden by anti-trust laws proved to be too good to pass up, and concerns about government regulation were tempered by the hope that cooperation would eliminate a great deal of worrisome competition.

A questionnaire had been sent to members about the Recovery Act before the meeting, and most had responded that they would cooperate in a voluntary association to set prices. As a result, the members at the meeting voted to set up a voluntary association under the NIRA to regulate their industry. It passed unanimously, despite the fact that the NIRA had not actually been signed into law at the time.

In September of that year, the ALBA met together with the Chicago Power Transmission Club, one of the units of Mechanical Power Engineering Associates. The primary focus continued to be on the implementation of the NIRA. The editor of the trade journal "Electrical Age" addressed the meeting, and pointed out that, due to the Depression, the main sales prospects over the next several years were going to be in re-tooling existing plants, rather than equipping new plants. He suggested a strategy of coordinated selling, based on the fact that individual items of equipment will not increase efficiency, but that combining re-engineering with new equipment would. In the discussion that followed, there was general agreement that the way to sell was to stress economic efficiency, appealing to the buyer's self interest.

The ALBA actively cooperated with the federal government to establish regulatory policies that would favor the leather industry. The association helped draw up the "Code of Fair Competition for the Leather Industry," and ALBA members participated in administering the code. As a result, wages and prices stabilized, and conditions for most members improved. Even so, leather belting's total share of new construction declined - the ALBA was unable to counter the sales campaign run by the v-belt and electric motor manufacturers. The industry survived in large part because uncertain business

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conditions meant that many firms retained their old machinery, preserving the replacement market for leather belts and repair parts.

Ironically, it was the boom in new construction fueled by World War II that would restore the fortunes of ALBA members, at least temporarily. Due to shortages of rubber and copper, leather belting was able to retain a large market share during the war years. Leather producers experienced shortages as well, but were in a better position than v-belt makers. During the war, the ALBA participated in the industrial rationing program developed by the federal government, helping to plan production and allocate the limited supply of leather to industry. The production boom helped the organization's budget - the annual budget rose from under \$3,000 in the mid-1930s to over \$23,000 in 1942, and continued to rise during the war years, reaching \$71,000 by 1945.

The expansion of the ALBA to include manufacturers of leather packing materials in 1944 and textile leather in 1948 was due to the same pressures that led to the formation of the ALBA in the first place. Just as the ALBA was formed in response to the competition from rubber V-belts, manufacturers of leather packing materials were responding to growing competition from a new technology. The increasing use of rubber O-rings in industry rendered obsolete many traditional applications of leather seals. Leather packing manufacturers saw the ALBA as a model for how to counter this competition, and so joined the ALBA in the hopes of reversing their industry's decline.

Although textile leather manufacturers were less explicit about the reasons they joined the ALBA, it appears they also were concerned about growing competition from new man-made products. The primary market for textile leather was for parts used in looms and other textile machinery, and in the late 1940s synthetic materials were just being introduced for these applications. Having seen what had happened to other leather manufacturers, the textile leather manufacturers no doubt wanted to get an early start on defending their market. Their primary motivation was the success of the leather packing division, a success they hoped to duplicate.

During and after World War II, the ALBA concentrated on three activities. First, they attempted to establish industry-wide size and performance standards for leather products. Second, they commissioned engineering studies of leather products. Finally, they sought to educate their customers about the results of the first two activities by publishing handbooks and sponsoring

lectures and meetings. Although the organization occasionally engaged in other work, such as an industry-wide survey of overhead costs undertaken by the packing division in 1951-52, these three efforts were the primary focus.

By the early 1950s, the efforts of the ALBA appeared to be paying off. Sales declined somewhat with the end of World War II as part of a general economic slump, but with the coming of the Korean War in 1950, sales increased markedly. The packing division was particularly successful - sales more than doubled during the Korean War, and continued at near-wartime levels through the late 1950s. The textile leather division was also able to maintain sales of their members' products. This accomplishment is all the more remarkable in that the association's annual budget declined after the war, reaching a low of \$36,000 in late 1940s.

Leather belting, on the other hand, continued its long decline. After peaking in 1941, total sales of leather belts dropped almost every year thereafter, increasing only briefly in 1950 and 51 in response to the Korean War. By the late 1950s, sales were one-third what they had been in the early 1940s.

The inclusion of the textile leather and packing groups, along with manufacturers of mechanical leather, eventually led the ALBA to change its name in 1954 to the National Industrial Leather Association (NILA). The name change had been discussed as early as 1943. It is unclear from surviving minutes why the change took so long, but it may be related to the fact that the association gained non-profit status in 1954, the same year as the name change. The name change was not related to any changes in the association's mission. The NILA continued to do the same things as the ALBA, concentrating on education and the dissemination of engineering data that would help sales staff to do their jobs.

Despite the best efforts of the NILA, sales of industrial leather products declined after the late 1950s. The decline was largely due to the availability of competing products. After the Korean War, military demand declined, and the price of rubber dropped. Rubber manufacturers also introduced new formulations, including a variety of synthetic and fabric-reinforced products. These new products allowed them to compete with leather in new markets, including textile machinery parts and high-pressure packing materials.

