

Design Steel: Chinese Steel Design

Design Results » Design: Steel

Functions

afx_msg void	OSDesignUI::ChineseSteelInitial () Initial Chinese Steel Design module.
afx_msg void	OSDesignUI::ChineseSteelPerformDesign () Perform Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelGetSolutionCount () get the solution count in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelGetSolution (const VARIANT FAR &index, VARIANT FAR &VarSolutionNo, VARIANT FAR &VarSolutionName, VARIANT FAR &VarSolutionType) get the solution information.
afx_msg VARIANT	OSDesignUI::ChineseSteelAddSolution (const VARIANT FAR &varSolutionName, const VARIANT FAR &varSolutionType) add a new solution in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelDeletedSolution (const VARIANT FAR &varSolutionNo) Delete a solution in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelGetDesignParametersCount (const VARIANT FAR &varSolutionNo) get the parameter count for a specified solution in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelAddDesignParameter (const VARIANT FAR &varSolutionNo) add a design parameter into the solution in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelDeletedDesignParameter (const VARIANT FAR &varSolutionNo, const VARIANT FAR &varParamIndex) Deleted a design parameter from the solution in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelGetDesignParameter (const VARIANT FAR &varSolutionNo, const VARIANT FAR &varParamIndex, const VARIANT FAR &varParamType, VARIANT FAR &varParamValue) Get a design parameter value from the solution in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelSetDesignParameter (const VARIANT FAR &varSolutionNo, const VARIANT FAR &varParamIndex, const VARIANT FAR &varParamType, const VARIANT FAR &varParamValue) Get a design parameter value from the solution in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelAssignDesigParameter (const VARIANT FAR &varSolutionNo, const VARIANT FAR &varParamIndex, const VARIANT FAR &varMemeberNos) Assign Member Nos to a design parameter in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelGetCheckOption (LPDISPATCH pCheckOption) get Code Check Option in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelSetCheckOption (const LPDISPATCH pCheckOption) Set Code Check Option in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelGetResults (const VARIANT FAR &varSolutionNo, const VARIANT FAR &varMemberNo, const VARIANT FAR &varResultCategory, LPDISPATCH pDesignResult) get the specified member design results in a specified solution.
afx_msg VARIANT	OSDesignUI::ChineseSteelGetCodeItemName (const VARIANT FAR &varCodeItem) get the check item Name in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelGetMaxResult (const VARIANT FAR &varSolutionNo, const VARIANT FAR &varMemberNo, VARIANT FAR &varStatus, VARIANT FAR &varMaxRatio, VARIANT FAR &varActualValue, VARIANT FAR &varLimitValue, VARIANT FAR &varControllItem, VARIANT FAR &varControlLoadNo, VARIANT FAR &varControlPosition, VARIANT FAR &varResultCategory) get the specified member maximum design result in a specified solution.
afx_msg VARIANT	OSDesignUI::ChineseSteelGetResultParameters (const VARIANT FAR &varSolutionNo, const VARIANT FAR &varMemberNo, LPDISPATCH pDesignParameters) get the specified member design results in a specified solution.
afx_msg void	OSDesignUI::ChineseSteelDisplayMemberReport (const VARIANT FAR &varSolutionNo, const VARIANT FAR &varMemberNo) Display Member Report in Chinese Steel Design.

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ChineseSteelDisplayResultTable ()

Display Chinese Steel Design Result Table.

afx_msg VARIANT	OSDesignUI::ChineseSteelGetStoreyCount () get the storey count in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelAddStorey (const VARIANT FAR &varName, const VARIANT FAR &varElevation) add a new storey in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelDeleteStorey (const VARIANT FAR &varIndex) Delete a storey from Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelAssignStorey (const VARIANT FAR &varIndex, const VARIANT FAR &varMemeberNos) Assign Member Nos to a Storey in Chinese Steel Design.
afx_msg VARIANT	OSDesignUI::ChineseSteelAssignDissipated (const VARIANT FAR &varMemeberNos, const VARIANT FAR &varPlasticZone) Assign Member Nos to plastic dissipated zone in Chinese Steel Design.

Detailed Description

These functions are related to get Chinese Steel Design Parameters and Results.

Function Documentation

◆ ChineseSteelAddDesignParameter()

VARIANT OSDesignUI::ChineseSteelAddDesignParameter (const VARIANT FAR & varSolutionNo) protected

add a design parameter into the solution in Chinese Steel Design.

Parameters

[in] **varSolutionNo** Solution Id(Type: Long/Integer).

Returns

the new parameter index in the solution(Type: Long/Integer).

