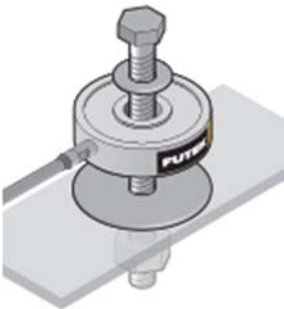
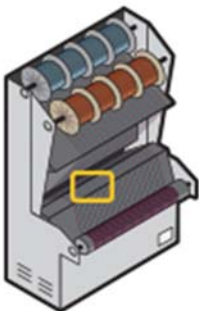
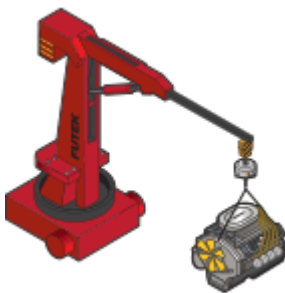
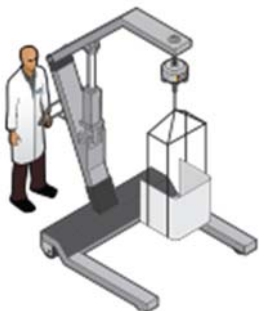
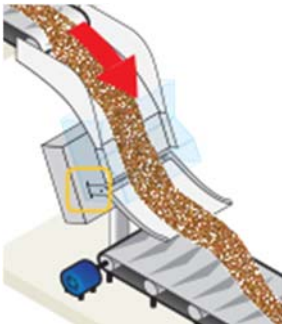
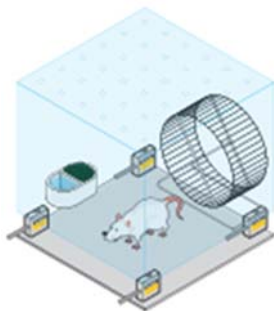



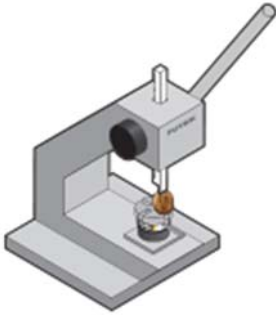

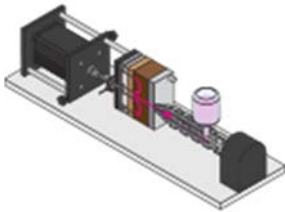

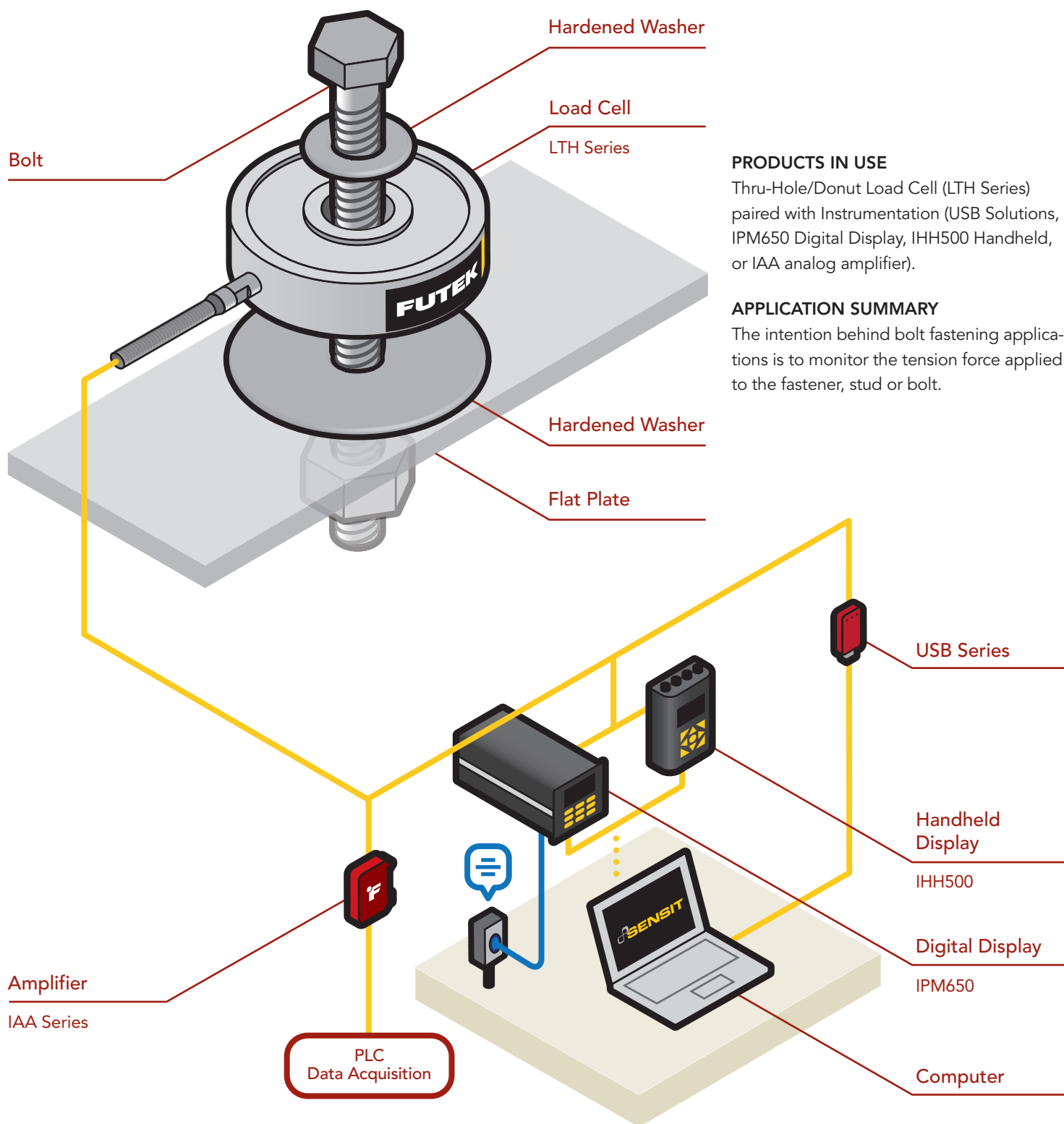


## Applicazioni OEM

Il concetto di applicazione OEM si basa sulla perfetta integrazione del sensore nell'impianto e la sua ripetizione con elevati volumi. Impianto è un termine ampio e generico che abbraccia l'integrazione del sensore negli strumenti per il laboratorio, impianti di produzione e linee di processo; questo grazie alla versatilità e varietà dei sensori FUTEK, la cui produzione giornaliera è in una buona parte di sensori OEM.

Bolt Fastening (Application 102)	Wire Tension Measurement (Application 104)	Portable Crane Weighing (Application 122)
		
Bite Force Measuring Study (Application 123)	Mass Flow Meter (Application 125)	Medical Behavioral Research (Application 129)
		
OEM Syringe Test Stand (Application 130)	Syringe Test Stand (Application 131)	Humanoid Robot Load Cell (Application 132)
		

Arbor Press Verification (Application 143)	Spring Testing System (Application 149)	Injection Molding Force Feedback (Application 159)
		
Precision Wire Tensioner (Application 166)		
		

