

Load Items: SelfWeight Load

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Functions

afx_msg VARIANT **OSLoadUI::AddSelfWeightInXYZ** (const VARIANT FAR &varInDirection, const VARIANT FAR &varLoadFactor)

Adds a self weight to the active load case and assign it to all entities (beams, plates and solids).

afx_msg VARIANT **OSLoadUI::AddSelfWeightInXYZToGeometry** (VARIANT FAR &varGeomNo, const VARIANT FAR &varInDirection, const VARIANT FAR &varLoadFactor)

Adds a self weight to plate(s), Beam(s) and Solid(s).

Detailed Description

These functions are related to self-weight load (not include seismic self-weight load).

Function Documentation

◆ AddSelfWeightInXYZ()

VARIANT OSLoadUI::AddSelfWeightInXYZ (const VARIANT FAR & varInDirection,
const VARIANT FAR & varLoadFactor)

Adds a self weight to the active load case and assign it to all entities (beams, plates and solids).

Parameters

[in] **varInDirection** Self weight direction index (= 1, 2, 3 for X, Y, Z, respectively).

[in] **varLoadFactor** Multiplying factor for self-weight.

Return values

true Add self weight successful.

false General error.

C++ Syntax

```
// Add self weight in Y direction with factor -1.0
VARIANT RetVal = OSLoadUI::AddSelfWeightInXYZ(2, -1.0);
```

VBA Syntax

Option Explicit

```
Sub Main
    Dim objOpenStaad As Object
    Dim stdFile As String
    Set objOpenStaad = GetObject(,"StaadPro.OpenSTAAD")
    objOpenStaad.GetSTAADFile stdFile, "TRUE"
    If stdFile="" Then
        MsgBox"Bad"
        Set objOpenStaad = Nothing
        Exit Sub
    End If
    Dim LoadNo As Long
    LoadNo = 1
    Dim bRes As Boolean
    bRes = objOpenStaad.Load.SetLoadActive(LoadNo)
    Dim nDirection As Integer
    nDirection = 2
    'Add self weight in Y direction with factor -1.0
    bRes = objOpenStaad.Load.AddSelfWeightInXYZ(nDirection, -1.0)
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSLoadUI::AddSelfWeightInXYZToGeometry](#)

◆ AddSelfWeightInXYZToGeometry()

VARIANT OSLoadUI::AddSelfWeightInXYZToGeometry (VARIANT FAR & **varGeomNo**,
 const VARIANT FAR & **varInDirection**,
 const VARIANT FAR & **varLoadFactor**)

Adds a self weight to plate(s), Beam(s) and Solid(s).

Parameters

[in] **varGeomNo** Beam, Plate or Solid number ID(s) VARIANT array(Type:Long Array).

[in] **varInDirection** Self weight direction index (= 1, 2, 3 for X, Y, Z, respectively).

[in] **varLoadFactor** Multiplying factor for self-weight.

Return values

true OK.

false General error.

C++ Syntax

```
// Add self weight in Y direction with factor -1.0
VARIANT RetVal = OSLoadUI::AddSelfWeightInXYZToGeometry(varGeomNo, 2, -1.0);
```

VBA Syntax

```
Option Explicit
Sub Main
  Dim objOpenStaad As Object
  Dim stdFile As String
  Set objOpenStaad = GetObject("StaadPro.OpenSTAAD")
  objOpenStaad.GetSTAADFile stdFile, "TRUE"
  If stdFile="" Then
    MsgBox"Bad"
    Set objOpenStaad = Nothing
    Exit Sub
  End If
  Dim LoadNo As Long
  LoadNo = 1
  Dim bRes As Boolean
  bRes = objOpenStaad.Load.SetLoadActive(LoadNo)
  Dim nDirection As Integer
  nDirection = 2
  Dim beams(1) As Integer
  beams(0) = 30
  beams(1) = 31
  ' Add self weight in Y direction with factor -1.0
  bRes = objOpenStaad.Load.AddSelfWeightInXYZToGeometry(beams, nDirection, -1.0)
  Set objOpenStaad = Nothing
End Sub
```

See also

[OSLoadUI::AddSelfWeightInXYZ](#)

