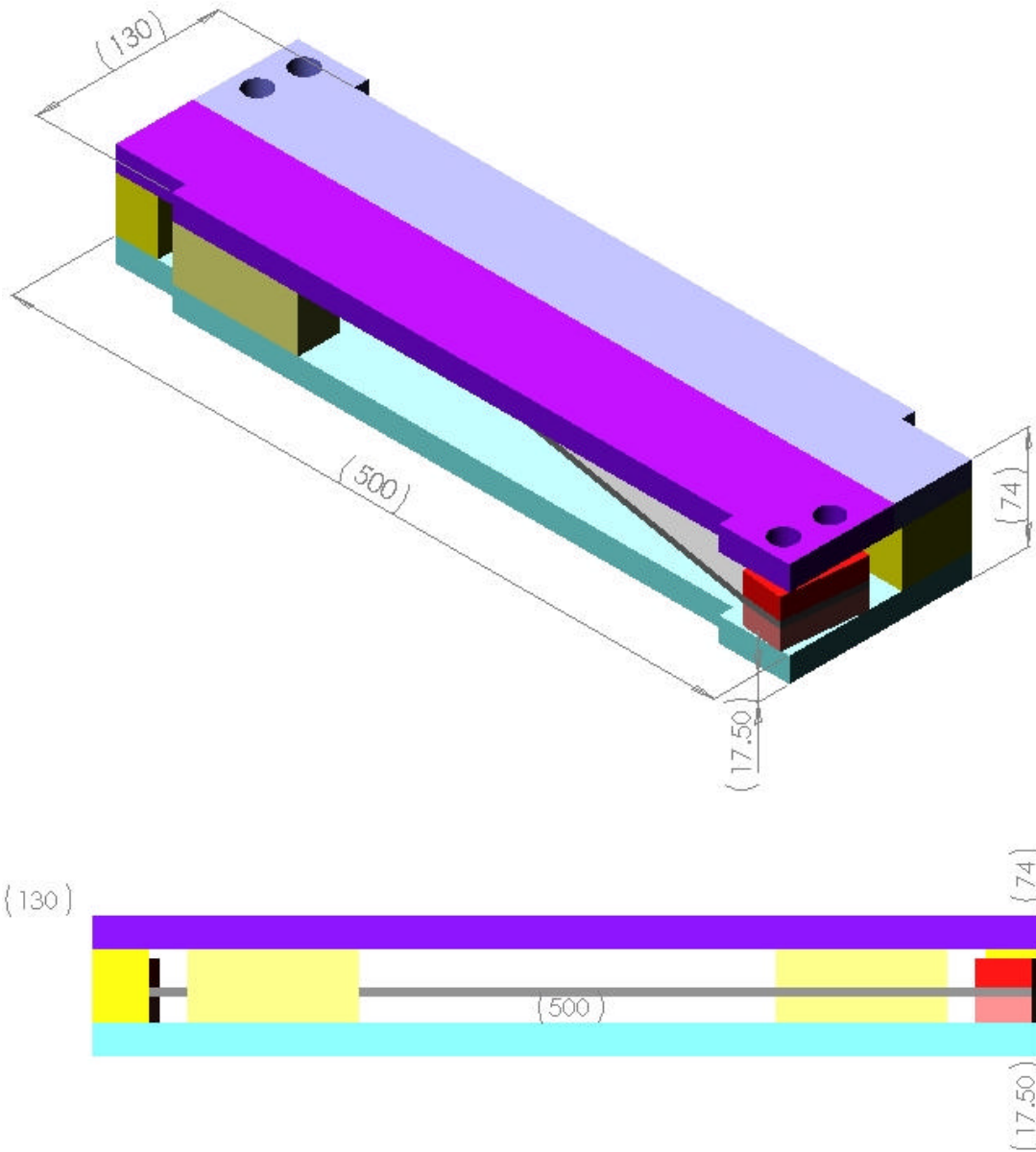


Examples of Possible ETM Quad Upper Masses. 9 May 2003

EXAMPLE 1
(no T-pieces)



