

```

BDSEnergyCounterSD
- verbose
- itsName
- BDSEnergyCounterCollection
- HitID
- enrg
- xpos
- ypos
- zpos

+ BDSEnergyCounterSD()
+ ~BDSEnergyCounterSD()
+ Initialize()
+ ProcessHits()
+ ProcessHits()
+ EndOfEvent()
+ clear()
+ DrawAll()
+ PrintAll()

```

```

std::vector< G4VPhysicalVolume * >
- elements

```

```

std::list< G4double >
- elements

```

```

std::vector< G4LogicalVolume * >
- elements

```

itsBDSEnergyCounter

itsMultiplePhysicalVolumes  
itsBLMPhysiComp

itsBlmLocZ  
itsBlmLocTheta

itsMultipleSensitiveVolumes  
itsGFlashVolumes

```

BDSAcceleratorComponent
+ itsOuterLogicalVolume
+ itsMarkerLogicalVolume
+ itsTunnelLogicalVolume
+ itsTunnelFloorLogicalVolume
# itsBlmLocationR
# itsName
# itsLength
# itsXLength
# itsYLength
# itsOuterR
# itsBpRadius
# itsXAper
# itsYAper
# itsAngle
# itsMaterial
# itsVisAttributes
# itsBlmLocZ
# itsBlmLocTheta
# itsTunnelMaterial
# itsXOffset
# itsYOffset
# itsZOffset
# itsTunnelRadius
# itsTunnelOffsetX
# itsType
# itsTilt
# itsPhiAngleIn
# itsPhiAngleOut
# itsMagScaleFactor
# itsPhi
# itsTheta
# itsPsi
# itsK1
# itsK2
# itsK3
# itsRotation
# itsPosition
# itsOuterStepper
# itsUserLimits
# itsOuterUserLimits
# itsMarkerUserLimits
# itsInnerBeampipeUserLimits
# itsInnerMostLogicalVolume
# itsTunnelCavityMaterial
# itsPrecisionRegion
# itsMarkerSolidVolume
# itsTunnelSolid
# itsSoilSolid
# itsInnerTunnelSolid
# itsTunnelCavity
# itsLargerTunnelCavity
# itsTunnelFloor
# itsLargerInnerTunnelSolid
# itsTunnelMinusCavity
# itsTunnelSizedBlock
# itsBLMLogicalVolume
# itsBLMCaseLogicalVolume
# itsBLMPhysiComp
# itsSoilTunnelLogicalVolume
# itsTunnelCavityLogicalVolume
# itsTunnelMinusCavityLogicalVolume
# itsTunnelPhysiInner
# itsTunnelPhysiComp
# itsTunnelFloorPhysiComp
# itsTunnelPhysiCompSoil
# itsTunnelUserLimits
# itsSoilTunnelUserLimits
# itsInnerTunnelUserLimits
- nullRotationMatrix
- tunnelRot
- VisAtt
- VisAtt1
- VisAtt2
- VisAtt3
- VisAtt4
- VisAtt5
- itsBLMSolid
- itsBLMOuterSolid
- itsSPos
- itsCopyNumber
- itsBDSEnergyCounter
- itsSensitiveVolume
- itsMultipleSensitiveVolumes
- itsGFlashVolumes
- itsMultiplePhysicalVolumes

+ ~BDSAcceleratorComponent()
+ GetName()
+ SetName()
+ GetType()
+ SetType()
+ GetPrecisionRegion()
+ SetPrecisionRegion()
+ BuildTunnel()
+ BuildBLMs()
+ BuildGate()
+ GetAngle()
+ SetLength()
+ GetLength()
+ GetZLength()
+ GetXLength()
+ GetYLength()
+ GetArcLength()
+ GetPhiAngleIn()
+ GetPhiAngleOut()
+ GetPhi()
+ SetPhi()
+ GetTheta()
+ SetTheta()
+ GetPsi()
+ SetPsi()
+ GetXOffset()
+ GetYOffset()
+ GetZOffset()
+ GetTunnelRadius()
+ GetTunnelOffsetX()
+ GetAperX()
+ GetAperY()
+ GetK1()
+ GetK2()
+ GetK3()
+ SetK1()
+ SetK2()
+ SetK3()
+ GetRotation()
+ GetPosition()
+ SetPosition()
+ GetTilt()
+ GetMarkerLogicalVolume()
+ GetTunnelLogicalVolume()
+ GetTunnelCavityMaterial()
+ GetBDSEnergyCounter()
+ SetBDSEnergyCounter()
+ GetCopyNumber()
+ GetSPos()
+ SetSPos()
+ GetCopyNumber()
+ SetSensitiveVolume()
+ GetSensitiveVolume()
+ SetMultipleSensitiveVolumes()
+ GetMultipleSensitiveVolumes()
+ SetGFlashVolumes()
+ GetGFlashVolumes()
+ SetMultiplePhysicalVolumes()
+ GetMultiplePhysicalVolumes()
+ SetInnerMostLogicalVolume()
+ GetInnerMostLogicalVolume()
+ GetInnerBFUserLimits()
+ GetUserLimits()
+ BDSAcceleratorComponent()
+ BuildOuterFieldManager()
+ PrepareField()
+ SynchRescale()
+ AlignComponent()
+ getParameterValue()
+ getParameterValueString()
+ BDSAcceleratorComponent()
+ BDSAcceleratorComponent()
+ GetVisAttributes()
# CalculateLengths()
- ConstructorInit()

```