

(23 CAD)

2005. 2. 4

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CAD

www.korea.ac.kr

- CAD : 22
 - (2000 : 14 , 2001 5 , 2002 : 1 , 2003 : 1)
 - : , FCAD, SDS, , DCS,
 - 2000 10 17 , 2000 11 2 , 2000 11 14 , 2000 11 28 , 2000 12 12 , 2000 12 26 , 2001 1 9 , 2001 2 2 , 2001 2 16 , 2001 3 16 , 2001 4 6 , 2001 4 13 , 2001 4 19 , 2001 5 24 , 2001 11 2 , 2001 12 7 , 2002 2 1 , 2002 3 29 , 2002 4 30 , 2002 12 20 , 2004 3 25 , 2004 6 24
- : 3 (2002)
 - : , , , , , LG , , , CALS
 - 2002 4 11 , 2002 5 16 , 2002 6 4

3

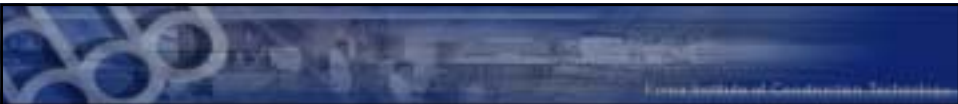
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CAD

1		21	
2		22	
3		23	
4		24	
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14		34	
15		35	
16		36	
17		37	ARCHITOP
18		39	Bentley Korea
19		39	D.C.S.
20		40	Fcad Korea


4

(KOSDIC)



Home Institute of Construction Technology

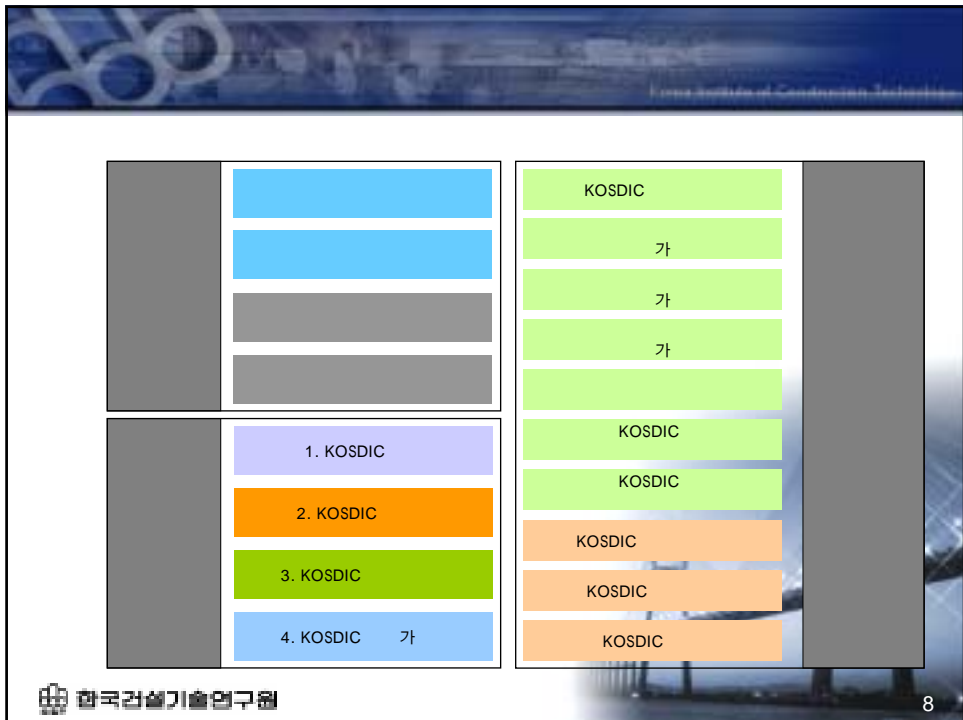
- (KOSDIC)
 - (ISO)가 (STEP)
2 CAD , ,
CAD
 - K0rea Standard of Drawing Information in Construction
- CALS/EC
 - 가
 - CAD