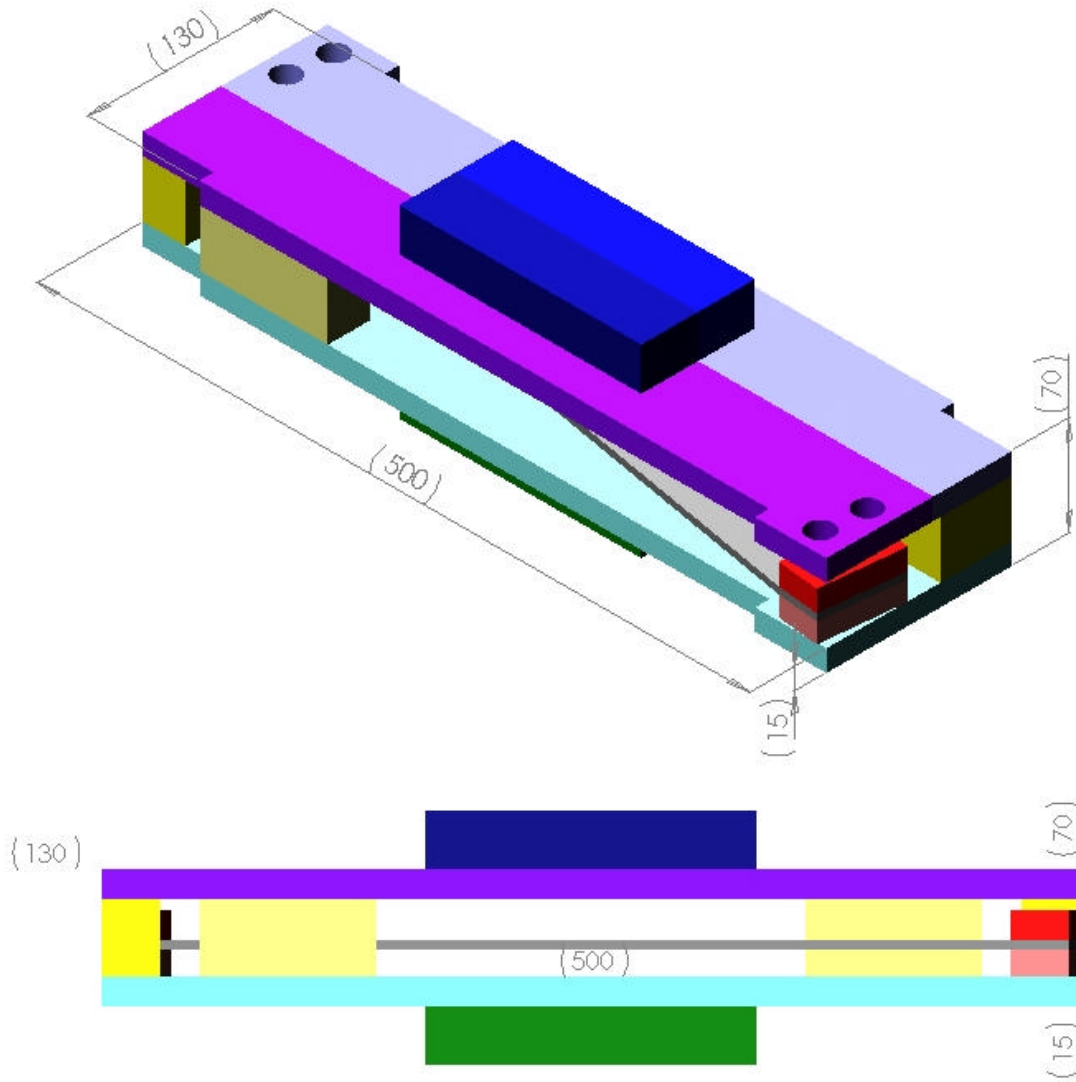
Mass = 21777.15 grams

Moments of inertia: (grams * square millimeters)

Taken at the center of mass and aligned with the output coordinate system.