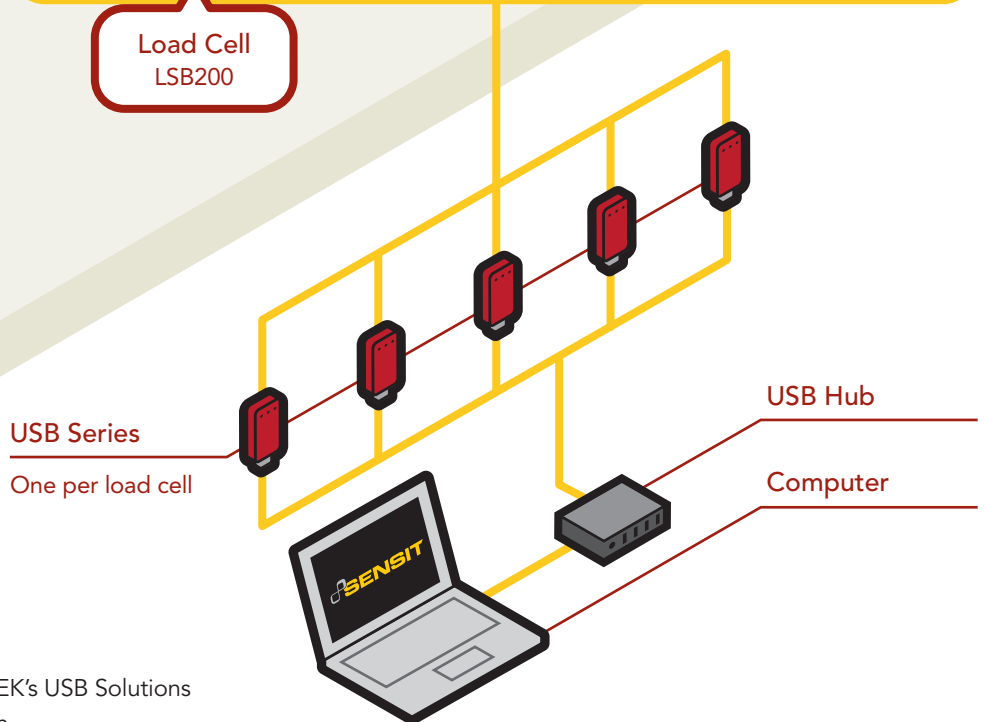
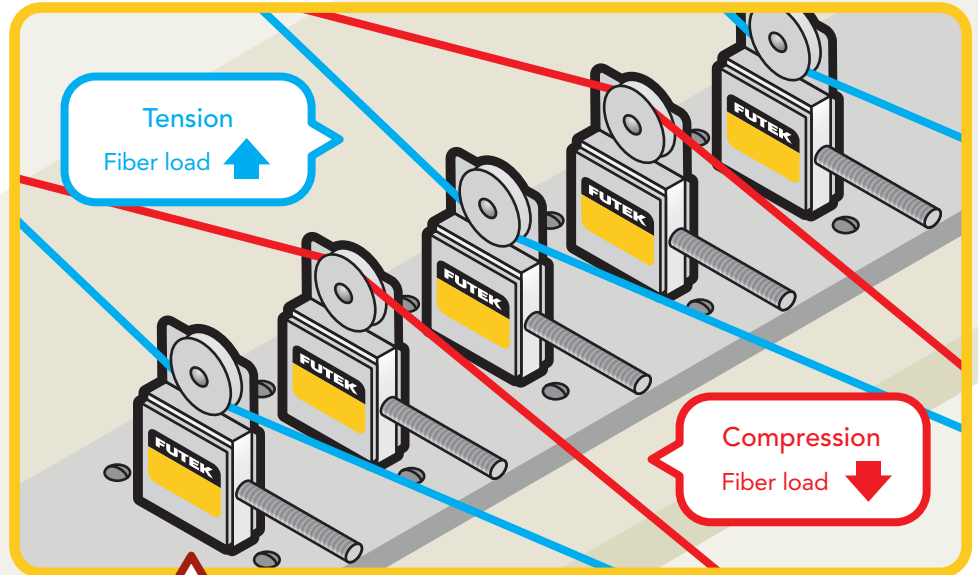
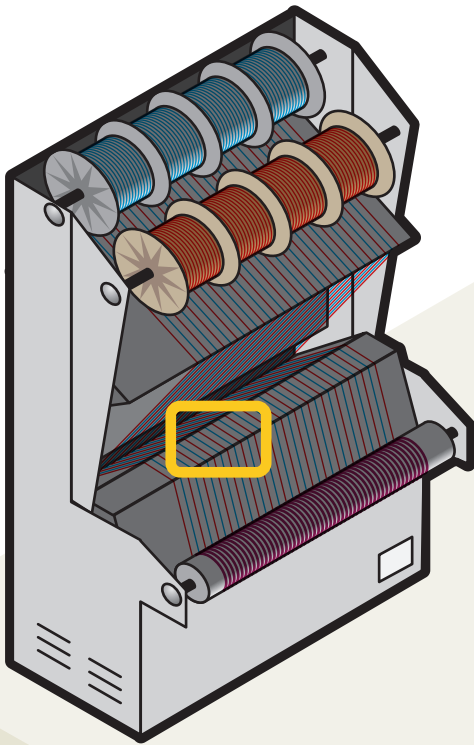


## PRODUCTS IN USE

Thru-Hole/Donut Load Cell (LTH Series) paired with Instrumentation (USB Solutions, IPM650 Digital Display, IHH500 Handheld, or IAA analog amplifier).

## APPLICATION SUMMARY

The intention behind bolt fastening applications is to monitor the tension force applied to the fastener, stud or bolt.



## PRODUCTS IN USE

Miniature S-Beam Jr. (LSB200) paired with FUTEK's USB Solutions for monitoring tension force and data collection.

## APPLICATION SUMMARY

Wire tension measurement is an integral part for manufacturers of fibers, cables, and even textile fabrics. This method of measurement allows manufactures to ensure their products fit their requirements.

## Sensor Solution Source

Load · Torque · Pressure · Multi Axis · Calibration · Instruments · Software

[www.futek.com](http://www.futek.com)

**DSPM Industria**  
sensori & trasduttori

Via Paolo Uccello 4 - 20148 Milano

Tel +39 02 48 009 757 Fax +39 02 48 002 070

[info@dspmindustria.it](mailto:info@dspmindustria.it) [www.dspmindustria.it](http://www.dspmindustria.it)





