NEW FEATURES IN Advance Steel

- MODELING
- FABRICATION DRAWING
- LISTS and NC FILES
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What’s new in Advance Steel 7.1

Technology

Technology 1: Unicode compatibility

Advance Steel on AutoCAD 2007 is now Unicode compatible. Any character of any alphabet can be displayed.
Advance Steel databases are now in Access 2000 file format.

Technology 2: Unique ID for synchronization

Each Advance Steel object has a new attribute as unique identification number. This identification number is unique per model and constant during the life of the element.

Technology 3: Revision / Creation date for members

Advance Steel saves internally the creation date and last modification date for each member. This simplifies the model synchronization between Advance Steel and other software, e.g. this information is used in the SDNF 3.0 format. The GTC (Graitec Technology Component) file format also uses this information while synchronize an Advance Steel model with a model coming from another software.

Technology 4: Object selection – Nodes

A new tool allows selecting all created nodes.
What’s new in Advance Steel 7.1

Technology 5: Display compass

A new tool allows you creating a compass in the model for the member orientation.
What’s new in Advance Steel 7.1

Technology 6: New BOM component

The BOM component has been entirely rewritten. Now it is easier to create a BOM or to customize an existing one.

Also, it is possible to create fast and easy BOMs for Advance elements. The tools are grouped in the first part of the Sub – BOM toolbar.
Advance Steel uses FlexLM 8.0d as license protection. This enables now the “Borrow license” functionality.
What’s new in Advance Steel 7.1

**Modeling**

**Model 1: New toolbar for folded plates**

The tools for creating folded plates have been grouped in a new flyout: **Sub – Folded Plates**.

**Model 2: Folded plate improvements**

- Relations are now created only along the common interval of connected edges.
What’s new in Advance Steel 7.1

- Contours/Holes cut now through the relations adjacent to the fold they are on

- Several different relations can be placed on one edge of a plate
What’s new in Advance Steel 7.1

- Improved concave plates connection
- The default radius is equal to the double of the folded plate thickness
- Folded plates can be split or merged like any other plates
Model 3: Polybeam improvements

- **IN THE MODEL**
  - Improved cope behavior on polybeams
  - A new behavior has been implemented for polybeams: “preserve orientation”. This creates polybeams suitable for stair and railing modeling.

- **DETAILING**

  2D polybeams get dimensioned
What’s new in Advance Steel 7.1

Model 4: Design Efforts in beam properties

New options have been developed for the North American users: Advance shows the calculated uniform load and also specifies the load percentage at each end. This information is used for the “quick connection” functionality and is controlled by the default C0_DisplayUniformLoadsPage.
What’s new in Advance Steel 7.1

Model 5: New “Properties 3” tab for beams

Moment of inertia, Elasticity modulus, Plastic modulus... are now displayed in the properties dialog. The Advance Steel profile database has been filled with these values for common profiles.

Model 6: Improved beam merge

The command for merging beams keeps the connections.

Model 7: New command for bolt update

A new command allows now the bolts update.
Model 8: Clash check - new “Cancel” button

Clash check on a big model can be cancelled at any time.
What’s new in Advance Steel 7.1

Joints and Structural Elements

Joints 1: New toolbar

The joint tools are grouped now in a new sub-toolbar: “Sub – Joint Utilities”

Joints 2: Reorganization of joint sub-toolbars

The Joints sub-toolbars have been reorganized so that end-users better find the connections they are searching for. In version 7.1:
- Joints “Beam to column” have been grouped in the same sub-toolbar
- Joints creating an endplate have been grouped in the sub-toolbar “Plate joints”
- Joints creating an clip angle have been grouped in the sub-toolbar “Clip angle joints”
- Joints creating a moment connection have been grouped in the sub-toolbar “Moment joints”
Joints 3: New Joints

- PIN HOLE CONNECTION

A new gusset plate connection has been developed with many additional options and a new dialog box layout for an ease use. The joint connects a column and a base plate to a diagonal. It can be used on the column web or flange.
• **BRACING EXTENSIONS**

Several gusset plate connections have been enhanced with an additional reinforcing end plate:

- Gusset plate at one diagonal
- Gusset plate two diagonals

An additional property tab provides the end plate option.
What’s new in Advance Steel 7.1

- **BRACING EXTENSIONS**

The HSS and Flat bracings include now an additional option for endplate or clip angle connection to the column or additional beam.
What’s new in Advance Steel 7.1

- **JOIST SEAT**

A new joist seats is available on existing joists or by a reference selection (point, distances...).

