TEXT AND OTHER MISCELLANEOUS INFORMATION

03/03/2006

ID	Description.	New at...
-1	Overflow text record (Used with all types of text records)	
+3	Coordinates for User positioned text	
-3	Text for Isometric Title Block	
+4	Information for detail plot files - stacking/Manual	10.5
-4	* Special SKEY input (i.e. In-line item types will be treated in special way)	
-5	PDMS version number	10.4
-6	Pipeline Reference	
-7	Spool Prefix identifier	
-8	Revision Identifier	
-9	Project Identification (Project Number)	
-10	Batch Reference (Zone or Area Name)	
-11	Piping Specification reference	
-12	Nominal Pressure Rating (class)	
-13	Line Type Identifier	
-14	Date of Data Transfer	
-15	Insulation Specification Reference	
-16	Tracing Specification reference	
-17	Painting Specification reference	
-19	Pipeline operating Temperature	
-20	Item Code	
-21	Item Description	
-22	Tag Number (Component Name)	
-23	Standard Bend Radius	
-24	Individual Bend Radius	
-25	System Isometric Reference (Multiple Pipeline drawing)	
-26	Change of Piping Specification reference	
-27	* B.O.P. (Bottom of pipe) Elevation Reference	
-28	Spool identifier	
-29	Equipment Trim Reference	
-30	Connection Comment - CONT.ON	
-31	Connection Comment - CONN.TO	
-32	Connection Comment - OPEN END	
-33	Connection Comment - CLOSED END	
-34	Connection Comment - VENT	
-35	Connection Comment - DRAIN	
-36	Unset connection for co-ordinates only output	
-37	Message text	
-38	Drawing Split Point Indicator. (++++)	
-39	Component identifier	
-40	Compound directions on various items in skewed pipelines, e.g. valve spindles.	
-41 to -45	User definable specification references	
-46	Valve Gearbox Orientation	
-47	* Break in pipe identification (Ghost gap)	
-48	System ISO/EQUI Trim Split Point	
-49	* Induction bend start / identification	
-50	* Induction bend termination	

-51 to -60	***ISODAT internal record types***	
-51	*Drawing terminator*	
-52	*Pipeline terminator*	
-53	*Fall message with flow*	
-54	*Fall Message against flow*	
-55	*Comment attached to weld*	
-56	*Change of dotted format (ghost gap)*	
-57	*Start of support dimension / zero length bend - word 2 holds value* *A = Angle required* *D = Angle and direction required* *H = Start of support type dimension*	
-58	*Additional material*	
-59	*Spare*	
-60	*Spare*	
-61	* Compipe area identifier	
-62	* Compipe drwg number	
-63	* Compipe pipeline description	
-70	Square Box Message	
-71	Angle end Box Message	
-72	Round end Box Message	
-73	Triangle Box Message	
-74	Diamond Box Message	
-75	Elliptical Box Message	
-76	Balloon Box Message	
-99	Selected Replot Identifier	
-100	Intermediate data transfer filename	
-101	Underlay plotfile name	
-102	Isometric plotfile prefix PLOT	
-103	Symbol Filename	10.5
-104	Material Control filename MATC	
-105	Message Filename MESS	
-106	3D System Error Filename	
-107	PDMS Executable Filename	
-108	Printed Material list file (Report) MATL	
-109	Centreline length summary (Report) CLLE	
-110	Centreline length/insulation summary CLIS	
-112	Support summary (report) SUPP	
-116	Cut list summary filename CUTP	
-117	Repeatability Named Return File	
-118	* Compipe line and MTO Filenames COMP	
-119	Font Filename	
-120	Weld table Filename WELD	10.4
-121	Bend table Filename BEND	10.4
-122	Detail Plot file names	10.5
-172	Detail plot to be labelled	10.5 - 11.1
-173	parameterised text for a detail plot (paired with 5072 records)	11.2
180 to 199	***ISODAT internal record types***	
+180	*Spare*	
+181	*Spare*	
+182	*Spare*	
+183	*Offline Instrument*	
+184	*Dummy (no action)*	
+185	*Start of return bend*	