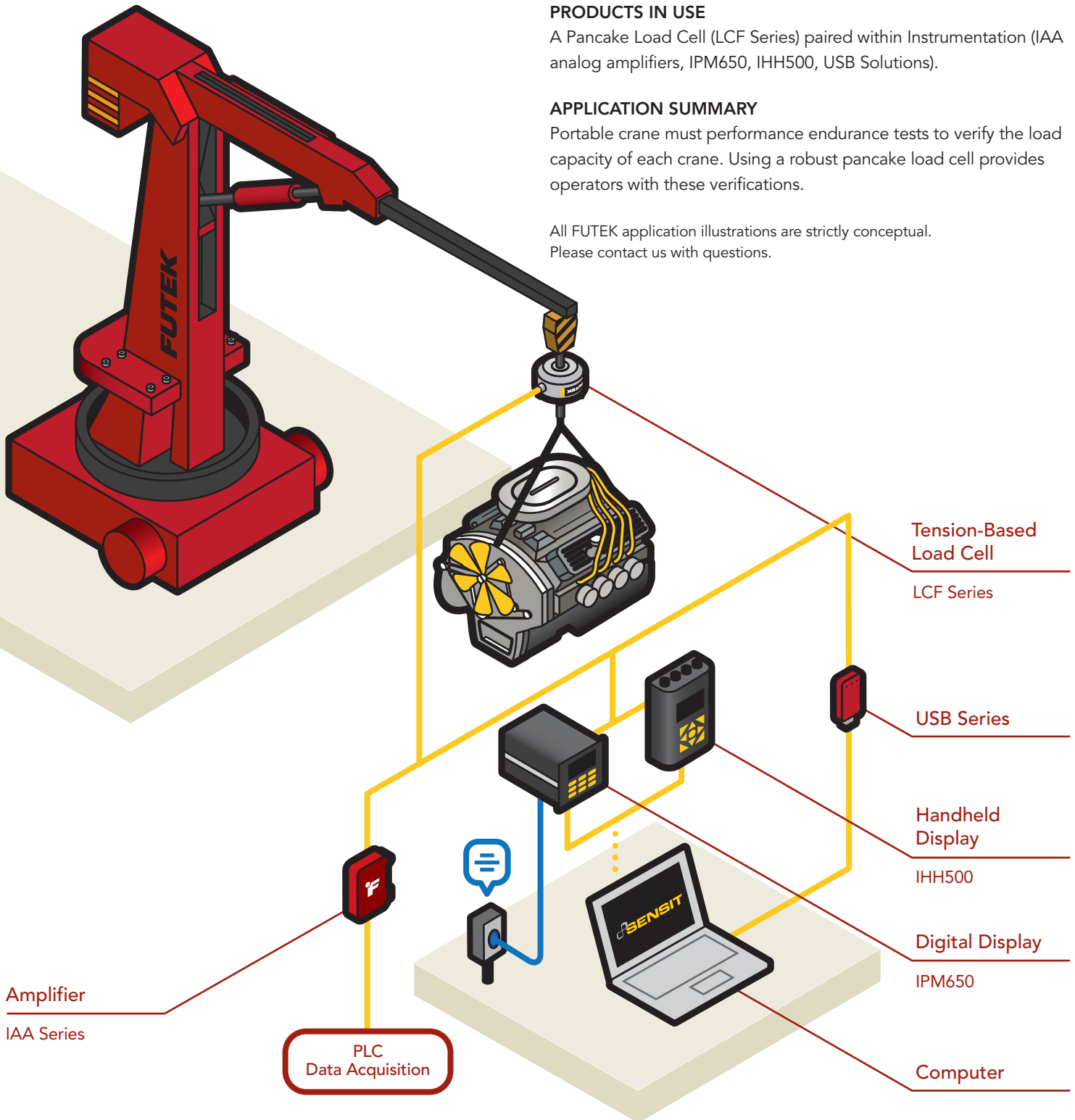
## PRODUCTS IN USE

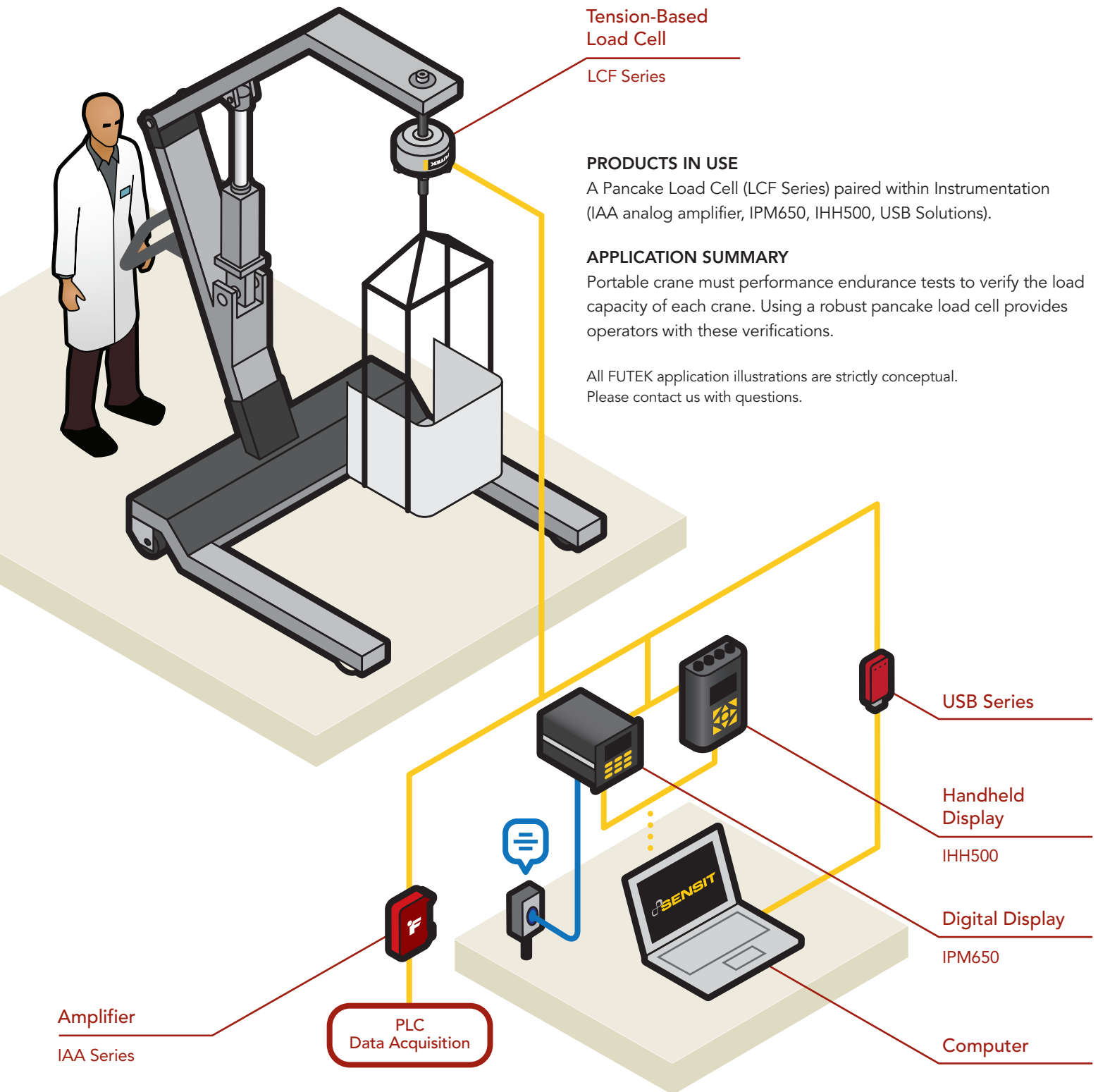
A Pancake Load Cell (LCF Series) paired within Instrumentation (IAA) analog amplifiers, IPM650, IHH500, USB Solutions).

## APPLICATION SUMMARY

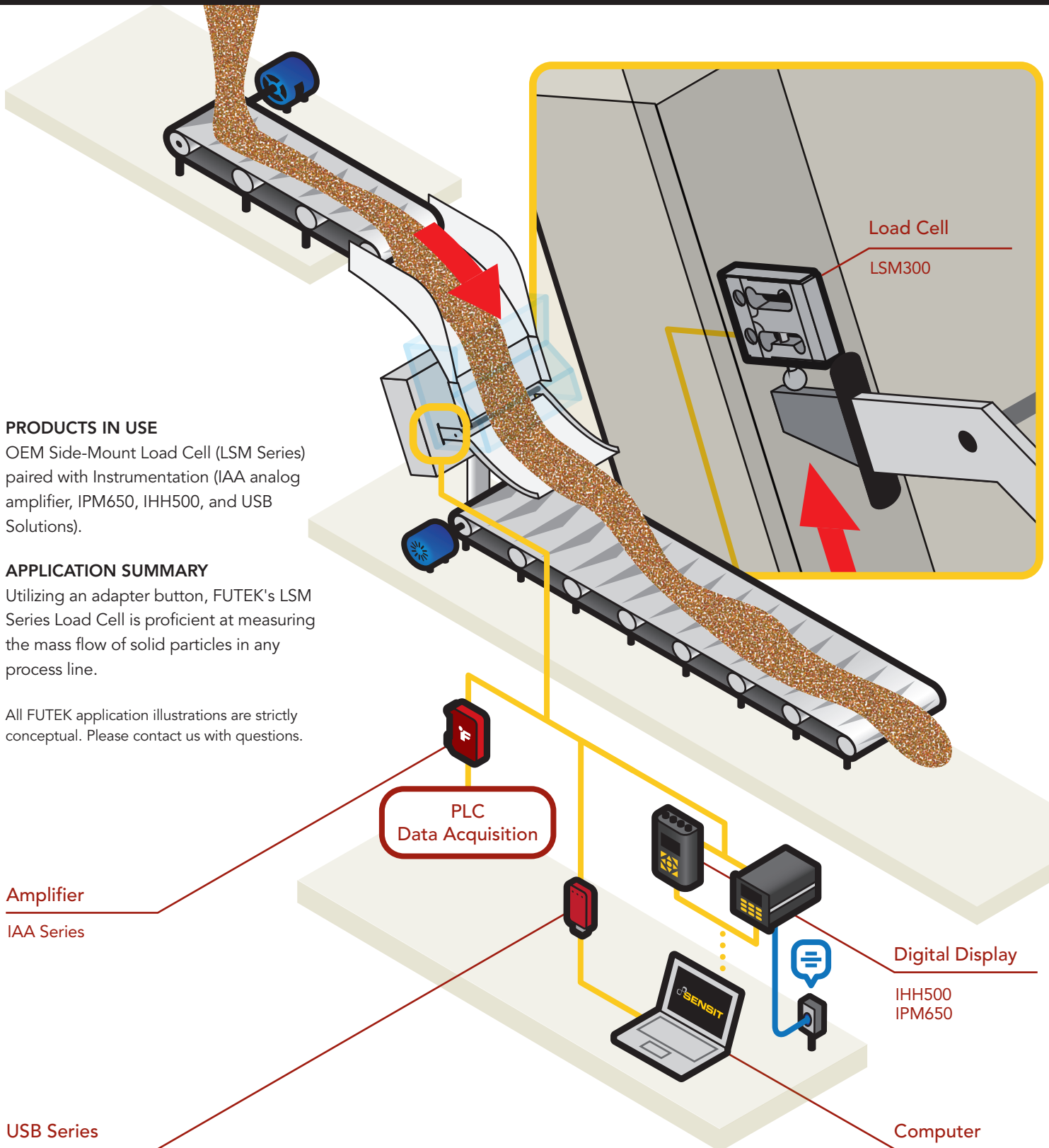
Portable crane must performance endurance tests to verify the load capacity of each crane. Using a robust pancake load cell provides operators with these verifications.