The joist seat can be created on beams or columns of all possible shapes.
What’s new in Advance Steel 7.1

• THROUGH PLATE

A new joint to connect two secondary beams to a column by a plate was developed. The plate goes through the column (main beam) and creates automatically a contour in the main beam. The connection works for horizontal or sloped/skewed beams.
**What’s new in Advance Steel 7.1**

- **DOUBLE SIDE CLIP ANGLE**

A new Joint has been developed to connect a floor beam and two beams as well as a column and two beams. The default parameters are according to the selected situation.

The attached beams can be sloped to the main one.
The connection works also for a curved passing beam or when the beams are compound or welded beams.
What’s new in Advance Steel 7.1

- **MOMENT FLANGE PLATE**

A new moment connection for seismic areas, created out of flange plates has been implemented. The connection works on all possible combination of sections. Also it works for sloped and skewed situations.
**What’s new in Advance Steel 7.1**

- **MOMENT FLANGE T**

Another new moment connection for seismic areas, created out of T-profiles has been implemented. The connection works on all possible combination of sections.

- **VERTICAL PURLIN PLATE**

The joint "Vertical purlin plate" is available in the “Purlin joints” toolbar.
What’s new in Advance Steel 7.1

Joints 4: Punch marks

Advance Steel 7.1 provides new Joints for the creation of punch marks in the model. The goal is to deeply improve the speed of punch mark creation.

- **PUNCH MARKS**

A new joint creates punch marks on a main beam according to the position of a secondary element (beam or plate). The command works on selection and on the whole model. You can modify the punch mark position or add new punch marks in the properties dialog.
What’s new in Advance Steel 7.1

- **GENERAL PUNCH MARKS**

A new joint creates punch marks on a main element (beam or plate) according to the position of a secondary element (another beam or plate).

Choose a suitable UCS, select the main element and then the points on the attached part.

The points selected on the attached part are taken into account for markings on the main element.

The points are projected on the main element plane.

<table>
<thead>
<tr>
<th>Punch marks joint - general</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Beam center</td>
</tr>
<tr>
<td>2. Outer edge</td>
</tr>
<tr>
<td>3. Gauge line</td>
</tr>
<tr>
<td>4. Free placement</td>
</tr>
<tr>
<td>5. Number</td>
</tr>
<tr>
<td>6. Distance from outer edge</td>
</tr>
<tr>
<td>7. Top/Bottom</td>
</tr>
<tr>
<td>8. Punch diameter</td>
</tr>
</tbody>
</table>
What’s new in Advance Steel 7.1

- AUTO PLACEMENT

Also, there is the possibility to place punch marks automatically.
What’s new in Advance Steel 7.1

Joints 5: Improvements on Joints

- **US CLIP ANGLE**
  New organization in the Vertical bolts tab for the bolts number and distances:
**HSS BRACING**

Advance Steel 6.1 SP2

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.
What’s new in Advance Steel 7.1

• **BASE PLATE WITH TRAVERSE**
  Advance Steel 6.1 SP2
  Now it is possible to set the plate size by projection or by setting the length and exact width values.

• **GUSSET PLATE – ONE DIAGONAL**
  Advance Steel 6.1 SP2
  A new gusset plate shape – “two variable” – can be created.
What’s new in Advance Steel 7.1

- SHEAR PLATE

Radius at inner plate corners

Now it is possible to create a radius between the shear plate and the extension to the bottom and/or to the top flange. The value can be set in the Plate tab of the properties dialog box.

