

one of Germany's Foremost diversified machinery firms), was a printing press company founded in 1840 in Augsburg. It was sold four years later to Koenig's nephew, Carl Reichenbach, who had worked for two decades at K&B, and Reichenbach's brother-in-law. In 1845, they began production of an improved version of the Hebig & Muller machine. The company built the first German web-fed press in 1872 and subsequently was an important innovator in web-fed and, later, offset printing. The company eventually merged with a machinery maker from Nuremberg in 1898 to become MAN.

The firm that became Miller-Johannisberg was founded in 1848 by machine mechanic Johann Klein, who had previously worked for Helbig & Muller. In 1861, Albert-Frankenthal (located in Frankenthal, Baden-Wuerttemberg, a town with a long machinery tradition) was established by Andreas Hamm and Andreas Albert, who had worked for K&B for ten years and then for Reichenbach. Heidelberger Druckmaschinen (Heidelberg) was founded in 1850 by the brother of Andreas Hamm. Heidelberg concentrated on sheet-fed presses, introducing a web-fed press considerably later than its competitors. The company rose to prominence when it introduced a significantly improved sheet-fed press in 1914, known as the Heidelberger Tiegel. The press, the first with fully automated paper handling, achieved an output 2,600 sheets per hour. Printing quality was also improved by the use of a device that allowed higher printing pressure. The superior quality and performance of the Tiegel, Heidelberg's pioneering of assembly line production of printing press (in 1926), and the early establishment of a worldwide marketing and service network led to success unparalleled in the industry. It sold more than 165,000 units by the time the model was discontinued in 1985; one Tiegel was even worshipped in the Senshuden shrine in the Japanese city of Kobe.

By the late 1800s, these and other German firms had emerged as world leaders. A gradual process of consolidation began during the world economic downturn following World War I. In 1921, K&B acquired Modlinger Schnellpressenfabrik and signed a cooperation agreement with Faber & Schleicher, an Offenbach-based firm that had been established in 1871. About the same time, Dresdner Schnellpressenfabrik merged with Leipziger Schnellpressenfabrik to become Planeta. A few years later, Faber & Schleicher (renamed Roland after its successful machine) began cooperation with Planeta that would continue for some years. Planeta exited letterpress production in order to concentrate on sheet-fed offset presses. It offered to merge with Roland in 1926, though the offer was declined. By the 1930s, the six leading German printing press producers were Heidelberg, MAN, Roland, K&B, Albert-Frankenthal, and Planeta. They were all located in a radius of about 150 miles. This group of companies was to sustain its industry leadership for many decades.

Michael E. Porter. *The Competitive Advantage of Nations*.