# BERNTSEN AT 40

Peter Berntsen and Phillip Peterson combined their skills in foundry technology and industrial sales to co-found Berntsen Cast Products, Inc., a Wisconsin corporation, in 1972. Their idea was to sell custom aluminum survev markers and monuments nationwide—something no one else was doing at the time. In May of 1972, they applied for a patent on the W-1 highway monument, the first of many patents for the company.

### The 1970s

were a time of product design and innovation, metallurgical and field testing, and marketing. Many of Bentsen's core products were designed in this decade, including monuments meant to break off and leave a magnetic remnant when disturbed and monuments that could be driven

#### Rhonda Rushing

maps out Berntsen's progression from a cast products business in Wisconsin to an international manufacturer of custom orbital, forged survey markers

into the ground, saving time. Early manufacturing tools were basic—a hammer, anvil and drill press. A "real" factory was a distant dream.

The 70s were a time of trials and tribulations but also of important success milestones for our company.

1975 Berntsen received the Wisconsin Society of Professional Engineers Governor's New Product Award for the Magnetic Survey Monument. The award was "judged on the basis of its engineering, ingenuity of concept, functionality, safety, appearance, packaging and contribution to the economy of Wisconsin."

1978 Bill Rushing combined a printing technique, art and sand casting to make custom logos for surveyors.







This innovation allowed sand casting of practically anything that could be drawn, including virtually any language. First experiments with artwork included the famous Disney World logo. Surveyors were delighted with the results that this artwork technique enabled, and thousands of cap designs have been created since then.

1979 We started research into RFID (radio frequency identification) for use in survey monuments toward the end of the 1970s. The technology to manufacture "smart" monuments would take thirty years to mature, but Berntsen not only started early, the company was also the first to make RFID enabled markers a reality.

The 1980s were a time of a growing need for improved manufacturing processes and quality and faster delivery of products. Berntsen's product development continued full speed, resulting in a patent in 1983 for the Top Security Rod Monument with fins. We needed more space than our rented warehouse gave us, and in 1980, we built an office and manufacturing plant on purchased land next door. This building is still home to Berntsen.



Wisconsin Governor Patrick Lucy (left) presents Phil Peterson (center) and Peter Berntsen (right) the new product award (1975)

The original W-1 Monument literature published, and Berntsen's 2010 product catalog





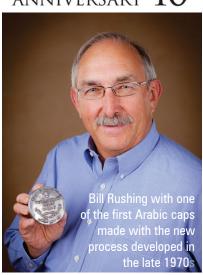


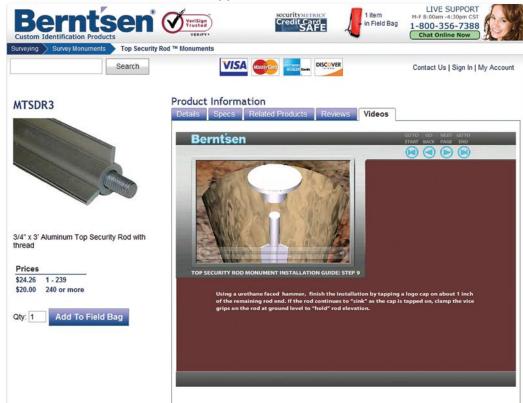
†Berntsen now has two orbital presses which apply the equivalent of 2,000 tons of pressure to form net shapes. The second was acquired in 2009.

↓E-commerce arrives at Berntsen (in 2000). The company's rod monument installation video has helped many field crews over the years. Berntsen is continuing to add "how to" videos online for many products



# BERNTSEN 40TH ANNIVERSARY







1981 We changed our name from Berntsen Cast Products, Inc. to Berntsen, Inc., to communicate better the expansion of our product line beyond castings. Significantly, the new name, being more encompassing, allowed us to expand the use of other manufacturing processes such as cold forging.

1985 A new Schmid 200 ton Orbital Forging Press was installed, following several years of researching and testing to prove this relatively unknown process. The goal was to reduce lead times from thirty or more days to three days or less. The acquisition of the Schmid press enabled us to develop a process for producing hub shapes, rebar caps, pipe caps and concrete markers in aluminum first, and then in leadfree bronze. We were the first to suggest the use of lead-free alloys in survey markers and monuments.

1988 Berntsen's product development efforts were recognized in 1988 by the Wisconsin Society of Professional Engineers, conjunction with the Wisconsin Department of Development and Wisconsin Manufacturers and Commerce. The award we received was the WSPE Governor's New Product Award, Certificate of Merit for "Development of the Rod Monument System" which recognized Berntsen "for its economic

contributions to the State of Wisconsin through professional engineering initiative and innovation."

## The 1990s

started with a change in leadership, as Phil Peterson became Chairman of the Board and Rhonda Rushing was named president. After much growth in the first eighteen years, we needed to develop a corporate culture in which a system for quality improvement could flourish. It was also a time of expanding into computer-controlled machining and milling. This was a busy decade, right from its first year.

1990 We became
Berntsen International, Inc. in
1990 to reflect the establishment of an international dealer
network and growing sales
around the world.

1991 This was the year we launched a process of continuous professional improvement which is now second nature to the employees of Berntsen. A significant tool for internal training and communication has been the (now legendary) Berntsen morning meeting. This 3-5 minute gathering of all employees at 7:55 am each day is facilitated by volunteers from the plant and the office, and its focus is a white board with a "snapshot" of the day's production, order levels, scheduled shipments, and statistics on timeliness of customer orders shipped.

1992 Berntsen won a patent on the Top Security Floating Sleeve in this year, solidifying its name for innovation.



199 / Berntsen entered the digital era with its website www.berntsen.com.

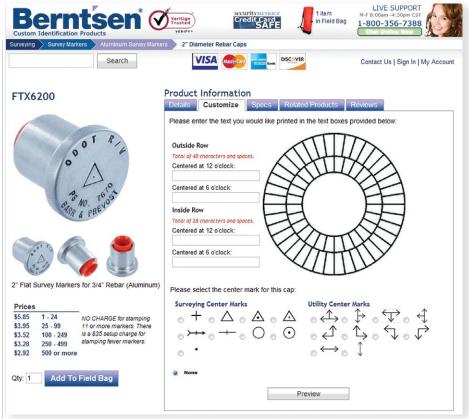
2000 The 21st century has marked a new era in Bentsen's use of technology to connect with customers.

However, while embracing the "digital age" with an e-commerce website, instant messaging (live chat), animated training videos, Facebook and a Berntsen YouTube channel. our corporate philosophy has remained grounded in relationships with customers. Apart from becoming a digital company, Berntsen acquired a second orbital press, its president published a book, and realized its 30-year-old dream of employing RFID technology in underground markers. With the launch of Berntsen's website in 2000, customers could, for the first time, order online and customize, before placing the order, the text, center mark, size and color of the survey markers ordered.

) Lasting Impressions: A Glimpse into the Legacy of Surveying comes out in 2006, celebrates the legacy of land surveyors—our customers.

Patent application for Bentsen's InfraMarker RFID system. Installation of 2<sup>nd</sup> orbital forging press. This has added flexibility in production scheduling and significant reduction in set-up time.

This year we have moved closer to being "paperless." We have adopted paperless order entry, factory orders, and logo sheets. It is estimated that at least 25,000



How times have changed from the days of tearing out the order form from the latest Survey Log and heading to the mailbox!.



sheets of paper are being saved annually at this time. In looking back over 40 years, the themes that run through our history are innovation, focus on our customers, the

ability to change and adapt, and continuous improvement. This has kept the journey exciting and fresh. We are ready for the next 40 years!