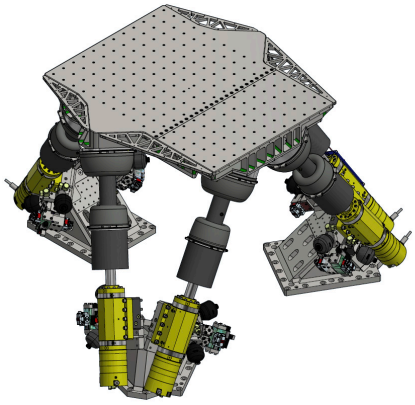
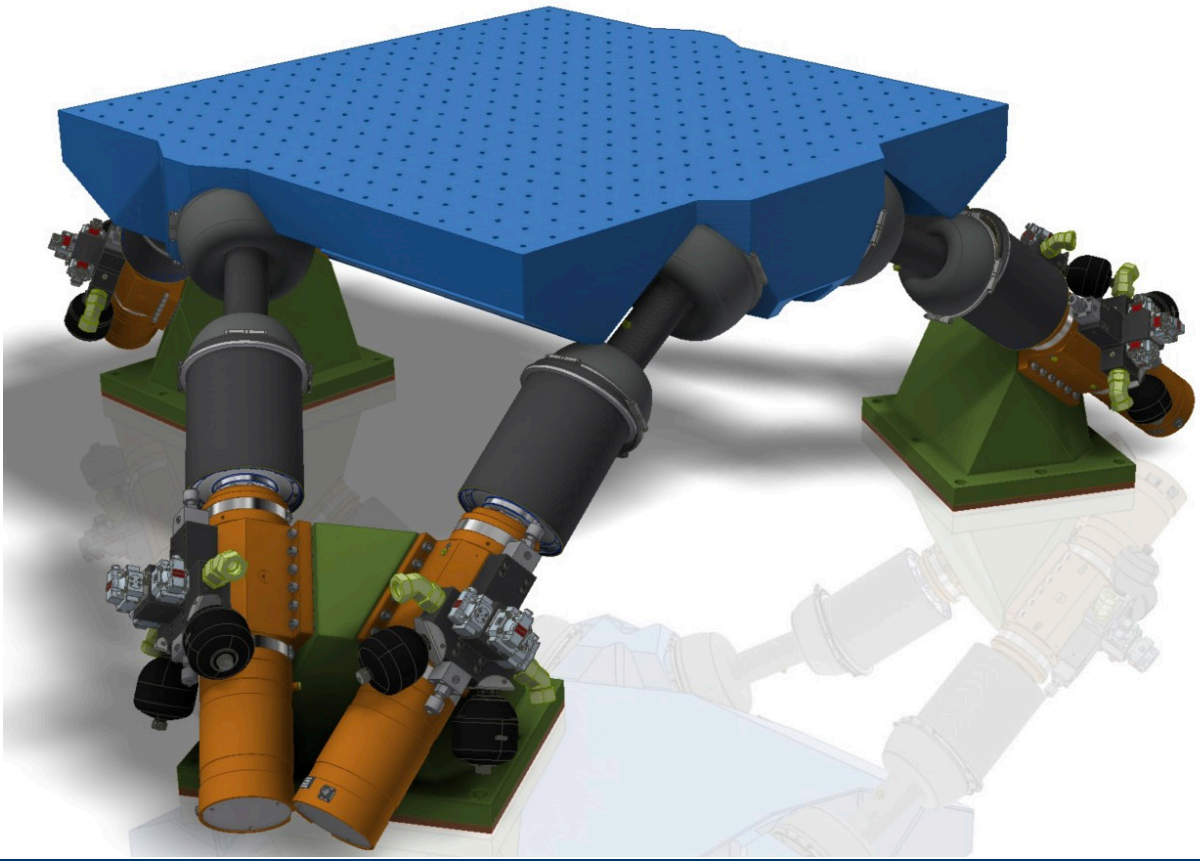
YOUR TESTING SOLUTIONS

Hexapode MAST System



- Inova is a specialist in the field of multiaxial systems for testing vehicles and their components.
- Our engineers develop a broad portfolio of MAST (Multi-Axis Shaker Table) systems that cover a wide range of application needs.
- The durability and accuracy of Inova MAST tables have been validated by leading companies in the automotive industry.
- Inova's hexapod designs are based on hydrostatic technology, with meticulous attention to every detail to ensure unmatched quality and minimal maintenance costs.