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim parameterIndex As Integer
    parameterIndex= objOpenStaad.Design.ChineseSteelAddDesignParameter(1)
    MsgBox "Parameter Index: "+Str(parameterIndex)
    Set objOpenStaad = Nothing
End Sub
```

See also

OSDesignUI::ChineseSteelGetSolution

◆ ChineseSteelAddSolution()

```
VARIANT OSDesignUI::ChineseSteelAddSolution ( const VARIANT FAR & varSolutionName,  
                                              const VARIANT FAR & varSolutionType )
```

protected

add a new solution in Chinese Steel Design.

Parameters

- [in] **solutionName** solution Name(Type: String).
- [in] **solutionType** solution Type(Type: long/Integer).

Value	Solution Type
0	First Order
1	P - Delta

Return values

- 1 Add solution with error.
- other,Solution No.**

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  
    objOpenStaad.Design.ChineseSteelInitial()  
    Dim solutionNo As Integer  
    solutionNo = objOpenStaad.Design.ChineseSteelAddSolution("solution", 0)  
    Set objOpenStaad = Nothing  
End Sub
```

See also

- [OSDesignUI::ChineseSteelGetSolution](#)
- [OSDesignUI::ChineseSteelDeletedSolution](#)

◆ ChineseSteelAddStorey()

VARIANT OSDesignUI::ChineseSteelAddStorey (const VARIANT FAR & varName,
const VARIANT FAR & varElevation)

protected

add a new storey in Chinese Steel Design.

Parameters

[in] **varName** storey Name(Type: String).

[in] **varElevation** storey elevation(Type: float/double).

Return values

true Success.

false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim solutionNo As Integer
    solutionNo = objOpenStaad.Design.ChineseSteelAddStorey("User Define Storey", 100.56)
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelDeleteStorey](#)

◆ [ChineseSteelAssignDesigParameter\(\)](#)

```
VARIANT OSDesignUI::ChineseSteelAssignDesignParameter ( const VARIANT FAR & varSolutionNo,
                                                         const VARIANT FAR & varParamIndex,
                                                         const VARIANT FAR & varMemeberNos )
```

protected

Assign Member Nos to a design parameter in Chinese Steel Design.

Parameters

- [in] **varSolutionNo** Solution Id(Type: Long/Integer).
- [in] **varParamIndex** Design Parameter Index in the solution, Start from 0.(Type: Long/Integer).
- [in] **varMemeberNos** Member Nos(Type: Long / Long Array).

Return values

- true** Success.
- false** General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim ret As Boolean
    Dim membs(3) As Integer
    membs(0)=1
    membs(1)=3
    membs(2)=4
    membs(3)=5
    ret= objOpenStaad.Design.ChineseSteelAssignDesignParameter(1, 1, membs)
    If ret Then
        MsgBox "Set Design Parameter Success"
    End If
    Set objOpenStaad = Nothing
End Sub
```

See also

- [OSDesignUI::ChineseSteelGetSolution](#)
- [OSDesignUI::ChineseSteelGetDesignParameter](#)
- [OSDesignUI::ChineseSteelAddDesignParameter](#)
- [OSDesignUI::ChineseSteelDeletedDesignParameter](#)

◆ ChineseSteelAssignDissipated()

VARIANT OSDesignUI::ChineseSteelAssignDissipated (const VARIANT FAR & varMemeberNos,
const VARIANT FAR & varPlasticZone)

protected

Assign Member Nos to plastic dissipated zone in Chinese Steel Design.

Parameters

[in] **varMemeberNos** Member Nos(Type: Long / Long Array).

[in] **varPlasticZone** Plastic Zone(Type: Long/Integer).

Value	Plastic Zone
0	Start
1	End

Return values

true Success.

false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim ret As Boolean
    Dim membs(3) As Integer
    membs(0)=2006
    membs(1)=3008
    membs(2)=4034
    membs(3)=1006
    ret= objOpenStaad.Design.ChineseSteelAssignDissipated(membs, 0)
    If ret Then
        MsgBox "Set Dissipated members Success"
    End If
    Set objOpenStaad = Nothing
End Sub
```

◆ ChineseSteelAssignStorey()

VARIANT OSDesignUI::ChineseSteelAssignStorey (const VARIANT FAR & varIndex,
const VARIANT FAR & varMemeberNos)

protected

Assign Member Nos to a Storey in Chinese Steel Design.

Parameters

[in] **varIndex** Storey index(Type: Long/Integer).
[in] **varMemeberNos** Member Nos(Type: Long / Long Array).

Return values

true Success.
false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim ret As Boolean
    Dim membs(3) As Integer
    membs(0)=2006
    membs(1)=3008
    membs(2)=4034
    membs(3)=1006
    ret= objOpenStaad.Design.ChineseSteelAssignStorey(0, membs)
    If ret Then
        MsgBox "Set Storey members Success"
    End If
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelGetStoreyCount](#)
[OSDesignUI::ChineseSteelAddStorey](#)
[OSDesignUI::ChineseSteelDeleteStorey](#)

◆ ChineseSteelDeletedDesignParameter()

VARIANT OSDesignUI::ChineseSteelDeletedDesignParameter (const VARIANT FAR & **varSolutionNo**,
const VARIANT FAR & **varParamIndex**)

protected

Deleted a design parameter from the solution in Chinese Steel Design.

Parameters

[in] **varSolutionNo** Solution Id(Type: Long/Integer).

