



Loctite Corporation—International Distribution

In December 1992, the senior management of Loctite Corporation was reviewing the company's international distribution policies in the light of a recent decision to acquire an equity interest in their Hong Kong distributor. Worldwide distribution capability had been a key element in the corporation's achievement of global leadership in the chemical adhesives industry. Loctite had a range of relationships through which it accessed international markets, including export agents, distributors, joint ventures, and wholly owned subsidiaries.

Chairman and CEO Ken Butterworth, a 17-year Loctite veteran who had once worked for Loctite's Australian distributor, was continually looking to open up new markets with potential. With economic recession limiting growth in Loctite's core North American and European markets, expansion in the Asia/Pacific region was a key strategic goal. Butterworth was discussing the company's Hong Kong options with David Freeman, president and COO, an Englishman with an 18-year Loctite career, and Martin Wiley, an American who had worked for the company for 30 years and was now regional manager for the southern half of Loctite's Asia/Pacific operations.

Company Background

Founded in 1956, Loctite Corporation, headquartered in Hartford, Connecticut, had grown to become the world's leading manufacturer and marketer of adhesives, sealants, and related products. During the 1980s, it had enjoyed impressive growth; net sales had increased from \$228 million in 1983 to \$608 million in 1992, and net earnings had grown during the same period from \$22 million to \$72 million. The 1992 balance sheet showed total assets of \$557 million, stockholders' equity of \$383 million, and long-term liabilities of \$36 million. The company had achieved *Fortune* 500 status in 1990, and in 1991 was ranked 477 in revenue, 190 in profits, 24 in profit as a percentage of sales, and 18 in per share annual growth over the previous decade. (**Exhibit 1** summarizes Loctite's income statements from 1990 to 1992.) By 1992, the company estimated its worldwide market share in industrial adhesives at 70%-80%.

As stated in the 1992 annual report, Loctite's growth had been based upon a "strategy of promoting diversity in end use markets and geographies for our core business; diversification into new businesses in which senior management has little expertise is not part of our strategy." This core business remained the sale of chemical adhesives to industrial users who had previously used mechanical fasteners such as screws and bolts; industrial chemical adhesives and sealants accounted for 50% of corporate revenues in 1992. From this base, Loctite had expanded into related markets in the 1970s, such as the automotive aftermarket, an entry built upon the acquisition of Permatex. In the mid-1970s, Loctite had also entered the consumer adhesives market and grew this business through

Doctoral Candidate David J. Arnold prepared this case under the supervision of Professor John A. Quelch as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

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acquisitions, principally the purchase of Woodhill Chemicals. More recently, Loctite had also expanded its technology base through the acquisition of silicone and polyurethane companies, and in 1990 had acquired a U.S. company selling hand-cleaning products, seen as a natural complement to adhesives and sealants.

Geographical expansion had begun early in the company's history. By 1992 Loctite had equity positions in operations in 33 countries outside the United States—with third-party distributors in other countries—and almost 60% of sales and 70% of earnings were derived from operations outside the United States.

Organization

Loctite was organized into four regional groups: North America, consisting of the United States, Canada, and Mexico; Latin America, consisting of all countries south of Mexico; Europe, which included the former Communist bloc countries and was also responsible for operations in the Middle East and Africa; and Asia/Pacific, stretching from Korea to Australasia and as far west as India. Within these regions, operations were organized into three business groups: the industrial market, including original equipment manufacture (OEM) and maintenance, repair, and overhaul (MRO) customers;¹ the retail and consumer markets; and the automotive aftermarket.

Organization structures varied by region. The president of North America headed a functional organization with no country managers, as the United States, Mexico, and Canada were viewed as a single market and divided into 12 sales regions (one of which, for example, spanned the U.S.-Canada border). These regional sales managers reported to a vice president of sales in Hartford. In the three other regions, country managers with profit responsibility reported to regional management, who also sometimes had regionwide responsibility for a line of business. For example, the vice presidents of northern and southern Europe, based in Munich and Milan, were also responsible, respectively, for development of Loctite's industrial products and consumer products throughout the entire European region. On a more informal basis, Loctite's two vice presidents of Asia/Pacific, based in Hong Kong and Tokyo, had complementary sales and technical backgrounds that helped them jointly develop business in the region. A limited number of functional managers also had regional responsibilities, such as the vice president of manufacturing in Europe, based in Dublin near the major Irish plant, and regional marketing managers, who provided guidance to and transferred best practices among marketing managers in Loctite's subsidiaries and distributors. (**Exhibit 2** depicts Loctite's organization structure as in 1992, and **Exhibit 3** gives a breakdown of employees by region.)

The corporation was run in a decentralized fashion, with only 56 people in the Hartford headquarters office. Direct reports to Butterworth and Freeman, besides the regional managers, included the heads of various corporate staff groups and New Business Development (NBD). The primary role of NBD was research and development, from basic chemical research through product development. There were no corporate marketing managers, as Butterworth believed that "marketing belongs at the coal face." Planning was a bottom-up process, which required national units to present their detailed plans annually to visiting corporate staff, usually either Butterworth and/or Freeman. Drawing on their years of experience at Loctite and their knowledge of other markets, they were able to challenge and refine the plans. Butterworth acknowledged that these sessions could be "brutal," but he always ensured that his visits incorporated customer meetings and

¹Original equipment manufacturers (OEM) made products for sale as new items, either under their own brand name or those of third parties. Maintenance, repair, and overhaul (MRO) organizations were service businesses offering after-sales support to maximize the performance of the products. The automotive aftermarket, an industry built around the service and maintenance of motor vehicles, was an MRO market, although it was of sufficient importance to Loctite to merit its own business group.

social functions which ensured a strong enough relationship between headquarters and the field that the latter could accept his challenging management style.

Product Line

Loctite's strategy was to offer a full range of adhesive and sealant products to meet the different needs of a broad range of customers: as stated in the 1991 annual report, "Loctite generally does not rely on blockbuster products. . . . We tend to have more application-sensitive products, each of which requires specific marketing focus to introduce." Technical leadership in product development was key to Loctite's success. In 1992, the company spent 4% of its revenue on R&D at facilities in Connecticut, Ireland, and Japan. Loctite sought to derive a minimum of 25% of its annual revenues from products launched within the previous five years.

Loctite sold three principal product lines: anaerobic adhesives, which accounted for 28% of corporate sales in 1992 and were sold exclusively in industrial markets; cyanoacrylates (CAs), which sold in both industrial markets (15% of sales) and consumer markets (18% of sales); and silicones (12% of sales). Loctite also sold adhesives and sealants based on other technologies, such as the epoxies used to bond microchips to circuit boards. Other revenues were derived from hand-cleaning products, which Loctite had recently introduced in several countries under the Fast Orange brand name, and a variety of dispensing equipment which Loctite had developed for its products, ranging from simple hand-held guns or rollers to complex assemblies such as screen-printing devices which could fit into computer-controlled assembly lines.

