Manufacturers & Suppliers of Continuous Weighing, Feeding and Metal Detection Equipment Brisbane Ph: (07) 3841 2844 Fx: (07) 3841 0005 Email info@web-tech.com.au
Brisbane int.: (617) 3841 2844 Fax int.: (617) 3841 0005

The Weighing & Flow Control of Bulk Solids

The <u>weighing</u> and flow <u>control</u> of bulk solids is not an easy task. It requires an in depth knowledge of a number of science based disciplines, namely mechanical engineering, electronics, firmware/software and applications engineering. Basically all that is required to measure is to perform the following equation,

Total & Mass Rate = WxS where W=weight & S=speed.

- The weight signal is provided from a load cell mounted in a mechanism (weigh frame) that mechanically isolates the cell from all loads other than from the vertical.
- The speed is provided from an encoder that measures rotational speed of a belts pulley.
- Combining all the above is performed by an electronics device commonly known as an integrator.

With design details/drawings most competent engineering workshops, can build a weigh frame and place an "off the shelf" load cell in it. Primitive rotational speed encoders are readily available.

However combining the two signals and producing the required outputs is a different matter. Sophisticated calibration routines that are easily implemented by general production engineers further complicate the production of an accurate, reproducible and reliable in motion bulk solids weighing and controlling system.

These facts limit the market to a few dedicated manufacturers worldwide. This market is further broken down into manufacturers that promise accurate and reliable systems, knowing that the verification their system results are difficult. Manufacturers that design in features that ensure their product is accurate, reliable and reproducible by <u>design</u> are rare.

Web Tech products are superior by design. Usually superior instruments generally mean a more expensive product. This is not the case with the Web Tech range of instrumentation. The use of advanced design aids and computerised system analysis provide Web Tech with a technical advantage in both design and advanced manufacturing techniques.

We are able to produce a technically advanced product at a competitive price.

Our product design philosophy is built into our companies DNA, by means of staff

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training and documentation. This guides each development along a well-worn road of design excellence.

Each of our products is built on the experience gained in other fields of research ie. Our knowledge of Loss in Weight (LIW) was built on our long-term technical analysis of static and weigh belt feeders.

Our analysis of static and weigh belt feeders was built on data that we were able to extract from devices running in the field by the use of microprocessor's in the early 1980's. This is when most of our competitors were still employing analogue techniques. Even when our competitors evolved enough to use the microprocessor, they were not the manufacturers of the device or the firmware running it. Web Tech designed and programmed their own hardware and software and were able to extract design data which was stored and used as tools for future development.

Our customer base is broad and diverse, our customers trust us with expensive and complex projects.

They listen to us regarding the use of static and in motion weighing equipment.

Often we have benefitted from taking on complex and novel projects and now many of our "off the shelf" systems are the result of such ventures.

If you would like more information on our product range, or to discuss you application with on of our technical sales engineers, please call us on 1800 777 906, or email info@web-tech.com.au