한국건설기술연구원 6

1999	STEP
2000	2 CAD KOSDIC
2001	KOSDIC KOSDIC ,
2002	KOSDIC KOSDIC
2003	CAD KOSDIC
2004	KOSDIC , ,

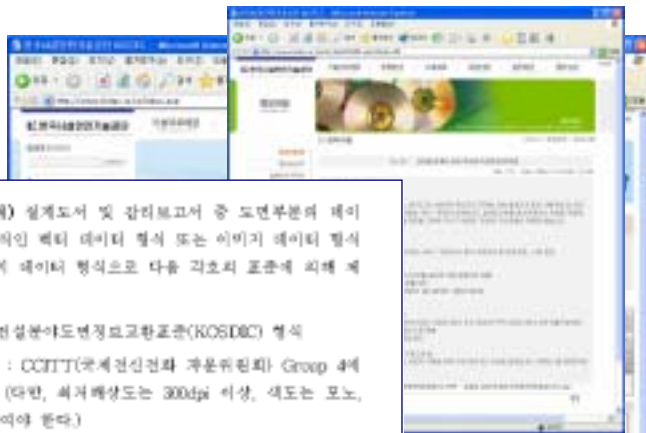
한국건설기술연구원



- KOSDIC v.1.0
 - 2004 8 25
CALS/EC
- KOSDIC
 - KOSDIC
 - KOSDIC EXPRESS Schema
 - KOSDIC
 - KOSDIC 가



- 2004. 11. 10



제8호(도면 및 문서 형식) 설계도서 및 잡리프로그서 중 도면부분의 데이터 형식은 전자도면 형식인 벡터 데이터 형식 또는 이미지 데이터 형식 이므로, 문서부분은 이미지 데이터 형식으로 다음 각호의 표준에 의해 제작하여야 한다.

1. 벡터 데이터 형식 : 건설분야도면정보교환표준(KOSD8C) 형식
2. 이미지 데이터 형식 : CCITT(국제전기통신연합 전문위원회) Group 4에 따른 TIFF 표준 형식 (다만, 최저해상도는 300dpi 이상, 색도는 모노, 스캐닝 축적은 1:1로 하여야 한다.)

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- 2005. 1. 28

다. 수급원은 원봉도면을 「건설분야 도면 정보 교환 표준」로 명명된 KOSDIC으로 납품한다. 다만 발주청에 요청하는 경우 수급원은 약내에서 허용되는 CAD 소프트웨어와 호환하는 전자도면파일 포맷으로 원봉도면을 납품할 수 있다. 수급원은 「전자도면 작성 규약」에서 정한 도면파일명 체계를 준수하여 원봉도면의 파일명을 작성한다. (예: 도면번호가 'C003001-012'이고 도면명이 '본선설면 및 중단면도'인 경우 'KOS'의 경우에는 'C003001-012-본선설면및중단면도.KOS'로 도면파일명을 작성한다.)

도포 및 여건경시용
설계-중공도시
전자납품 편람

2005. 1.

한국건설기술연구원

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KOSDIC

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KOSDIC	CALS/EC	CAD
<ul style="list-style-type: none"> ▪ KOSDIC 		
<ul style="list-style-type: none"> ▪ KOSDIC 		
<ul style="list-style-type: none"> ▪ KOSDIC 		
<ul style="list-style-type: none"> ▪ KOSDIC 		

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12

- KOSDIC
 - 1 : KICT
 - 2 :

- /
- KOSDIC
-
-
-

- KOSDIC
 - 2005



CALS/EC

- (CITIS)
 - 가 / /

- “ ” 17

- :
 - (HMS)
 - (AIS)



(KOSDIC)

KOSDIC V1.0

1/4

- KOSDIC
 - KOSDIC (, , ,)
 - KOSDIC
 - KS B 7099-21, ISO 10303-21
 - KOSDIC
 - ISO ISO 10646 Unicode
 - 1 ()
 - NGIS Font
 - KOSDIC P21 ASCII
 - Unicode(ISO 10646), Hexa, \X2\ \X0\
 - : KOREA KOREA
 - : KOREA\X2\B4EBC7D1B9CEB1B9\X0\KOREA
 - KOSDIC
 - KOSDIC STEP
 - KOSDIC STEP
 - KOSDIC ,
 - CAD ,
 - CAD KOSDIC