$L_{xx} = 521761742.92$	$L_{xy} = -427734.10$	$L_{xz} = 382.37$
$L_{yx} = -427734.10$	$L_{yy} = 48062685.18$	$L_{yz} = 512.73$
$L_{zx} = 382.37$	$L_{zy} = 512.73$	$L_{zz} = 540350640.01$

EXAMPLE 2
(with t-pieces)



Mass = 21563.05 grams

Moments of inertia: (grams * square millimeters)

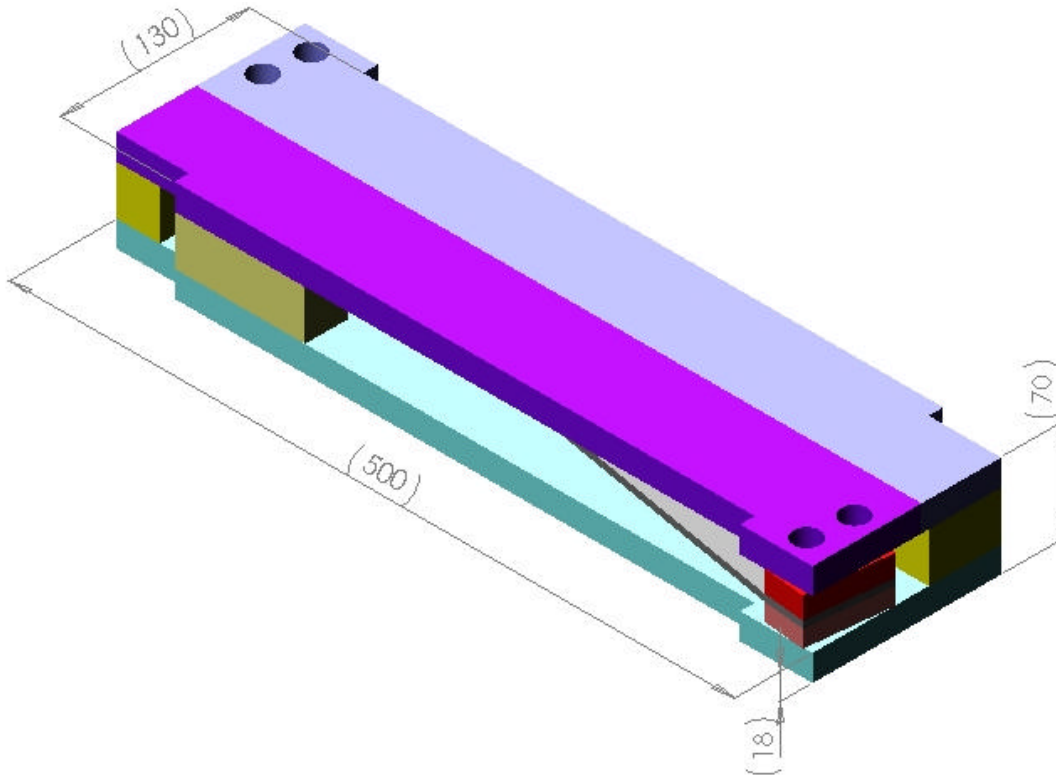
Taken at the center of mass and aligned with the output coordinate system.

$L_{xx} = 481892246.51$	$L_{xy} = -1852965.44$	$L_{xz} = 319.81$
$L_{yx} = -1852965.44$	$L_{yy} = 48734138.92$	$L_{yz} = 428.84$
$L_{zx} = 319.81$	$L_{zy} = 428.84$	$L_{zz} = 495281642.77$

NOTE: The Height of the t-pieces is around 30mm, i.e overall height = 130mm

EXAMPLE 3

(similar to example 1 but reducing gap & height [z-dir] further – no T-pieces)



Mass = 21894.95 grams

Moments of inertia: (grams * square millimeters)

Taken at the center of mass and aligned with the output coordinate system.

$L_{xx} = 515535226.35$	$L_{xy} = 1676862.56$	$L_{xz} = 361.02$
$L_{yx} = 1676862.56$	$L_{yy} = 46108258.78$	$L_{yz} = 484.10$
$L_{zx} = 361.02$	$L_{zy} = 484.10$	$L_{zz} = 535923552.34$