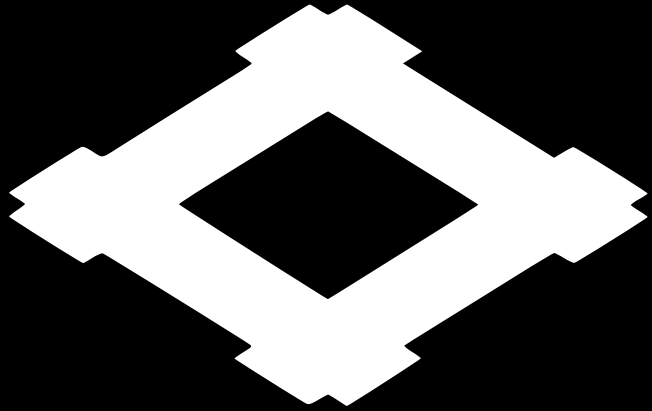


Only Connect

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An igeta, or well crib—four timbers crossed into a frame. Sumitomo has flown a mark of this kind for four centuries, a house whose gearboxes and film credits turn out to be branches of the same tree.

My wife and I settled in last night to watch *Howards End*—the 1992 Merchant Ivory adaptation of E. M. Forster’s novel, all the manners and mannerisms of the manor born, about as far from a factory floor as a film can get. Then a name slid across the opening credits and my wife sat up: “Look—Sumitomo Corporation!” My first thought was, “Now I know what my next ‘Power Play’ will be!” but I have no idea where this will go from here.

Sumitomo Corporation, one of Japan’s great *sōgō shōsha*, or general trading houses—a company that buys, sells, ships, and finances everything, everywhere. The Sumitomo you and I know, the one on the cycloidal gearbox humming on a conveyor line, is Sumitomo Heavy Industries and its motion arm, Sumitomo Drive Technologies. Not the same company but the same family—and to see how a maker of speed reducers and a financier of English costume dramas share a name, you must go back four hundred years.

Sumitomo begins with a former Buddhist priest who went by his religious name, Monjuin. In the early 1600s, under his lay name, Masatomo Sumitomo opened a Kyoto shop selling books and medicine. Near the end of his life, he left behind the *Monjuin Shiigaki*—which Sumitomo renders in English as the “Founder’s Precepts”—a letter to one of his retainers, a man named Kanjuro. Its thrust is that you should do everything carefully and honestly, “not only in business, but in every aspect of your life.”

Every company in the Sumitomo orbit still points back to it. The fortune came from copper: his brother-in-law had learned a European refining method, *nanban-buki*, for pulling silver from crude copper, and it made Osaka Japan’s copper capital. In 1691 the family opened the Besshi copper mine, which ran for 283 years and yielded

some 700,000 tons of copper—a load-bearing beam of Japan’s industrialization. Mines need machinery, and in 1888, Sumitomo built a machine shop at Niihama, the town around Besshi; that shop became Sumitomo Machinery and, in 1969, Sumitomo Heavy Industries.

In 1938, Sumitomo licensed a peculiar German invention—the cycloidal speed reducer, dreamed up by Lorenz Braren in the 1920s, which rolls a lobed disc around a ring of pins so load is shared across many points at once. Production of the Cyclo drive began in 1939 at Niihama, the very ground of the old copper mine. It has since passed ten million units, and its descendants are probably somewhere in your plant.

So how did that name end up backing a movie? After the war, Sumitomo reassembled into a constellation of independent companies linked by cross-shareholdings. They all fly the same crest: the *igeta*, a diamond mark of four connecting lines symbolizing a traditional well crib of crossed timbers. In the early 1990s Merchant Ivory needed roughly \$8 million as its distributor slid toward bankruptcy; much came from Japan, Sumitomo Corporation among the backers—a house whose creed warns against easy gains. The film won three Academy Awards.

Forster gave the novel a two-word epigraph: “Only connect.” It seems to echo the *igeta* and precepts. A cycloidal disc does its work by connecting—meshing at dozens of points at once, sharing the load, turning fast motion into slow torque without drama, unlike the movie. Yet gearbox and film are two branches of the same four-hundred-year-old tree. My wife spotted it; I’ve done my best to make connections.

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