

EST-Duct New Features, Enhancements and Fixes

Version 2.38.050 (17th February 2009) **LOK CODE 17**

NEW PATTERNS & PATTERN CHANGES

CID 2155 (Double Bend)

Stop CID 2155 converting the bottom Twist Angle and last rotation to Feet and Inches when in Imperial

CID 2882 (Swept Branch)

Resolved issue with CID2882 missing it's second branch

CID 3 (Square Elbow)

Resolved issue with CID 3 holes being incorrectly positioned when using double wall

CID 33 (Straight + Shoes)

Resolved issue with CID 33, developed hole positions incorrect

CID 382 (Grille Box)

Resolved issue with CID 382, hole positions incorrect, could not place up to box edge

APPLICATION FIXES

Connectivity Auto Attaching F x M Bends

Fixed auto attaching FxM bends from reporting a connector mis match instead of swapping ends and attaching by the "other" end.

NOTE

This issue was only since Sept 2008, when a fix was implemented for reduces swapping ends when attaching.

Design Line : Constraint Lists

Fixed ordering of constraints list to display in numerical order

Design Line

Resolved issue with Design line square to rounds misaligning widths on risers

Double Wall

Resolved issue with "Double Wall" items not reporting insulation

Previous Jobs

Fixed MAJ/ESJ file version if creation date prior to August 2005 reporting an error instead of opening successfully and converting to the new version.

Version 2.38.045 (02nd February 2009) **LOK CODE 17**

New Features

Import Underlay: DWG Format

Added support for more AutoCAD entity types.

Main Application

Main program now performs autosave before running any batch process if enabled

Sub Assembly

Enabled Sub Assemblies to be built into product lists

Digitizer

Added the ability to select a Template printer from the Printer Setup menu. Users now have a separate printer for template creation.

Design Line

Line Editor

Added button 'Select Lines' to the Line Editor dialog, Clicking Selected Lines button enables line selection, to update Right Click the dialog selections.

Fix By

New option to adjust the line position, reflecting any change in "Fix By" position, e.g. changing Fix By from bottom to top will move the line to the top of duct/pipe when enabled.

OffsetRedBend

Node now supports the use of CID 142 (Offset Reducing Segment Bend) upon filling the Design Line this pattern will adjust to different offset / "Fix By" options.

Insulation / Hangers

Implemented "adjust hanger" override on insulation.

New Patterns

- CID 828 New Insulation Box Pattern.
- CID 1117 Flat Oval Tee with Airturns.
- CID 1118 Oval Straight & Branch with Reducers
- CID 1120 3 Way Combined (DuctBoard)
- CID 1121 Drop Cheek Breeches (DuctBoard)
- CID 1122 Drop Cheek Bend (DuctBoard)
- CID 1130 Double Radius Bend Combined (DuctBoard)
- CID 1131 Radius Bend and Straight Combined (DuctBoard)
- CID 1133 Rectangular Straight with Integral Damper
- CID 1134 Double Boot
- CID 1136 Angled Grill Box (DuctBoard)
- CID 1137 Double Shoe without Pipe
- CID 1138 Angled Plenum (DuctBoard)

Defects Fixed

Digitiser Template.

Amended the default column widths so template prints as previewed in the print preview screen.

CID 30

Development had bottom hole offsetting from wrong end from what was shown in Takeoff

Pattern 2523 square outer insulation: is only intended for when bendhaving two segments;
Square Insulation Option is now hidden if is not so

CID 365 (Circular Tap on Easy Elbow)

Now supports development of the circular branch.

CID 394 (2 Segment Bend)

Inside insulation 3D was incorrectly positioned

CID 1116 (Oval Shoe Tee Cross with Integral Reducer)

The pattern's branch length is now specified from the surface of the oval straight. Pattern fix to resolve branch developments, problem occurred if the branch hole crossed the oval's flat.

CID 1115 (Oval Conical Tee Cross with Integral Reducer)

Pattern now allows the input of the branches bottom width instead of the slope angle, the branch length is now specified from the surface of the oval straight. Pattern fix to resolve issue with double wall not positioning correctly when branch was rotated onto oval straight's flat. Pattern fix to resolve branch developments, problem occurred if the branch hole crossed the oval's flat. Limit on branches maximum slope angle is now ignored

CID 365 (Oval Bend + Branch)

Pattern now allows the branch piece to be set wider than the ovals flat dimension

CID 927 Fixed Item Centre Line Length and Item Pattern Length not being reported.