Anaerobic adhesives were the "family crown jewels," the technology on which the company had been founded in 1956. They were stored and dispensed in liquid form, but self-hardened into tough plastics as soon as they were deprived of air. Originally developed to bond cylindrical metal parts (such as a bolt to a nut), they were later employed in a wide range of applications such as engine housings and bearings. The benefits of anaerobics compared to mechanical fixings were fourfold:

1. *Cost savings.* Unlike mechanical fixings, aerobic retention was not dependent upon the precision with which the parts were engineered, and so allowed manufacturers to achieve savings on components.
2. *Speed of assembly.* The application of the adhesive was simple and fast compared to mechanical fixings. By switching from mechanical fastenings to chemical adhesives, Westland, the U.K. helicopter manufacturer, reduced assembly time for each of the 200 bearings in its Lynx aircraft from 10-15 minutes to 2 minutes without any modification of the parts involved.
3. *Strength in service.* However fine the tolerance to which they were engineered, the two or more parts of a mechanical fixture could be in contact only at their high points, typically 25% of the surface, leaving what Loctite referred to as "inner space." The liquid anaerobic adhesive, by filling all this space, provided 100% surface contact, resulting in a stronger fitting, less wear in use, and lower maintenance requirements.
4. *Leakproofing.* Since total surface fit eliminated the leakage of liquids or gas, an anaerobic could act as a sealant and improve the performance of an assembly. Vibration and other wear caused by leakage of liquids or gas could also be eliminated, reducing maintenance requirements.

CAs set faster than anaerobics but were less tough and durable. Suitable for a wider range of applications and materials beyond metal-to-metal fixtures, they were also sold to consumers as

instant general-purpose adhesives. The first CA had been introduced by a division of Eastman Kodak in 1958, and during the 1960s Eastman sold CAs to Loctite for repackaging. Loctite developed its own manufacturing technology in 1971 and, by 1978, was believed to have exceeded Eastman's share of the North American industrial CA market. Loctite's consumer CA brand, Super Glue, had grown to become a major player in selected markets around the world, although it faced tough competition from several international brands such as the world leader, Krazy Glue, manufactured by Toagosei of Japan.

Silicone products had been added to the product line in the late 1980s as part of Loctite's strategy of broadening its technology base. Sold exclusively in industrial markets, they were used for a range of applications complementary to the rigid plate fixings for which anaerobics were best suited, such as coating, sealing, lubricity, thermal conductivity, and electrical insulation. They were particularly important in "formed-in-place" gaskets (where their leakproofing qualities outperformed traditional materials such as metal or rubber) and in electronic manufacturing (for example, in the protection of electronic components on a printed circuit board).

Product formulations were, with few exceptions, identical in all markets and countries. Packaging was more variable and was customized to individual markets, with the Irish packaging plant able to print packages in 62 languages with low changeover costs. In line with Loctite's strategy of focus in product range and diversity in markets and geography, local salespeople were encouraged to adapt their communications messages to individual customers.

Sales Mix

The sales mix of Loctite products varied from one country to another, although Loctite's business was always based upon the core industrial product lines of anaerobics and industrial CAs. Freeman commented, "We will only enter the automotive aftermarket and/or consumer markets when a base of business has been established and profitability achieved in the industrial market." In Loctite's more mature American and European operations, the sales mix covered the entire Loctite product range. A typical distributor in these mature markets carried approximately 100 stock-keeping units (SKUs), consisting of various sizes of some 30 Loctite products. Around 25% of SKUs were common to virtually all distributors and these typically generated at least 50% of a distributor's sales. Having built its business on these core products, a mature market distributor then expanded its range of Loctite products according to the type of customer industries it served. In many less-developed markets, by contrast, Loctite was still building its core industrial business.

Loctite's sales mix was also broadly based in terms of customers, with no one end user in the United States accounting for more than 1% of corporate sales, and no North American distributor accounting for more than 10%. While some of the sales mix variation was due to inherent differences in market potential and stage of economic development, Butterworth also believed it was due to the differing skills, experience, or contacts of distributors which resulted in their focusing on one or two of Loctite's product lines at the expense of others. Experience gained in industrial markets, for instance, had seldom proved transferable to the building of a consumer business. In total, 18% of Loctite worldwide revenues in 1992 were from nonowned operations outside North America, consisting of 12.5% from joint ventures and 5.5% from independent distributors. Ten years earlier, independent distributors had contributed approximately one-third of revenues.

The greatest variation in sales performance was in consumer markets. In 1992, for instance, consumer product sales represented only 6% of revenues in North America, where Super Glue ranked second in market share, but were considerably higher in Europe, which accounted for over 60% of worldwide sales of Super Glue. Loctite's worldwide market share in consumer instant adhesives was 20%-25%. In markets where Loctite had been the first to launch consumer instant adhesives, or where a distributor had invested substantially in building a consumer business, Loctite was the market leader; Brazil and France were the primary examples. In many other countries,

Loctite faced more intense competition for consumer product sales and could not easily afford the investment required to build a consumer brand franchise through advertising.

Despite its dominant worldwide share in industrial adhesives, Loctite believed its products had achieved only limited penetration of the available market. Mechanical engineers were generally untrained in the chemistry of adhesive technology and relied by a three-to-one margin on the traditional mechanical fastening approaches in which they had been educated. These prospective customers often rejected an initial Loctite sales approach by declaring that they had no need for chemical adhesives. Loctite's marketing and sales efforts, therefore, focused on educating both distributors and end users in the properties of its products through seminars, product videos, and product demonstrations at end user premises. Another problem was that prospective customers often regarded adhesives or fastenings as the least important components of their products. Wiley commented, "Selling industrial adhesives is like selling salt to restaurants." Butterworth believed that Loctite had to work hard on changing its image from a glue company to that of a high-technology company; in 1992 he had approved a partial three-year sponsorship of a Lotus Formula 1 racing car, which incorporated some Loctite products in its assembly.

Loctite faced few direct competitors, and none held more than a 5% share of the world market for industrial adhesives. Major competitors were National Starch, a Unilever subsidiary, which marketed under the Permabond brand name; the German chemical company Henkel; and, more recently, the Japanese Three Bond Corporation, which competed in both retail and industrial markets in Japan but in only industrial markets in North America. 3M had entered the CA market but had withdrawn in 1983. These competitors invested only a fraction of what Loctite invested in R&D. Each offered a narrower product line than Loctite, focusing either on a single adhesive technology or on products for a specific vertical market such as electronics. Most competitors simply copied Loctite products and sought to recruit employees of Loctite and its distributors.

