

AS-INTERFACE INTERVIEW

Interview with Bernhard Wiedemann,  
Managing Director of Bihl+Wiedemann GmbH

# „A Homerun for Small Applications“

With AS-i Power24V the advantages of modern bus technology can now be used even in the smallest applications. In this interview with AS-i MASTER NEWS (AMN), Bernhard Wiedemann explains why Bihl+Wiedemann GmbH started out emphasizing the development of the respective safety components.

**AMN:** Mr. Wiedemann, the unparalleled cost efficiency has always been one of the outstanding strengths of AS-Interface. Does AS-i Power24V result in further reduced costs?

**Bernhard Wiedemann:** No. Power24V is definitively not a replacement for the highly successful AS-Interface standard system, but is an alternative, especially developed for small and smallest applications. Right from the beginning, the goal was to lower the financial hurdle of applying modern automation technology, allowing users to transition applications that until now used to be solved with outdated parallel wiring methods. No. Power24V is definitively not a replacement for the highly successful AS-Interface standard system, but is an alternative, especially developed for small and smallest applications. Right from the beginning, the goal was to lower the financial hurdle of applying modern automation technology, allowing users to transition applications that until now used to be solved with outdated parallel wiring methods.

**“AS-i Power24V not a replacement for AS-Interface, but an alternative for small applications”**

**AMN:** Therefore, with Power24V AS-Interface is ready to go after the *last resort* for lots of cables?

**Bernhard Wiedemann:** Yes, you can put it this way. Indeed, this new technology developed by the members of the organization hit a home run for small applications. This opens additional growth potential for AS-Interface exactly where the system was always positioned: at the base of the automation pyramid. Furthermore, AS-i Power24V offers the user the option to benefit from the multiple advantages of an efficient bus technology even more cost effective than ever before.

**AMN:** Specifically, where were you able to find additional savings potential for AS-Interface?

**Bernhard Wiedemann:** The thought process is very simple: For machines/systems with 20 or more inputs

and outputs, the 30V AS-Interface power supply is a minor cost factor – naturally, this is very different for systems with less than 10 I/Os. In the past, the cost of the power supply was reason enough for many users of such small applications to sacrifice modern communications and continue to parallel wire sensors and actuators. This is exactly the gap we are filling with the new Power24V technology that allows AS-Interface to run with an ordinary 24V industrial power supply, which is typically already present on most machines.

**„The decreased supply voltage is barely noticeable in these applications”**

**AMN:** On the other hand this means: Nothing changes for users already incorporating AS-interface?

**Bernhard Wiedemann:** Correct - at least not in relation to the applications that already are efficiently networked via AS-i and for which the power supply cannot be easily omitted. However, many of our current customers still use

small, complex hardwired sub-systems in certain parts of their manufacturing systems. Naturally, for these customers it makes sense to contemplate the switch to AS-i Power24V.

power supplies the maximum network length is reduced from 100 to 50 meters is of as little interest for these applications as are the minimal limitations concerning outputs resulting from the lower power.

with the most difficult task: The development of a single master with integrated Safety Monitor but without PROFIBUS interface, as that is not needed for such small machines anyway. At this time, in addition to the basic device, all our safe slaves are approved for the new technology. Therefore, our entire safety portfolio is ready for AS-Interface Power24V.



**AMN:** “Ideally suited for smallest applications from three to five safe signals,” states the product description of your new basic safety unit. Are you sure that it is worthwhile to use Power24V in such small applications?”

**“Our entire safety portfolio is ready for the AS-i Power24V”**

**Bernhard Wiedemann:** Do you remember the cost comparison of safety technology published in the latest edition of AS-i MASTER NEWS? This analysis supported the surprising fact that AS-i Safety achieves cost benefits even in very small machines when compared to conventionally wired solutions; despite the fact that at that time each of the three example machines/systems included an additional 30V power supply and a safety combined device with PROFIBUS Gateway. Therefore, it is easy to see that the break even point is now considerably lower.

**AMN:** Mr. Wiedemann, thank you for answering our questions.

**AMN:** Following the laws of logic, decreasing the operating voltage by 6V should be noticeable when it comes to the overall power. What limitations result from utilizing AS-i Power24V?

**Bernhard Wiedemann:** In general those limitations have none or only minor significance for the small applications we are discussing here. The fact that without the use of 30V

**AMN:** What about the safety technology: Does AS-i Safety at Work operate with Power24V?

**Bernhard Wiedemann:** Absolutely. For us at Bihl+Wiedemann, this area was at the top of our agenda during the first step, mainly because the possibility to integrate safe signals is the most important decision criteria for many users. This is why we decided to start