[in] **varParamIndex** Design Parameter Index in the solution, Start from 0.(Type: Long/Integer).

Return values

true Success.

false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim ret As Boolean
    ret= objOpenStaad.Design.ChineseSteelDeletedDesignParameter(1, 3)
    If ret Then
        MsgBox "Deleted Parameter Success."
    End If
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolution](#)

◆ ChineseSteelDeletedSolution()

VARIANT OSDesignUI::ChineseSteelDeletedSolution (const VARIANT FAR & varSolutionNo)

protected

Delete a solution in Chinese Steel Design.

Parameters

[in] **varSolutionNo** solution Id(Type: long/Integer).

Return values

true Success.

false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim ret As Boolean
    ret = objOpenStaad.Design.ChineseSteelDeletedSolution(1)
    If ret Then
        MsgBox "Deleted Solution Success."
    End If
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolution](#)

[OSDesignUI::ChineseSteelAddSolution](#)

◆ [ChineseSteelDeleteStorey\(\)](#)

VARIANT OSDesignUI::ChineseSteelDeleteStorey (const VARIANT FAR & varIndex)

protected

Delete a storey from Chinese Steel Design.

Parameters

[in] **varIndex** storey index(Type: long/Integer).

Return values

true Success.

false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim ret As Boolean
    ret = objOpenStaad.Design.ChineseSteelDeleteStorey(4)
    If ret Then
        MsgBox "Deleted Solution Success."
    End If
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolution](#)

[OSDesignUI::ChineseSteelAddSolution](#)

◆ [ChineseSteelDisplayMemberReport\(\)](#)

```
void OSDesignUI::ChineseSteelDisplayMemberReport ( const VARIANT FAR & varSolutionNo,
                                                    const VARIANT FAR & varMemberNo )
```

protected

Display Member Report in Chinese Steel Design.

Parameters

- [in] **varSolutionNo** Chinese Steel Design solution No(Type-Int).
- [in] **varMemberNo** Member number ID(Type-Int).
- [in] **varCodeType** Design Code Type(Type: Long/Integer), please reference [OSDesignUI::ChineseSteelGetResults](#).

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
    objOpenStaad.Design.ChineseSteelInitial()
    'Test ChineseSteelDisplayMemberReport
    Dim codeType As Integer
    codeType = 1
    objOpenStaad.Design.ChineseSteelDisplayMemberReport(1, 1,codeType)
    Set objOpenStaad = Nothing
End Sub
```

◆ ChineseSteelDisplayResultTable()

```
void OSDesignUI::ChineseSteelDisplayResultTable ( )
```

protected

Display Chinese Steel Design Result Table.

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
    objOpenStaad.Design.ChineseSteelInitial()
    objOpenStaad.Design.ChineseSteelDisplayResultTable()
    MsgBox"Macro Ending"
    Set objOpenStaad = Nothing
End Sub
```

◆ ChineseSteelGetCheckOption()

VARIANT OSDesignUI::ChineseSteelGetCheckOption (LPDISPATCH pCheckOption)

protected

get Code Check Option in Chinese Steel Design.

Parameters

[out] pCheckOption, Check Option (Type - [COSChineseSteelCheckOption](#)).

Return values

true Success.

false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim ret As Boolean
    Dim ckOption As Object
    Set ckOption = CreateObject("StaadPro.ChineseSteelCheckOption")
    ret=objOpenStaad.Design.ChineseSteelGetCheckOption(ckOption)
    If ret Then
        MsgBox "Get Check Option Success"
    End If
    Set objOpenStaad = Nothing
End Sub
```

See also

[COSChineseSteelCheckOption](#)

[OSDesignUI::ChineseSteelSetCheckOption](#)

◆ ChineseSteelGetCodeItemName()

VARIANT OSDesignUI::ChineseSteelGetCodeItemName (const VARIANT FAR & varCodeItem)

protected

get the check item Name in Chinese Steel Design.

Parameters

[in] varCodeItem Code Check item ID(Type: Long).

Value	Code Check Item	Code
1	Beam Bending Strength	GB50017/GB50018
2	Shear Strength	GB50017/GB50018
3	Equivalent Stress	GB50017/GB50018
4	Overall Stability	GB50017/GB50018
5	Web Slenderness	GB50017/GB50018
6	Flange Slenderness	GB50017/GB50018
7	Truss Strength	GB50017/GB50018
8	Compression Stability	GB50017/GB50018
9	Compression Shear	GB50017/GB50018
10	Column Strength	GB50017/GB50018
11	Stability around Z Axis	GB50017/GB50018
12	Stability around Y Axis	GB50017/GB50018
13	Compression Slenderness	GB50017/GB50018
14	Tension Slenderness	GB50017/GB50018
15	Compression Flange Slenderness	GB50017
16	Compression Web Slenderness	GB50017
17	Beam Deflection	GB50017/GB50018
18	Min Performance Factor	GB50017-Performance
19	Beam Axial Force	GB50017-Performance
20	Plastic Shear Force	GB50017-Performance
21	Dissipated Slenderness	GB50017-Performance
22	Dissipated Web Slenderness	GB50017-Performance
23	Dissipated Flange Slenderness	GB50017-Performance
24	Truss Net Area	GB50017-Performance
25	Dissipated Beam Length	GB50017-Performance
26	Strong Column	GB50017-Performance
27	Pressed Plate Flakiness Ratio	GB50018
28	Lip Flakiness Ratio	GB50018

Returns

check item Name(Type: String).

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim checkItemName As String
    OpenStaad.Design.ChineseSteelGetCodeItemName(1)
```