Fixed problem with CID's 1, 25, 35, 36, 340, 410, 411, 412, 866, 924, 972, 1972 which would not remove added holes by setting width/depth to 0

Fixed sysscr.map fix breaking profile editor if there is no profile.map file

Fixed CID 889 (oval straight with branches + optional reducer) Bug where the check that C1 & C2 diameter adjusts are the same should have been C1 & C5 adjusts when the reducer is enabled

Sub Assembly

Application fix to resolve issue with the incorrect dim descriptions in the "dims" tick box for patterns whose real dims aren't in the same order as the displayed dims. Also application fix to enable Sub Assemblies to be built into product lists

Design line

Design fall: amended the way the fall is implemented to work to a positive fall in the indicated flow direction. So a drainage (extract) service no longer needs negative falls applied to the lines. Unfortunately, this change impacts on existing falling design systems. With the new logic on pre-existing design lines with falls setup on extract services the falls will be reversed - will appear incorrect.

Version 2.37.176 (30th October 2008) LOK CODE 16

NEW PATTERNS & PATTERN CHANGES

CID 12 & 802 (Cap End)

Application fix to resolve issue where if holes were added and the item's connectors were locked, when the item was edited the connector would become unlocked. Fix applied to only unlock the connector if the hole type is changed i.e. from Rectangular to Round

CID 3 (Square Bend)

Application fix to resolve issue where item was causing the application to crash, if the pattern had the following options applied "2 Part Wrapper" set to "Oversize Check" or "Maximum Fold Length". When the item was developed the application was crashing.

CID 889

Application fix to resolve issue where the check that C1 & C2 diameter adjusts are the same, should have been C1 & C5 adjusts when the reducer is enabled

Version 2.37.172 (15th October 2008) LOK CODE 16

NEW FEATURES

- Reinstated Taper Notch logic on left and right side wrapper panels. Logic was lost when Left and Right Mitre Length dimensions were added.
- Allow Rectangular Cap End (CID 222) added to Standard Parts library

APPLICATION FIXES

- Fixed the sysscr.map not being saved for Services if it didn't exist in the 1st place. This was causing newly created Services to be lost.
- CID 355,356,357,358,359,831,889 Oval Branch/Cross on Straight and CID 894,895,896 Oval Tap on Reducer: Fixed a typo causing the Connectors Tab to be displayed empty if space for connectors/seams were not saved in item files.
- Relaxed the dimension checking on Pipework bends to allow insulation that is thicker than the inner radius
- Fixed Area Takeoff Parts being reported as having the same area as the original part on which they are based - original area was cached and not being cleared. (Digitiser)
- Fix for Carry over Specification as this was changing during takeoff when the user hasn't selected - Carry Spec will now *only* change when lock icon is blue.
- Swapped around ESJ/MAJ buttons on job browser as MAJ most common amongst users.
- Relaxed the dimension checking on Pipework bend, allow insulation that is thicker than the inner radius
- Fixed writemode=ansi switch potentially corrupting any MAP files that contained arrays of strings - especially prodinfo.map
- Fixed crashes when using Installation Time tables from Costing Database which only occurred in 2.37.163 version.
- Opus - All Dimensions types - Fix typo causing dimension value text to be displayed offset to right of correct position.
- Opus - Angular Dimensions - Fix angular dimensions not being drawn as entered if the angle is less than 180 degrees - Unexpected side effect of previous fix for small arcs being treated as full circles.
- Changed Pattern CID 985 type from Pipework to Standard
- Fixed Pattern CID 2882 so it is no longer drawing the swept branch at the same diameter as the

- pipe when using OD specifications.
- Fixed the Oval Coupler pattern which is no longer resetting the depth to 200, even on an Imperial setup

Release Version 2.37.163 (01st September 2008)

New Patterns

- Added new pattern CID 1101: bridging pattern for connectivity
- CID 1109 - Inline Cullotte: A new version of the cullotte pattern based on CID 89, with added option to have any number of outlets between 2 and 6.
- CID 1119 - Oval 3 way with Left and Right reducers.
- CID 1049 - Round Sleeve, based on CID 149 with options for vertical and only one connector, also pipework option added to this and 149

New Features

- Add DIN taper pattern to list for stretch lengths (CID 441)
- Option to display the hidden lines of rectangular extensions on CID 902 added to the patterns options.
- Add access to connector group via scripting (read only)
- CID 1 - Add Oversize Check option default value YES for compatibility. If option set to NO forces development selected by Straight Type option.
- CID 114,355,356,357,358,359,831,899 (NF) Upgrade Pipe Parts and Branch Parts options to allow cutting No, 1, 2 or 4 parts.
- Add option to item db export to expand sub assemblies or not.
- Pattern 2149 allows in-line handle option.
- Pattern 2155, added option for two double bends.
- Added double wall to Pattern 844, reorganised skin calcs/etc since many other patterns also, fixed annotations/etc
- New Support Type added to CID 838 Roll, 2 Threaded rods and round support bar.
- Allow Design Line to be drawn on user specified layer, controlled in Service Database using new CAD and Service Type "Design Line".

