

## Advance – Steel suite 6.1 / SP2

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This document describes only the improvements in Service Pack 2 compared to Service Pack 1. The installation of SP2 includes SP1; please see the previous document for improvements in SP1.

Please notice that models and drawings saved with Advance Steel 6.1 - SP2 cannot be opened with previous Versions of Advance Steel.

### **DRAWINGS**

- The dimension points removed from an automatic dimension remain removed after an update.
- Interactive dimensions remain in case that the dimension point is affected by the object moving.
- The support of ACAD dimension settings gives now the same result in ACAD and Advance.
- A curved beam arc dimension error has been corrected.
- Attached parts with / without holes: Now it is possible to dimension the holes from attached parts and the contour for the attached parts without holes in a single dimension line.
- In some situations interactive dimensions disappeared in a drawing update. This has been corrected.
- Radial dimensions keep the user modifications.
- Placing improvement for radial dimension.
- Weld preparation: angle dimensions are correctly created in details.
- Now it is possible to add labels to several objects on a drawing at the same time.
- "Rotate view" rotates now correctly the object labels with it.
- Interactive dimensions and interactive labels remain after a drawing update.
- Labels move according to the element position.

- Multi-edit for the label properties works fine in drawings.
- The curved axis grids are correctly represented in isometric views.
- Document Manager: Empty drawings are displayed in the Document Manager.
- Document Manager: A new possibility has been added to sort in the Document Manager according to the Revision Index and by modification Date.
- Document Manager: Revision has default index again.
- Document Manager: The drawing is flagged for update if the BOM placed on the drawing is obsolete.
- Document Manager: Updating the BOM from the Document Manager now updates the drawing list in all cases.
- Document Manager: Registering a drawing in the model doesn't crash the Document Manager.
- DSM: The "New model object" dialog shows now the combo box for "Group".
- DPM: The copied process keeps the given name.
- Speed improvement: Adding a view to an existing drawing is much faster.
- Speed improvement: Change labels or create a dimension works fine now.
- Speed improvement for the batch plotting details with revision. Now it is the same as batch plotting details without revisions.
- Speed improvement for label update when the detail is open.
- Now it is possible to place the absolute dimension under the dimension line.
- When re-scaling a view the labels are repositioned and suit the new scale.
- Curved beams - dimension points restrictions relative to object / main part behavior. The dimension point restrictions take now into account that the beam is curved.
- Additional icons for stair and railing drawing styles have been added in the toolbar (Depending on the country installation).
- Hatch settings are also available for plate with weld preparations in the cut views.
- Compound median line is correctly represented in drawings.
- "ASDETPROTO-A4.dwg" has been modified for Benelux.
- French drawing processes works fine on a model done with the Dutch installation.
- The drawing styles for stairs and railings have been added to the Dutch installation.
- Undo in detail works fine now.
- Improvements in "Beams ends processing" point selection for beam dimensioning.
- The folded plates are represented correctly in the overviews.
- Visible holes are represented correctly.
- Update twice a detail works fine now.
- The hole distance is adjusted according to the beam shrink value.

## **MODELING**

- The Japanese and South African profiles are now included in Advance Steel 6.1.
- No more error messages at splitting compound beams.
- No more errors for several shortenings at one end of a poly beam.
- The object snap point "Perpendicular" works on the Advance Steel grid.
- "Perpendicular" Beam object snap point works fine now in imperial coordinates.
- For beams in "exact" presentation all the grip points are visible and can be used to snap to with a node snap.
- The Copy command erases all source objects when mirroring.
- Copy by Rotate works fine now for stairs with connected railings.



- The bolt location does not change at copy command.
- Creating a polygonal opening in a plate works fine now.
- The polygon contour command doesn't create invalid contours.
- Advance Steel functionalities support now as well old AutoCAD 2D polylines.
- In a circular bolt pattern the holes are correctly arranged after setting the hole definition type to "slotted" and inverting the bolt pattern.
- Remove compound beam from connection works correctly.
- Audit reports bad features and gives the beam ID and the feature causing the error.
- No more crash on creating folded plate from 2 plates having weld preparation.
- No more crash after Undo when working with 2D Snap on and moving beam grips in specific situations.
- The cope is placed correctly on the required side on a curved beam.
- Folded plates: Some problems with mirrored plates have been corrected.
- Folded plates: problems with not erased or transferred features have been corrected.
- Folded plates: problems with mirrored holes have been corrected.
- Folded plate relations are calculated better now in the case of collinear edges.
- Folded beam creation from a 2D polyline works fine now.
- Roof and wall: Opening from polyline is created correctly.
- Holes are recalculated when their parent plate thickness changes.
- "Display connected objects" now can mark all the connected elements, including welds from the joints.

## **NUMBERING**

- No more error message after numbering.
- Identical plates were not recognized as identical for a specific problem. This has been fixed.
- New numbering possibilities are available, e.g. numbering according to an assembly group.