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```
Set objOpenStaad = Nothing  
End Sub
```

◆ ChineseSteelGetDesignParameter()

```
VARIANT OSDesignUI::ChineseSteelGetDesignParameter ( const VARIANT FAR & varSolutionNo,
                                                    const VARIANT FAR & varParamIndex,
                                                    const VARIANT FAR & varParamType,
                                                    VARIANT FAR & varParamValue )
```

Get a design parameter value from the solution in Chinese Steel Design.

Parameters

- [in] **varSolutionNo** Solution Id(Type: Long/Integer).
- [in] **varParamIndex** Design Parameter Index in the solution, Start from 0.(Type: Long/Integer).
- [in] **varParamType** Parameter Item Type(Type: Long/Integer).

Value	Parameter Item Type	Type	Description	In Page
0	Parameter Name	String		General
1	Steel No	String	"Auto","Q235","Q345","Q355","Q390","Q420","Q460" could be set, or other user defined material.	General
2	Member Type	Integer	0 for auto, 1 for Bending Member, 2 for Truss Member, 3 for Column Member, 4 for Defined Member.	General
3	Judgement Principle for Member Type	Integer	Only Member Type is 0, This value is worked.0 for Geometry, 1 for Stress Feature.	General
4	Cantilever Type	Integer	0 for None-Cantilever, 1 for Cantilever in Both, 2 for Cantilever in Z Axis, 3 for Cantilever in Y Axis.	General
5	Bending with Axial Force	Integer	0 for Warning, 1 for Ignore, 2 for Check.	General
6	Use Axis forces member Post-Buckling	Boolean		General
7	Truss Secondary Moment	Boolean		General
8	Section Slenderness Grade	Integer	1 for S1, 2 for S2, 3 for S3, 4 for S4, 5 for S5	General
9	Optimize Design	Boolean		General
10	Fatigue Check Request	Boolean		General
11	Safety Ratio	Double		General
12	Failure Ratio	Double		General
13	Force Loads List	String		General
14	Displacement Loads List	String		General
15	Use Seismic Adjusting Factor	Boolean		Seismic Design
16	Strength Seismic Adjusting Factor	Double	0 for auto	Seismic Design
17	Stability Seismic Adjusting Factor	Double	0 for auto	Seismic Design
18	Seismic Measure Grade	Integer	-1 for Auto, 0 for None, 1 for Level1, 2 for Level2, 3 for Level3, 4 for Level4.	Seismic Design
19	Reduction Factor of Bearing Capacity	Double		Seismic Design
20	Allowable Compression Slenderness	Double	0 for auto	Allowable Slenderness
21	Allowable Tension Slenderness	Double	0 for auto	Allowable Slenderness
22	Seismic Column, GB50011-2010, 8_3_1	Boolean		Allowable Slenderness
23	Seismic Brace, GB50011-2010,8.4.1	Boolean		Allowable Slenderness

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24	Seismic Single-storey Plant, GB50011-2010,9.2.13	Boolean		Allowat Slendern
25	Seismic Multi-storey Plant, GB50011-2010,H.2.8	Boolean		Allowat Slendern
26	Plastic Development Factor in Z Axis	Double	0 for auto	Plasti Developr Facto
27	Plastic Development Factor in Y Axis	Double	0 for auto	Plasti Developr Facto
28	Plastic Development Factor in Sharp side	Double	0 for auto	Plasti Developr Facto
29	Equivalent Moment Factor in-Plane of Z Axis	Double	0 for auto	Equival Momei Facto
30	Equivalent Moment Factor in-Plane of Y Axis	Double	0 for auto	Equival Momei Facto
31	Equivalent Moment Factor out-Plane of Z Axis	Double	0 for auto	Equival Momei Facto
32	Equivalent Moment Factor out-Plane of Y Axis	Double	0 for auto	Equival Momei Facto
33	Lateral Load Along Local z	Boolean		Equival Momei Facto
34	Lateral Load Along Local y	Boolean		Equival Momei Facto
35	Span/Deflection (DFF)	Double		Deflecti Paramet
36	Start Joint (DJ1)	Integer	-1 for Member Start Joint, 0 Auto	Deflecti Paramet
37	End Joint (DJ2)	Integer	-1 for Member End Joint, 0 Auto	Deflecti Paramet
38	Check Horizontal Section Displacement	Boolean		Deflecti Paramet
39	Overall Stability Factor of Beam in Z Axis	Double	0 for auto	Stabili Factor
40	Overall Stability Factor of Beam in Y Axis	Double	0 for auto	Stabili Factor
41	Stress Feature	Integer	1 for Type1, 2 for Type2, ... 10 for Type10. If Cantilever type is in Z-Axis or Both Axis, Only 1,2,3 support.	Stabili Factor
42	Consider C.0.5	Boolean		Stabili Factor
43	Stability Factor of Axial Compression in Z Axis	Double	0 for auto	Stabili Factor
44	Stability Factor of Axial Compression in Y Axis	Double	0 for auto	Stabili Factor
	Axial Compression Section Type in Z Axis	Integer	0 for auto, 1 for Class a, 2 for Class b, 3 for Class c, 4 for Class d	Stabili Factor

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46	Axial Compression Section Type in Y Axis	Integer	0 for auto, 1 for Class a, 2 for Class b, 3 for Class c, 4 for Class d	Stability Factor
47	Unbraced Length in Z Axis	Double	0 for auto	Effective Length
48	Unbraced Length in Y Axis	Double	0 for auto	Effective Length
49	Effective Length Factor in Z Axis	Double	0 for auto	Effective Length
50	Effective Length Factor in Y Axis	Double	0 for auto	Effective Length
51	Brace Type	Integer	0 for unbraced member, 1 for braced in Both Axes, 2 for Only braced in y Axis, 3 for Only braced in z Axis	Effective Length
52	Gyration Radius Calculation Of Single Angle	Integer	0 for Strong Weak Axis Calculation (U-V Axis), 1 for Parallel Leg Calculation (Y-Z Axis)	Effective Length