+186	*End of return bend*	
+187	*Instrument tee branch leg*	
+188	*Tee bend or fitting stub*	
+189	*Secondary movement on offset block*	
+190	*Start of skew – word 2 = position in PLINE of longest item to skew*	
+191	*End of skew* *word 15 = Box primary direction (digit 4)* *word 16 = Box dimension* *Next 191 record is the secondary direction and dimension* *Next 191 record after that is the 3rd direction and dimension*	
+192	*End condition – word 2 = value* *0 = Butt weld* *1 = Screwed* *2 = Compression* *3 = Socket weld* *(word 3 = 1 in plegs1.src but is not used)*	
+193	*Reducing elbow – word 2 = fitting pointer*	
+194	*MTO record – converted from 160*	
+195	*MTO record – converted from 161*	
+196	*Start of mitred bends*	
+197	*End of mitred bends*	
+198	*Lagging/tracing change = value in word 2* *0 = No lagging or tracing* *1 = Lagging* *2 = Tracing* *3 = Lagging and tracing*	
+199	*Special fittings (gap, flanged line)*	
+250	Cut Back Allowance (immediately after type 30 record) or generic type record This defines the SkeyScale factor for UNIV PCOM (after type 95 record)	11.2/11.3
+251	Attached weld numbers to appear in weld table (immediately after type 120 record)	
-253	Highlight record for both text and components	11.4
+253	Highlight record for components each word refers to a specific attribute	11.4
+254 to +299	Reserved	
-201 to -500	ATEXT values	
+501 and +502	User defined symbol definition	
-600 to -699	Pipe attribute information	
-700	North arrow identification record	
-702	Drawing (or Sheet) number identification record	
-703	Number of Drawings (or Sheets) identification record	
+1000	Material list column size and order data	10.4
-1000	Material list column titles	10.4
-1001 to -1020	Material list attribute values	10.4
+1100	Weld table column size and order data	10.4
-1100	Weld table column titles	10.4
-1101 to -1120	Weld table attribute names	10.4
+1200	Revision table column size and order data	10.4
-1200	Revision table column titles	10.4

-1201 to -1220	Revision table attribute names	10.4
+1300	System Attributes table column size and order data	10.4
-1300	System Attributes table column titles	10.4
-1301 to -1320	System Attributes table attribute names	10.4
-1321	System attributes table short code	10.4
-2500 to -2599	User positioned text for Drawing attributes	10.4
-2600 to -2699	User positioned text as text strings	10.4
+5072	Detail Plot file to be labelled (may have paired -173 records)	11.2
-6006	***ISODAT internal record type***	
-6006	*Header record created in stage 1 and used in stage4 with positioned text for the pipeline name.*	

SPOOL AND IN-LINE FITTINGS

Fitting Type	Record IDs			
	In	1st	2nd	Out
Bend	30	-	-	31
Elbow	35	-	-	36
Olet	40	41	-	42
Tee	45	46	-	47
Cross	50	51	52	53
Reducer(Con/Ecc)	55	-	-	-
Tee Reducer(Con/Ecc)	60	61	-	62
Reducing Flange	65	-	-	-
Tee Bend/Elbow	70	71	-	72
Angle Valve	75	-	-	76
3 Way Valve	80	81	-	82
4 Way Valve	85	86	87	88
Instrument	90	91	92	93
Pcom (Pipe Comp.)	95	-	-	96
Pipe (Tube)	100	-	-	-
Fixed Length Pipe	101	-	-	-
Pipe Block (Fixed length)	102	-	-	-
Pipe Block (Variable Length)	103	-	-	-
* Ghost Gap	104	-	-	-
Flange	105	-	-	-
Lap Joint Stub End	106	-	-	-
Blank Flange (Blind)	107	-	-	-
Gasket	110	-	-	-
Male Part	111	-	-	-
Nut	112	-	-	-
Clamp	113	-	-	-
Blank	114	-	-	-
Bolt	115	-	-	-
Weld (or End Condition)	120	-	-	-
Cap	125	-	-	-
Coupling	126	-	-	-
Union	127	-	-	-
Valve	130	-	-	-
Trap	132	-	-	133
Vent	134	-	-	135
Filter	136	-	-	137
* Split point and spool ID location	148	-	-	-
User Positioned Comment or Flow Arrow or Reference Point Location	149	-	-	-
Pipe Hanger/Support	150	-	-	-
Primary Plane Reference Dimension	151	-	-	
Skewed Reference Dimension(s)	152	-	-	
Referenced Item Centre Line Orientation	153	-	-	-
Additional MTO item	160	-	-	-
Additional MTO item or Equipment Trim Record	161	-	-	-
Tapped fitting branch	200	-	-	201

Base position in metres	300	-	-	-
Base position in feet	301	-	-	-
Bore Record	0	-	-	-
End of File Marker	999	-	-	-

BASIC RECORD INFORMATION

The individual component records are made up from 14 words as follows.

Word 1:-

Component record type identifier

Word 2:-

East(+ve) / West(-ve) In leg Co-ordinates in 1/100ths mm.

