

AX3000 SANITARY



Building services engineering

Authorized reseller



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What makes AX3000 different?



What makes AX3000 different?

- AX3000 is available as Plug-In for
 - BricsCAD V17-V20
 - Allplan 2017-2019
 - AutoCAD 2017-2020
- All versions and platforms are 100% compatible
- Easy interface enables quick training
- Work in CAD with familiar functions
- ONE tool for all planning phases
- ONE intuitive program workflow with both:
Easyline (1-line dimensioning)
AND
construction



What makes AX3000 different?

- Innovation and competence
- Own calculation kernel / own calculations
- Trace calculation stages separately – calculations without interfaces
- Graphical check of the building elements
 - everything is testable
 - detect errors immediately
- AX3000 integrates everything from standardized parts lists, graphical fitting lists to CNC-manufacturing lists
- Graphical presentation:
 - Holohedral (filled), black-and-white, no fill
 - with and without hidden edges

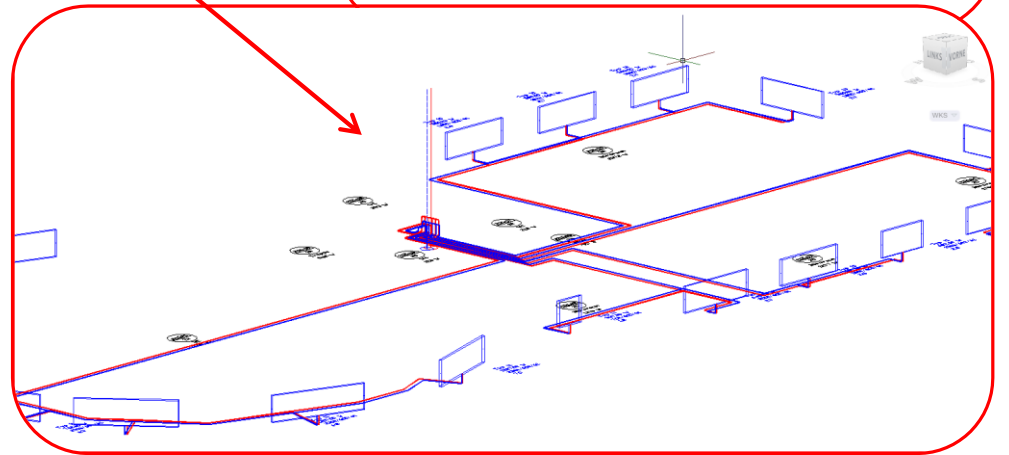
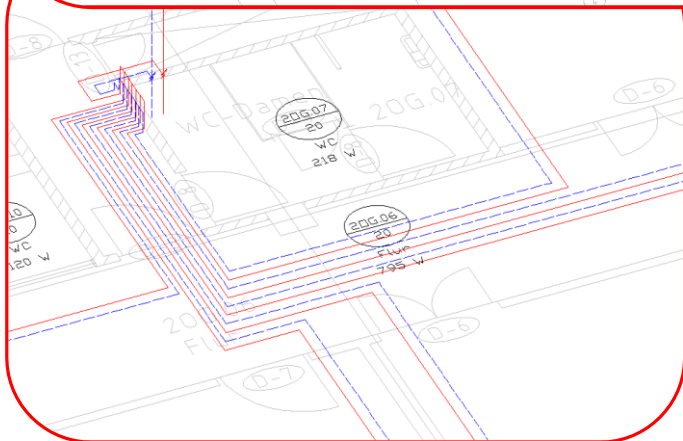
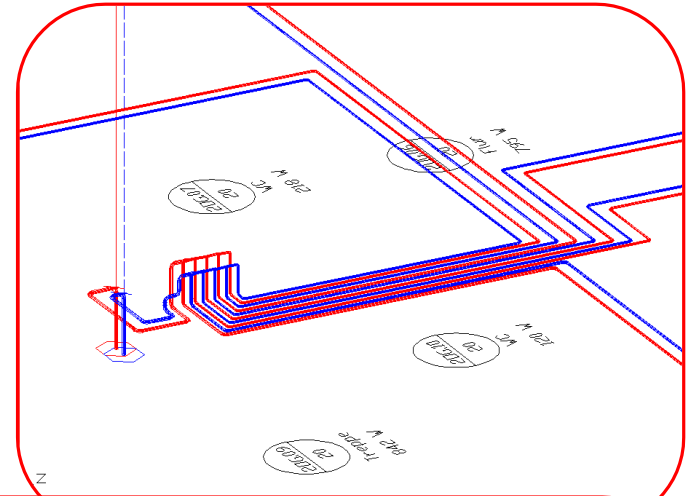
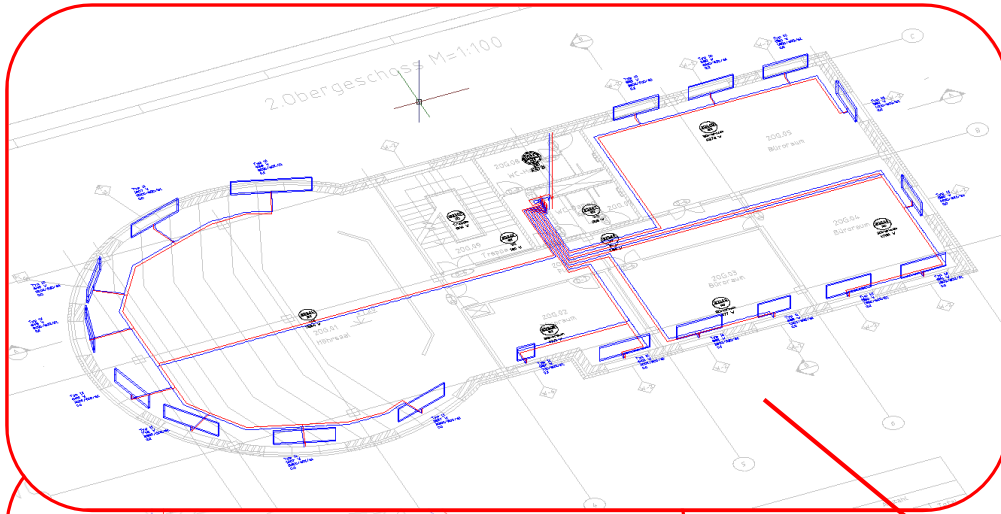
Main Advantages of AX3000