All FUTEK application illustrations are strictly conceptual.  
Please contact us with questions.









## PRODUCTS IN USE

OEM Side-Mount Load Cell (LSM Series) paired with Instrumentation (IAA analog amplifier, IPM650, IHH500, and USB Solutions).

## APPLICATION SUMMARY

Utilizing an adapter button, FUTEK's LSM Series Load Cell is proficient at measuring the mass flow of solid particles in any process line.

All FUTEK application illustrations are strictly conceptual. Please contact us with questions.

Amplifier

IAA Series

USB Series

PLC  
Data Acquisition

Digital Display

IHH500  
IPM650

Computer

## Sensor Solution Source

Load · Torque · Pressure · Multi Axis · Calibration · Instruments · Software

[www.futek.com](http://www.futek.com)

**DSPM Industria**  
sensori & trasduttori

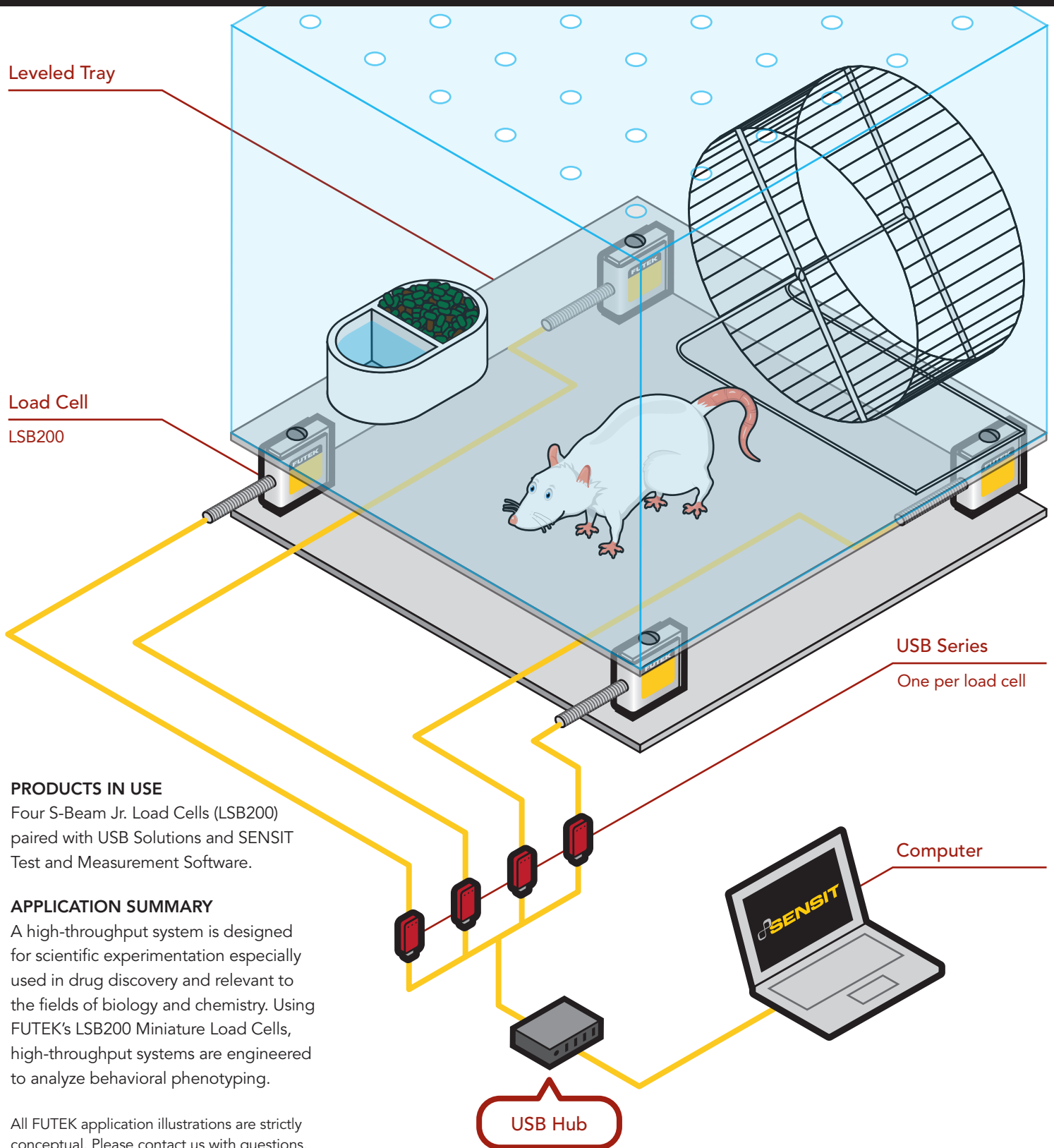
Via Paolo Uccello 4 - 20148 Milano

Tel +39 02 48 009 757 Fax +39 02 48 002 070

[info@dspmindustria.it](mailto:info@dspmindustria.it) [www.dspmindustria.it](http://www.dspmindustria.it)



U.S. Manufacturer



#### PRODUCTS IN USE

Four S-Beam Jr. Load Cells (LSB200) paired with USB Solutions and SENSIT Test and Measurement Software.

#### APPLICATION SUMMARY

A high-throughput system is designed for scientific experimentation especially used in drug discovery and relevant to the fields of biology and chemistry. Using FUTEK's LSB200 Miniature Load Cells, high-throughput systems are engineered to analyze behavioral phenotyping.

All FUTEK application illustrations are strictly conceptual. Please contact us with questions.

