OPTION SWITCHES

17/08/2005

No	Isometric Facility	Pars	Description		Default	New at...
1						
1	Plot file length control	0 data	Use default plotfile length Specified plotfile length in mm		3275	
2	Cutting list	Digit 1 Digit 2 Digit 3 Digit 4	0 1 0 1 0 1 0 1	Suppress cut pipe list and numbers Cut piece numbers and cut pipe list appear. Cutting list for whole pipeline Cutting list per drawing No itemcodes on cutting list Itemcodes on plotted cutting list. No end preparations on cutting list End preparations on cutting list	0	 10.5.2 11.2
3	Cut marks	0 1	No cut marks set Plotted cut marks		0	
4	Character height	data	Character height in 100ths mm		245	11.2*
5	Suppress output of end co-ordinates	data	Optionally set each of 7 digits to 0 or 1 to output or suppress end co-ordinates associated with records -30 to -36. (eg. 1101101 = suppress all end co-ordinates except for the -31 and -34 records.)		0	
6	Date in title block	0 1 2 3	14 APR 96 14/05/96 - European form 05/14/96 - American form Suppress date on drawing		0	
7	Drawing/split control	0 data	Normal split control using option 38. Number of drawings that a pipeline is required to be split into.		0	
8	Dimension line standout distance	data	Distance of dimension line from pipeline in mm		11	
9	Dimensions on drawings	0 1 2 3	Standard dimensioning No dimensions Support dimensions only Composite dimensions		0	
10	Drawing margin left	data	Size of left hand drawing margin		5	
11	Drawing margin right	data	Size of right hand drawing margin		5	
12	Drawing margin top	data	Size of top drawing margin		5	
13	Drawing margin bot	data	Size of bottom drawing margin		5	

14	Paper size	1 2 3 4 5 6 7 8 9 10	A1 A2 A3 A4 AD AC AB AA AE A0		2	
2						
15	Drawing height	data	Special drawing height if not one of above		0	
16	Drawing width	data	Special drawing width if not one of above		0	
17	Instrument Flow arrows	0 1	Fluid flow arrows on selected in-line components Suppress fluid flow arrows		0	
18	Frame control	Digit 1	0 1	Output standard drawing frame Suppress drawing frame	0	
19	Falling lines display	Digit 1 Digit 2+	0 1 2 3 4 5 6 data	FALL 1.5 (Degrees) FALL 1:50 (Ratio) FALL 1.5% (Percentage) FALL 1 GRAD (Grads) FALL 3/16" PER FT (Imperial) FALL 16 MM PER M (Metric) Suppress falling line indication Accuracy level in appropriate units.	0	 10.4
20	Falling lines accuracy	data	Controls what degree of steepness should be treated as a fall (in units of previous option)		5, 11, 9, 5, 1 or 88	
21	Isometric type	Digit 1 Digit 2	0 1 2 3 4 5 6 7 0 1	Combined Erection Fabrication Combined Erection Combined Fabrication Erection Fabrication Spool None Picture drawn No picture drawn	0	
22	Loose flange and field fit weld allowance	data	Amount of extra pipe added to cut length dimensions and material list at Loose Flanges and Field Fit Welds (FFW) in mm		150	
23	Plotted material list control	0 1	Plot material list on isometric Suppress plotted material list		0	
24	Material list type	Digit 1 Digit 2 Digit 3	0 1 0 1 2 3 0 1	List per drawing List per pipeline Partnumbers generated Partnumbers from DB separate Partnumbers from DB Totalled Pipe only separate Not per spool Per spool	0	