53	Flange Slenderness Limit (b/t)	Double	0 for auto	Detailing Check
54	Web Slenderness Limit (h ₀ /t _w)	Double	0 for auto	Detailing Check
55	Include check for web of H profiles in a Truss as per GB50017-2017, Table 8.5.2	Boolean		Detailing Check
56	Net Area Factor (A _n /A)	double		Section Factor
57	Net Resistance Moment Factor (W _{nz} /W _z)	double		Section Factor
58	Net Resistance Moment Factor (W _{ny} /W _y)	double		Section Factor
59	Effective Section Factor Of Axis Force (n _A)	double		Section Factor
60	Reduce Strength Of Angle Section (Ref 7.6.1)	boolean		Section Factor
61	Unequal Angle Connection Type	Integer	0 for Short Leg, 1 for Long Leg.	Section Factor
62	Strength Reduction Factor	double	0 for auto	Section Factor
63	Stability Reduction Factor	double	0 for auto	Section Factor
64	Performance_StructureType	double		Performance Design
65	Performance_PerformanceGrade	double		Performance Design
66	Performance_PrecautionaryCategory	double		Performance Design
67	Performance_DuctilityGrade	double		Performance Design
68	Performance_PerformanceFactor	double		Performance Design
69	Performance_AmplificationFactor	double		Performance Design
70	Performance_Yita_y	double		Performance Design
	Performance_DissipatedLength	double		Performance Design

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72	ThinWall_SteelNo	String	"Q235","Q345", Other value regard as "auto"	GB500 Only
73	ThinWall_CheckCompressedFlakiness	Boolean	0 for unchecked, 1 for checked	GB500 Only
74	ThinWall_CheckLipFlakiness	Boolean	0 for unchecked, 1 for checked	GB500 Only
75	ThinWall_BearingStatus	Integer	0 for Auto, 1 for HingedWarpFree, 2 for BuildingInWarpRestrained, 3 for HingedWarpRestrained	GB500 Only
76	ThinWall_HavingBattenPlate	Boolean	0 for unchecked, 1 for checked	GB500 Only
77	ThinWall_BattenPlateSpace	double		GB500 Only
78	ThinWall_UnstiffenedFlakinessLimit	double	0 for auto	GB500 Only
79	ThinWall_PartStiffenedFlakinessLimit	double	0 for auto	GB500 Only
80	ThinWall_StiffenedFlakinessLimit	double	0 for auto	GB500 Only
81	ThinWall_LipFlakinessLimit	double	0 for auto	GB500 Only
82	ThinWall_BeamBearing	Integer	1 for uniformForce, 2 for concentratedForce, 3 for endMoment3, 4 for endMoment4, 5 for endMoment5,6 for endMoment6,7 for endMoment7	GB500 Only
83	ThinWall_LateralSupport	Integer	1 for NoSupport, 2 for OneSupport, 3 for TwoOrMoreSupport	GB500 Only
84	ThinWall_IsConsiderColdFormingEffect	Boolean	0 for unchecked, 1 for checked	GB500 Only
85	ThinWall_IsHighFrequencyWelding	Boolean	0 for unchecked, 1 for checked	GB500 Only
86	ThinWall_ForceToFlexuralCenter_Z	double	can be changed in gsp file	GB500 Only
87	ThinWall_ForceToFlexuralCenter_Y	double	can be changed in gsp file	GB500 Only
88	ThinWall_ReduceStrength	double	0 for auto	GB500 Only
89	ThinWall_ReduceStability	double	0 for auto	GB500 Only
90	Beam Bending Strength	Boolean	Beam/Defined Member	Option Check
91	Beam Shear Strength	Boolean	Beam/Column/Defined Member	Option Check
92	Beam Equivalent Stress	Boolean	Beam/Defined Member	Option Check
93	Beam Overall Stability	Boolean	Beam/Defined Member	Option Check
94	Beam Web Slenderness	Boolean	Beam/Defined Member	Option Check
95	Beam Flange Slenderness	Boolean	Beam/Defined Member	Option Check
96	Truss Strength	Boolean	Truss/Defined Member	Option Check

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97	Truss Stability	Boolean	Truss/Defined Member	Option Check
98	Shear Strength	Boolean	Truss/Defined Member	Option Check
99	Column Strength	Boolean	Column/Defined Member	Option Check
100	Column Stability in-plane	Boolean	Column/Defined Member	Option Check
101	Column Stability out-plane	Boolean	Column/Defined Member	Option Check
102	Compression Slenderness	Boolean	Truss/Column/Defined Member	Option Check
103	Tension Slenderness	Boolean	Truss/Column/Defined Member	Option Check
104	Compression Flange Slenderness	Boolean	Truss/Column/Defined Member	Option Check
105	Compression Web Slenderness	Boolean	Truss/Column/Defined Member	Option Check
106	Beam Deflection	Boolean	Beam/Defined Member	Option Check

[out] **varParamValue** Parameter Item value(Type: String).

Return values

true Success.

false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim value As String
    Dim ret As Boolean
    ret= objOpenStaad.Design.ChineseSteelGetDesignParameter(1, 1, 1,value )
    If ret Then
        MsgBox "Steel No: " +value
    End If
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolution](#)

[OSDesignUI::ChineseSteelSetDesignParameter](#)

[OSDesignUI::ChineseSteelAddDesignParameter](#)

[OSDesignUI::ChineseSteelDeletedDesignParameter](#)

◆ ChineseSteelGetDesignParametersCount()

VARIANT OSDesignUI::ChineseSteelGetDesignParametersCount (const VARIANT FAR & varSolutionNo)

protected

get the parameter count for a specified solution in Chinese Steel Design.

Parameters

[in] **varSolutionNo** Solution Id(Type: Long/Integer).

Returns

The total number of parameters in the solution(Type: Long/Integer).

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim paramCount As Integer
    paramCount= objOpenStaad.Design.ChineseSteelGetDesignParametersCount(1)
    MsgBox "Parameter Count: "+Str(paramCount)
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolution](#)

◆ ChineseSteelGetMaxResult()