Distribution in North America

By 1992, Loctite products were available through approximately 1,600 outlets across North America. Distributors ranged from single-outlet distributors to Loctite's largest customer, Bearings Inc., with some 260 outlets. The value of Loctite ex-factory sales to these distributors approximated \$70 million in 1992. The average distributor margin was 30%-35%.

Loctite was represented in only a small proportion of the 50,000 potential outlets for its products in North America. Loctite believed that selective distribution allowed it to provide a superior level of service to its end customers while still achieving sufficient market coverage. Loctite devoted considerable effort to the selection of distributors. The process began with Loctite surveying the number of manufacturing plants, their sizes and lines of business in a given region, and calculating the sales potential. Selected potential end users of Loctite products were often researched as to their preferred suppliers, and a number of potential distributors was identified. The criteria for appointment as a Loctite distributor included the mix and type of the distributor's existing customers, other lines carried, creditworthiness, and any previous contacts with Loctite. It was Loctite's policy to have two or three distributors covering any market, so that end users had a choice of suppliers.

The low level of knowledge of adhesive technology among many end users was reflected at the distributor level, and in its early years Loctite had to persuade potential distributors to carry its line. Although the company's success in the 1980s meant more distributors applied to carry the Loctite line than the company needed, Loctite continued to provide more support to distributors than that offered by any other competing supplier. Support included training of the distributor's inside and outside salespeople, demonstrations of new products in Loctite seminars, and extensive merchandising aids such as item selection charts and case histories of applications in different industries. A typical distributor employed one or two outside salespeople and four or five counter staff; Loctite usually targeted two of them for intensive product training. Loctite also undertook joint

sales efforts with each distributor and ran seminars at end users' premises, hoping that, eventually, the distributor would learn enough to be able to run such seminars independently.

Distributors could expect attractive returns. Although Loctite products represented only 2%-5% of turnover for most distributors, their distributor margin of 30%-35% was 50%-100% higher than the average margin for the other products they carried. In addition, inventories of Loctite products turned over two to three times faster than most other distributors' product lines. While some of these distributors carried competitor adhesives in product lines which Loctite no longer covered—such as epoxy resins—they rarely carried directly competitive products in Loctite's categories.

These factors had resulted in a stable network of distributors. Of the 1,600 outlets, some 1,400 had been Loctite distributors for at least 10 years, with most of the growth in the 1980s coming either from additional appointments in areas that were insufficiently covered, or from the acquisition of new outlets by existing Loctite distributors. It was rare for a distributor to choose to leave the Loctite network, and only occasionally did Loctite have to dismiss a distributor. The company anticipated some broadening of its distribution in North America to approximately 1,800 outlets by 1996, while maintaining its selective distribution strategy.

The two largest categories of distributors were bearing distributors, serving engineering and equipment manufacturers, and general mill suppliers which offered a wide range of product lines to factories, from industrial clothing to nuts and bolts. Both served a broad base of customers. A few distributors served only specific vertical markets, such as automotive, oil, or electronics firms (although electronics customers were increasingly served by general distributors).

The Loctite North American sales force which served these industrial distributors was organized into 12 regions. Given the differences in buying patterns across Loctite's three product-market sectors, some salespeople within each region specialized in areas such as OEM when justified by the volume of business. Direct sales to large end users were managed by specialist sales representatives who reported to a national sales manager. In 1992, direct sales represented 40% of the industrial business in North America. This figure included some drop shipments, whereby Loctite delivered large orders direct to end users who were established customers of a distributor and paid the relevant distributor 10% of the end user price.

Working alongside the sales organization were six market managers, based in Connecticut and reporting to the vice president of marketing. The six markets were automotive, electronics, other OEM, maintenance, automotive aftermarket, and consumer retail. There were plans to consolidate the North American business into a single organization in Connecticut rather than continue to have efforts directed at the consumer retail market and automotive aftermarket run separately from Cleveland, Ohio—the preacquisition base of Woodhill.

A more intensive distribution strategy was adopted for the maintenance market, in which applications were less complex. For this market, Loctite products were available through some 5,500 outlets under a separate brand name, Permatex. When distributors applied to represent Loctite products in geographical areas that Loctite already covered sufficiently, they were often encouraged to take on the Permatex line instead. There was minimal overlap between the two sets of distributors: the 1,600 industrial distributors could stock the more widely available Permatex products, but the 5,500 maintenance outlets could not carry Loctite-branded products. Cannibalization between the two lines was minimal.

Loctite's International Development

In the late 1950s, Loctite began its international growth with opportunistic export sales to Canada, Australia, and the United Kingdom. Some shipments were also made to Japan under licensing agreements. This international business soon grew to the point where Loctite had to

appoint national distributors who, as principals, bought product from Loctite for resale. During the 1960s, expansion continued into Europe: a French distributor was appointed, along with two in Germany—one for anaerobics and one for CAs. All overseas sales were of exported products, until the establishment of manufacturing plants in Ireland and the Netherlands in the late 1960s. International expansion was also accelerated by acquisitions; for example, joint ventures in Australia, Chile, and Venezuela came with the Permatex acquisition.

In the early 1970s, Loctite began acquiring equity interests in its distributors. This process began in Europe, with the establishment of the corporation's first joint venture in Belgium and the acquisition of distributor companies in the United Kingdom, Spain, and Italy. By 1992, Loctite's international operations consisted of a portfolio of wholly owned subsidiaries, joint ventures, and distributorships (see **Exhibit 4**). In most cases, Loctite's penetration of a country market began with a relationship with a distributor, followed by an increasing stake in the business and eventual Loctite ownership. All joint ventures and wholly owned subsidiaries had evolved from Loctite's relationships with third-party national distributors. (**Exhibit 5** shows Loctite's equity transactions in international operations for 1985-1992.)

In 1992, the North America and Europe regions each accounted for approximately 40% of sales, but Europe contributed 50% of earnings. (**Exhibit 6** summarizes financial data by region.) In 1992, an economic recession across much of Europe meant that slower growth was anticipated than in the 1980s. Wholly owned Loctite subsidiaries generated 97% of the company's European sales, the balance coming from distributors and joint ventures. Asia/Pacific sales depended heavily on automotive and electronics manufacturers in Japan, where sales had declined sharply in 1992. Growth in newer markets had offset this downturn, and these were expected to be the basis for the growing importance of the region in Loctite's global strategy. In 1992, 85% of Asia/Pacific sales were derived from wholly owned Loctite companies. In Latin America, 82% of sales were from wholly owned companies, 68% of sales were made in Brazil, and economic development and market conditions varied widely among countries.

