

LEA **Linii Electrice Aeriene**





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Extensii in SCIA ENGINEER pentru modelarea si analizarea stalpilor de inalta tensiune:

- Introducerea modelului 3D utilizand sabloane parametrizate
- Generarea cazurilor de incarcare
- Generarea incarcarilor (ex. incarcare proprie, vant, intretinere, etc.)
- Generarea combinatiilor
- Izolatori LEA
- Verificarea elementelor din otel
- Optimizarea elementelor din otel



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De asemenea, programul poate fi utilizat pentru:

- Industria de telecomunicatii (turnuri cu zabrele)
- Macarale cu anumite modificari (turnuri cu zabrele)



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Module pentru LEA:

- Sabloane speciale cu stalpi de inalta tensiune
- Incarcari de intretinere si SBS pentru stalpi de inalta tensiune
- Verificari speciale pentru stalpi de inalta tensiune conform cu EN 50341-3-15



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Avantaje:

- Pachet integrat in SCIA ENGINEER (fara programe aditionale)
 - ➔ continuitate, stabilitate, tehnologie moderna
- Datorita integrarii in SCIA ENGINEER, pe langa “Turnuri” puteti calcula si alte tipuri de structuri.
- Utilizarea sabloanelor parametrizate
- Calcularea iterativa a structurii
- Optimizarea structurii
- Breviar de calcul foarte flexibil



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Functionalitati derivate din proiectele LEA

- Sabloane parametrizate
- Optimizarea intregii structuri
- Taiere/Unire sectiuni transversale
- Incarcari de intretinere pe structuri



Exemplul 1

SCIA.ESA PT - [Eindmast+ca1_2+wind+CL+CSS+BC+DOC_01_no_results70014.esa : 1]

File Edit View Libraries Tools Modify Tree Setup Window Help

Results

- Deformation of nodes
- Supports
 - Reactions
 - Resultant of reactions
 - Foundation table
 - Nodal space support resu
- Beams
 - Internal forces on beam
 - Deformations on beam
 - Relative deformation
 - Member Stress
 - Shear stress
 - Connection input
 - Connection Forces
- Bill of material
- Calculation protocol

Properties

Deformations on me

Name	Deformations o...
Selection	All
Type of loads	Load cases
Load cases	Ice - Ice
Filter	No
Structure	Initial
Values	uz
System	Principal
Extreme	Global
Drawing setup	...
Section	All

Actions

- Refresh >>>
- Preview >>>

m Plane XY Setting of UCS for active view. Snap mode Filter off Current UCS



Exemplul 2

SCIA.ESA PT - [Example1-Steuemast-SteelCheck.esa : 1]

File Edit View Libraries Tools Modify Tree Setup Window Help

Example1-Steuemast- 1

Load

B9-T

- Point force
 - in node
 - on beam
- Line force - on beam
- Moment
 - in node
 - on beam
- Wind generator
- Pond load - water accumulati
- LTA Conductor insulators
 - 1 node
 - 2 nodes
 - 3 nodes

Member B335 (9,776 m)

Properties

Member (1)

Name	B335
Type	beam (80)
CrossSection	CS60 - I
Alpha [deg]	0,00
Member syst...	centre
ey [mm]	0
ez [mm]	0
LCS	z by vector
X [m]	0,041
Y [m]	0,001
Z [m]	-0,999
LCS Rotatio...	180,00
FEM type	standard
Buckling an...	Default
Layer	Cr-A-LB
Geometry	
Length [m]	9,776
Shape	Line
Beg_node	N406
End node	N376
Nodes	
N376	abso
N406	abso
Data	
Hinge on be...	H827
Mesh data	MB529
Point force ...	B335
Point force ...	B335
Point force ...	B335
Point force ...	B335
Point force ...	B335
Point force ...	B335
Point force ...	B335
Point force ...	B335
Point force ...	B335
Point force ...	B335

Command line

Command >

m Plane XY Ready

Snap mode Filter off Current UCS

Actions

Table edit geometry >>>