```
VARIANT OSDesignUI::ChineseSteelGetMaxResult ( const VARIANT FAR & varSolutionNo,
                                              const VARIANT FAR & varMemberNo,
                                              VARIANT FAR & varStatus,
                                              VARIANT FAR & varMaxRatio,
                                              VARIANT FAR & varActualValue,
                                              VARIANT FAR & varLimitValue,
                                              VARIANT FAR & varControlItem,
                                              VARIANT FAR & varControlLoadNo,
                                              VARIANT FAR & varControlPosition,
                                              VARIANT FAR & varResultCategory )
```

protected

get the specified member maximum design result in a specified solution.

Parameters

- [in] **varSolutionNo** Chinese Steel Design solution No(Type-Int).
- [in] **varMemberNo** Member number ID(Type-Int).
- [in] **varCodeType** Design Code Type(Type: Long/Integer), please reference **OSDesignUI::ChineseSteelGetResults**.
- [out] **varStatus** Design Status(Type - Int).

Value	Design Status
0	Uncheck
1	Passed
2	TooSafe
3	Failure
4	Warning

- [out] **varMaxRatio** Design Ratio in the control check item(Type - Double).
- [out] **varActualValue** Calculate value in the control check item(Type - Double).
- [out] **varLimitValue** Limit value in the control check item(Type - Double).
- [out] **varControlItem** control check item(Type - Int), use the reference link to get the check item name, please reference **OSDesignUI::ChineseSteelGetCodeItemName**.
- [out] **varControlLoadNo** control load case no(Type - Int).
- [out] **varControlPosition** max ratio position in the control check item(Type - Double).
- [out] **varResultCategory** Result Category Type(Type-Int).

Value	Result Category Type
1	General result
2	Dissipated result
3	NonDissipated result

Return values

- true** Success.
- false** General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
```