The decision to enter a country typically began with an assessment by Loctite management of the market potential. There were several ways to identify potential distributors or partners. The most important, as in North America, was discussion with potential end users of Loctite products—typically, 10 or more manufacturers were approached and questioned about their preferred distributors for factory supplies. A second method was to obtain recommendations from Loctite distributors in neighboring countries, who often knew the major regional distributors of imported industrial supplies. Third, the distributors of complementary product lines, such as Borg Warner products, were identified. This three-pronged initial search would typically surface three to six potential distributors, with whom discussions would then ensue. The whole selection process from assessing a country's market potential through to appointment of a distribution partner typically took one to two years. Although Loctite preferred distributors who had previous experience of distributing imported products, there were few other criteria regarding the most suitable type of business. In Taiwan, for instance, the appointed distributor was a large conglomerate operating many businesses besides distribution, whereas the distributor in Indonesia was a smaller, family-owned business.

Loctite usually granted a new distributor exclusive rights in its territory and provided extensive support. After initial product and sales training, Loctite sales personnel continued to visit a distributorship at least monthly, while senior regional officers visited at least quarterly. Butterworth and/or Freeman also visited every international distributorship and subsidiary for a business review at least once a year. This review would also be the basis for deciding whether a distribution contract would be renewed. Typically, contracts were open-ended rather than for fixed terms, with Loctite reserving the right to give six months' notice of severance if performance was significantly below agreed-upon sales and/or profit projections (exceptions could be made for extraneous factors such as a recession in the national market). The right to terminate a distribution contract had rarely been exercised. Freeman believed that, in the past, Loctite had sometimes been too supportive of

underperforming distributorships but that many of the problems encountered might have been avoided with earlier and preventive intervention by Loctite management. Freeman commented:

The prime message we convey to distributors is the importance of pricing to value. It's difficult for many international distributors to understand what they regard as high Loctite prices. Instead of assessing the value of our products to the customer, they are tempted to set margins and prices low, as they do for the other products they carry, such as bearings, where price competition is fierce. We've learned that our support is necessary early in the relationship to help them adapt to this way of selling.

Loctite regarded sales growth as the most important performance measure in evaluating distributors. Freeman explained:

In most international markets the business potential is not a constraint to growth, as chemical adhesives and sealants have little or no penetration, and mechanical fixtures are still dominant. A good distributor in Asia/Pacific, for instance, might be able to grow the business by 35%-40% annually, and we would expect a minimum of 10%-15%. The main reason why France is our second-largest market is not because it has greater potential, but because over a long period the distributor reinvested a large proportion of his profits back into growing the business.

Once a distributor had established a profitable business in the industrial market, Loctite regional managers would help the firm identify opportunities for growth by reviewing the range of applications for which Loctite products had been successfully employed in other countries. These case studies of vertical industry marketing programs would be introduced by regional sales management and by distributors from one country visiting another and reporting directly on successful initiatives they had undertaken. From surveys of the potential customers for these new applications and experience in other markets, Loctite managers were able to advise the distributor on potential sales volumes.

In many cases, slowing sales growth had stimulated Loctite's acquisition of equity stakes in international distributors. "Once a core business is established, it's tempting for a distributor to sit on the higher margins which Loctite products give him," commented Butterworth. Loctite also believed that many distributors found it difficult to execute the complex sales approach required for its products. In a country where double-digit sales growth was maintained, Loctite was content to continue to serve the market through an independent distributor. Historically, however, Loctite always managed to accelerate sales growth after taking an equity interest in a distributor.

Loctite had recently introduced two mechanisms for global management. The first was the appointment of multinational account coordinators for international customers. Based in the home country of a multinational, these managers were responsible for keeping distributors worldwide informed of their customer companies' plans and operations, and coordinating prices across country markets. A national distributor would be given a price range for a multinational customer by the account coordinator. This ensured that the subsidiaries of a company such as Seagate Technology, with R&D in California and manufacturing in Singapore and Malaysia, would be able to receive roughly equivalent prices no matter where Loctite products were procured, as well as a uniform worldwide service. In turn, each multinational account's profitability could be assessed worldwide. By 1992, about 25 accounts were managed in this way, representing approximately 5% of corporate sales, although the percentage was as high as 25% in markets such as Singapore and Malaysia. (**Exhibit 7** shows a brochure produced by Loctite's Japanese multinational account coordinators describing their role.)

A second Loctite coordination initiative was the establishment of three global task forces, one for each business area. Each task force included vice presidents from each of the four regions and met four times a year. Their main function was idea transfer across regions; the Industrial task force, for instance, was helping Loctite's European operations develop its electronics business, which had not grown as fast as in other regions. The task forces were also a vehicle for improving worldwide coordination of branding, packaging, and pricing of Loctite products.

Europe

Loctite gained most of its early experience of joint ventures and subsidiaries in Europe. Butterworth had managed Loctite's European operations in the 1970s out of a regional office in Paris which had been closed during the recession of the early 1980s. By 1992, the corporation had acquired all of its European operations except those in Switzerland, Portugal, Sweden, Denmark, and Finland, which continued as independent distributors, and in Norway, where Loctite owned 51% of a joint venture.

The evolution of the French business was typical. The French distributor had learned about Loctite products in the early 1960s as a result of an existing relationship with the company that served as Loctite's U.K. distributor. By 1979, the French distributor had grown the Loctite business to a point where it was established as a company in its own right. This opened the door for Loctite to buy the whole business, not just the franchise, but during the early 1980s the franchise plunged into loss as it attempted to develop the consumer market for instant adhesives, despite the fact that its key managers had experience serving only industrial markets. In 1986, Loctite acquired a 50% stake with an agreement to purchase the remaining 50% five years later, which it duly did according to a pre-agreed-upon formula. By 1992, France was the second-biggest market after the United States, with a strong consumer business. The original French manager, and most of the employees, were still in place two years after the change of ownership.

The distributor relationship had a less happy ending in the Netherlands, where the local distributor of 20 to 30 years' standing refused to sell Loctite any stake in its business. Loctite wanted to establish a single company covering the three Benelux countries (Belgium, the Netherlands, and Luxembourg). The original contract imposed stiff penalties on Loctite for withdrawing its franchise. In addition, the Loctite distributor successfully contested a noncompete clause in the Dutch courts and had it reduced from five to two years. By 1992, the former distributor was carrying a competitor's product line.

