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'Measuring Mass and Centre of Gravity of a Product

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'Macro: CATIA\_Measure\_Mass\_COG.CATScript

'Version: 1

'Code: CATIA CATScript

'Purpose: Measuring Mass and Centre of Gravity of a Product

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'Start code

Sub CATMain()

'Definition that SRT is active product

Set SRT = CATIA.ActiveDocument

'Active product to be measured

Set oProduct = SRT.Product

Set oInertia = oProduct.GetTechnologicalObject("Inertia")

'Definition that mass will be measured

Dim dMass As Single

dMass = oInertia.Mass

'Definition that COG will be measured by coordinates – (2) indicates measured from X-Y

Dim dCoordinates(2)

oInertia.GetCOGPosition dCoordinates

'Load existing txt file to save mass and centre of gravity data

Dim File As File

Set File = CATIA.FileSystem.GetFile ("T:\04\_Cluster\_C\500\_SRT\033\_SRT Package\Parametric Model\AEV\_Tool\06\_Exchange\catia\_inertia.txt")

'Defining how to write mass and COG into txt file 0=X, 1=Y, 2=Z

Dim DStrom As TextStream

Set DStrom = File.OpenAsTextStream ("ForAppending")

DStrom.Write cstr(dMass) & " "

DStrom.Write cstr(dCoordinates(0)) & " " 'X

DStrom.Write cstr(dCoordinates(1)) & " " 'Y

DStrom.Write cstr(dCoordinates(2)) 'Z

DStrom.Close

'End code

End Sub