#### Sensor Solution Source

Load · Torque · Pressure · Multi Axis · Calibration · Instruments · Software

[www.futek.com](http://www.futek.com)

**DSPM Industria**  
sensori & trasduttori

Via Paolo Uccello 4 - 20148 Milano

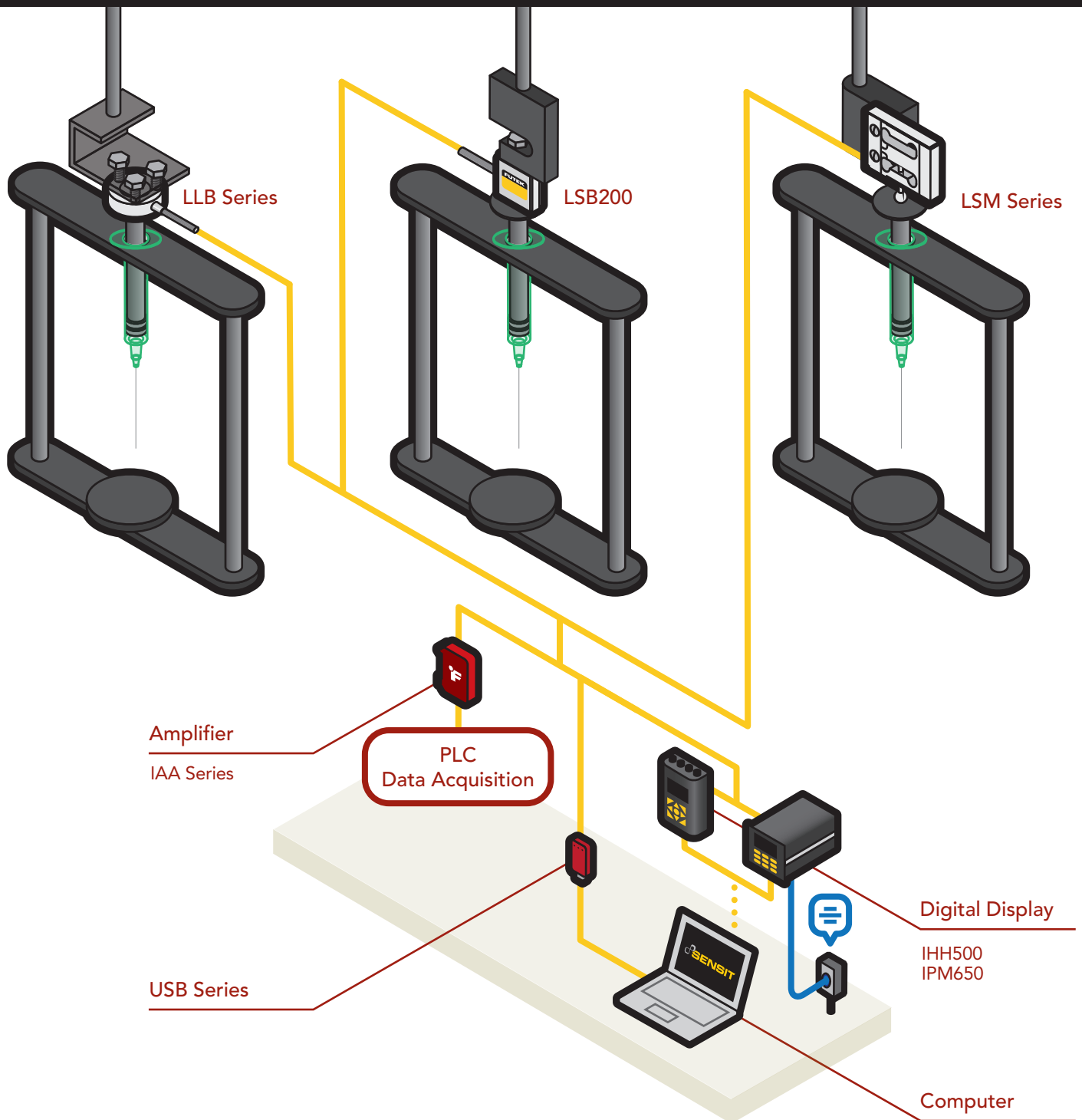
Tel +39 02 48 009 757 Fax +39 02 48 002 070

[info@dspmindustria.it](mailto:info@dspmindustria.it) [www.dspmindustria.it](http://www.dspmindustria.it)



U.S. Manufacturer



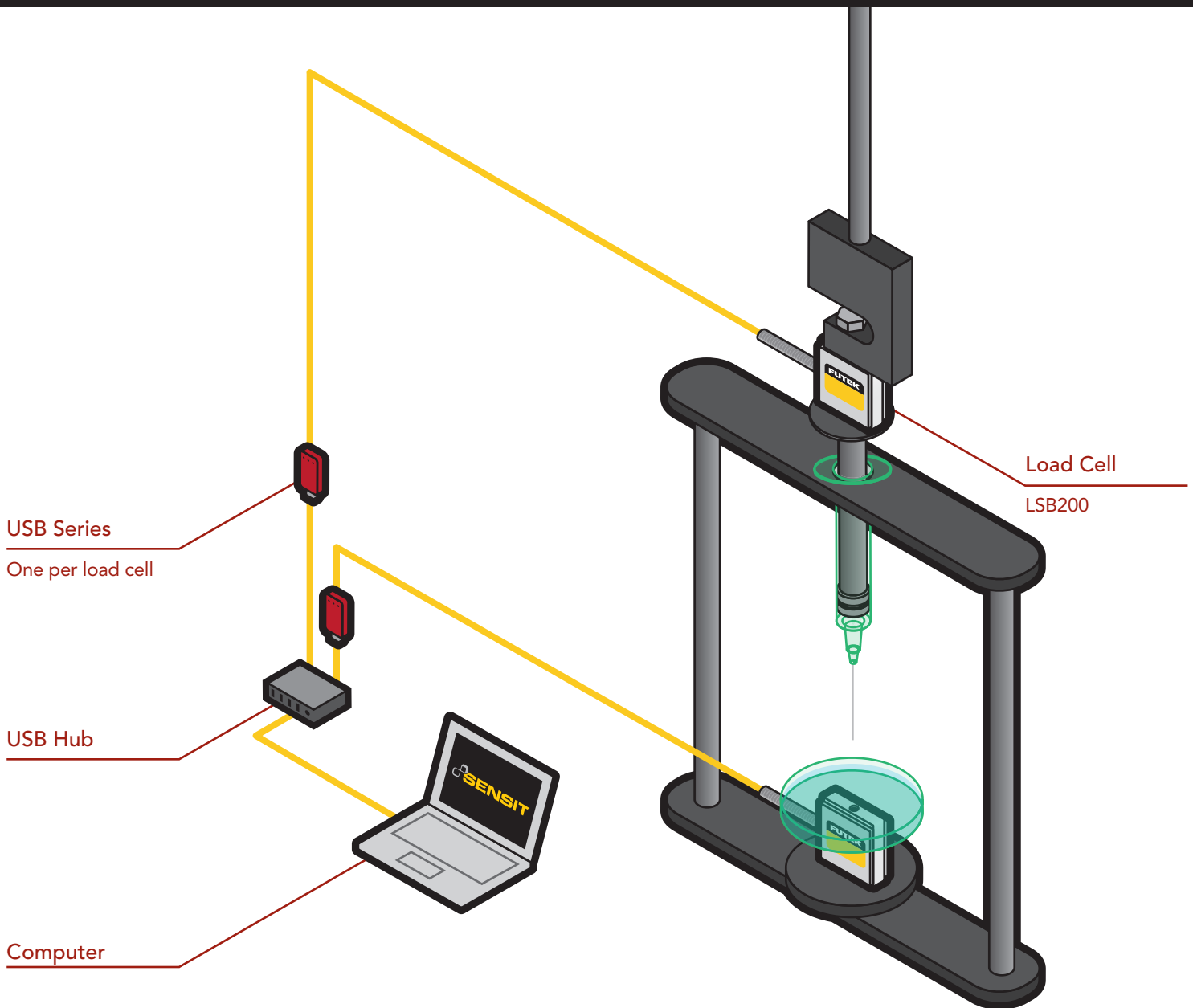


## APPLICATION SUMMARY

Utilizing OEM load cells to audit syringes (infusion pumps) provides medical quality inspectors with assurance that these apparatuses will perform up to code.

