Inertial systems from 125 N to 650 N

TIRA produces inertial systems (IN) in the range from 125 N to 650 N, which can be bolted directly to the structure and aligned at any angle within 360°.

The generators have an **excellent lateral and axial stiffness**. Excitation is made by permanent magnets, and a special spring system provides optimal guidance so that the full body mass can impact on the structure.

The generator is cooled by a maintenance-free fan, with cooling air entering through a filter assembly. As inertial generators from **TIRA** can efficiently apply dynamic forces to large structures, they have found their applications in manufacturing, aerospace, buildings, civil engineering and shipbuilding.

Inertial shaker S 51140-IN

System		TV 51112-IN	TV 51125-IN
Shaker		S 51112-IN	S 51125-IN
Amplifier		BAA 120	BAA 500
Blower		–	TB 0080
Rated peak force (N)	$Sine_{pk}$ / $Random_{RMS}$	125/70	250/150
Frequency range (Hz)		DC - 2000	DC - 2000
Max. displacement (mm)	Pk - Pk	9	9
Max. velocity (m/s)	Sine/Random	1.5/1.5	1.5/1.5
Max. acceleration (g)	Sine/Random	0.98/0.54	2/1.2
Suspension stiffness (N/mm)		20	20
Effective moving mass (kg)		0.35	0.35
Weight (kg)		13	13
Coupling (Thread ø/mm)		M12	M12
Max. power consumption at 230 V (kVA) Amplifier/Blower		0.1/-	0.4/0.46

System		TV 51140-IN	TV 51165-IN
Shaker		S 51140-IN	S 51165-IN
Amplifier		BAA 1000	BAA 1000
Blower		TB 0140	TB 0140
Rated peak force (N)	$Sine_{pk}$ / $Random_{RMS}$	400/311	650/420
Frequency range (Hz)		DC - 2000	DC - 2000
Max. displacement (mm)	Pk - Pk	9	9
Max. velocity (m/s)	Sine/Random	1.5/1.5	1.5/1.5
Max. acceleration (g)	Sine/Random	2.8/2	2.8/1.8
Suspension stiffness (N/mm)		56	98
Effective moving mass (kg)		0.63	0.97
Weight (kg)		16	26
Coupling (Thread ø/mm)		M12	M12
Max. power consumption at 230 V (kVA) Amplifier/Blower		1.22/1.4	1.27/1.4