Available functionalities

Autodesk Advance Concrete 2016

MODELING

- Structural elements: Column, Beam, Slab, Isolated footing, Continuous footing, Pile
- Structural elements: Stairs, Roofs
- Slabs, walls and beam openings
- Automatically create footings adapted for every structural element
- Converting ACIS solids into Advance Concrete elements and vice versa
- Export the structure in the AutoCAD® DWG format with ACIS elements
- Converting ADT entities into Advance structural elements
- Converting AutoCAD® 2D entities from the architectural drawing into Advance structural elements
- Layer naming standards definition
- Possibility for several users to work together at the same time to create a model.

MATERIAL AND SECTION LIBRARIES

- Various concrete, masonry and full bricks materials
- Parametric sections
- Sections from libraries: AISC, OTUA, Euro Profile
- Possibility to create user sections

AUTOMATIC VIEW CREATION

- Plan views creation
- Elevation views creation
- Cross section views creation
- Isometric views creation
- Reinforcement views creation
- Automatic labeling
- Drawings dimensioning
- Copying the dimensions and labels from one drawing to another
- Export documents and drawings to DWG

REINFORCEMENT DRAWING CREATION

- Manual reinforcement (stirrups, straight bars, polygonal bars, meshes)
- Manual reinforcement using shape codes according to standards
- Automatic shape code recognition for reinforcement bars
- Automatic distribution of meshes on surfaces
- Meshes: stock cutting optimization
- Management of bar and mesh symbols
- Management of bending details
- Insert automatic reinforcement styles
- Insert dynamic reinforcement in the model
- Define dynamic reinforcement solutions
- Reinforcement 3D viewer (preview)
- Collisions detection for bars and meshes
- Generate new sections and elevations on detailed reinforcement (3D Power)
- Automatic creation of reinforcement symbols and bending details
- Mesh and bar schedules
- Import reinforcement drawings from Arche Reinforcement
- Import reinforcement drawings from Advance Design

DOCUMENTS

- Arranging drawings on layouts
- Adding frame and title block
- BOM creation for concrete volume and formwork area
- View, sort and filter materials from drawings or from structural elements
- Compare the estimated rebar weight with the detailed bar weight
- Material orders management. The ordered bars and meshes are locked and can no longer be modified.

INTEROPERABILITY

- BIM synchronization with GRAITEC compatible software and Revit
- IFC 2x3 export / import
- Export 3D reinforcement to DWF
- Exporting material lists in NC files: aSa, Soule and SteelPAC
- Export material lists to XLS and DOC format

STRUCTURAL ANALYSIS

- Finite Element Structural Analysis.