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Integer

String

```

Dim solutionType As Integer
objOpenStaad.Design.ChineseSteelGetSolution(0,solutionNo,solutionName,solutionType)
Dim memberNo As Integer
memberNo = 23
Dim ckStatus As Integer, ControlItem As Integer,ControlLoadNo As Integer, resultCategory As Integer
Dim maxRatio As Double, actualValue As Double, limitValue As Double, controlPosition As Double
objOpenStaad.Design.ChineseSteelGetMaxResult(solutionNo, memberNo,ckStatus,maxRatio, actualValue, limitValue,
ControlItem,ControlLoadNo ,controlPosition,resultCategory)
Dim ControlItemName As String
ControlItemName =objOpenStaad.Design.ChineseSteelGetCodeItemName(ControlItem)
Dim str As String
str = "status - "+CStr(ckStatus)+ vbNewLine _
      +"Ratio - "+CStr(maxRatio)+ vbNewLine _
      +"actual Value - "+CStr(actualValue)+ vbNewLine _
      +"limit Value - "+CStr(limitValue)+ vbNewLine _
      +"Control Item - "+ControlItemName+ vbNewLine _
      +"Control Load No - "+CStr(ControlLoadNo)+ vbNewLine _
      +"Control Position - "+CStr(controlPosition)+ vbNewLine
MsgBox str
End Sub

```

See also[OSDesignUI::ChineseSteelGetSolution](#)[OSDesignUI::ChineseSteelGetCodeItemName](#)◆ [ChineseSteelGetResultParameters\(\)](#)

```
VARIANT OSDesignUI::ChineseSteelGetResultParameters ( const VARIANT FAR & varSolutionNo,
                                                       const VARIANT FAR & varMemberNo,
                                                       LPDISPATCH          pDesignParameters )
```

protected

get the specified member design results in a specified solution.

Parameters

- [in] **varSolutionNo** Chinese Steel Design solution No(Type-Int).
 [in] **varMemberNo** Member number ID(Type-Int).
 [in] **varCodeType** Design Code Type(Type: Long/Integer), please reference [OSDesignUI::ChineseSteelGetResults](#).
 [out] **pDesignParameters** Design Parameters(Type - [COSChineseSteelDgnParameters](#)).

Return values

- true** Success.
false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim solutionNo As Integer
    Dim solutionName As String
    Dim solutionType As Integer
    objOpenStaad.Design.ChineseSteelGetSolution(0,solutionNo,solutionName,solutionType)
    Dim memberNo As Integer
    memberNo = 23
    Dim parameters As Object
    Set parameters = CreateObject("StaadPro.ChineseSteelDgnParameters")
    objOpenStaad.Design.ChineseSteelGetResultParameters(solutionNo, memberNo,parameters)
    Dim str As String
    str ="Name - " + parameters.Name+ vbNewLine _
        +"Member Type - "+CStr(parameters.MemberType) + vbNewLine _
        +"Section Slenderness Ratio Grade - "+CStr(parameters.SectionSlendernessRatioGrade)+ vbNewLine _
        +"Gama_re Strength - "+CStr(parameters.GamaReStr) + vbNewLine _
        +"Gama_re Stability - "+CStr(parameters.GamaReSta) + vbNewLine _
        +"Lamda_c - "+CStr(parameters.LmdCompressed) + vbNewLine _
        +"Lamda_t - "+CStr(parameters.LmdTension) + vbNewLine _
        +"Gama_z - "+CStr(parameters.GamaZ) + vbNewLine _
        +"Gama_y- "+CStr(parameters.GamaY) + vbNewLine
    MsgBox str
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolution](#)
[COSChineseSteelDgnParameters](#)

◆ ChineseSteelGetResults()

```
VARIANT OSDesignUI::ChineseSteelGetResults ( const VARIANT FAR & varSolutionNo,
                                             const VARIANT FAR & varMemberNo,
                                             const VARIANT FAR & varResultCategory,
                                             LPDISPATCH          pDesignResult )
```

protected

get the specified member design results in a specified solution.

Parameters

[in] **varSolutionNo** Chinese Steel Design solution No(Type-Int).
 [in] **varMemberNo** Member number ID(Type-Int).
 [in] **varResultCategory** Result Category Type(Type-Int).

Value	Result Category Type
1	General result
2	Dissipated result
3	NonDissipated result

[out] **pDesignResult,Design** Results(Type - **COSChineseSteelDgnResults**).

Return values

true Success.
false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim solutionNo As Integer
    Dim solutionName As String
    Dim solutionType As Integer
    objOpenStaad.Design.ChineseSteelGetSolution(0,solutionNo,solutionName,solutionType)
    Dim memberNo As Integer
    memberNo = 23
    Dim results As Object
    Set results = CreateObject("StaadPro.ChineseSteelDgnResults")
    objOpenStaad.Design.ChineseSteelGetResults(solutionNo, memberNo, 1, results)
    Dim str As String
    Dim strRatio As String
    Dim i As Integer
    For i = 1 To (results.Count)
        strRatio =CStr(CSng(results.Ratio(i)))
        str +=results.CheckItemString(i)+" - "+strRatio + vbNewLine
    Next
    MsgBox str
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolution](#)
[OSDesignUI::ChineseSteelGetCodeItemName](#)
[COSChineseSteelDgnResults](#)

◆ ChineseSteelGetSolution()


```
VARIANT OSDesignUI::ChineseSteelGetSolution ( const VARIANT FAR & index,
                                              VARIANT FAR & solutionNo,
                                              VARIANT FAR & solutionName,
                                              VARIANT FAR & solutionType )
```

protected

get the solution information.