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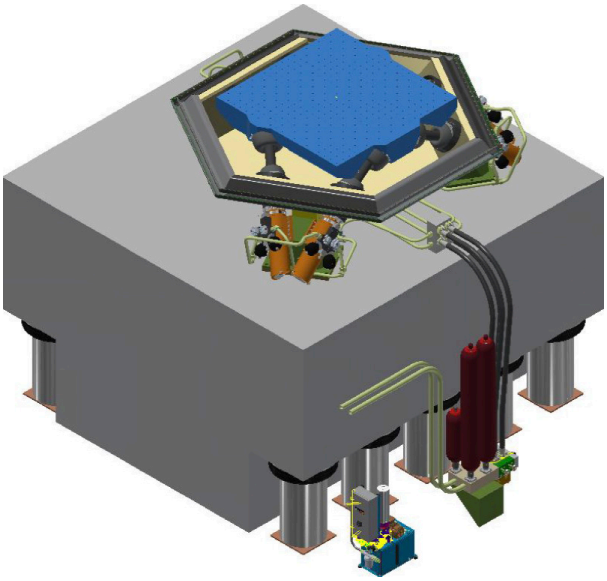
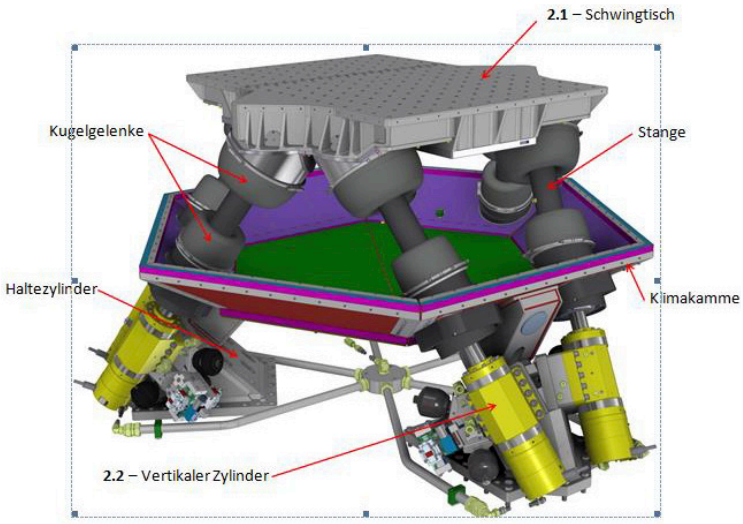
Key Features

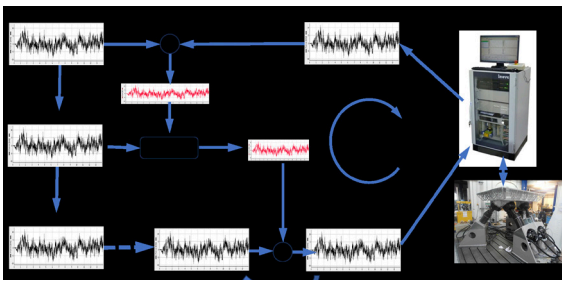
- Inova hydrostatic actuators
- Hydrostatic ball joints
    - Even signals with very small amplitudes are replicated with high accuracy and repeatability thanks to frictionless hydrostatic operation.
    - Oil-through design maintains constant joint temperature during varying load and thermal simulation scenarios.
- Actuator body fixation ensures resonance-free performance across all axes and throughout the full frequency range.
- All Inova MAST hexapods are fully prepared for temperature simulation.
- Under-table isolation and gap sealing on moving parts minimize the “breathing effect,” ensuring consistent performance in controlled thermal conditions.
- The table’s compact aluminum structure is optimized for vibration-free operation and features an inner acoustic damping layer to reduce noise.
- Inova delivers the complete solution, including the seismic mass with air spring isolation.

