ELECTRO MAGNETIC FIELDS (EMF): CLEARING UP THIS NATURAL PHENOMENA



DVC™ PLATE OFFICIAL EMF EXPOSURE IN A GM500 IVC CAGE

The revolutionary DVCTM system is based on proximity sensor technology that applies the same principles commonly used in Tablet devices





DVC™ generates MICRO EMF (Electro Magnetic Fields) that are only detectable by professional antennas specifically designed to perform an EMF exposure assessment.

Results from an independent EMC Certification Company during the analysis of the DVC™ while in use on a Tecniplast Rack, showed that the EMF Fields generated are negligible compared to other sources of EMF commonly found in many Animal Rooms. An EMF exposure assessment on our DVC™ rack, in a specific animal room, were compared to the guidelines of ICNIRP (International Commission on Nonlonizing Radiation Protection, an independent organization).

The results are presented in the Table below:

Potential EMF Exposure in GM500 IVC Cages Fitted with DVC					
EMF STRENGTH r.m.s. [V/m]	Values detected within the GM500 cage AHU operating	Values detected within the GM500 cage with DVC™	Values detected within the GM500 cage with DVC™ and Changing Station at 2m distance	Values detected directly under the Changing Station	ICNIRP Reference levels for general public exposure [V/m]
5Hz - 100Hz	0.63	2.24	3.12	62.0	From 5000 to 2500
100Hz - 1KHz	0.15	0.7	0.8	3.90	From 2500 to 250
1KHz - 100KHz	0.25	0.46	0.42	2.40	From 250 to 8.3
100KHz - 3GHz	1.73	1.51	1.69	na	8.3

The detected magnetic field values into the spectrum are extremely low and comparable to the sensitivity of the EMF Testing equipment used to perform the analysis (completely overlapping with background magnetic field noise of the room). Copy of original report available on request.

CONCLUSIONS

The DVC[™] is a revolutionary system that has been developed to utilize micro EMF monitoring to improve both scientific outcomes and animal welfare. More specifically, the micro EMF used by the DVC[™] are comparable to, or below, normal background situations. As the data in the Table above show, it is much lower than other EMF sources generated by common electrical equipment already present in Animal Rooms, and which have not been shown to affect animal welfare.

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 = COMPANY WITH ENVIRONMENTAL SYSTEM CERTIFIED BY DNV GL

= ISO 14001 =



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