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The NILA attempted to counter these new products by sponsoring engineering studies that showed the superiority of their products for engineering applications, in much the same way the ALBA had sponsored engineering studies of leather belting. Their efforts were frustrated, however, by the constant improvements made by rubber and synthetic fiber makers, who were able to change the chemical composition of their products. Leather product makers, limited by the unchanging composition of their raw material, were unable to compete. They saw their sales decline all through the 1960s, despite the growth in the economy in general.

By the early 1970s, it had become clear to NILA's leadership that leather was a declining industry. According to J. J. Keating, then chairman of the leather belting division, “talking about increasing sales or expanding markets for leather belting was a hopeless cause.” As a result, he and others decided to expand his division to include producers of synthetic belting. The belting division quickly became the most active within the association, and by 1976, the leather products manufacturers were subsumed within the newly created National Industrial Belting Association (NIBA).

The expansion to include rubber and synthetic belting revitalized the organization. The increasing market for flat belts, driven by an expanding retail sector which used belting for warehouse sorting systems and retail sales stations, meant that these firms were willing to participate in an industry-specific organization. Coupled with expanding industrial applications for flat belting for use in processing, the size of this new industry allowed it to soon dominate NIBA, reducing leather manufacture to a small sidelight for the association.

The 1976 name change also led to a change in the primary focus of the association. As leather became a smaller and smaller part of the association's concern, sponsorship of research and dissemination of the results were discontinued. The association increasingly concentrated on providing information to its members about business conditions, changes in labor and environmental law, and management theory

and technique. Although these activities had always been a part of the association's work, they assumed new importance as the defense of leather's market share became irrelevant. These changes were reflected in the nature of annual meetings. Speakers were increasingly drawn from universities, government agencies, and consulting firms.

In the mid-1980s, the association initiated an effort to resolve conflict between manufacturers of belting materials and their distributors. NIBA surveyed its members about problems they had experienced and distributed the results in an effort to improve communications. The association also initiated a program at the 1982 national meeting called “conference booths,” where distributors could meet with senior manufacturers' representatives to question them about their plans and policies. These measures went a long way to reducing conflict within the organization.

NIBA experienced continued growth in the late 1980s, especially in attendance at national meetings. During the same period, the association changed the contractor it used to run its everyday operations. The firm of Fernley and Fernley, under contract since 1975, was replaced by the Management Association of Illinois (MAI) in 1988. As part of the shift, NIBA changed its state of incorporation from New York to Illinois. MAI initiated a number of changes, the most notable of which was the increasingly professional appearance of NIBA's newsletter, the Belt Line.

NIBA also became more active in the area of education. The association established a scholarship program for students in college industrial distribution programs, awarding the first scholarship in 1990. The scholarship fund also initiated two scholarship programs—for children and for employees of NIBA Distributor/fabricator members--and as of 2007 has awarded 40 scholarships.

For its members, the association began to videotape its technical seminars and offer them for sale. It also commissioned the preparation of training videos for use by its members. These





materials were designed to supplement the traditional engineering handbooks and instruction manuals.

One major change in written materials published by NIBA during the 1980s and early 1990s was a marked increase in the number of publications that addressed business issues. In particular, NIBA began to publish and distribute information on government regulations and changes in workplace-related laws. Belt Line also increasingly carried articles related to business practices and government regulation, rather than technological or sales-related matters. This reflected membership's increased concern with these issues.

In 1993, the board of directors initiated a new effort to expand membership. A five year plan was adopted that called for ten percent membership growth per year. As part of this effort, the association's bylaws were changed to allow manufacturer member employees to serve as officers, and a new category of international membership was created for firms from outside the North America. The board also called for increased efforts to recruit end users as members, and the establishment of industry standards for belting.

In 1994, NIBA changed its management contract again and NIBA now makes its headquarters in the Milwaukee suburb of Waukesha, Wisconsin. In 2001 NIBA changed its name to NIBA-The Belting Association to reflect the increasingly global nature of our association and of the belting marketplace.

NIBA products have evolved into current media as new training aids are developed. The NIBA web site came on line in 1999 with a Members Only section featuring technical resources, belting formulas, past Belt Lines, and much more. NIBA takes its show on the road with training seminars in various parts of the United States, bringing current belting training to our members.



The historical developments of NIBA and its predecessors reflect a constant effort to cope with change, both social and technological. The response to the decline in leather belting sales by sponsoring engineering research, the willingness to incorporate first other leather product manufacturers and then synthetic belting manufacturers, and the more recent efforts to provide information on government regulations and the recruitment of members outside of North America, all demonstrate the inherent flexibility of the organization. The continued survival and growth of NIBA reflect its ability to adapt itself to new missions and to serve its members as a valued and valuable association. Continued flexibility will no doubt be necessary for future success, but if past performance is a guide, NIBA will be ready to meet the challenge.

Photos courteous of Hagley Museum and Library in Wilmington, Delaware.



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