An additional parameter has been added allowing to set the end distance.
New plate shape

Advance Steel 6.1 SP2
A new plate shape “flange both - straight” has been added.
What’s new in Advance Steel 7.1

- **SPLICE JOINT**
  Advance Steel 6.1 SP2
  **Weld location**
  The weld location is now available for each weld used in the connection.

![Image of SPLICE JOINT](image1.png)

- **FLAT BRACING**
  Advance Steel 6.1 SP2
  An additional option to place the angle at the gusset plate edge has been added in the **Angle** tab.

![Image of FLAT BRACING](image2.png)
What’s new in Advance Steel 7.1

Joints 6: Improvements on existing Structural elements functionalities

- STAIRS

Improved formula 2R+G

Improved tread type

For the “Type 3” there is an option to create a frame underneath the tread.

Different top and bottom tread

Now you can give different settings (different tread type, with particular dimensions) for the top and bottom tread.
What’s new in Advance Steel 7.1

Improved stringer offset
New possibilities for the stringer offset: slope, horizontal, vertical.

• RAILINGS

Post-handrail connection - not sloped
For a sloped Railing, you can choose now between a sloped and a non-sloped post-top handrail connection.
What’s new in Advance Steel 7.1

Rotate posts
The posts can be rotated with a selected angle.

Move Posts individually
The Posts can be moved individually by a given offset.
Select in the combo box the post you want and specify the offset. The selected post is displayed in red.
**What’s new in Advance Steel 7.1**

**Improved Post offset**

The offset value is always perpendicular to the post (horizontal if the post is vertical, even for sloping railings, or in slope of the stair if posts are perpendicular to stringers).

**Remove the mid rail end**

The middle handrail can be created to the last post, or can be extended by a given length.

A positive value shortens the handrail while a negative value extends it.
Middle handrail on sloped parts
NEW STAIR FOOTING JOINT

A new Stair Footing Joint has been developed with many new options for a better configuration. You can choose between a plate and an angle:

The new Joint works on hot and cold rolled profiles, on User section (if the user created his stringer with a User section) and also for Welded-Beams and Polybeams.
What’s new in Advance Steel 7.1

• QUICK CONNECTION

You have the possibility now to define connections for any situation in a project. According to the settings the joints will be designed and Advance creates all connections automatically in the project model. This tool helps to avoid errors in the modeling part.

Workflow:

1. Framing
   a) Create the framing with model roles (column, beam, bracing…) and define loads
   or use the Uniformed Load Percentage
   b) Or import the framing from Engineering software and finish it with assigned model roles. In this case the nodes and loads are already assigned to the single construction nodes and stored in the beam properties.

2. Setup the Auto Connection

The tool “Configure Quick Connection” allows defining the connections for the different framing situations.
What’s new in Advance Steel 7.1

In the appeared dialog select the profile types, the conditions (linear, inversed, at web...), the connection, ...
For each defined connection you can modify the default settings. The settings are depending on the connection type and are only used for exactly the defined situation (combination for input set, condition and associated connection).
The “Connection” settings provide general assumptions necessary to design or create a connection.
What’s new in Advance Steel 7.1

Special user connection
Also, there is the possibility to define certain nodes (connection situations) that should be excluded from the joint design or to overwrite the Auto Connection, as the user has to create “special” connections there.

3. Set the general design criteria
Usually there are many settings to be used for the joint design. You can modify them according to your needs and job requirements. For example, for common connections and shear plates, the amount of bolts per structural member height and the bolt distance from the top of the beam to the first hole can be defined.
4. Start Quick Connection

After the quick connection setup is done, click the Quick Connection All button. Advance Steel designs and creates all connections according to the setup.