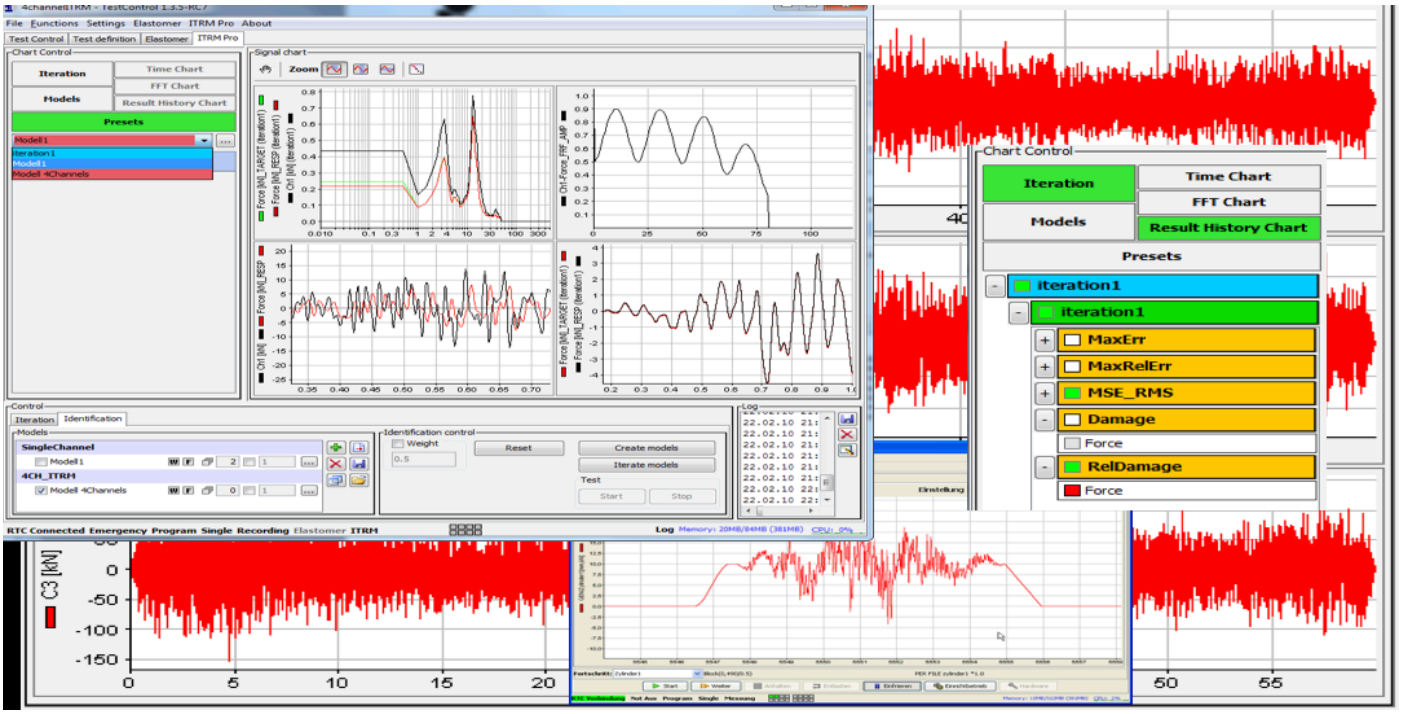




Controller

- HW - EU3000 based on the real time application 10kHz
- Software TestControl
- Iteration module ITRM Pro including SCT evaluation (Road profiles)
- Vibration module (PSD, noise...)
- Test run monitor





Application Modules	Testing Run Monitoring	Control	Communication
Steering function testing		RTI (realtime iteration)	Serial
LCF/HCF,TMF		ITRMPro (iteration, service load simulation)	Modbus/TCP
Material Testing	Elastomer Monitor	Resonance search & hold	EtherCAT
Damper Testing	Damage Monitor	Extended Regulator (cascade control&user definable control algorithm)	FlexRay
Elastomer Testing	Trend Monitoring Base Modul	Extended Generator (sweep, noise, expression, double sine)	CAN/CAN FD
			Web&Application Interface

Base Software TestControl

Parameters Hexapodes

Parameter	Unit	MAST BW 40	MAST BR 50	MAST BR 63	MAST VV 100	MAST DR 160
Nominal Payload	kg	500	750	1000	2000	3000
Frequency	Hz	250	200	200	150	100
Table size	mm	1200 x 1700	1200 x 1800	1200 x 1800	2000 x 2000	2000 x 2000
Hydrostatic actuators	-	Yes	Yes	Yes	Yes	Yes
Hydrostatic ball joints	-	Yes	Yes	Yes	Yes	Yes
Stroke (+/-)	Unit					
Translation X / Y / Z	mm	90 / 90 / 65	100 / 100 / 75	100 / 100 / 100	110 / 110 / 140	110 / 110 / 140
Rotation X / Y / Z	deg	6 / 6 / 8	7 / 7 / 9	9 / 9 / 10	9 / 9 / 7	9 / 9 / 7
Speed	Unit					
Speed X/Y/Z(m/s)	m/s	1,7 / 1,7 / 1,3	1,7 / 1,7 / 1,3	1,7 / 1,7 / 1,3	1,2 / 1,2 / 1,45	1,2 / 1,2 / 1,45
Speed rX/rY/rZ (deg/s)	deg/s	110 / 110 / 150	110 / 110 / 150	110 / 110 / 150	100 / 100 / 80	100 / 100 / 80
Acceleration with various payload	Unit					
3000kg - Translation X / Y / Z	m/s^2	-	-	20 / 20 / 60	35 / 40 / 60	60 / 70 / 90
2000kg - Translation X / Y / Z	m/s^2	25 / 25 / 65	25 / 25 / 60	30 / 30 / 85	50 / 55 / 80	75 / 85 / 120
1000kg - Translation X / Y / Z	m/s^2	35 / 35 / 105		50 / 45 / 130	75 / 75 / 110	100 / 110 / 160
750kg - Translation X / Y / Z	m/s^2	45 / 40 / 120	45 / 40 / 110	55 / 50 / 150	85 / 85 / 120	120 / 120 / 170
500kg - Translation X / Y / Z	m/s^2	50 / 50 / 140	50 / 45 / 140	65 / 60 / 170	90 / 90 / 130	130 / 130 / 180
Bare table - Translation X / Y / Z	m/s^2	70 / 70 / 200	65 / 65 / 200	85 / 85 / 250	110 / 110 / 170	150 / 150 / 200