Word 3:-

North(+ve) / South(-ve) In leg Co-ordinates in 1/100ths mm.

Word 4:-

Up(+ve) / Down(-ve) In leg Co-ordinates in 1/100ths mm.

Word 5:-

East(+ve) / West(-ve) Out leg Co-ordinates in 1/100ths mm.

For comments:-

= 1 if comment is not dimensioned

Word 6:-

North(+ve) / South(-ve) Out leg Co-ordinates in 1/100ths mm.

Word 7:-

Up(+ve) / Down(-ve) Out leg Co-ordinates in 1/100ths mm.

Word 8:-

Nominal Bore in mm or 1/16's of an Inch.

Word 9:-

Digits 1 to 6:-

Item Code/Description pointer

A sequence number pointing to the blocks of -20 and -21 records further down the file. For example:

Some records...		Word 9	
35	----------	1	-----
36	----------	1	-----
100	----------	2	-----
105	----------	3	-----
110	----------	4	-----
115	----------	5	-----
105	----------	3	-----
100	----------	2	-----

-20	EL100
-21	Long radius e
-1	lbow CS
-20	TU100
-21	Seamless tube
-1	CS
-20	FL100
-21	300# RF Weld
-1	neck flange A
-1	STM A105 CS
-20	GA100
-21	Gasket CAF
-20	BL3/4x120
-21	Stud bolts c/
-1	w 2 nuts blac
-1	k 120mm long

Digits 7 to 10:-

Part number for partnumbering from data base option.

ISODAT internal processing

Item code / description pointer

Set negative for Bends, Elbows, Tees, Crosses, Fixed Length Pipes etc. to indicate fitting type component.

Word 10:-

Wall thickness – overwritten with detailed information about the current record.

ISODAT internal processing

Digit 1 - Dimensioning

0 = normal
1 = suppressed

Digit 2 - End connection

0 = normal
1 = special end termination

Digit 3 - Tee leg

0 = normal or branch
1 = inleg
2 = outleg

Digit 4 – Fitting output

0 = normal
1 = suppressed
2 = fitting with pipe on set on tee
3 = dotted

Digit 5 – Fitting comment

0 = normal
1 = dial face
2 = tapping
3 = tail
4 = window

Digit 6 – Spool indication

0 = normal
1 = fitting associated with spool number

Digit 7 – Specification change

Digit 8 – Special rating flange

0 = normal
1 = Flange associated with transition gasket
2 = Fitting associated with transition gasket

Word 11:-

For bolts:-

Number of bolts required

For welds:-

Digits 1 to 6:-

Weld allowance for cutting list

Digit 7:-

0 = assign to both legs
1 = assign to inleg
2 = assign to outleg

Digit 1:-

For Pipe:-

1 = Screwed end at start
2 = Screwed end at end
3 = Screwed at both ends.

For Flanges and LJSE:-

4 = Loose flange

Digits 2, 3 and 4:-

For Pipe:-

Basic wastage percentage taken from the tube section of piping specification in 1/10ths of percent

Digit 5:-

Plant Area identification number (1-9)

Digit 6:-

0 = Standard pipework
1 = Dotted pipework not dimensioned
2 = Dotted pipework fully dimensioned

Digit 7:-

0 = Item to be in the Material list
1 = Item not to be in the Material list
2 = Item code to be in the Material list and on the isometric

Word 12:-

Symbol Key (SKEY)

Word 13:-

For Welds:-

Weld number if using weld numbers from data base option

For angled items such as bends, elbows and tees:-

Angle in 1/100ths of degrees

For Bolts:-

Bolt length in mm or 16ths of an inch

For Flanges:-

Length of any protrusion beyond the face of flanges that require special welds. This value (stored in mms) is used to calculate the required "Cut Lengths" and is added to the accumulated Material list quantity.

Word 14:-

Digit 1:-

1 = Fabrication item
2 = Erection item
0 = Both

Digit 2:-

0 = Fluid flow in direction as built
1 = Fluid flow in opposite direction as built.

Digit 3:-

Direction code associated. (e.g. Valve spindle, Flat on eccentric reducer, Instrument dial face, Orifice Plate tapping, Tail of Spectacle Plate, Tail of slip plate.

0 = No direction
1 = North
2 = South
3 = East
4 = West
5 = Up
6 = Down

Digit 4:-

0 = No insulation of tracing
1 = Insulated
2 = Heat traced
3 = Insulation and heat traced

Digit 5:-

Off-line leg direction on flanged Tee bends/elbows

0 = unset
1 = Branch leg in-line with main line in leg
2 = Branch leg in-line with main line out leg