## PRODUCTS IN USE

One S-Beam Jr. Load Cell (LSB200), Side-Mount Series Load Cell (LSM Series), or Load Button Load Cell (LLB Series) paired with Instrumentation (IAA analog amplifier, IPM650, IHH500, or USB Solutions) and SENSIT™ Test and Measurement Software.



All FUTEK application illustrations are strictly conceptual.  
Please contact us with questions.

#### APPLICATION SUMMARY

Medical equipment requires precise testing. Utilizing FUTEK's LSB200 Miniature S-Beam Jr. provides quality inspectors with measurements down to the micro-gram on delicate applications, such as this syringe test stand (infusion pump).

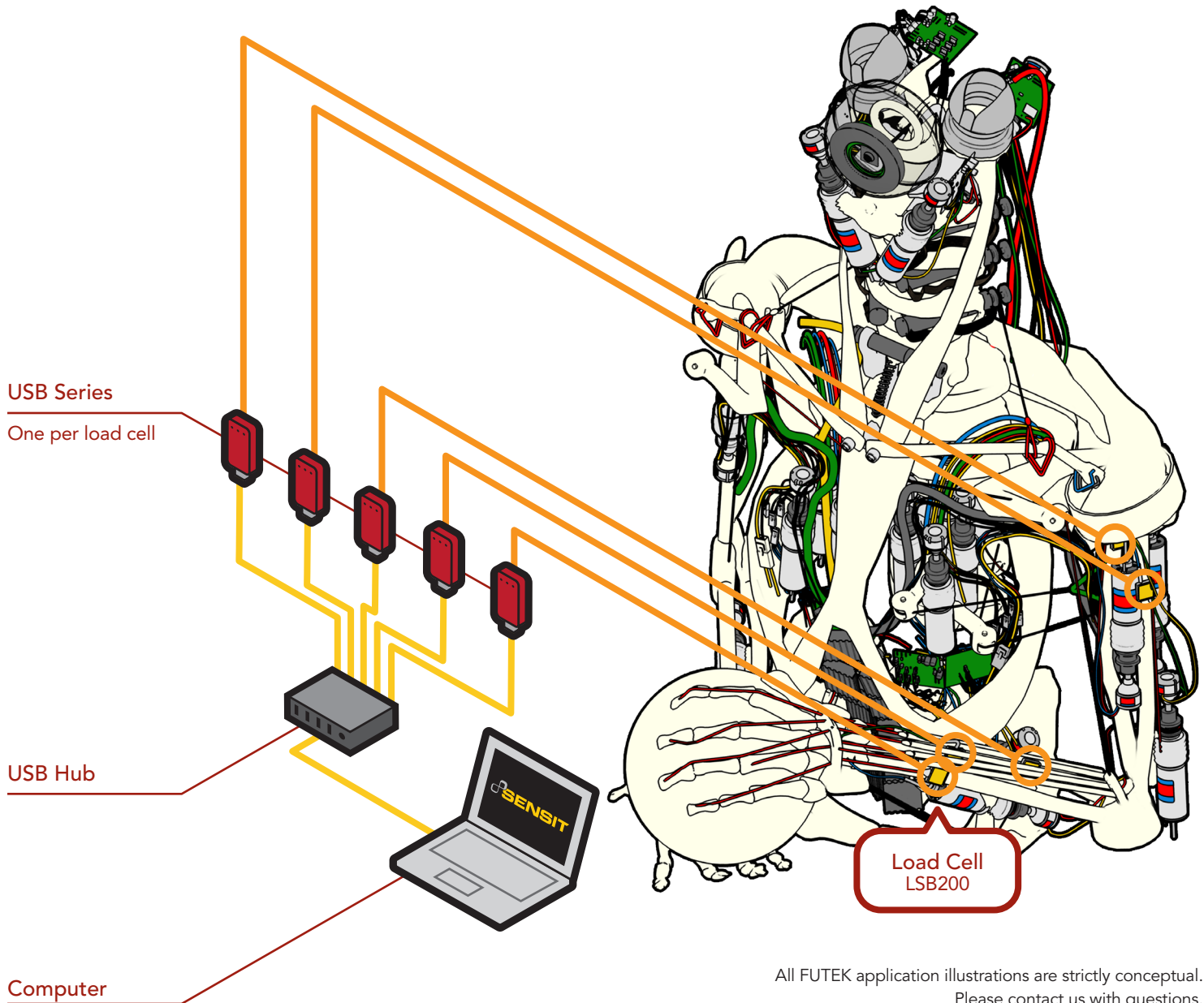
#### PRODUCTS IN USE

Two S-Beam Jr. Load Cells (LSB200) paired with USB Solutions and SENSIT Test and Measurement Software.

#### Sensor Solution Source

Load · Torque · Pressure · Multi Axis · Calibration · Instruments · Software

[www.futek.com](http://www.futek.com)



#### PRODUCTS IN USE

60+ Miniature S-Beam Jr. Load Cells (LSB200) with USB Solutions and SENSIT™ Test and Measurement Software.

#### APPLICATION SUMMARY

FUTEK partnered with The Robot Studio, a specialist in biometric robotic hardware, to construct a fully functional humanoid robot. Over 60 of FUTEK's LSB200 Miniature S-Beam Jr. Load Cells are in operation to monitor the robot's movements.

#### Sensor Solution Source

Load · Torque · Pressure · Multi Axis · Calibration · Instruments · Software

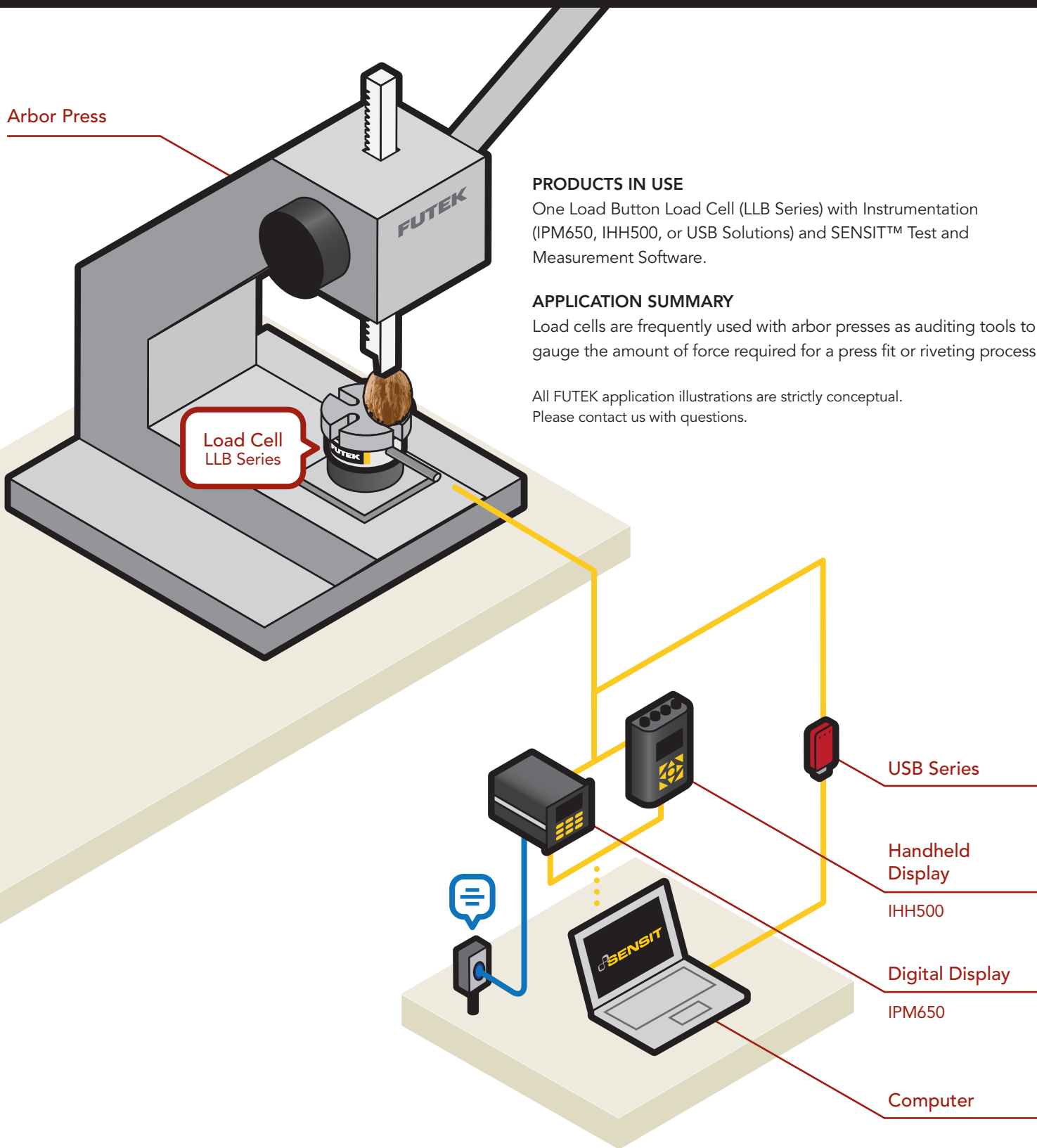
[www.futek.com](http://www.futek.com)