25	Material list position	0 1	List on left side of drawing List on right side of drawing		0	
26	Material list description	0 1	Output material detail text Suppress detail text		0	
27	Material list character height	data	Character height in 100ths mm		245	11.2*
28	Material list item code length	data	Number of characters in item codes		8	
3						
29	Material list line spacing	data	To reduce or increase line spacing		100	
30	Material list overflow	Digit 1 Digit 2	0 1 2 0 1	Overflow list plotted alongside Overflow list plotted on new page with no picture. Overflow sheets numbered "1A of n". Single sheets not numbered Single sheets numbered "1 of 1".	1	
31	Isometric output	0 1	Multiple file output Single file output		0	
32	Plotted scale	data	Scale factor on complete drawing (50 - 100% allowable)		100	
33	Special TESO rules	0 1	Normal TESO rules apply P3 outside diameter of pipe allowed		0	11.2
34	Picture scale	data	Scale isometric picture within the drawing area		100	
35	Reserved areas	Digit 1-5 Digit 5+	data data	Reserved picture area at bottom of picture in mm Reserved area at bottom of material list in mm	0	10.5.2
36	Drawing stacking arrangement	data	Number of drawings stacked on a multiple sheet		1	
37	Drawing orientation	0 1	Along - Normal Across - perpendicular		0	
38	Drawing split control	data	Controls automatic splitting. Set > 100 to increase data on each drawing		100	
39	Spool numbers	Digit 1 Digit 2	0 1 2 3 0 1	Plot spool numbers Suppress spool numbers Use -28 record for user positioned spool identifiers Spool numbers generated in the DESIGN Spooling application (From DB). Spool numbering across sheets Spool numbers restart at 1 for new drawing sheets.	0	10.4.1
40	Pipe supports	Digit 1 Digit 2 Digit 3+	0 1 2 0 1 0 data	Support dimensions in string form Support dimensions in overall form Support dimensions suppressed Draw alongside string dimensions Draw opposite to string dimensions Use default standout distance. Support standout distance	0	

41	Dimensional units	Digit 1 Digit 2	0 1 2 0 1	Imperial bores with metric lengths Imperial bores and lengths Metric bores and lengths Output all imperial measurements in feet and inches. Output imperial measurements between 1 and 2 feet in inches.	0	
42	View point control	1 to 4 add	1 2 3 4 +4	North arrow to bottom right North arrow to top right North arrow to top left North arrow to bottom left Boxed north arrow	3	
Options 43 to 51 control the extra quantity that is to be added (on a percentage) basis to material list entries for pipe to allow for cutting and wastage during fabrication. Digit 5 of word 11 of the record definition may hold the plant area number for that item (1 to 9) The options below hold a multiplication factor for wastage in each area.						
4						
43	Wastage (area 1)	data	Wastage multiplication factor for area 1		1	
44	Wastage (area 2)	data	Wastage multiplication factor for area 2		1	
45	Wastage (area 3)	data	Wastage multiplication factor for area 3		1	
46	Wastage (area 4)	data	Wastage multiplication factor for area 4		1	
47	Wastage (area 5)	data	Wastage multiplication factor for area 5		1	
48	Wastage (area 6)	data	Wastage multiplication factor for area 6		1	
49	Wastage (area 7)	data	Wastage multiplication factor for area 7		1	
50	Wastage (area 8)	data	Wastage multiplication factor for area 8		1	
51	Wastage (area 9)	data	Wastage multiplication factor for area 9		1	
52	Vessel trim	Digit 1 Digit 2 Digit 3	0 1	Each nozzle has separate numbering sequence Numbering is continuous through the sequence of nozzles. Always = 1!! Always = 1!!	0	
53	Weld numbers	Digit 1 Digit 2 Digit 3 Digit 4 - 8	0 1 0 1 2 0 1 2 data	No weld numbers Output weld numbers All welds numbered Fabrication welds only Erection welds only No weld box Output standard weld box Weld numbers from data base Weld number character height in 100ths mm	0	 10.4 11.2*
54	Weld control	0 1 2 3 4	All welds plotted All welds suppressed Erection welds only plotted Fabrication welds only plotted Change all erection welds to fabrication.		0	
55	spare					11.2
56	ISODAT tracing flag	data	Diagnostic output level from ISODAT		0	
5						
57	spare					11.2

