

CFD FLOW SIMULATION

**M.E.M: MANUAL ELEVATION MECHANISM**

REF.20504

AERODYNAMIC TEST

**KTM 790 ADVENTURE / R**  
2019 -

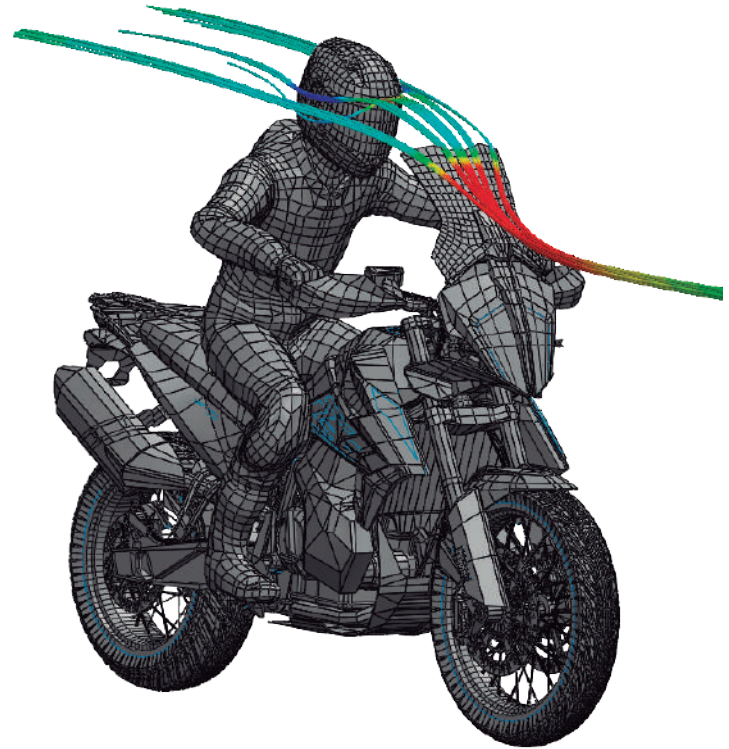
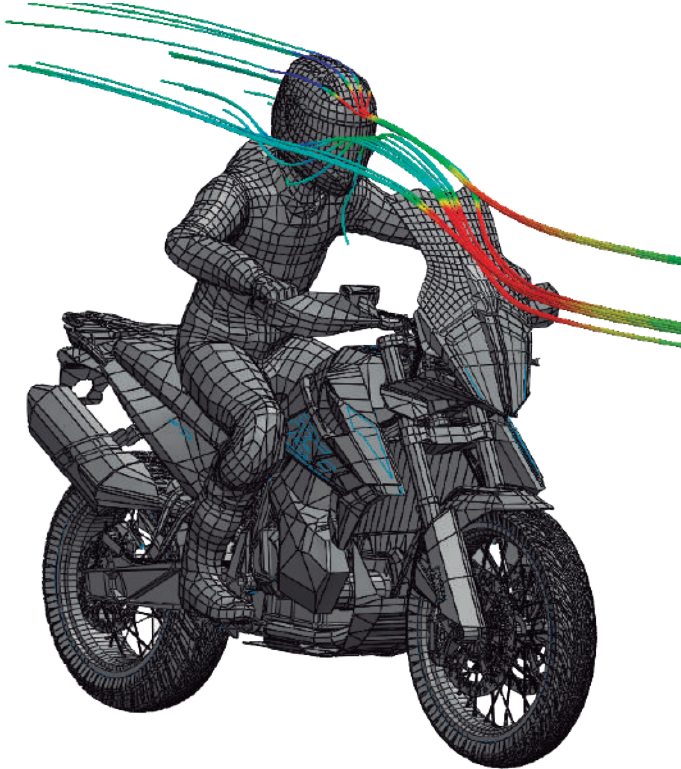


AIR FLOW & PREASSURE COMPARISON



ORIGINAL SCREEN

M.E.M. (High Position)



