

# **Epac** Division of Harford Industries

*A Thirty-five Year reputation of producing the finest in profiling systems*

*“At Epac, our core competency is leading edge design and production of roll and sheet profiling systems. Our systems are thoughtfully conceived and carefully crafted by an extraordinarily talented and dedicated group of engineers.”*

*Susan Harford CEO, Harford Industries*

*Innovative thinking* combines with *leading edge technology* and *solid engineering* to produce every *Epac system*. Built to withstand the rugged conditions of working mill environments, *Epacs* have a long tradition of providing trustworthy readings and low maintenance even in extremely harsh environments.

One example of *Epac’s leading edge design and solid engineering* is the *patented Epac Series 3000 roll measurement system*. *The Epac Series 3000* simultaneously measures roll profile, diameter and temperature, providing a colored printout of all 3 readings for each skate which can be wirelessly transmitted to the user’s database.

Another example is *The Epac Series 4000 Profile Strip Gauge*, built as an offline instrument to be used in the rugged mill environment rather than in a lab. This instrument simultaneously measures and displays the top, the bottom and the gauge (thickness) profiles of the strip sample. A touchscreen active PC with wireless capability controls all operational functions and displays. Critical data can be used to monitor product quality on the spot for quick decisions. The skates can be saved to a database for additional quality analysis and archiving.

*The Epac Division of Harford Industries has assembled a team of top talent in mechanical, electrical, software, and production engineers.* These people are all *innovative thinkers* who enthusiastically work together to *deliver extraordinary design with state-of-the art technology at an affordable price.*

***William Mellander, Epac Design Engineer and Project Manager, brings over 35 years of experience in working with all phases of steel mill technology together with his talent in designing and manufacturing equipment to lead the group.***

In 1999, ***Harford Industries*** acquired the rights to the ***Epac*** from ***Wilbar Manufacturing Co. Inc.*** The acquisition brought ***all rights to the technology along with Wilbar's core personnel and competencies into the Epac Division of Harford Industries.***

At ***Wilbar***, ***William Mellander*** was ***chief designer*** as well as ***production coordinator*** for all micrometers. ***Mr. Mellander*** is among the ***foremost designers of saddle-type roll micrometers in the world.*** He has been designing and manufacturing saddle-type roll micrometers for over thirty five years. For twenty nine years, he was a principal with ***Wilbar Manufacturing Company***, which designed and manufactured the mechanical components of analog and electronic micrometers for several companies. ***Wilbar*** marketed an analog micrometer under its own name, ***dominating the market from the mid 70s until about 1990***, when electronic micrometers became the industry standard.

Other US micrometer producers were attracted to ***Wilbar*** for ***Mr. Mellander's talent and expertise in saddle mic design.***

*Until the mid 1970s, analog saddle mics were the standard method of roll profiling. With the introduction of the personal computer and related technology in the late 1970s, electronic roll profiling with documentation became possible. Two companies, both of which were the combination of a retired roll shop manager and an electronic manufacturer, came into being: Androlog and RDM, (which later changed its name to Pro-Mic). Both of these companies came to Wilbar for their mechanical design and production. By adding brackets to hold small acquisition devices and linear encoders, and replacing the dial indicator with a LVDT, these two companies adapted hundreds of Wilbar analog micrometers to electronic capability.*

***Wilbar*** worked closely with both companies to improve performance. ***William Mellander, head of Wilbar's micrometer design***, was a

valuable consultant to these emerging companies, contributing his talents in mechanical design to improve their performance with quality engineering solutions.

***Among the many contributions William Mellander has made to improve saddle-type roll micrometer design are these:***

- ***He invented the probe positioner, which is now in common use.***
- ***With a reputation for designing rugged instruments with lasting performance, he invented the box frame design to enclose the electronic components.***
- ***He invented the current Epac 3000, which measures roll temperature, profile and diameter simultaneously. Harford Industries holds the patent for the use of chordal technology for diameter and profiling measurement as a result of his invention.***
- ***He invented Harford Industries' patent-pending Epac 3000 vertical wheel design, which greatly reduced wheel diameter and enhanced mechanical performance of the skate unit.***

***With a commitment to staying on the leading edge of innovation and delivering the very best in design and engineering, Harford Industries' engineers will see to it that Epac stays the best available choice in roll and sheet profiling systems for the long term.***

***With a 35 year history of providing exceptional customer service, Epac's service personnel will continue to see to it that your total Epac experience is a pleasant one.***

***Expect the best from the company that has invested the money and effort to raise the bar on the industry standards! We are committed to your success.***