**DSPM Industria**  
sensori & trasduttori

Via Paolo Uccello 4 - 20148 Milano  
Tel +39 02 48 009 757 Fax +39 02 48 002 070

[info@dspmindustria.it](mailto:info@dspmindustria.it) [www.dspmindustria.it](http://www.dspmindustria.it)







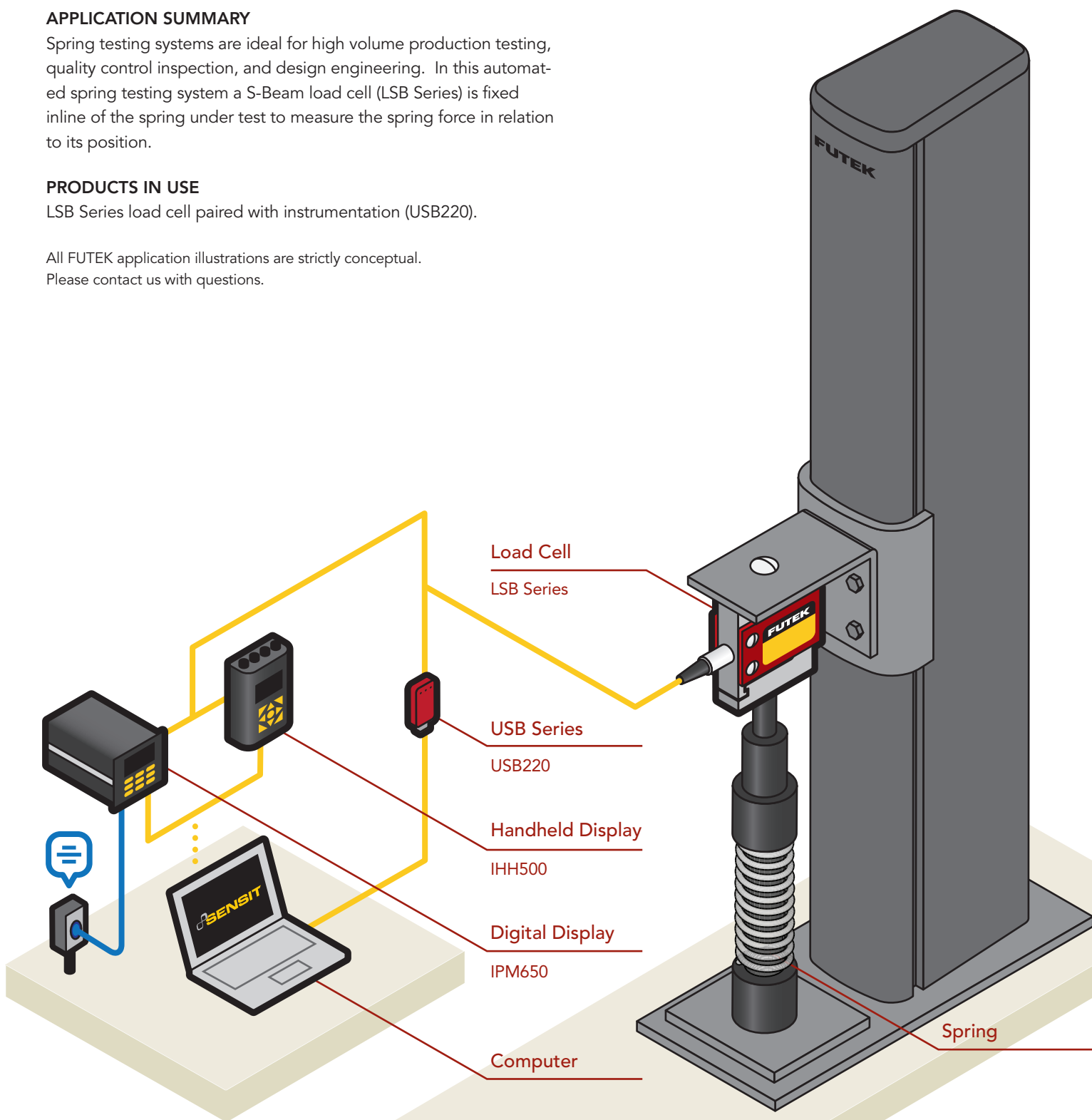
## APPLICATION SUMMARY

Spring testing systems are ideal for high volume production testing, quality control inspection, and design engineering. In this automated spring testing system a S-Beam load cell (LSB Series) is fixed inline of the spring under test to measure the spring force in relation to its position.

## PRODUCTS IN USE

LSB Series load cell paired with instrumentation (USB220).

All FUTEK application illustrations are strictly conceptual.  
Please contact us with questions.



## Sensor Solution Source

Load · Torque · Pressure · Multi Axis · Calibration · Instruments · Software

[www.futek.com](http://www.futek.com)