## **IMPORT/EXPORT**

- DPM: Export/Import a customized process works fine now.
- CIS/2: Columns are imported correctly.
- CIS/2: The bolt information is correctly imported/exported (bolt type, grade and diameter). The bolt assembly is exported as number of washers and nuts.
- CIS/2: Folded beams are weld connected after import/export.
- It is now possible to import structures from Autodesk Revit. A button for the import has been added in the "Import/Export" flyout of the toolbar "Additional tools".
- Packet 22 (holes) is supported.
- Holes/contours are "transferred" in SDF files.
- Export to Fabtrol (KISS file) with command "*AstM4CommAstorToKiss*"



## **LISTS**

- The feet and inch representation in the lists/BOM has been improved. It is now possible to show/suppress the zero for feet and inches like in the AutoCAD dimension settings.
- A new category has been added in the Document Manager: "Update in BOM required"
- Beam list sorts the beams by the position number.
- Plates always have a weight in the lists.
- The sorting in BOM Wizard now corresponds to the created lists (imperial and metric).
- A drawing list could not be updated in a certain situation; this has been fixed.
- The bolts with head on the beam flange belong to the beam in the BOM.
- A problem with wrong shortening causing a negative beam length in the lists has been corrected.
- The weight calculation for the apex haunch joint has been corrected. The list displays now the correct value.

## **NC and DXF FILES**

- Some NC files couldn't be read on some CAM software's; this has been corrected.
- In a certain situation, the "nc.dxf" writer was missing some code required to correctly handle holes on custom planes; this has been corrected.
- NC files for mirrored pfc profiles, plates with bevels, beam with copes and bent copes are correct.
- The AK-Bloc (outer contour) doesn't appear in NC files
- The bloc header data is correct.
- The coordinates of the internal and external contours are correct.
- NC-DXF files can now be created in imperial units.
- It is also possible to add a SI block (Signature) to the plate dxf files.

## **MANAGEMENT TOOLS**

- A new BOM template for cladding.
- Management Tool: Templates Wizard - Advance Template are not editable anymore.
- No empty units in the Management Tool.

## **JOINTS AND STRUCTURAL ELEMENTS**

- Some joint update problems are corrected.
- Bolted end plate: Better weld placement when creating the joint on curved beams.
- Splice joint: Weld location is now available.
- Shear plate: For the sloped and skewed case the bolts are correctly aligned.
- Shear plate: A new plate shape "flange both - straight" has been added.
- Shear plate: The bolts are placed correctly on curved beams.
- Flat bracing: The picture has been corrected to show all parameters.



- Flat bracing: It is now possible to set negative value for the gusset plate projection.
- Flat bracing: An additional option to place the angle at the gusset plate edge has been added in the "Angle" tab.
- The new joint "Vertical purlin plate" is added on the "Purlin" toolbar.
- Correction in "Gusset plate three diagonals" joint creation.
- Clip angle, skewed: deleted the beam in a certain case; this has been corrected.
- Clip angle, skewed: The beam is cut correctly.
- Clip angle: Improved distance calculation.
- Clip angle: Bolts create correctly the holes in the angle.
- Clip angle: The connection can be copied from one model to another without any trouble.
- Clip angle: The chamfer creation has been corrected.
- Clip angle: Slotted holes now take into account the hole tolerance.
- Clip angle: No more collisions caused by the clip angle connection.
- Clip angle: The slotted holes are correctly aligned by the offset.
- Clip angle: Now it is possible to select the weld location in the "Bolts parameters" tab.
- The HSS bracing has been extended. It is now possible to have no bolts between the sandwich plate and the butt strap. Also it is possible to have no butt strap at all.
- HSS bracing middle connects members correctly.
- Saw angle without plate: The weld thickness defined by the joint can be transferred correctly to the weld properties.
- HSS Bracing Simple: The gusset plate size doesn't change dramatically at definition change from "Projection" to "Total".
- Twisted base plate: The units for the angle have been corrected.
- Stiffener: The stiffener is placed correctly for a sloped beam.
- Stiffener: The stiffener width is calculated with the existing default(s).
- Stiffener UCS: The welds are correctly placed.
- Single side end plate: No more double bolts.
- Railings are correctly aligned on a short part of a channel.
- Stair footing: The additional end plate dimensions are calculated, but the size can be modified from the parameters.
- Bent/trim hand railing: The option "Formula 1.5xdiameter" works fine now for a curved connection.
- Bent/trim hand railing: Weld locations changes correctly according to the location setting.
- Cladding: Changing cladding from vertical to horizontal didn't work in a certain case; this has been corrected.
- Cladding: The option "Total length rounded up to" works fine now.
- Corner Base plate: An error for leveling plate has been corrected.
- Base Plate with Traverse: Now it is possible to set the plate size by projection or by setting the length and exact width values.

## **MISCELLANEOUS**

- Non administrator users are allowed to work with shared databases in a network environment.
- A new option to RENAME a model view created by "\_hype\_invisboxview" is available.
- A progress bar has been added to display the status when the new copy tools copy many objects.
- No more crashes on using UNDO command.



- The Russian letters can be used also for the automatic axes labeling.
- A small GUI problem has been solved in the Process Manager.
- Marking command "*AstM4CommShowMarkings*" works also with joint boxes.
- Some problems have been corrected in the Lisp API.
- New "Use" button for Drawing Process Manager.
- Correction of some errors in the drawing styles conversion from 5.1 to 6.1.
- Model Browser: Better display for configured prefixes in the Model Browser.