- KOSDIC (EXPRESS Schema)
 - 2 CAD KOSDIC
 - ISO 10303-202(Associative_draughting)
 - 56 Type 176 Entity

```

SCHEMA KOSDIC;

TYPE angle_relator = ENUMERATION OF (equal, large, small);
END_TYPE; -- angle_relator

TYPE axis2_placement = SELECT (axis2_placement_2d);
END_TYPE; -- axis2_placement

...

ENTITY angular_dimension SUBTYPE OF (dimension_curve_directed_callout);
END_ENTITY; -- angular_dimension

...

ENTITY text_style_with_mirror SUBTYPE OF (text_style);
    mirror_placement : axis2_placement;
END_ENTITY; -- text_style_with_mirror

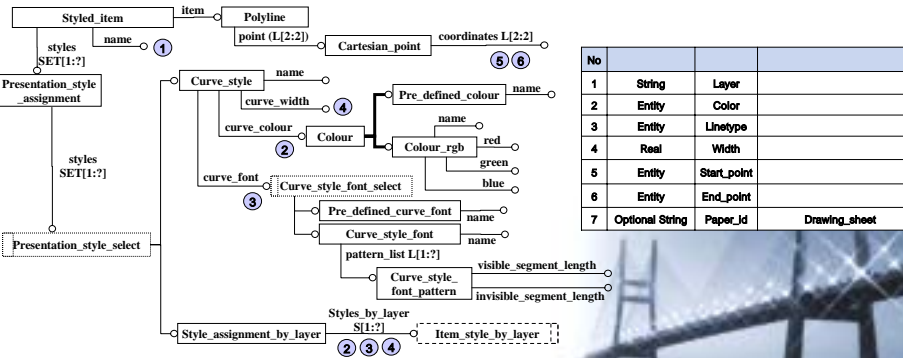
ENTITY text_style_with_spacing SUBTYPE OF (text_style);
    character_spacing : character_spacing_select;
END_ENTITY; -- text_style_with_spacing

...
END_SCHEMA; -- KOSDIC
    
```