Parameters

- [in] **index** Solution Index, start from 0(Type: Long).
- [out] **solutionNo** Solution Id(Type: Long).
- [out] **solutionName** Solution Name(Type: String).
- [out] **solutionType** Solution Type(Type: Long).

Value	Solution Type
0	First Order
1	P - Delta
2	Direct Analysis

Return values

- true** Success.
- false** General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim solutionNo As Integer
    Dim solutionName As String
    Dim solutionType As Integer
    objOpenStaad.Design.ChineseSteelGetSolution(0,solutionNo,solutionName,solutionType)
    MsgBox"Macro Ending"
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolutionCount](#)

◆ ChineseSteelGetSolutionCount()

VARIANT OSDesignUI::ChineseSteelGetSolutionCount ()

protected

get the solution count in Chinese Steel Design.

Returns

The total number of solution in Chinese Steel Design(Type: Long/Integer).

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim solutionCount As Integer
    solutionCount = objOpenStaad.Design.ChineseSteelGetSolutionCount()
    MsgBox "solution Count = " + Str(solutionCount)
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolution](#)

◆ ChineseSteelGetStoreyCount()

VARIANT OSDesignUI::ChineseSteelGetStoreyCount ()

protected

get the storey count in Chinese Steel Design.

Returns

The total number of storey in Chinese Steel Design(Type: Long/Integer).

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim count As Integer
    count = objOpenStaad.Design.ChineseSteelGetStoreyCount()
    MsgBox "Storey Count = " + Str(count)
    Set objOpenStaad = Nothing
End Sub
```

◆ ChineseSteelInitial()

void OSDesignUI::ChineseSteelInitial ()

protected

Initial Chinese Steel Design module.

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
    objOpenStaad.Design.ChineseSteelInitial()
    MsgBox"Macro Ending"
    Set objOpenStaad = Nothing
End Sub
```

◆ ChineseSteelPerformDesign()

void OSDesignUI::ChineseSteelPerformDesign ()

protected

Perform Chinese Steel Design.

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
    objOpenStaad.Design.ChineseSteelInitial()
    objOpenStaad.Design.ChineseSteelPerformDesign()
    MsgBox"Macro Ending"
    Set objOpenStaad = Nothing
End Sub
```

◆ ChineseSteelSetCheckOption()

VARIANT OSDesignUI::ChineseSteelSetCheckOption (const LPDISPATCH pCheckOption)

protected

Set Code Check Option in Chinese Steel Design.

Parameters

[in] **pCheckOption**, Check Option (Type - **COSChineseSteelCheckOption**).

Return values

true Success.

false General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim ret As Boolean
    Dim ckOption As Object
    Set ckOption = CreateObject("StaadPro.ChineseSteelCheckOption")
    ret=objOpenStaad.Design.ChineseSteelGetCheckOption(ckOption)
    ckOption.SecondMembers = "1 to 8"
    ret=objOpenStaad.Design.ChineseSteelSetCheckOption(ckOption)
    If ret Then
        MsgBox "Get Check Option Success"
    End If
    Set objOpenStaad = Nothing
End Sub
```

See also

[COSChineseSteelCheckOption](#)

[OSDesignUI::ChineseSteelGetCheckOption](#)

◆ [ChineseSteelSetDesignParameter\(\)](#)

```
VARIANT OSDesignUI::ChineseSteelSetDesignParameter ( const VARIANT FAR & varSolutionNo,
                                                    const VARIANT FAR & varParamIndex,
                                                    const VARIANT FAR & varParamType,
                                                    const VARIANT FAR & varParamValue )
```

protected

Get a design parameter value from the solution in Chinese Steel Design.

Parameters

- [in] **varSolutionNo** Solution Id(Type: Long/Integer).
- [in] **varParamIndex** Design Parameter Index in the solution, Start from 0.(Type: Long/Integer).
- [in] **varParamType** Parameter Item Type(Type: Long/Integer), please reference [OSDesignUI::ChineseSteelGetDesignParameter](#).
- [in] **varParamValue** Parameter Item value(Type: String).

Return values

- true** Success.
- false** General error.

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
    objOpenStaad.Design.ChineseSteelInitial()
    Dim ret As Boolean
    'Set Optimize to checked.
    ret= objOpenStaad.Design.ChineseSteelSetDesignParameter(1, 1, 9, "1" )
    If ret Then
        MsgBox "Set Design Parameter Success"
    End If
    Set objOpenStaad = Nothing
End Sub
```

See also

[OSDesignUI::ChineseSteelGetSolution](#)
[OSDesignUI::ChineseSteelGetDesignParameter](#)
[OSDesignUI::ChineseSteelAddDesignParameter](#)
[OSDesignUI::ChineseSteelDeletedDesignParameter](#)