Main Advantages of AX3000

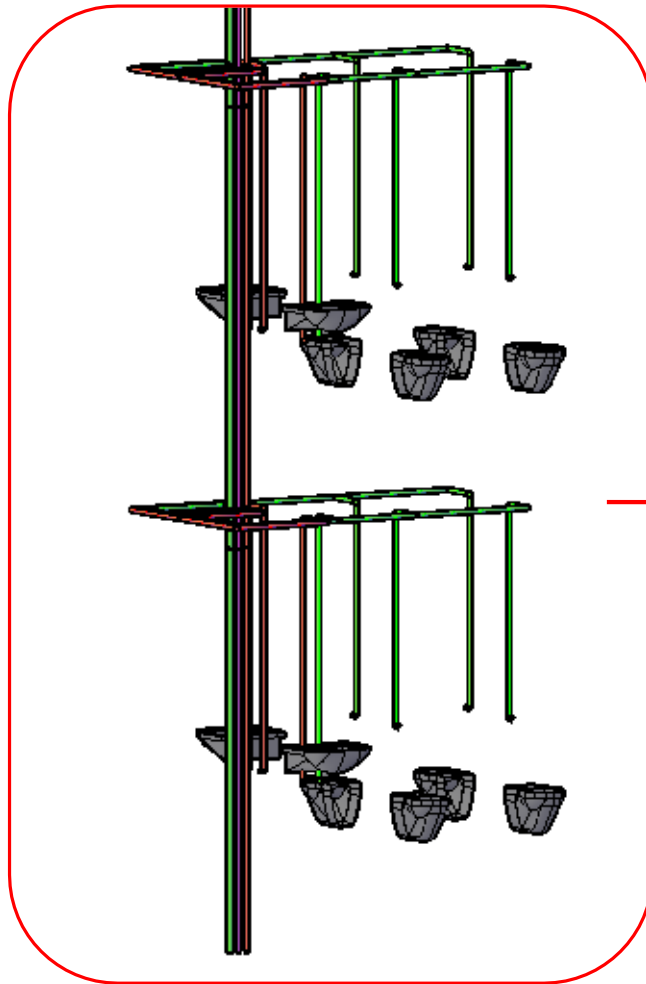
1. Easy planning with „Easyline“ (1-line dimensioning)
2. Use the „normal“ CAD drawing functions
3. Drinking water with circulation pipe networks
4. Wastewater calculation according to EN 12056
5. Generate lists in Excel for analysis
6. Overall drawing workflow
7. Total compatibility among CAD systems