58	spare					11.2
59	Instrument identification	0 1	Instrument name output Instrument Item Code output (NB. Ref manual could be wrong!)		0	
60	Tag numbers	0 1	No tag numbers on in-line items Tag numbers plotted		0	
61	Insulation control	0 1 2	Insulation plotted on pipe only No insulation Insulation pipe and fittings		0	
62	Tracing control	0 1 2	Tracing plotted on pipe only No Tracing Tracing pipe and fittings		0	
63	Material list file.	Digit 1-4 Digit 5	data 0 1	Number of lines per page One file per detail One file per plot	55	 10.5.2
64	Pipe support information	0 1 2	No support names on iso (Use standard spec ref (Item code) on material list) Output support names on iso and use name in material list Output support names on iso but use spec ref in material list		0	
65	Bolting units	0 1 2 3	Imperial diameters, metric lengths Imperial diameters and lengths Metric diameters and lengths No bolts		0	Extended to parts list 11.1
66	Angle accuracy	0 1	Angles given to nearest 0.1 degree Angles given to nearest 0.01 degree		0	10.4
67	3d skews drawn as 2d skews with fall indication	0 1	Use 3D skew boxes Use 2D boxes and falling line indicator		0	
68	Zero length bends	 0 1	Where Zero Length bends are positioned between vertical branches and connection points on falling pipelines:- Skewed (non-vertical) branch connection presentation on Falling pipelines. Vertical branch connection presentation on Falling pipelines.		0	
69	min grip length	0 >0	no length min grip length		0	11.2.1
70	Suppress small offleg skew boxes	0 data	Do not suppress offleg skew boxes. Suppress offleg skew boxes with < data components.		0	10.2
6						
71	Plotfile format	0 4 7	Standard Pseudo code only DXF only Pseudo code and DXF		0	
72	Fonts	0 >0 1 2 3	Standard font only Standard and 16 bit fonts (e.g. Kanji) Russian (7 bit format) DXF EUC Format DXF SHIFTJIS Format		0	10.3

73	Material control file extension	0 1	Standard material control file output Extra information added to material control file.		0	10.4
74	Hyperplant "hit" files.	Digit 1 1 Digit 2 0 1	0 1 0 1	No hit files produced. One hit file per plotfile output Hyperplant without debug Red debug info output to plotfiles.	0	11.1
75	Language Flag	Data	1 2 3 101 102 103 104	Singlebyte no Local conversion. Singlebyte Hungarian with Local conversion on NT. Singlebyte Russian with Local conversion on NT. Multibyte Japanese Multibyte Chinese Multibyte Korean (NT only) Multibyte Taiwanese (NT only)	1	11.3
76	spare					
77	spare					
78	spare					
79	spare					
80	spare					
81	spare					
82	spare					
83	spare					
84	spare					
7						
85	spare					
86	spare					
87	spare	1-12	Plot file foreground pen number: 1=gray, 10=white. The default 0 is treated as 10.		0	11.6.0
88	spare	0	Highlight changes flag = 1 if on		0	11.4.0
89	spare	0	Highlight changes colour val = 1-12		0/2	11.4.0
90	Compipe Output	0 1	MTO per drawing MTO per pipeline		0	
91	Compipe Output	Dig1 Dig2 Dig3	User / client item codes Short / long descriptions Supports included / not included in MTO file		0	
92	spare					
93	Extended material control file					
94	spare					
95	Plotted leg lengths	data	Drawing length of tee or elbow legs in mm		9	
96	Pbendnumbers	0 1 2	Off On On with numbers taken from part number		0	11.5sp1 11.6sp1
97	Overall skews	0 1	Across branches Each branch		0	
98	spare					
8						

99	Skew box style and dimensioning	Digit 1 Digit 2 Digit 3	0 1 2 3 0 1 0 1 2 3	Box style, standard dimensions Triangular style, standard dimensions Triangular style, dimension standout specified by option 100 Triangular style, dimensions without leader lines. Used in ISODRAW but not implemented by ISODRAFT No tagging of triangular skews Tag skew swing angles Tag Horizontal and Vertical triangles. Tag both	0	10.5.2
100	Skewed box dimension standout (triangles)	0 data	Standout distance is 4mm if option 99 = 3 or 11mm otherwise Dimension standout distance for triangular skews in mm*10		0	
101	Skew angle triangle hatching	Digit 1/2 Digit 3/4	0 1 data 0 data	Hatching off Default hatching gap of 0.3mm Hatching gap in mm*10 No partial hatching Cut off length for partial hatching in mm	0	
102	Hatching gaps	Digit 1/2 Digit >2	Hatching gaps in 0.1*mm. (If =1 use default hatching gaps = 3mm) Extent of partial hatching in 0.1*mm.		1	
103	spare					
104	spare					
105	spare					
106	spare					
107	spare					
108	Split in tube	0 1 2	Acceptable Reject iso Reject marked iso		0	
109	Repeatability	0 101	OFF ON		0	
110	spare					11.2
111	Dotted nozzles	0 1	Dotted nozzles suppressed Dotted nozzles shown		0	
112	Flow arrow on pipe	0 1 data	Use default Flow arrow size Suppress flow arrows on pipes. Scale factor size between 5 and 15		0	
9						
113	spare					11.2
114	spare					11.2
115	spare					11.2
116	spare					11.2
117	Dimension round off carry over	0 1	Carry over dimension after rounding Carry over dimension without rounding		0	