Loctite was seeking to establish itself early in the former Communist bloc countries of Eastern Europe, but was following a different approach to achieving distribution. In the 1980s, Loctite had developed export sales to these countries, working through a network of contacts ranging from the government agents who administered hard foreign currency purchases, to engineering academics involved in manufacturing process development. Following the collapse of Communism, the countries assessed as having the greatest potential were Poland, Hungary, and Czechoslovakia, since their economies relied to a greater extent on conversion or assembly technologies, whereas the economies of the former Soviet republics were based more on natural resources and raw materials. In each of these three countries, representative offices were established in 1990, headed by one of Loctite's previous contacts and typically supported by two local Loctite-trained sales engineers. All were full-time Loctite employees, able to supplement their salaries with bonuses based on sales performance. These representative offices carried minimal inventories; their orders were processed through Loctite's Vienna warehouse. Loctite planned to form full subsidiaries in these countries as soon as possible.

Latin America

Loctite attempted to minimize its capital investment in Latin America, serving all Central American countries from its subsidiary in Costa Rica and concentrating its South American regional management staff at its Brazilian subsidiary in Svo Paolo. The Latin American business had been strongest in the automotive aftermarket, with more recent success in consumer markets—the same number of tubes of Loctite Super Glue were sold to consumers in Brazil as in the United States. By 1992, corporate and regional managers were pushing local distributors to develop the factory maintenance market.

Loctite's experience in Argentina reflected a problem common to more regulated, emerging economies. Though small in annual sales, the Argentinean distributor had access to Loctite's technology as a result of the establishment of a local manufacturing plant in 1975, which government regulations at that time required Loctite setup to enter the market. When Loctite bought out the distributorship in 1988, the head of the company left and set up a plant in direct competition with his former partner.

Asia/Pacific

Although Loctite had long been active in Asia/Pacific, acquiring its joint venture distributors in Japan and Australia in the mid-1970s, penetration was still low in this region, partly because most of Loctite's investment in international expansion to date had concentrated on building business in Europe. Historically, Loctite had appointed agents in Asia/Pacific countries for whom Loctite's business typically represented a third or more of sales and a higher proportion of profit. In recent years, with more attention focused on the region, Loctite had reconsidered its approach to distribution.

In the 1980s, Thailand, Taiwan, and Korea had been identified by Loctite as especially attractive markets. After extensive search processes, distributors were appointed in each of the three countries, but sales growth over the first two years proved disappointing in all three cases. After several visits to the distributors, Butterworth concluded that the problem lay in a lack of familiarity with the sales approaches required for Loctite products and the operating policies of the company. "In North America, Europe, and Australia, we were able to appoint real Loctite veterans to build our businesses. There simply were no Asian *Loctite Charlies*." Loctite's customary policy of relying entirely on local principals was therefore changed in two ways: Loctite began taking equity interests in its Asian distributors earlier in the relationships and began placing its own employees in the distributorships to provide the technical and sales education required to build their businesses.

Loctite formed 51% joint ventures with the Thai distributor in 1990 and the Taiwanese distributor in 1991, basing the business valuations upon current profitability, with agreements that the remaining 49% would be purchased five years later according to an agreed-upon formula. In the intervening five years, the formula guaranteed the distributor that Loctite would grow the business by an average of 10%-15% annually, and also guaranteed that Loctite would pay a pro rata share of any profits on sales growth above this level. In most cases, profits for the first two years were below the guaranteed minimums, as Loctite invested in business development. The "sunset" buyout price at the end of the five-year period was based upon profit levels in the fourth and fifth years.

In the years preceding the formation of the joint ventures, Loctite personnel had been appointed to work in the distributor companies, primarily to provide technical support. Wiley commented that this had met with mixed success:

There were often control issues beneath the surface, and attempts to isolate the Loctite representative because he wasn't "family." While joint ventures seemed the obvious way to run the business in Asia/Pacific—combining Loctite product

expertise with local culture—it was often difficult. We certainly need local managers to front the sales effort and to cope with the idiosyncracies of local government and distribution systems, but it always takes several years before they really become Loctite people.

Soon after the Thai joint venture had been formed, the distributor was being run almost entirely by Loctite personnel. In Taiwan, where the joint venture partner, FTF Trading, was a large conglomerate with businesses ranging from supermarkets to the automotive aftermarket, Loctite employees again largely ran the business, with FTF contributing to management of the complex administrative requirements of doing business in Taiwan.

In Korea, the distributor resisted what he saw as Loctite's infiltration into his business and sought to retain all the cash flows generated by his Loctite distributorship. Loctite's appointment of a sales engineer only strained the relationship further. As the distributor's cooperation could not be obtained, Butterworth and Freeman decided that the market potential warranted establishing a wholly owned subsidiary alongside the distributor in 1985. Initial profitability was low, aggravated by the need to let the distributor's existing inventory sell through or be bought out by Loctite to avoid dumping of stock at low prices, but, by 1988, Loctite's Korean sales had tripled. Eventually, in 1992, Loctite canceled the distributor's contract.

Wiley believed some expatriate management was necessary to grow businesses in Asia/Pacific at the rate it now required.

Our agents in this region used to be able to make gross margins as high as 70%-80% on our products. We are now considering cutting this margin, maybe by as much as half, and insisting on employing some local engineers, training them in Connecticut, and supporting them inside the distributorships.

He also considered it important that, in Asia/Pacific, Loctite maintain its approach of initially restricting each distributor to a few core products:

In Asia/Pacific I start a distributor on a range of six to eight machinery adhesives. These are our bread-and-butter products, offering good margins to the distributor, and they are also the perfect way for him to learn the Loctite approach. The ideas of selling the customer something which they didn't know they needed, and of pricing to value rather than cost, are new to many of these distributors, partly because of cultural background and partly because of the nature of the other products they carry. Only when the distributor has established this core business, which takes a year or two, do I encourage him to move into other markets and broaden his product line.

The trend toward greater Loctite involvement in its distribution operations had resulted in the number of Loctite employees in the Asia/Pacific region rising rapidly to 278 in 1992. Of these, only six were in the regional offices, the remainder being attached to Loctite's joint ventures or wholly owned subsidiaries in the region. At that time, only one Loctite employee, in Indonesia, was working inside an independent distributor company. Nevertheless, Loctite still believed in the need for local management; in cases where expatriate managers headed national distributors, they were required by Butterworth and Freeman to identify and develop local national successors within five years.

Despite this trend toward greater control of its distribution, Loctite had recently enjoyed a successful and cooperative relationship with a new independent distributor in Indonesia. Until 1991, Indonesian sales had been managed by the Singapore distributor. Loctite was unhappy with both the level and growth of sales, attributed to lack of attention by the domestically focused Singapore distributor, and decided that a separate national distributor was needed for Indonesia. The Indonesian distribution rights were reacquired with no payment to the Singapore distributor, and an

initial survey of potential manufacturing customers produced a list of four potential distributors. In 1990, however, Loctite was introduced to a fifth candidate—a general mill supplier—by a former Loctite employee of 20 years' standing, who now headed up international distribution for a spray gun manufacturer. After the head of this family-run business had attended a Loctite regional distributors' conference where he had impressed regional management with his knowledge of the region and its network of manufacturing supplies distribution, the firm was appointed as Loctite's exclusive distributor in Indonesia, without a formal contract and with an understanding that Loctite would eventually want to buy out the business for about twice the annual gross margin.