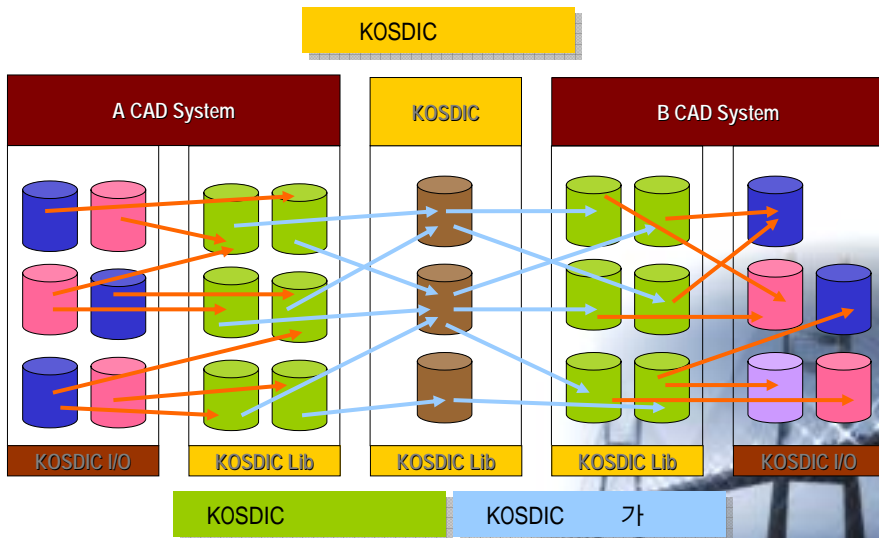
- KOSDIC
 - KOSDIC 2 CAD
 - 31 4

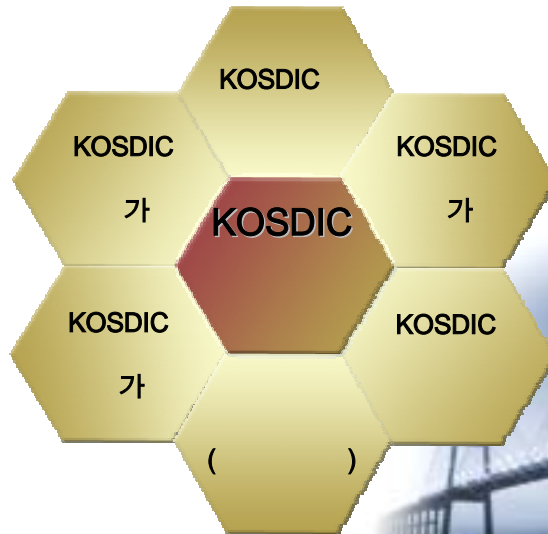
No		No		No	
1	Drawing_sheet	7	19	Subfigure_locate	10
2	Presentation_view	7	20	Externally_defined_symbol	9
3	Layer	8	21	Linear_dimension	47
4	Pre_defined_line_type	1	22	Angular_dimension	50
5	User_defined_line_type	3	23	Radius_dimension	32
6	Pre_defined_colour_type	1	24	Diameter_dimension	36
7	User_defined_colour_type	4	25	Label_leader	26
8	Point_marker	8	26	Balloon_leader	28
9	Line	7	27	Externally_defined_hatch	5
10	Polyline	10	28	Fill_area_colour	5
11	Circle	7	29	Fill_area_style_hatch	13
12	Arc	9	30	Fill_area_style_tiles	14
13	Ellipse	9	31	Composite_curve	8
14	Ellipse_arc	11			
15	Spline	8	1	Raster_image	11
16	Text_string	18	2	Contour	9
17	Multi_text_string	21	3	Attribute_text_string	23
18	Subfigure_organization	4	4	Attribute_subfigure_locate	13

- KOSDIC 가
 - KOSDIC CAD 가 KOSDIC



No			
1	String	Layer	
2	Entity	Color	
3	Entity	Linetype	
4	Real	Width	
5	Entity	Start_point	
6	Entity	End_point	
7	Optional String	Paper_id	Drawing_sheet





- KOSDIC
 - Paper Space 1 가
 - Model Space(Presentation_view)
 - Drawing_sheet
 - Paper space , Paper Space Model Space
 - Drawing_sheet Presentation_view
 - Paper space , Model Space
 - Drawing_sheet Views, Locations, Boundaries NULL
 - (Pre_defined_line_type)
 - Continuous, Dotted, Dashed, Chain, Chain double dash, Bylayer
 - (Pre_defined_colour_type)
 - Black, Red, Green, Blue, Yellow, Magenta, Cyan, White, Bylayer

▪ KOSDIC

▪ (User_defined_line_type)

- Complex Line type :
- Complex Line type User_defined_line_type
 - Name = _____ ; _____ (Unicode _____ Hexa Code)
 - Segment = 2
 - Pitch = (0, -1E+10)
 -) Complex line CD001
 - Name : CDV000_1.0_1.0 ; A,,9,[KC24,KHCLINE.shx,s=.006],-.2
 - Segment : 2
 - Pitch : (0, - 1E+10)
- ByBlock
 - Block _____ Byblock
 - Name = 'Byblock', Segment = 2, Pitch = (1, 1E-10)
 - , Byblock _____ Block _____ , Block _____ Byblock

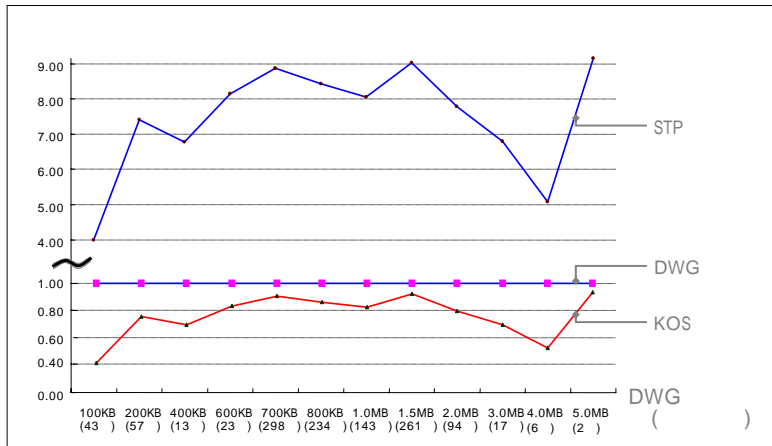
▪ KOSDIC

- (Complex line) KOSDIC
- IO
 - _____
 - _____ Block _____
- Complex line
 - _____ Name = Complex Line Name_global scale_local scale; _____ , Segment = 2, Pitch = (0, - 1E+10)
- Complex line Block
 - Subfigure_organization _____ Subfigure_locate _____
- Complex line 가
 - 가 CAD _____
- Block _____ , 가 _____