Main Advantages of AX3000



Easy planning with “Easyline” (1 – line dimensioning)

Main Advantages of AX3000



Drinking water calculation DIN/1988

Job: Büro_2d_Sanitär
 Customer: AX3000

17. März 2011



Order no.
 Project:
 Dno.:

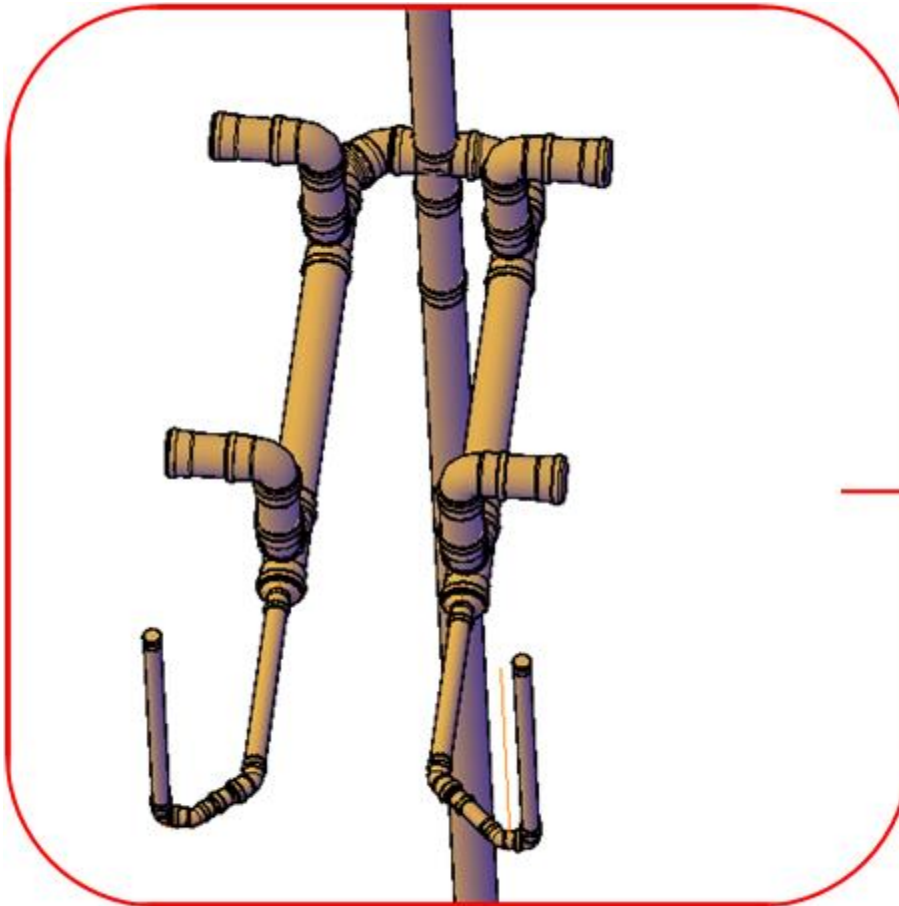
S_KW

Material: Stahlrohr Roughness: 0,045 mm
 Density: 1000 Temperature: 10 C°

Line	Name	Dimensions (mm)			Sum-flow rate l/s	Max. flow rate l/s	r. Flow-velocity m/s	R-value mbar/m	Min. flow press. mbar	Pressure loss mbar
		l	d1	d2						
Washbecken 3d			15		0,07				1000,0	
SANITÄR-STANDARD										
1.0	Dp geo. Height differenc								65,0	
	Sum of pressure loss									1176,0
Washbecken 3d			15		0,07				1000,0	
SANITÄR-STANDARD										
2.0	Dp geo. Height differenc								65,0	
	Sum of pressure loss									1173,5
Washbecken 3d			15		0,07				1000,0	
SANITÄR-STANDARD										
3.0	Dp geo. Height differenc								65,0	
	Sum of pressure loss									1165,3
Washbecken 3d			15		0,07				1000,0	
SANITÄR-STANDARD										
4.0	Dp geo. Height differenc								65,0	
	Sum of pressure loss									1148,2
Washbecken 3d			15		0,07				1000,0	
SANITÄR-STANDARD										
5.0	Dp geo. Height differenc								65,0	
	Sum of pressure loss									1145,7

Drinking water with circulation acc. to DVGW

Main Advantages of AX3000



Waste water calculation DIN EN 12056/DIN 1986-100

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Auftrag: HLS-Gröschler
Kunde: AX-3000



Best. Nr.
Projekt:
Znr.:

S_AW_KG

Material: AX3000_Gebert
Nutzungsart: unregelmäßige Wohnhaus, Pension, Büro
Abflusskennzahl: 0.5

Strang	Leitungart	Abmessungen			D(DU)	Q _{max}	Defälle
		l [m]	DN	DA x s			
Waschbecken 3l SANITAR-STANDARD 10							
			40		0.50		
	AL	0.75	70	76.5x4.5	0.50	0.50	
	AL	0.09	70	76.5x4.5	0.50	0.50	
