

BDSBeamPipeFactoryBase

```
# lengthSafety
# checkOverlaps
# maxStepFactor
# nSegmentsPerCircle
# vacuumSolid
# beamPipeSolid
# containerSolid
# containerSubtractionSolid
# vacuumLV
# beamPipeLV
# containerLV
```

```
+ CreateBeamPipe()
+ CreateBeamPipeAngledIn()
+ CreateBeamPipeAngledOut()
+ CreateBeamPipeAngledInOut()
# BDSBeamPipeFactoryBase()
# CleanUp()
# CommonConstruction()
# BuildBeamPipeAndRegisterVolumes()
# CalculateFaces()
# TestInputParameters()
# BuildLogicalVolumes()
# SetVisAttributes()
# SetUserLimits()
# PlaceComponents()
```



BDSBeamPipeFactoryElliptical

```
- _instance
```

```
+ ~BDSBeamPipeFactoryElliptical()
+ CreateBeamPipe()
+ CreateBeamPipeAngledInOut()
+ Instance()
- BDSBeamPipeFactoryElliptical()
- TestInputParameters()
- CommonFinalConstruction()
- CreateGeneralAngledSolids()
```