The joint design creates a design report for each connection with all verifications and conditions. In case a connection failed the joint design flags the failed connections so that you can verify the connections.
What’s new in Advance Steel 7.1

- QUICK PARAM FIT
• SPIRAL STAIR

Spiral stairs are now available.
The joint creates:
- the central post (or a central stringer)
- the treads
- the connections between the treads and the central post (or the central stringer)
- the handrail
- the connections between the handrail and the treads
- the optional top cape plate (on the top of the column)
What's new in Advance Steel 7.1

**Joints 7: Interface for joint design**

Advance Steel 7.1 provides Joint Design for several joints according to the following norms:

- EC3 (Eurocodes) norms
- AISC and CISC (North-American) norms
- CM66 (French) norms

**Joints 8: Joint design according to the North American standard**

Advance Steel 6.1 SP2

Joint Design according to the North American standards has been implemented for the following joints:

- Shear plate
- Through plate
- Clip angle
- Clip angle skewed
- Double side clip angle
- Single side end plate
- Double side end plate
- Splice joint
- Front plate splice
What’s new in Advance Steel 7.1

**Joints 9: Joint design according to the EC 3**

Joint Design according to the EC3 has been implemented for the following joints:
- Knee of frame bolted, with haunch
- Apex bolted with plate haunch
- Apex bolted with beam haunch
- Clip Angle
- Single Side End Plate
- Splice joint

**Joints 10: Joint ID in the dialog**

You can choose to display or not the joint ID in the properties dialog. This is controlled by a default: $C0\_ShowObjectsUserID$
What’s new in Advance Steel 7.1

**Numbering**

**Numbering 1: Improvements for method “with drawing number”**

An improvement in numbering “with drawing number”: You can choose from the dialog box how to define the counter:

- Small letters
- Capital letters
- Numbers

This is controlled by a default: `C0_NumberWithDrawingNumberSeparator`
What’s new in Advance Steel 7.1

Numbering 2: **Improvement in numbering**

The gaps in numbering are automatically filled at new objects creation. This is controlled by a default: *C0_PartDetectionReuseNumbers*

Numbering 3: **Smaller holes fitting into bigger hole**

Smaller holes fitting into bigger holes can be taken into account at numbering with standard parts. This is controlled by a default *C0_EPDSpecialHoleSettingsEps*
What’s new in Advance Steel 7.1

Numbering 4: Profiles for prefix settings

In the Prefix settings it is possible to set up different profiles for different jobs.
What’s new in Advance Steel 7.1

Numbering 5: Configure prefix according to the profile type

The prefixes can be configured according to the profile type.

![New Prefix dialog box]

- **Object Type**: Beam
- **Model Role**: ACIS objects
- **Profile subtype**: Various options from a drop-down menu, including 'Any', 'Angle', 'Circular Hollow Sections', 'Flat', 'I Sections', 'Rectangular Hollow Sections', 'Round bars', 'Square Bars', 'T Sections'.
**What’s new in Advance Steel 7.1**

**Numbering 6: Processes drawing number**

A new feature, very useful when working with different Phase/Lot for example: You can control now the drawing numbers assigned to drawings created by a process.

![Process properties dialog box with fields for selection, part thickness, drawing number, and arrangement settings.](image)
**Numbering 7: Modified objects get new number**

Besides the majority criteria (objects which have the majority keep their number), it is possible now to keep the original number of elements that are never modified. This is controlled by a default: *C0_ModifiedObjectsGetNewNumber*
Numbering 8: Weld and/or bolt properties taken into account at Assembly numbering

Now you have the possibility to compare the weld properties and bolt properties in numbering. E.g. two identical beams but with a different weld (size, type, note etc) get a different part number.
This is controlled by the defaults: \texttt{C0\_GTEWithWelds} and \texttt{C0\_GTEWithBolts}.
Numbering 9: Columns with different orientation get a different number

Columns with a different orientation get different Main Part marks. This is controlled by a default:

*C0_UseColumnOrientationForMPNumbering*
What’s new in Advance Steel 7.1

New numbering possibilities

New numbering possibilities are now available, e.g. numbering according to an assembly group.
**Document Manager**

**DM 1: Check status only for the selected drawings**

It is possible now to select only certain drawings to check their state. For this, uncheck the option **Automatic detail status check**. All selected drawings appear in the “Unknown” category.

