



Celle di carico combinate

Combinazione di celle di carico per la caratterizzazione dei combustibili solidi e liquidi di un razzo.

Rocket Engine Thrust Stand (Application 161)	Prosthetic Foot Emulator (Application 167)	
		

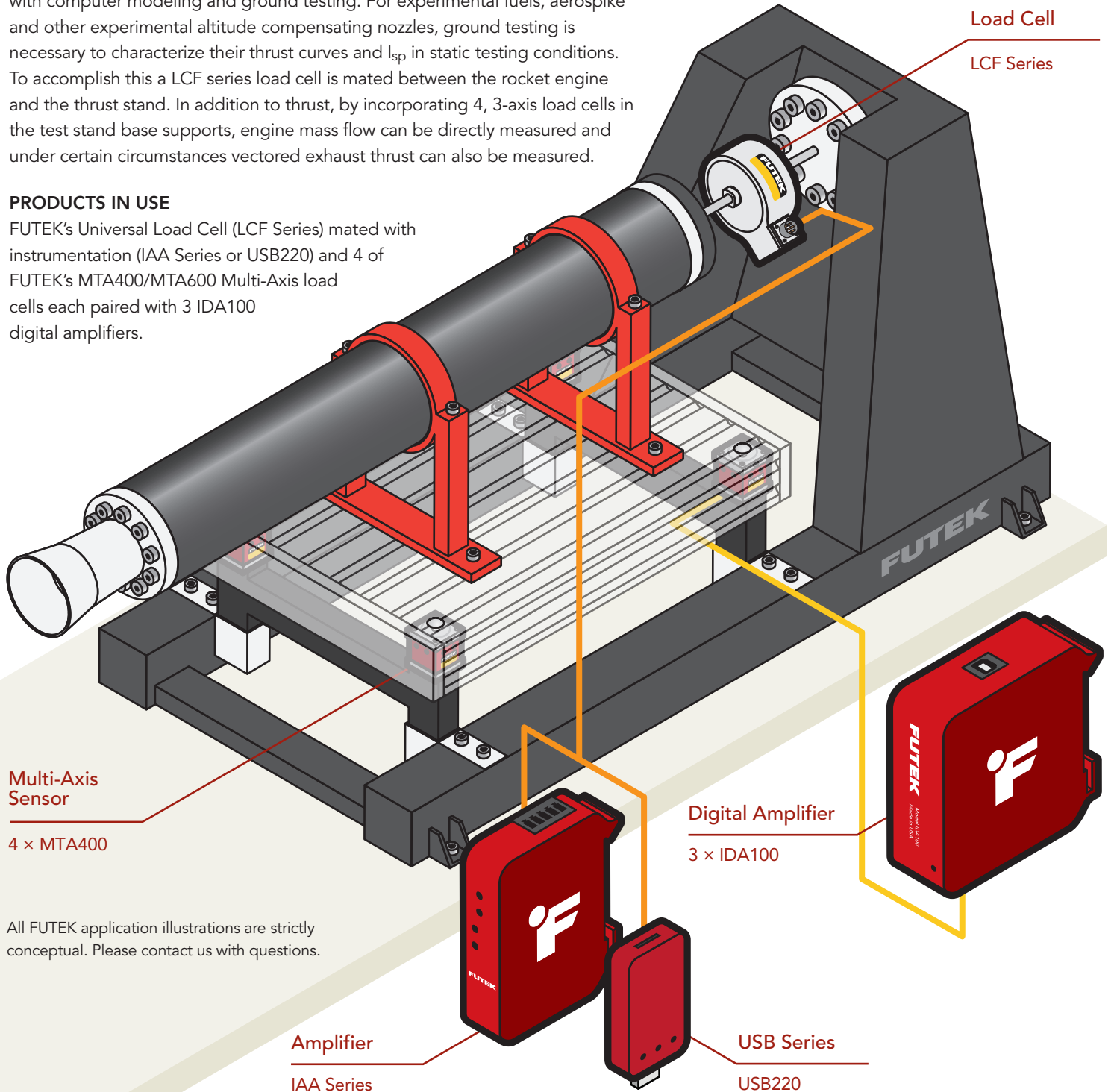


APPLICATION SUMMARY

Characterization of solid, liquid, and hybrid rocket engines is often performed with computer modeling and ground testing. For experimental fuels, aerospike and other experimental altitude compensating nozzles, ground testing is necessary to characterize their thrust curves and I_{sp} in static testing conditions. To accomplish this a LCF series load cell is mated between the rocket engine and the thrust stand. In addition to thrust, by incorporating 4, 3-axis load cells in the test stand base supports, engine mass flow can be directly measured and under certain circumstances vectored exhaust thrust can also be measured.

