

Tubex Pro, the new generation of Bühler scales. Cloud connected, reliable, cost efficient, ensuring the highest food safety standards.

Accurate weighing of raw materials and finished product at every point in the manufacturing and processing chain is essential for efficient and cost-optimized production in the food and feed industries. The new Tubex Pro MSDN-L provides the perfect solution.

Bühler's new scale complies with the highest hygienic design standards making it easy to clean and maintain. It runs with top quality servo drives, eliminating the need for any compressed air at all, thereby reducing the energy usage by more than 90%. It is integrated into Bühler Insights (Bühler's digital solutions platform), allowing for remote monitoring and maximizing yield.

Tubex Pro brings reliability and sustainability to the next level.

Three highly accurate load cells take independent measurements while the advanced algorithms calculate an average to provide the highest possible precision, at any given capacity.

The innovative, Bühler-patented internal air circulation system ensures the best environment for a smooth product flow, eliminating the need for external pipes. The result is a more compact and adaptable machine that can fit even in reduced spaces.

The fact that Tubex Pro is operated by the revolutionary, Bühler-patented, servo drives means there is no need for compressed air at all. Their built-in super capacitors store and reuse the energy, making the scale as cost efficient as it can be.

Compared to the traditional pneumatic drives, the energy consumption is reduced by more than 90%; in other words, savings of up to 5,000 USD per scale per year.



Energy saving of the servo drives system, compared to pneumatics.

While the use of compressed air increases with the scale size, the servo drives' energy consumption remains constant, allowing for savings of up to 5,000 USD per scale per year.

Scale Size [L]	Tubex Pro MSDN-L [USD/h]	Pneumatic Scales Energy saving [USD/h] [%]		Energy saving per year [USD]	
40	0.01	0.08	88%	\$ 638	
80	0.01	0.11	91%	\$ 914	
120	0.01	0.23	96%	\$ 1,926	
160	0.01	0.32	97%	\$ 2,733	
240	0.01	0.39	97%	\$ 3,366	
300	0.01	0.59	98%	\$ 5,063	

Assumptions: Energy cost = 0.2 USD/kWh

Compressed air cost = 0.04 USD/m3



Tubex Pro uses an electromechanical drive system instead of pneumatic cylinders.



A user friendly control panel will get the operators up and running in no time.

The optimized algorithms continuously monitor the scale

The scale's data can be sent to Bühler Insights to transform them into valuable information for the decision making process.



You can significantly reduce your energy usage, wear and maintenance costs.



You benefit from high throughput with minimum space requirement.



Made of stainless steel and food safety approved materials

Dismountable covers for easy cleaning, maintenance and product changeover.

Virtually free from product build-up.



The attractive design is also highly functional, ergonomic and can be easily retrofitted for existing scales.

Connected to Bühler Insights.

Precise data at the right time for the decision making process.

Bühler Insights

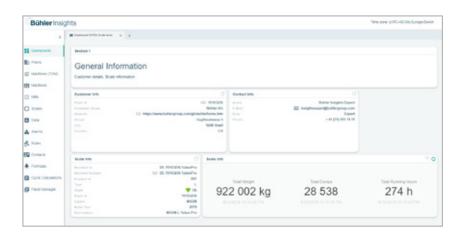
In the era of Digital Transformation and Data Analytics, the smart use of the information available can make significant impact in terms of productivity and profitability.

Tubex Pro is ready to be connected to **Bühler Insights**, where customers can benefit from a growing portfolio of Digital Services. By collecting data on this powerful digital environment, real time reports will help businesses optimise their processes and, ultimately, increase their profit.

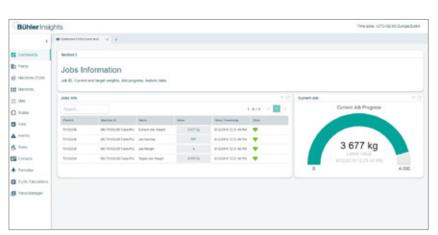
At a single scale level, the machine status and configuration can be monitored for predictive maintenance purposes. Process variables such as throughput and jobs can also be analyzed, both in real time or at specific times in the past for optimal traceability of product and processes.

An overview of the advantages:

- Monitor scale status and process to maximize the yield
- Highest food safety standards
- Precision at its best
- Easy to retrofit







Connected to Bühler Insights.

Maximize process efficiency from any internet device.

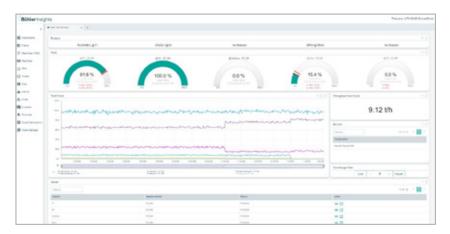
Yield is the main driver to improve the profitability of a mill. With Bühler's Yield Management System you have full control of your production.



Entire processes can be controlled, either in specific points of the value chain or from the raw material inlet to the final product.

Many different products, production lines and plants at various locations across the globe can be monitored from your chosen internet device.

Moreover, thresholds and notifications can be set in order to prevent below standard operating conditions. Both the additional transparency and push notifications help food and feed producers to react quickly if deviations become apparent. That way, a constantly high yield can be achieved.



Customized service.

Exactly according to your requirements.

Bühler puts close customer relations and high customer satisfaction at the top of its priority list. That is why we cultivate a constructive and trusting partnership with our customers worldwide. Our customers can rely on the expert advice of our experienced professionals to keep their machines, systems and processes running at the highest level of performance, precision and efficiency.



Plant and production processes at their best.

Bühler offers a comprehensive service package for problemfree operation of your Tubex Pro. Expertly trained service technicians can advise and support our customers on site or wherever needed through tailored service agreements, fast repair, support services and innovative retrofits.

Better control with automation solutions.

As a market leader and process specialist, Bühler provides extensive experience in the planning, commissioning and maintenance of efficient automation solutions. We support our customers by optimizing their existing processes and structuring their plant control more efficiently with powerful automation solutions and control systems.

Broad product range.

Exactly as needed.

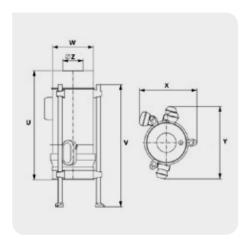
The right scale for every requirement.

Tubex Pro comes in a variety of versions to meet individual capacity and throughput requirements. All versions share robust, durable construction, compact design for reduced space requirements, convenient operation, and maintenance.



Overview of technical data for the Tubex Pro MSDN-L:

		MSDN-L 40	MSDN-L 80	MSDN-L 120	MSDN-L 160	MSDN-L 240	MSDN-L 300
Capacity	m³/h	13	26	40	53	79	99
Approx. Weight	kg	217	230	245	283	312	329
Dimensions	mm						
X		815	815	815	890	890	890
Υ		1020	1020	1020	1115	1115	1115
Z		250	250	250	300	300	300
U		1122	1362	1602	1602	1842	2182
V		1300	1500	1800	1800	2000	2300
W		504	504	504	604	604	604



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