Select the drawings to check by selecting the checkbox in the list on the right side of the dialog.

![Document Manager screenshot](image)

Click the **Run check** button.
The Document Manager will check at startup the “state” only for the selected dwg files. The results are displayed in three categories:

- Not checked
- Updated
- Update required

You can add one or more of not checked details by marking them and clicking Run check. Only these details will be checked.

You can add as many details as necessary without scanning again the already checked ones.
**DM 2: New sorting method**

Advance Steel 6.1 SP2

A new possibility has been added to sort in the Document Manager according to the Revision Index, by modification Date and by Issue.
What’s new in Advance Steel 7.1

**DM 3: New category**

Advance Steel 6.1 SP2

A new category has been added in the Document Manager: “Update in BOM required”
Drawings

Draw 1: Orientation Marks

Shop drawings can be configured to get an orientation mark. The orientation mark shows the beam end direction or the column orientation.
What’s new in Advance Steel 7.1

Erection drawings labeling can be configured to show the members orientation by arranging the label to point on the beam end depending on the shop drawing orientation.
3D-views can be configured to show beam orientations by displaying the compass.
What’s new in Advance Steel 7.1

The numbering has a new option allowing you to get a different piece mark for different oriented columns.

For example:
Suppose there are two identical members but inversed in the model (one pointing South and the other one pointing North), Advance Steel will create:
- On the shop drawings: a drawing with an arrow on the left side containing the label: 1x South, 1x North

- On the erection drawings: The member label is placed on the left side of the member according to how it is detailed. The member pointing South has the label on the South end side, and the member pointing North has the label on the North end side.
What’s new in Advance Steel 7.1

Draw 2: Labels resized according the scale
Advance Steel 6.1 SP2
When rescaling a view, the labels are repositioned and suit the new scale.

Draw 3: Shrink in MP drawings
A new default allows displaying both standard and shrinked dimensions in the assembly drawings:
*C40_UseShrinkInfoInMPDrawings*

Draw 4: Label non visible parts
A new default allows labeling the invisible elements in details: *C40_EnableAnnotationOfInvisibleObjects*
**What’s new in Advance Steel 7.1**

**Draw 5: Improved slope triangle**

Now you have the possibility to create automatically a slope triangle for:

- saw cuts (on single parts drawings)
- weld preparation (on single parts drawings)

Other improvements are:

- A grip point allows orientation modification - the slope triangle becomes vertical (if horizontal) or vice-versa.
- You can display the angle value
- Configurable closed slope triangle: fixed symbol shape

Slope triangle for diagonal orientations – display the system lines (of diagonals) and get a slope triangle to indicate the “orientation” of the diagonal
**What’s new in Advance Steel 7.1**

**Draw 6: Labeling non standard holes**

A new default “**Don’t label standard hole diameter**” allows labeling only the non-standard holes. Another default “**Standard hole diameter**” defines the reference hole diameter.

**Draw 7: Label assembly number on single part details**

The single parts can be part of several assemblies. Now the Single part details can contain the assembly label. This is controlled by a new default: `EnableMultipleMainpartMarksInLabel`.

**Draw 8: Hatch settings**

Advance Steel 6.1 SP2

Hatch settings are available for plates with weld preparations in cut views.
What’s new in Advance Steel 7.1

**Draw 9: Configure cut view names**

The cut view names can be configured now using tokens. Also suffixes and prefixes can be used. The set of characters is controlled by a new default: *C40_CutViewNameNumberingType*.

**Draw 10: New tokens for prototypes**

New tokens for prototypes have been implemented:
- Main Part Coating
- Main Part Phase
- Main Part Material

**Draw 11: New tokens for weight**

Additional tokens for weight have been added in the label designer:
- Weight of the complete assembly
- Weight of the part (secondary or main part of an assembly)
These are useful for a better view title, and also avoid some dimensions in the detail views. Therefore the created workshop drawings are cleaner.