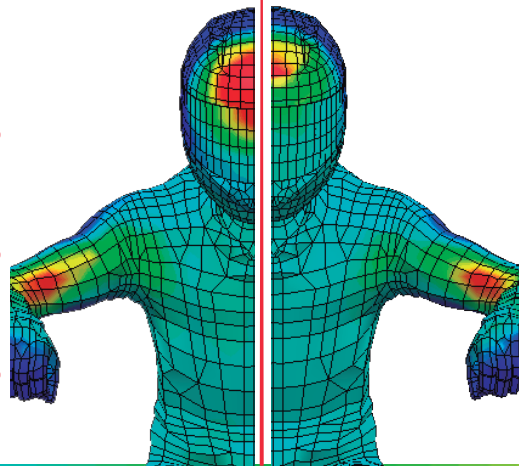
HELMET PROTECTION



UPPER BODY PROTECTION



LOW BODY PROTECTION



HELMET PROTECTION



UPPER BODY PROTECTION



LOW BODY PROTECTION



LOW PRESSURE

HIGH PRESSURE

TOTAL DISSIPATED PRESSURE WITH M.E.M. IS EQUIVALENT TO **0.8 Kg**

INCREASE WIND PROTECTION

**88%** WITHOUT LOSING  $C_x$

AERODYNAMIC TEST CONDITIONS

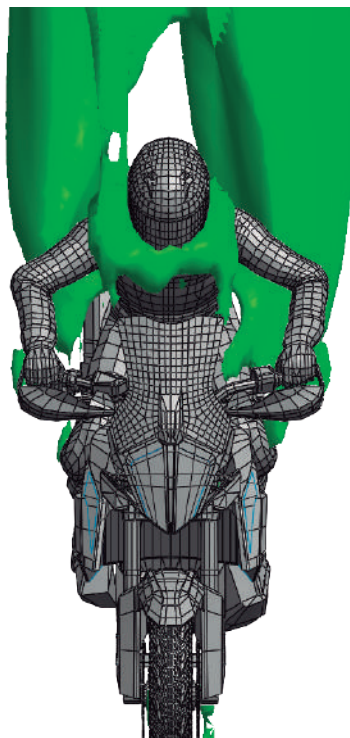
VSPEED	150 Km/h	94 mph
RIDER HEIGH	180 cm	5.9 ft
TEMPERATURE	20°	68°F
RIDER POSITION		Standard
LATERAL WIND		No

**ACOUSTIC POWER LEVEL COMPARISON**

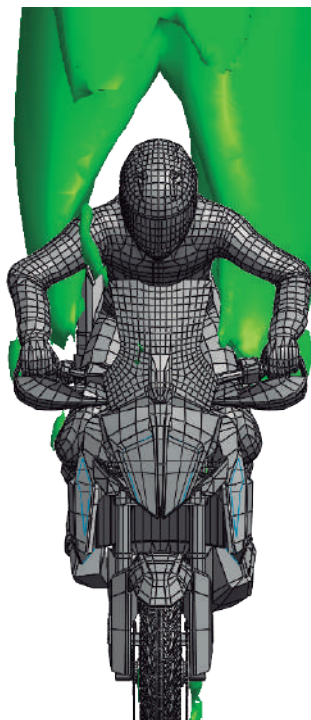
**50dB zone:**

The green cloud that we can see in the following images defines the area affected by a sound level of 50dB. As we can see, when mounting the M.E.M. in high position, we managed to remove all that annoying sound from the helmet area.

**ORIGINAL SCREEN**

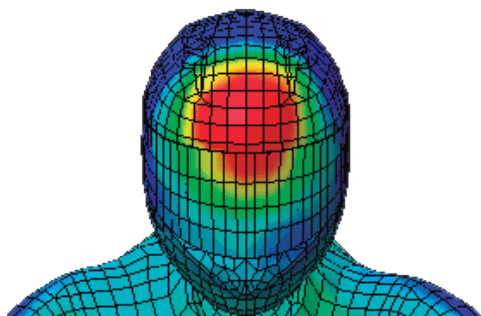


**M.E.M.  
(High Position)**



**HELMET PRESSURE COMPARISON**

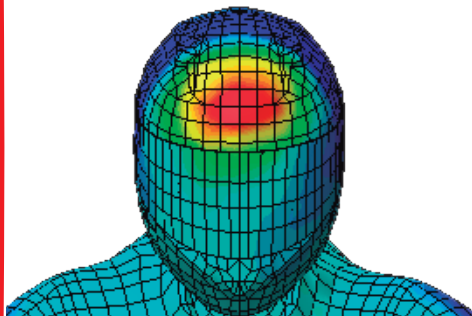
**ORIGINAL  
SCREEN**



HELMET PROTECTION



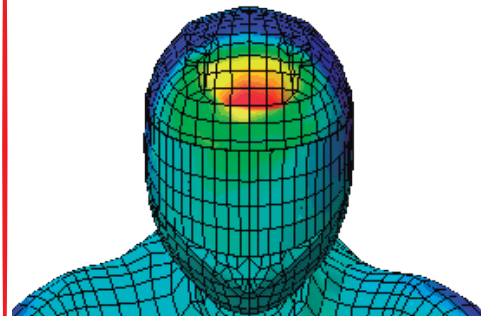
**M.E.M  
MIDDLE POSITION**



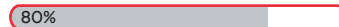
HELMET PROTECTION



**M.E.M  
HIGH POSITION**



HELMET PROTECTION



LOW PRESSURE

HIGH PRESSURE