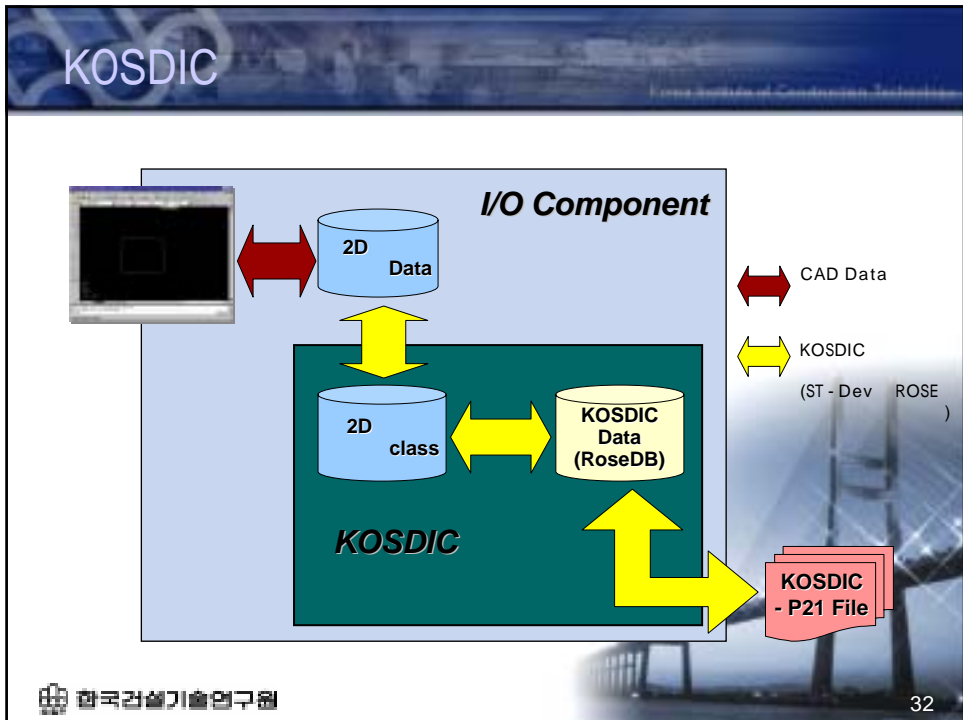
- KOSDIC
 - Insert Block
 - KOSDIC
 - External Reference
 - Block 'Xref | , ,
 - (AutoCAD Ray)
 - Line, Polyline
 - Attribute
 - Multi_text_string
 - Trace
 - Fill_area_colour

- KOSDIC CAD
 - Style(Text style, Dimension style, Point style, etc)
 - Text style , style
 - KOSDIC , Style
 - , 가 Multi text string
 - Multi_text_string
 - Multi_text_string
 - 3 CAD
 - Contour
 - Display order
 - KOSDIC Display order
 - KOSDIC 가 ,

- : 1,191 DWG
- : ()



KOSDIC



- KOSDIC
 - ST-Developer V9.0
 - STEPtools
 - ST-Developer S/W KOSDIC
 - ST-Developer KOSDIC
 - 가
 - ST-Developer
 -
 -

KOSDIC

- KOSDIC
 - KOSDIC
 - CAD KOSDIC
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- KOSDIC
 - CAD KOSDIC
 - KOSDIC
 - CAD KOSDIC
- KOSDIC
 - KOSDIC
 -
- KOSDIC
 -
 -

- KOSDIC
 - CAD , (Viewer)

No				
1	CAD	KOSDIC	STP+W	DXF2KOS
2	CAD	KOSDIC	STP+W+V	DXF2KOSV
3	KOSDIC	CAD	STP+R	KOS2DXF
4	KOSDIC	CAD	STP+R+V	KOS2DXFV
5	KOSDIC		STP+R+V	KOSV
6	KOSDIC		STP+R+W	KOSWR
7	KOSDIC		STP+R+W+V	KOSRWV
8	CAD		STP+R+W+V	IO

- KOSDIC
 - KOSDIC
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 - KOSDIC
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&