**Draw 12: Define the default tokens**

It is now possible defining default tokens in the views. This is controlled by a default: *C40_OverviewWantedTokens*
A new tool allows adding additional tokens in an existing view.

Start the tool and then select the detail view (green contour)

In the Update tokens dialog, select the tokens you want to add and confirm by clicking OK.
**What’s new in Advance Steel 7.1**

**Draw 14: Improved assembly length calculation**

A new default allows assembly length calculation according to different methods.

- In WCS (minimum-volume bounding box)
- In the main part CS
- Minimum between the above two options

**Draw 15: Dimension the total length of an assembly**

Now it is possible to automatically get the dimension of the total assembly length.
A new default has been implemented for slotted holes representation with symbol.
What’s new in Advance Steel 7.1

Draw 17: Improved prototypes

The prototypes usually used for General Arrangement drawings have been updated: title block, included revision table, new configuration of the dimension styles, …

The prototypes usually used for workshop drawings have been updated: new configuration of the dimension styles, included specific BOM’s, …
**What’s new in Advance Steel 7.1**

**Drawing Style Manager**

**DSM 1: Better cut views arrangement**

An improvement in the cut views arrangement: the cut views can be placed on the left and right side of the main view.
New geometric restrictions for plates and beams object presentation:

<table>
<thead>
<tr>
<th>Geometric restriction</th>
<th>Plates</th>
<th>Geometric restriction</th>
<th>Beams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Front (Li Fr)</td>
<td><img src="image1" alt="Linear Front" /></td>
<td>Linear Front (Li Fr)</td>
<td><img src="image2" alt="Linear Front" /></td>
</tr>
<tr>
<td>Linear Top (Li Top)</td>
<td><img src="image3" alt="Linear Top" /></td>
<td>Linear Side (Li Side)</td>
<td><img src="image4" alt="Linear Side" /></td>
</tr>
<tr>
<td>Not Linear Front (N-Li Fr)</td>
<td><img src="image5" alt="Not Linear Front" /></td>
<td>Linear Top (Li Top)</td>
<td><img src="image6" alt="Linear Top" /></td>
</tr>
<tr>
<td>Not Linear Top (N-Li Top)</td>
<td><img src="image7" alt="Not Linear Top" /></td>
<td>Not Linear Front (N LiFr)</td>
<td><img src="image8" alt="Not Linear Front" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Linear Front Side (N-LiSide)</td>
<td><img src="image9" alt="Not Linear Front Side" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Linear Top (N-LiTop)</td>
<td><img src="image10" alt="Not Linear Top" /></td>
</tr>
</tbody>
</table>
What’s new in Advance Steel 7.1

**DSM 3: Option to not combine with other dimensions**

A new option allows avoiding a dimension to combine with others, increasing the drawing quality when two similar dimensions must remain separate even if they dimension points from the same line, or show the same values.

This option allows a better cope dimension at both beam ends.
**DSM 4: Group dimension for bolts and holes groups on secondary parts**

A new possibility is available to dimension bolts and holes groups on secondary parts, in assembly drawings and overview drawings. Now you can create a dimension line for each group and dimension the objects in the group. The drawing style can be configured to get the wished result automatically.
What’s new in Advance Steel 7.1

**DSM 5: Better internal bolt group dimensions**

Bolt and hole groups can be dimensioned now according to X or Y direction.
**What’s new in Advance Steel 7.1**

**DSM 6: Improved level dimension line**

Now you can create a dimension line to dimension points relative to the model zero level. The level dimension line works as well for a horizontal column.
What’s new in Advance Steel 7.1

**DSM 7: Better empty space management in workshop drawings**

Workshop drawings are automatically well filled, so that there is no empty space on the left and/or on the right, and also above and below of the (main) views.
What's new in Advance Steel 7.1

**DSM 8: More possibilities to place the title**

More possibilities to place the view title. Also, the possibility to have no title at all has been added.
What’s new in Advance Steel 7.1

**DSM 9: Different clipping representation types**

Now you can choose between different clipping representation types. These representation types can be changed also after the view creation.