118	Overall dimensions	Digit 1 Digit 2+	0 1 2 3 4 5 0 data	No overall dimensioning Overall, across branches Overall, stop at branches Centre line, across branches Centre line, stop at branches Critical dimensioning Use default standout distance Standout distance	0	
119	Vertical dimensions /elevations	0 1 2	Normal dimensions Elevation only output on vertical pipes at points where dimension lines would normally be. Elevations and dimensions output on vertical pipelines.		0	
120	Scale of tapped branch	0 data	100% scale factor > 100 to increase branch scale		0	
121	Tapped branch dimensions	0 1	Dimensions on tapped branches Suppress dimensions on tapped branches		0	
122	Coordinates at tapping points	0 1	No co-ordinates output at user defined fitting tap points. Output co-ordinates at developed fitting tap points		0	
123	Instrument balloons	0 data	No ballooning of instrument text Number of characters in balloon (1 to 5)		0	
124	File handling debugging switch	0 >0	No diagnostic output Diagnostic output for file handling		0	10.2
125	Pipe Line thickness	0 1-10	Use default line thickness (=3) Draw 1-10 lines to represent pipe.		0	10.3
126	Accuracy of message layout	Digit 1 Digit >1	Accuracy level. (1-3) (if =0 -->1) Maximum number of uncrossing iterations		0	10.5.1
10						
127	Output banner at bottom of isometric	0 1	No banner output Banner output		0	
128	spare					
129	Flag if testing	1 0	Close NT console window after execution Leave console window open		0	11.3
130	Reserved for internal					
131	Return file compatibility	0 1	Use >Mk 10.5.2 return file mechanism Use < Mk 10.5.1 return file mechanism		0	10.5.2
132	Cut piece report file format	0 1	Use old cut-piece report file code Output .csv file NB option only used at 10.5. from 11.2 always outputs csv file		0	11.2.1
133	Reserved for internal					
134	Reserved for internal	Data	Relative pipe length factor to stop drawing drifting too far from reality (see PL_Options.cxx) The value is divided by 100.0 to produce the Real/Relative pipe length factor. The default 0 sets the value to 6.0		0	

135	Reserved for internal	Digit 1 2 3 4 5	Diagnostic output level from pipeline layout (see PL_Options.cxx) Value 52343 to switches all options on. Section colour (3=red) Bypass section colour (4=red chained) Page colour (3=red) Message colour (2=purple) Options_flag: 0 = No debug message 1 = Final layout scores to screen only. 2 = 1 plus Final layout scores to debug file 3 = 1 + 2 plus Final drawing details 4 = 1 + 2 plus Scores after each iteration 5 = 1 + 2 plus on line tracing	0	
136	Reserved for internal	Digit 1-5 6+	Diagnostic output: plots blocked grid squares. Used with option 137. Low X square number High X square number	0	
137	Reserved for internal	Digit 1-5 6+	Diagnostic output: plots blocked grid squares – see DIGRID(IDIAG) code. Used with option 136. Low Y square number High Y square number	0	
138	Reserved for internal	Data	Temporarily switch on stage 3 diagnostics for this positioned message number. See POSMS1(ELMESS) for more details.	0	
139	Reserved for internal	Digit 1 2 3+	Diagnostic output levels. Debug flag for stage 3 IDIGRID(level) for MESLAY exit, works with options 136/137. IDIGRID(level) for MESLAY entry, works with options 136/137.	0	
140	Reserved for internal	1 – 6	Diagnostic output level from stage 4	0	

Notes:

* → Option replaced see charsz_fs.doc for old option definition. (NB. ISODRAW will still handle old transfer files.)