Wiley commented that Loctite was impressed by the management policies of Kawan Lama, the Indonesian appointee, which were unusual for a manufacturing supplies distributor in Asia.

The company has a very modern approach to human resource management, with extensive training and high levels of pay. They are also prepared to invest in growing our business, even appointing about a dozen subdistributors to cover specific regions and industries better than they could themselves.

Loctite had reciprocated with extensive training support.

Two weeks after we appointed Kawan Lama as distributor, at a time when they had only about \$500 worth of Loctite products on their shelves, I ran a full-day training seminar on their premises and was impressed by the high number of staff who attended, including the head of the company. Since they were appointed, we have invested almost 100 man-days in training seminars for the company's staff, customers, and subdistributors.

In India, Loctite encountered problems which it attributed to the distributor's lack of familiarity with Loctite. Indian government regulations in the 1970s dictated that Loctite could initially take only a 40% stake in the business, and that the company had to establish manufacturing operations in the country. Disagreements soon emerged over pricing levels, with the local distributor cutting them below what Loctite regarded as appropriate in order to boost sales volume. Although the original principal of the distributorship had left the business when Loctite acquired the remaining equity, the corporation was still not confident that the new manager was enough of a "Loctite man." By 1992, Loctite was moving toward its goals of acquiring the balance of the business and launching, for the first time in Asia/Pacific, a product line targeting the consumer market.

The People's Republic of China (P.R.C.) had also long been regarded as a market with huge potential. A joint venture was required by local law, and Loctite had, in 1985, taken a 50% stake in such a business. This business was run by a Chinese manager with U.S. citizenship and extensive knowledge of Loctite. In 1992, Loctite was negotiating to increase its stake in the business, although 100% ownership was not legally feasible and not necessarily desirable. An assessment of the emerging Vietnamese market was also being conducted, so that Loctite would be able to act swiftly if and when the U.S. trade sanctions on doing business there were lifted.

Hong Kong

Loctite's distribution in Hong Kong had been managed for 10 years by a Hong Kong Chinese who had been Loctite's Asia/Pacific region manager. He had left the company to set up his own business with some modest financial assistance from Loctite. By 1990, the distributor had developed a sizable business, but was still almost entirely dependent upon Loctite products. Loctite sales to the Hong Kong distributor were \$1,183,000 in 1992, and the distributor was estimated to achieve a gross margin around 50%. However, Loctite had become increasingly dissatisfied with the distributor's willingness to reinvest profits in the business and to expand its customer base. Loctite had therefore taken back the distribution rights to several product lines outside the core of industrial adhesive

products. The relationship had been further strained by the refusal of the Hong Kong distributor to accept anything other than technical support from Loctite; this insistence on independence extended to a refusal to share accounts and business plans, which Loctite expected to receive from all its distributors.

Having decided that some form of Loctite control was necessary to boost sales growth in Hong Kong, Butterworth, Freeman, and Wiley were considering their options. The trend toward acquiring 100% of a Loctite distributorship and establishing a wholly owned subsidiary was exemplified by the recent acquisition of Singapore/Malaysia rights from Asia Radio, the Singapore-based firm that had distributed Loctite products for 23 years. The benefits of working with local companies, however, were exemplified by the early success of the relationship with Kawan Lama in Indonesia. Also prominent in their thoughts was the concept of a Greater China subsidiary formed from the operations in Hong Kong, the P.R.C., and Taiwan. The Greater China concept was fueled by the fact that control of Hong Kong was scheduled to revert to the P.R.C. from the United Kingdom in 1997. Wiley reported that Loctite's P.R.C. joint venture was already competing with the Hong Kong distributor to supply factories in the booming southern Chinese province of Guangdong and offering prices substantially lower than those offered by Loctite's Hong Kong distributor. He estimated that P.R.C. customers accounted for 25% of the Hong Kong distributor's sales. Sales revenues in 1992 for the Taiwan and P.R.C. joint venture operations were \$1,613,000 and \$2,277,000 respectively. Wiley estimated that, as in Hong Kong, Loctite commanded 75%-80% of the established market in these countries. In terms of market penetration, however, the joint ventures lagged Hong Kong; penetration of market opportunity was estimated at less than 20% in Taiwan and less than 5% in the P.R.C., compared with less than 50% in Hong Kong.

Butterworth, Freeman, and Wiley concluded that Loctite had three options regarding the Hong Kong operation:

1. Buy 51% or more of the existing Hong Kong distributorship, and grow the business from its existing base.
2. Find a new distribution partner, probably an established local business, and form a second joint venture in Hong Kong.
3. Buy out 100% of the Hong Kong business and attempt to build a Greater China subsidiary.

