

```
BDSTypeSafeEnum< def, inner >
- val
+ BDSTypeSafeEnum()
+ BDSTypeSafeEnum()
+ underlying()
* operator==
* operator!=
* operator<=
* operator<
* operator>=
* operator>
```

```
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()
+ SetExtentX()
+ SetExtentY()
+ SetExtentZ()
+ RegisterLogicalVolume()
+ RegisterLogicalVolumes()
+ RegisterSensitiveVolume()
+ RegisterSensitiveVolumes()
+ GetAllLogicalVolumes()
+ GetAllSensitiveVolumes()
# BDSGeometryComponent()
```

```
BDSBeamPipeInfo
+ beamPipeType
+ aper1
+ aper2
+ aper3
+ aper4
+ vacuumMaterial
+ beamPipeThickness
+ beamPipeMaterial
+ BDSBeamPipeInfo()
+ BDSBeamPipeInfo()
```

```
BDSMagnetOuterInfo
+ geometryType
+ outerDiameter
+ outerMaterial
+ BDSMagnetOuterInfo()
+ BDSMagnetOuterInfo()
```

```
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
```

```
BDSBeamPipe
# containerSubtractionSolid
# vacuumLogicalVolume
# containerIsCircular
# containerRadius
+ BDSBeamPipe()
+ ~BDSBeamPipe()
+ GetContainerSubtractionSolid()
+ GetVacuumLogicalVolume()
+ ContainerIsCircular()
+ GetContainerRadius()
```

```
BDSMagnet
# itsType
# itsStepper
# itsMagField
# itsEqRhs
# itsBeamPipeLogicalVolume
# itsInnerBPLLogicalVolume
# itsBeamPipeUserLimits
# itsPhysiComp
# itsPhysiInner
# itsBFFieldMgr
# itsOuterFieldMgr
# itsInnerIronRadius
# itsChordFinder
# itsOuterMagField
# beamPipeInfo
# beampipe
# outerDiameter
# outer
# itsMagnetOuterInfo
# itsK1
# itsK2
# itsK3
# inputface
# outputface
+ BDSMagnet()
+ ~BDSMagnet()
+ GetK1()
+ GetK2()
+ GetK3()
# Build()
# BuildContainerLogicalVolume()
# BuildOuterVolume()
# BuildBeampipe()
# BeamPipeCommonTasks()
# BuildOuterFieldManager()
- BuildBFFieldMgr()
- BuildBFFieldAndStepper()
- FinaliseBeampipe()
* GetK1()
* GetK2()
* GetK3()
* inputface
* outputface
```

outer

beampipe

beamPipeInfo

itsMagnetOuterInfo

beamPipeInfo

itsType

beamPipeType

geometryType