Defects Fixed

- Included straight optimisation for Design Line Fill In 3D. Optimisations were not having any effect previously.
- Improved Design line grip editing as this was excessively slow on the larger Design Lines.
- Fixed CID 996 that was drawing additional lines when configured as "Y" or "I" and also drawing arrows at the wrong outlet positions.
- Corrected CID 861 that was reporting the wrong sizes for the connectors when holes were added.
- Straights, CIDs 32, 33, 150, 340 would allow "Auto" for straight lengths.
- CID 857 and 2857, Fixed the angles that were being converted from to metric/imperial/in/ft
- Have fixed CID 399 that when set to bend right and was insulated, it had been flipping the model view
- Issue with file locking. Fixed system template editing crash & stopped occasional loss of just added information. Similarly, of section information.
- 1) Take out debugging lines causing slow development
2) Add fix wrapped holes method for 3D intersect holes relates to CID 895.
- Fixed branch holes not being added to pipe developments - Relates to CID 895.
- Design line pressure drop calculations have been zeroed out so realistic air pressure loss appears sensible in ductwork systems.
- Fix included for users not being able to configure units on job data exports since exports changed to support filtering etc

- Fixed pattern dimension / option print objects not working with units & ignoring fractional units in particular.
- Changed network down counter error to display "licence expired" so users can tell it's not just too many users active and now added warning when network down counter is low.
- Fix estimating summary reporting costs for fixed material / fabrication / install even when they are excluded by using cost type "Supply only" or "Free Issue" (reports/exports are ok).
- Fix swap out of sub assemblies - will swap parent item if sub items picked
- Fix section db reporting "not got the latest version" when user clicks apply then ok (in fact the ok was not saved!)
- Fix merged numeric custom data displaying a list of individual values per row rather than displaying a single total per row
- Design line: not filling bend & shapechange combination. E.g. Rectangular 300x200 line meeting a round 200 diameter line at 90 degrees was failing to place a bend & square-to-round.
- Design GUI : Resize command was crashing when RHS had no service selected & the user clicks '+' or similar.
- Design line fill bug: Only occurs in fixed size mode, when e.g. a rediltee node has a larger branch than the main output, combination fittings were failing to fill. (Combination e.g. straight, shoe, reducer). Change has been made to code that could affect filling of any 3-way node. So specific testing should make sure existing tees, wyes, breeches, etc can fill okay still.
- Fix profiles in CAM when using archived jobs - uses the profile services/sections, not the archived ones.
- CID 114,355,356,357,358,359,831,899 (BF) CID 831/899 use original Pipe Part option not newly added option.
- Fix graduated background not being as graduated as it should be + fix it not working (and getting 'corruption') if the last item drawn is mirrored (from CAD)
- Fix flex disappearing when user drags it and uses CTRL+Z to undo the change
- Fix straights labels being printed for straights who's material is set not to be decoiled (decoil 'no' flag). This makes things consistent, as they already don't get output to the decoiler - they get machine cut instead.
- The Hanger pattern (CID 838) was not displaying the options with fraction formatting on reports.
- Fix "save space in archived jobs" flags losing status on items.
- Flexfill not taking into account any connector adjust on the flex connectors. Would leave a gap in the connectivity. Not a problem unless the grip point of the connector is not the normal model end of the flex pattern.
- New CID 979, Cable 90 degree Offset for electrical bus bar, extensions are stretchable independent of each other. NOTE based on CID 11 and 366; verify existing functionality of these patterns has not changed.
- Option to draw edge lines on electrical patterns extended to draw in the depth.
- Design line taper branches not filling correctly for inline tees. Particularly non-90 degree branches.
- Design line straights not producing auto length straights correctly in scenarios where the spec applies connectors with different straight adjusts on other sizes.
- Design line with a loop & no constraints would cause the calcs to lockup.
- Design Line: when filling still not setting auto on some of the straights.
- Design Line fill: latest fixes to ensure auto length straights was messing up non-auto length std straight fills.
- Pattern 989 Fix - Connectors 2 & 3 had no CAD nodes, extensions line detail was missing.
- Pattern 66, fixed C Line & added missing annotation, added double wall branch length/extension adjust, option for branch inset from other end was faulty especially with double wall.
- Pattern 41 was missing edge lines for holes` extensions, added holes` connector annotation, added holes extensions` Auto.
- Pattern 41 circular holes were using both size dims for connector, made so uses only width.
- Fix EST swap out of straight not using the original item's length sometimes.
- Undo bugfix - make insulation facing costed even if insulation is turned off
- New skin calcs methods missed extension/collar Auto.

- Bad dim letter incorrectly displayed if dims display positions not yet defined
- P933 double wall branches insets/lengths were v wrong.
- Pressure Drop Calculations 1) Fix branch and main leg resistance values sometimes being exchanged due typo 2) Fix resistance lookup failing if dimension name has changed since pattern creation.
- Pressure Drop Calculations - Fix resistance lookup failing on items at node but not defined in node resistance rule.