**DSPM Industria**  
sensori & trasduttori

Via Paolo Uccello 4 - 20148 Milano  
Tel +39 02 48 009 757 Fax +39 02 48 002 070

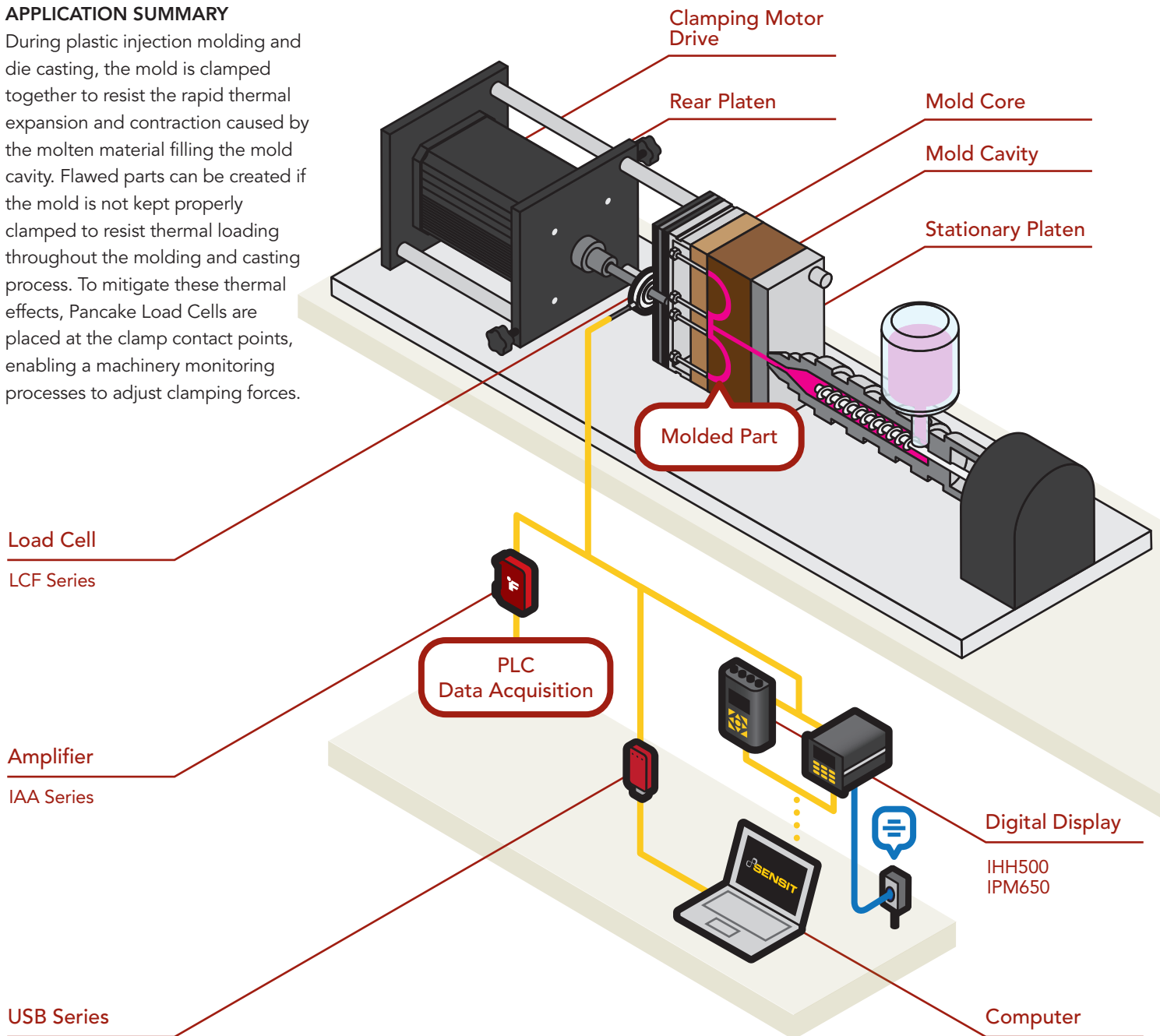
[info@dspmindustria.it](mailto:info@dspmindustria.it) [www.dspmindustria.it](http://www.dspmindustria.it)





### APPLICATION SUMMARY

During plastic injection molding and die casting, the mold is clamped together to resist the rapid thermal expansion and contraction caused by the molten material filling the mold cavity. Flawed parts can be created if the mold is not kept properly clamped to resist thermal loading throughout the molding and casting process. To mitigate these thermal effects, Pancake Load Cells are placed at the clamp contact points, enabling a machinery monitoring processes to adjust clamping forces.



### PRODUCTS IN USE

FUTEK's Universal Pancake Load Cells (LCF Series) coupled with the IAA Series analog amplifier for feedback into a PLC.

All FUTEK application illustrations are strictly conceptual. Please contact us with questions.

### Sensor Solution Source

Load · Torque · Pressure · Multi Axis · Calibration · Instruments · Software

[www.futek.com](http://www.futek.com)

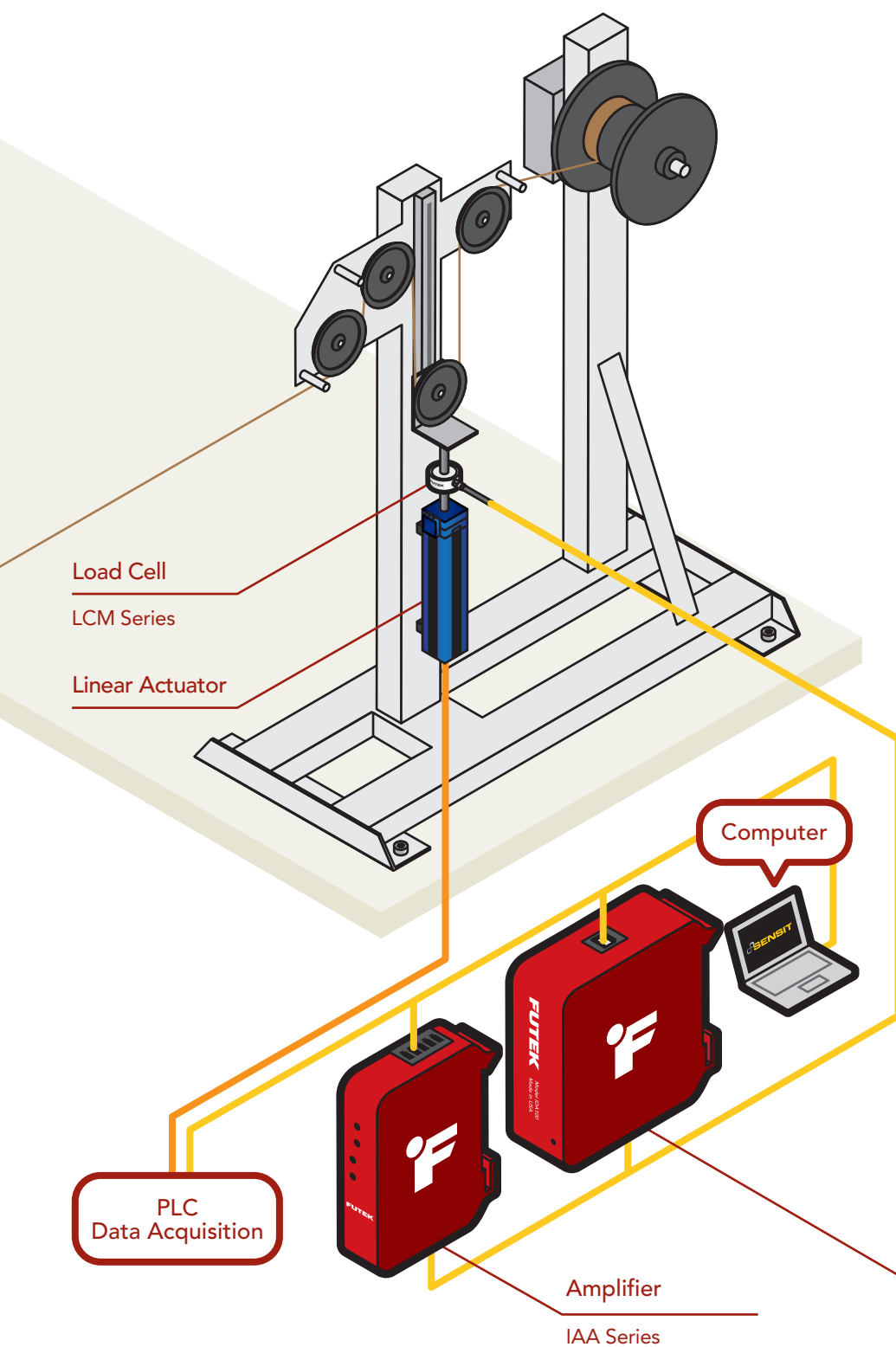
**DSPM Industria**  
sensori & trasduttori

Via Paolo Uccello 4 - 20148 Milano  
Tel +39 02 48 009 757 Fax +39 02 48 002 070

[info@dspmindustria.it](mailto:info@dspmindustria.it) [www.dspmindustria.it](http://www.dspmindustria.it)







## APPLICATION SUMMARY

Whether you are feeding a wire EDM machine, a wire stripper, or winding electric motor coils, precision wire tension is key to meet today's high performance standards. The key to precision wire tension control requires live monitoring of the wire tension. By utilizing a load cell in-line with the wire tensioner, a versatile wire tensioning system can be developed that can adapt to changing wire quality and conditions. Furthermore this adaptive system can maintain high coil winding quality and repeatability while maximizing process efficiency by preventing wire breakage.

## PRODUCTS IN USE

1 In-Line Tension and Compression Load Cell (LCM Series) paired with Instrumentation (IAA Series or IDA100).

All FUTEK application illustrations are strictly conceptual. Please contact us with questions.