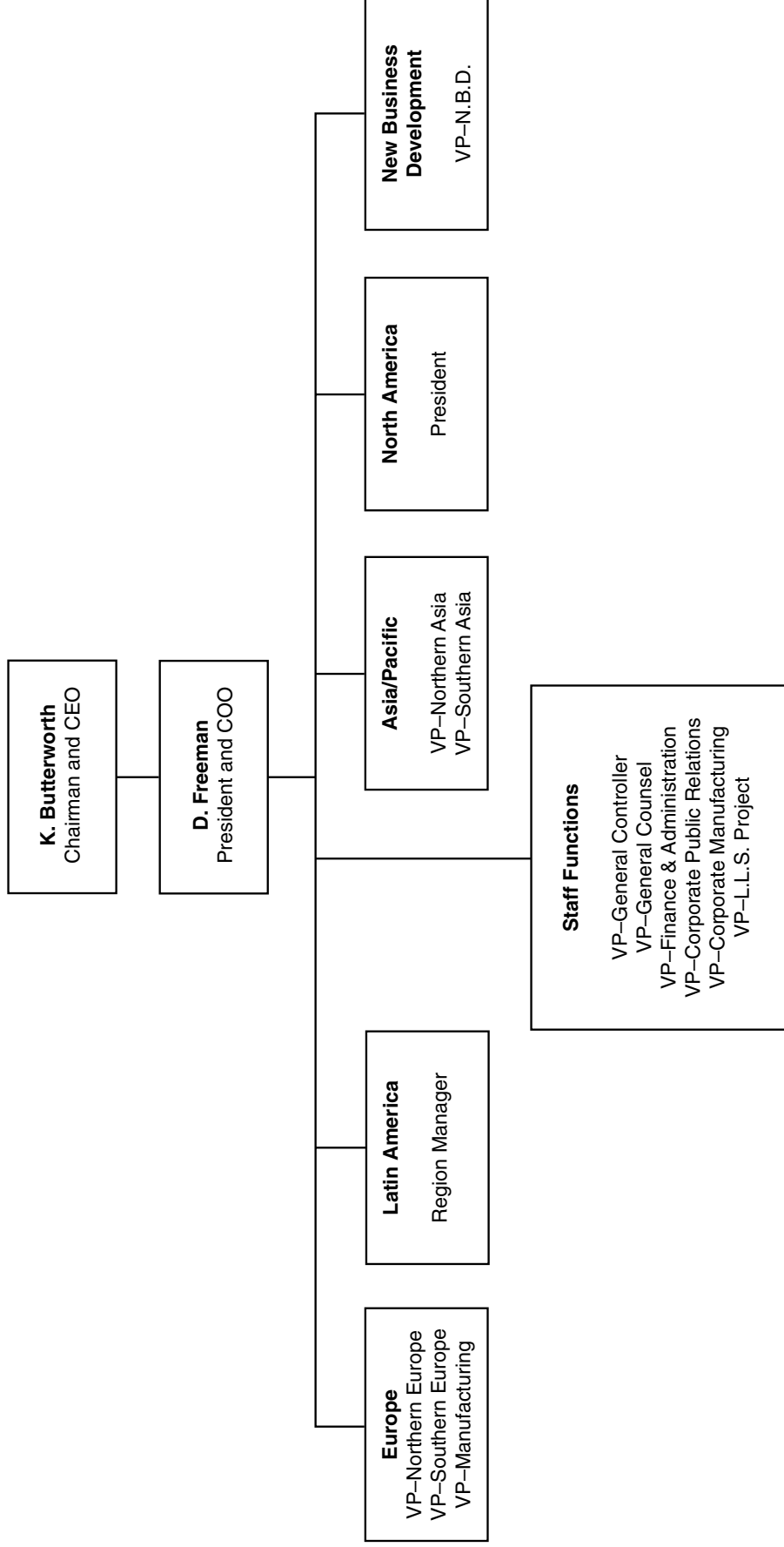
There were no major legal issues or constraints shaping the decision.

Exhibit 1 Loctite Corporation: Income Statements, 1990-1992 (\$ in thousands)

	Year Ended December 31,		
	1990	1991	1992
Net sales	\$555,185	\$561,218	\$607,967
Cost of sales	215,132	217,501	229,175
Gross margin	340,053	343,717	378,792
R&D expense	21,731	22,498	26,152
Selling, general, and administration expenses	222,884	222,240	239,640
Restructuring charges	0	4,434	12,740
Earnings from operations	95,438	94,545	100,260
Investment income	11,010	13,365	9,173
Interest expense	(6,790)	(5,477)	(5,593)
Other expense	(934)	(346)	(94)
Foreign exchange loss	(7,440)	(6,202)	(8,601)
Earnings before income taxes	91,284	95,885	95,145
Provision for income taxes	23,861	23,971	22,834
Net earnings	\$67,423	\$71,914	\$72,311
Earnings per share	\$1.86	\$1.98	\$1.99

Source: Loctite Corporation annual reports

Exhibit 2 Loctite Corporation: Organization Structure, 1992



Source: Loctite Corporation

Exhibit 3 Employees by Region, December 1992

	Total		Regional Management
North America	1,792	(48.6%)	2
Europe	1,095	(29.7%)	4
Asia/Pacific	278	(7.5%)	4
Latin America	<u>524</u>	(14.2%)	2
	3,689		
Corporate headquarters	56		

Source: Loctite Corporation

Exhibit 4 Loctite Corporation: Countries Served by Loctite Operating Units, 1992

	Loctite Equity Holding (%)	Loctite Manufac- turing Plant (M)	Loctite Internal Packaging Plant (P)
North America:			
Canada	100		
Mexico	100	M	P
Puerto Rico	100	M	P
United States	100	M	P
Europe:			
Austria	100		
Belgium	100		
Czech Republic	100		
Denmark	0		
France	100		
Finland	0		
Germany	100		P
Hungary	100		
Ireland	100	M	P
Italy	100	M	P
Netherlands	100		
Norway	51		
Poland	100		
Portugal	0		
Slovenia	100		
South Africa	100	M	P
Spain	100		
Sweden	0		
Switzerland	0		
United Kingdom	100		
Asia/Pacific:			
Australia	100		
Hong Kong	0		
India	40	M	P
Indonesia	100		
Japan	100	M	P
Malaysia	100		
New Zealand	0		
People's Republic of China	50	M	P
Philippines	0		
Singapore	100		
South Korea	100		
Taiwan	51		
Thailand	51		
Latin America:			
Argentina	100		
Brazil	100	M	P
Chile	100	M	P
Colombia	100		P
Costa Rica	100	M	P
Ecuador	0		
Peru	0		
Venezuela	51	M	P

Source: Loctite Corporation

Exhibit 5 Loctite Corporation: Equity Transactions in International Operations, 1985-1992

	1985	1986	1987	1988	1989	1990	1991	1992
Mexico			Acquired 100% of manufacturing joint venture					
United States				Acquired specialty silicone company	Acquired hand cleaner company			
Belgium			Bought out remaining 49% of joint venture					
Czech Republic						Opened representative office		
France		Acquired 51% of 20-year distributor						
Hungary						Opened representative office		
Italy				Acquired polyurethane company				
Netherlands					Bought out national distribution rights and formed subsidiary			
Poland					Opened representative office			
Slovenia					Opened representative office			
Australia			Acquired 100% of joint venture partner in automotive aftermarket venture			Merged automotive aftermarket venture into Loctite Australia subsidiary		
India					Formed 51% joint venture with seven-year national distributor			
People's Republic of China		Formed 50/50 joint venture with Loctite Technical Institute						
Singapore/Malaysia								Bought out national distribution rights from 23-year distributor and formed subsidiary
South Korea			Formed subsidiary alongside national distributor to provide technical support		Cancelled distribution contract to activate subsidiary as full marketing company			
Taiwan							Formed 51% joint venture with six-year distributor	
Thailand					Formed 51% joint venture with five-year distributor			
Argentina				Cancelled distribution contract and formed subsidiary				
Chile			Bought out joint venture partner to form subsidiary					
Colombia			Bought out 20% balance of joint venture to form subsidiary					
Venezuela				Increased joint venture holding from 49% to 51%				

Source: Loctite Corporation

Exhibit 6 Loctite Corporation: Financial Data by Region (US\$'000s)