	AL	0.20	70	76.5x4.5	0.50	0.50	0.60
	AL	0.09	70	76.5x4.5	0.50	0.50	0.60
	BL	1.08	100	110.5x5.5	3.00	0.50	0.60
	BL	0.12	100	110.5x5.5	0.50	1.17	0.50
	BL	0.14	100	110.5x5.5	0.50	1.17	0.50
	BL	0.10	100	110.5x5.5	0.50	1.17	0.60
	FL	0.20	100	110.5x5.5	11.00	1.00	
	FL	3.40	100	110.5x5.5	11.00	1.00	
	FL	0.20	100	110.5x5.5	22.00	2.35	
	FL	3.40	100	110.5x5.5	22.00	2.35	
	FL	0.20	100	110.5x5.5	33.00	2.87	
	FL	3.40	100	110.5x5.5	33.00	2.87	
	FL	0.20	100	110.5x5.5	44.00	3.32	
	FL	3.40	100	110.5x5.5	44.00	3.32	
	FL	0.20	100	110.5x5.5	55.00	3.71	
	FL	2.80	100	110.5x5.5	55.00	3.71	
W.C. hängend 3l SANITAR-STANDARD 10							
			100		2.50		
	AL	0.20	100	110.5x5.5	2.50	2.50	
	AL	0.38	100	110.5x5.5	2.50	2.50	
	AL	0.20	100	110.5x5.5	2.50	2.50	
	BL	1.08	100	110.5x5.5	3.00	0.50	0.60
W.C. hängend 3l SANITAR-STANDARD 10							
			100		2.50		
	AL	0.20	100	110.5x5.5	2.50	2.50	
	AL	0.38	100	110.5x5.5	2.50	2.50	
	AL	0.20	100	110.5x5.5	2.50	2.50	
	BL	0.12	100	110.5x5.5	0.50	1.17	0.60

Waste water calculation acc. to EN 12056

Main Advantages of AX3000

Seite 1 von 1

PIPE PARTS LIST

Order: Büro_2d_leer_recover
Project: D:\Projekt\Büro_2d_leer_recover

Originator:
Date/Time: 17. März 2011



Name	Fno.	Dimensions (mm)							Entire				
		L/α	d1	d2	d3	d4	I1	I2		I/r	Pcs.	r	
MA Kupfer													
PIPE	15		15										
PIPE	15		20										
PIPE	15		25										
PIPE	15		32										
ELBOW ROUND	25	90	15									47,00	
ELBOW ROUND	25	90	32									2,00	
TRANSITION ROUND S	30	3	20	15				-2	-2			2,00	
TRANSITION ROUND S	30	25	25	20				-2	-2			2,00	
TRANSITION ROUND S	30	25	32	25				-3	-3			2,00	
TEE ROUND 90	75	17	15	15	15	15	17					10,00	6,00
TEE ROUND 90	75	17	20	20	15	15	17					10,00	4,00
TEE ROUND 90	75	37	25	25	15	15	37					37,00	12,00
TEE ROUND 90	75	19	32	32	15	15	19					15,00	6,00