Also the option presentation inside the dialog has been improved.
What's new in Advance Steel 7.1

Lists

Lists 1: Export to Excel – more options

More options are available for the export to MS Excel.

![Export options window for Advance Steel 7.1](image)
What’s new in Advance Steel 7.1

Settings in the Management Tool

MT 1: New pictures for better comprehension

New pictures for defaults are now available:

- Default for collision
What’s new in Advance Steel 7.1

- Default for orthogonal tolerance
What’s new in Advance Steel 7.1

**Import / Export**

Graitec exchange file (*.gtc) stores Graitec Model Objects data. This file type can be used for the communication between Graitec software.

- **IMPORT GTC FORMAT**

You can now import a *.gtc file to Advance Steel.

- **EXPORT TO GTC FORMAT**

You can now export a *.gtc file from Advance Steel.

- **GTC SYNCHRONIZE**

You can now synchronize an Advance Steel model with a *.gtc file.
What’s new in Advance Steel 7.1

Import/Export 2: Import from Autodesk Revit

Advance Steel 6.1 SP2

It is now possible to import structures from Autodesk Revit. A new button has been added in the “Import/Export” toolbar.

Import/Export 3: KISS export

It is now possible to export structures to Fabtrol. A new button has been added in the “Import/Export” toolbar.

Import/Export 4: PSS

- Better customization of the PSS output path.
- CS substructure can be taken into account at PSS static import/export.

Import/Export 5: SDNF CIS/2 beam orientation improvements

Due to differences on profile definitions between Advance Steel and other software, some profiles can be mirrored or rotated after import. Now it is possible by configuration to correct these differences.
### Catalogs

<table>
<thead>
<tr>
<th>Catalog 1: Japanese profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance Steel 6.1 SP2</td>
</tr>
<tr>
<td>The Japanese profiles are now included in Advance Steel.</td>
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</table>

<table>
<thead>
<tr>
<th>Catalog 2: South African profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance Steel 6.1 SP2</td>
</tr>
<tr>
<td>The South African profiles are now included in Advance Steel.</td>
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</table>

<table>
<thead>
<tr>
<th>Catalog 3: China materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese materials have been added.</td>
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</table>

<table>
<thead>
<tr>
<th>Catalog 4: South Korean materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following materials have been added: SWS400, SWS490, SMA400, SMA490</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Catalog 5: Bolt names for Benelux installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The bolt names have been modified for the Benelux installation.</td>
</tr>
</tbody>
</table>
What’s new in Advance Steel 7.1

Catalog 6: South Korean profiles

The following Korean profiles are now included in Advance Steel:
- C-Channels
- Structural tees
- Unequal angles
- Channels
- Square, hexagonal and octagonal bars
- Rails
- Steel flat bars
- Round bars
- Sheet piles
- I-Beams
- H-beams – Hot rolled
What’s new in Advance Steel 7.1

7.1 Speed improvements...

The speed has been improved in many areas of Advance.

- Workshop drawings creation
- BOM/List creation
- Existing drawing list display
What’s new in Advance Steel 7.1

NC Files

- Outer contour blocks are now split when the object is completely cut along the view
- Internal contours and elements with many weld preparations are better handled.
- Arc approximation errors at arcs ends are now automatically corrected in most cases
- The pieces are described so that punch marks are placed on the “v” view rather than “h”. This helps users to get better-processed pieces out of the NC machines since some machines cannot process the marks and holes at all.
- Improved weld preparation handling in the NC files
- The “Construction Line” – “MaxHoleDiameter” can be now controlled by the default: C0_MaxHolesDiameterForNC.
What’s new in Advance Steel 7.1

Others...
Advance Steel 6.1 SP2

- 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.
- The Russian letters can be used also for the automatic axes labeling.
- In the Autodesk DWF Viewer, properties of Advance Steel objects can now be visualized when you export an Advance Model to 3D DWF within AutoCAD 2007.
- The drawing styles for stairs and railings have been added to the Dutch installation.
- A new BOM template for cladding.