	<u>1990</u>		<u>1991</u>		<u>1992</u>	
Sales Revenues:						
North America	242.4	43.7%	248.6	44.3%	266.7	43.9%
Europe	222.7	40.1%	220.0	39.2%	244.2	40.2%
Asia/Pacific	41.7	7.5%	47.0	8.4%	47.2	7.8%
Latin America	48.4	8.7%	45.6	8.1%	49.9	8.2%
	<u>555.2</u>		<u>561.2</u>		<u>608.0</u>	
Operating Profit:						
North America	39.8	30.0%	45.8	33.5%	56.8	36.8%
Europe	70.1	53.0%	67.9	49.7%	78.1	50.6%
Asia/Pacific	9.1	6.9%	9.6	7.0%	5.8	3.8%
Latin America	13.4	10.1%	13.3	9.7%	13.5	8.8%
New business development	-20.4		-21.7		-25.8	
Corporate headquarters	-16.5		-15.9		-15.4	
Restructuring change	0.0		-4.4		-12.7	
	<u>95.5</u>		<u>94.6</u>		<u>100.3</u>	

Source: Loctite Corporation

Note: Operating profit by region determined based on allocations of Sales and Expenses to units which generated or are responsible for the sales or expense.

Exhibit 7



We are
Multi-National Account
Managers in Japan.
If you need our help,
contact us at.....
FAX No. 81-45(785)0747
Phone No. 81-45(784)2500

Loctite Japan MNA Management Team



Y. MAEDA
NISSAN
11 YEARS SERVICE AND 9
YEARS IN CHARGE OF
NISSAN ACCOUNTS LIVES
IN YOKOHAMA.



N. FUJIWARA
MATSUSHITA
15 YEARS SERVICE AND 12
YEARS IN CHARGE OF
MATSUSHITA ACCOUNTS
LIVES IN OSAKA.



H. KATO
HONDA
8 YEARS SERVICE AND 6
YEARS IN CHARGE OF
HONDA ACCOUNTS LIVES
IN YOKOHAMA.



I. TSURUWAKA
NISSAN
11 YEARS SERVICE AND 9
YEARS IN CHARGE OF
NISSAN ACCOUNTS LIVES
IN YOKOHAMA.



S. KASAMAKI
TOYOTA
ONE OF STARTING MEM-
BER OF THE MNA TEAM
15 YEARS IN CHARGE OF
TOYOTA ACCOUNTS
LIVES IN NAGOYA.



N. KOMATSU
MAZDA
4 YEARS SALES EXPERI-
ENCE IN CHARGE OF
ACCOUNTS LIVES IN HIR-
OYAMA, SHIMA.



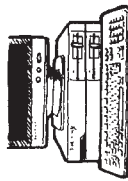
K. Fujii
Communications
Coordinator

How to communicate ...
If you would like to know anything
about Multi-National Accounts in
Japan, Please fax to MNAMs and
copy to K.Fujii, who will interpret
your English message for MNAMs
and vice versa.



Applications

Electronics



- FDD Gimbal/Carriage 326 LVUV
- HDD Shaft/Bearing 648
- LCD Terminal sealing 350

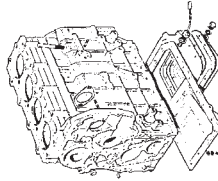


- Speaker Magnet bonding 392/792
- Speaker assembly for phone 403, 411, 424



- PCB Tacking jumper wire to Tak Pak AD
- Chip SMT(one by one, pin transfer) 348, 3607

Automotive



- Engine Cores Plugs sealing 962T
- ATX Flange sealing 518, FMD-127
- Bolt Precoating
- LIS Dri Loc
- Power steering case PMS-10E

Profile of Accounts

TOYOTA

Date of Establishment: Aug. 1937
Sales* 8,941 Bill. Yen
Net profit* 201 Bill. Yen
Number of employees: 75,300
Number of offshore manufacturing plants 34

NISSAN

Date of Establishment: Dec. 1933
Sales* 4,271 Bill. Yen
Net profit* 54 Bill. Yen
Number of employees: 55,600
Number of offshore manufacturing plants 19

HONDA

Date of Establishment: Sept. 1948
Sales* 2,911 Bill. Yen
Net profit* 33 Bill. Yen
Number of employees: 31,500
Number of offshore manufacturing plants 26

MAZDA

Date of Establishment: Jan. 1920
Sales* 2,304 Bill. Yen
Net profit* 9.2 Bill. Yen
Number of employees: 29,800
Number of offshore manufacturing plants 13

MATSUSHITA

Date of Establishment: Dec. 1935
Sales* 4,995 Bill. Yen
Net profit* 110 Bill. Yen
Number of employees: 47,600
Number of offshore manufacturing plants 44

SONY

Date of Establishment: May. 1946
Sales* 1,979 Bill. Yen
Net profit* 21 Bill. Yen
Number of employees: 19,800
Number of offshore manufacturing plants 21
* : Annual business term(April 1991 - March 1992)

A,B,C, for communication with Japanese key staff at customers --- .

- A - Provide Japanese catalogs and data.
- B - Request a Japanese language letter of introduction from MNAM and bring it on the first call.
- C - Introduce Japanese ACHs of the MNA in Japan.
- D - Learn a few Japanese words and use them, for instance.



For our timely support, what we need to know from you are --- .

- A - Current business status and/or relationship between you and MNAs.
- B - Applications you are developing at MNAs and ACHs.

Loctite Products Specified/used in Japan

(TOYOTA) Loctite products are listed in the following specifications.

Spec. No	PRODUCT
TSK6706	962T
TSK6708	572, 575
TSK6709 CLASS 1	200
" " CLASS 2	204
TSH7910	PMS 10E

(NISSAN) A lot of Loctite products are specified in Nissan Engineering Standard (NES) as Anaerobic Adhesive M6514. Please contact us for details.

(MAZDA) D/Loc is specified in MAZDA Engineering Standard (MES) CF 510B, as follows,
CLASS 1 202
CLASS 2 200

(HONDA) There is no specification for anaerobic adhesives, but their needs for pre-applied threadlockers, 200 and 204, have been growing. Design manual for Dri-Loc and liquid threadlockers will be compiled soon.

(MATSUSHITA) Our products are mainly applied for Audio-Visual Appliances and office automation equipment. Try to develop all potential applications in parts assembly for VCR, HDD, FDD, LCD and telephone.

(SONY) UV products, such as 38EUV Blue, 38EUVY etc., are mainly applied to motor assembly, optical devices, VCR, FDD and Audio parts assembly. Since 348 was specified in Sony's chipbonding spec. No. 7-432-910-74 in 1992, this business is one of our most promising applications. Please try!

Loctite (Japan) Corporation
1-15-13, Fukuro, Kanazawa-shi,
Yokohama, Japan 228

Sales Headquarters
Phone No. 81-45(785)0747
Telefax No. 81-45(784)2500