PRODUCTS IN USE

FUTEK's Universal Load Cell (LCF Series) mated with instrumentation (IAA Series or USB220) and 4 of FUTEK's MTA400/MTA600 Multi-Axis load cells each paired with 3 IDA100 digital amplifiers.



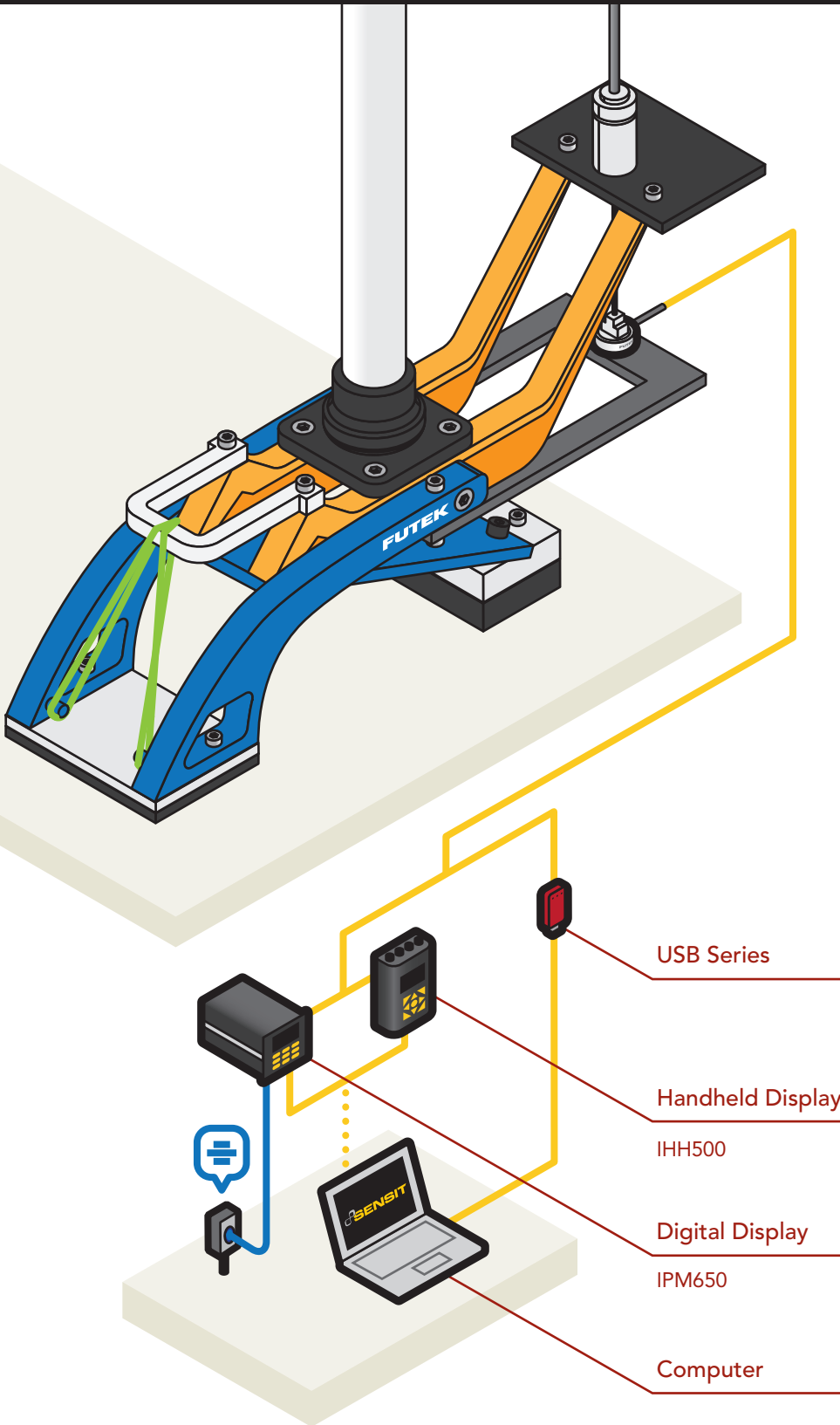
All FUTEK application illustrations are strictly conceptual. Please contact us with questions.

Sensor Solution Source

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

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APPLICATION SUMMARY

For individuals who have lost part or all of a limb, rehabilitation is always a difficult process. For those who have undergone trans-tibial amputation, their prosthesis needs to mimic the tibia, ankle, and foot. FUTEK worked with Humotech in selecting a sensor for a trans-tibial prosthesis that could adapt to an individual's gait during rehabilitation. By mounting our LCM200 Miniature Threaded In-Line Load Cell in-line with a servo-driven cable system, Humotech was able to create a closed-loop system that adapts to the patient's gait for a speedier recovery and rehabilitation.

PRODUCTS IN USE

1 FUTEK LCM200 Miniature Threaded In-Line Load Cell paired with IDA100 Digitally Configurable Amplifier.

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