

BDSGeometryComponent

```
# containerSolid
# containerLogicalVolume
# extentX
# extentY
# extentZ
# allLogicalVolumes
# allSensitiveVolumes
# placementOffset

+ BDSGeometryComponent()
+ BDSGeometryComponent()
+ ~BDSGeometryComponent()
+ GetName()
+ GetContainerSolid()
+ GetContainerLogicalVolume()
+ GetPlacementOffset()
+ SetPlacementOffset()
+ GetExtentX()
+ GetExtentY()
+ GetExtentZ()
+ GetExtentPositive()
+ GetExtentNegative()
+ SetExtentX()
+ SetExtentY()
+ SetExtentZ()
+ RegisterLogicalVolume()
+ RegisterLogicalVolumes()
+ RegisterSensitiveVolume()
+ RegisterSensitiveVolumes()
+ GetAllLogicalVolumes()
+ GetAllSensitiveVolumes()
# BDSGeometryComponent()
```



BDSAcceleratorComponent

```
# name
# arcLength
# type
# chordLength
# angle
# tiltOffset
# precisionRegion
# beamPipeInfo
# lengthSafety
# emptyMaterial
- readOutLV
- itsSPos
- itsGFlashVolumes
- itsMultiplePhysicalVolumes

+ BDSAcceleratorComponent()
+ ~BDSAcceleratorComponent()
+ GetName()
+ GetType()
+ GetPrecisionRegion()
+ GetAngle()
+ GetTiltOffset()
+ GetArcLength()
+ GetChordLength()
+ GetReadOutLogicalVolume()
+ PrepareField()
+ GetParameterValue()
+ GetParameterValueString()
+ GetSPos()
+ SetSPos()
+ SetGFlashVolumes()
+ GetGFlashVolumes()
+ SetMultiplePhysicalVolumes()
+ GetMultiplePhysicalVolumes()
# Initialise()
# Build()
# BuildContainerLogicalVolume()
- BDSAcceleratorComponent()
- operator=()
- BDSAcceleratorComponent()
* GetParameterValue()
* GetParameterValueString()
* GetSPos()
* SetSPos()
* SetGFlashVolumes()
* GetGFlashVolumes()
* SetMultiplePhysicalVolumes()
* GetMultiplePhysicalVolumes()
* name
* arcLength
* type
* chordLength
* angle
* tiltOffset
* precisionRegion
* beamPipeInfo
```

component



BDSBeamlineElement

```
- component
- positionStart
- positionMiddle
- positionEnd
- rotationStart
- rotationMiddle
- rotationEnd
- referencePositionStart
- referencePositionMiddle
- referencePositionEnd
- referenceRotationStart
- referenceRotationMiddle
- referenceRotationEnd
- sPositionStart
- sPositionMiddle
- sPositionEnd
- xAxisReferenceStart
- yAxisReferenceStart
- zAxisReferenceStart
- xAxisReferenceMiddle
- yAxisReferenceMiddle
- zAxisReferenceMiddle
- xAxisReferenceEnd
- yAxisReferenceEnd
- zAxisReferenceEnd

+ BDSBeamlineElement()
+ ~BDSBeamlineElement()
+ GetAcceleratorComponent()
+ GetName()
+ GetPositionStart()
+ GetPositionMiddle()
+ GetPositionEnd()
+ GetRotationStart()
+ GetRotationMiddle()
+ GetRotationEnd()
+ GetReferencePositionStart()
+ GetReferencePositionMiddle()
+ GetReferencePositionEnd()
+ GetReferenceRotationStart()
+ GetReferenceRotationMiddle()
+ GetReferenceRotationEnd()
+ GetSPositionStart()
+ GetSPositionMiddle()
+ GetSPositionEnd()
+ GetXAxisReferenceStart()
+ GetYAxisReferenceStart()
+ GetZAxisReferenceStart()
+ GetXAxisReferenceMiddle()
+ GetYAxisReferenceMiddle()
+ GetZAxisReferenceMiddle()
+ GetXAxisReferenceEnd()
+ GetYAxisReferenceEnd()
+ GetZAxisReferenceEnd()
+ SetReferencePositionEnd()
+ SetReferenceRotationEnd()
+ SetXAxisReferenceEnd()
+ SetYAxisReferenceEnd()
+ SetZAxisReferenceEnd()
- BDSBeamlineElement()
* GetAcceleratorComponent()
* GetName()
* GetPositionStart()
* GetPositionMiddle()
* GetPositionEnd()
* GetRotationStart()
* GetRotationMiddle()
* GetRotationEnd()
* GetReferencePositionStart()
* GetReferencePositionMiddle()
* GetReferencePositionEnd()
* GetReferenceRotationStart()
* GetReferenceRotationMiddle()
* GetReferenceRotationEnd()
* GetSPositionStart()
* GetSPositionMiddle()
* GetSPositionEnd()
* GetXAxisReferenceStart()
* GetYAxisReferenceStart()
* GetZAxisReferenceStart()
* GetXAxisReferenceMiddle()
* GetYAxisReferenceMiddle()
* GetZAxisReferenceMiddle()
* GetXAxisReferenceEnd()
* GetYAxisReferenceEnd()
* GetZAxisReferenceEnd()
* SetReferencePositionEnd()
* SetReferenceRotationEnd()
* SetXAxisReferenceEnd()
* SetYAxisReferenceEnd()
* SetZAxisReferenceEnd()
* positionStart
* positionMiddle
* positionEnd
* rotationStart
* rotationMiddle
* rotationEnd
* referencePositionStart
* referencePositionMiddle
* referencePositionEnd
* referenceRotationStart
* referenceRotationMiddle
* referenceRotationEnd
* sPositionStart
* sPositionMiddle
* sPositionEnd
* xAxisReferenceStart
* yAxisReferenceStart
* zAxisReferenceStart
* xAxisReferenceMiddle
* yAxisReferenceMiddle
* zAxisReferenceMiddle
* xAxisReferenceEnd
* yAxisReferenceEnd
* zAxisReferenceEnd
```