Water capacity pipes:
Water capacity radiators:
Entire water capacity

Drinking water calculation DIN/1988

Seite 1 von 1

Job: Büro_2d_Sanitär
Customer: AX3000

17. März 2011



Order no.
Project:
Dno.:

S_KW

Material: Stahrohr
Density: 1000

Roughness: 0,045 mm
Temperature: 10 C°

Line	Name	Dimensions (mm)			Sum flow rate	Max flow rate	r. Flow velocity	R-value	Mn. flow press.	Pressure loss
		I	d1	d2						
Washbecken 3d										
SANTAR-STANDARD										
1.0	Op geo. Height differe									
	Sum of pressure loss									

Circulation system acc. to DVGW553

Job: Büro_2d_Sanitär
Customer: AX3000

17. März 2011



Order no.
Project:
Dno.:

S_Z

Material: Stahrohr
Density: 983

Roughness: 0,045
Temperature: 60

Line	Name	[m]	Dimensions [mm]			Flow rate	r. Flow velocity	R-value	d
			I	d1	d2				
LP-L	Op geo. Height differe								
1.1	Line	0,01	10	10		0,00	0,1	0,0	0
1.2	Line	1,30	10	10		0,00	0,1	0,0	0
1.3	Line	1,00	10	10		0,00	0,1	0,0	0
1.4	Tee (Passage)	2,45	10	10		0,00	0,1	0,4	0
1.5	Tee (Passage)	2,50	10	10		0,00	0,1	0,4	0
1.6	Line	2,97	10	10		0,00	0,1	0,6	0
	Sum of pressure loss								
	Heat loss kW								
	Sum of heat load								
LP-L	Op geo. Height differe								
2.0	Op geo. Height differe								
2.1	Line	0,01	10	10		0,00	0,1	0,0	0
2.2	Tee (Passage)	2,30	10	10		0,00	0,1	0,0	0
2.3	Line	0,40	10	10		0,00	0,1	0,0	0
2.4	Branch	1,00	10	10		0,00	0,1	0,4	0
2.5	Tee (Passage)	2,60	10	10		0,00	0,1	0,4	0
	Sum of pressure loss								
	Heat loss kW								
	Sum of heat load								
LP-L	Op geo. Height differe								
3.0	Op geo. Height differe								
3.1	Line	0,01	10	10		0,00	0,0	0,1	0,0
3.2	Branch	0,07	10	10		0,00	0,0	0,0	0,0
3.3	Line	0,90	10	10		0,00	0,0	0,1	0,0
	Sum of pressure loss								
	Heat loss kW								
	Sum of heat load								
LP-L	Op geo. Height differe								
4.0	Op geo. Height differe								
4.1	Line	0,01	10	10		0,00	0,0	0,0	0,0
4.2	Tee (Passage)	1,91	10	10		0,00	0,0	0,0	0,0
4.3	Line	0,40	10	10		0,00	0,0	0,3	0,0
4.4	Branch	1,00	10	10		0,00	0,0	0,0	0,0
4.5	Line	2,97	10	10		0,00	0,0	0,4	11,4
	Sum of pressure loss								
	Heat loss kW								
	Sum of heat load								
LP-L	Op geo. Height differe								
5.0	Op geo. Height differe								

Drinking water calculation DIN/1988

Seite 1 von 1

Job: Büro_2d_leer_recover
Customer: AX3000



Order No.
Project:
Dno.:

S_WW

Material: Stahrohr
Density: 983

Roughness: 0,045 mm
Temperature: 60 C°

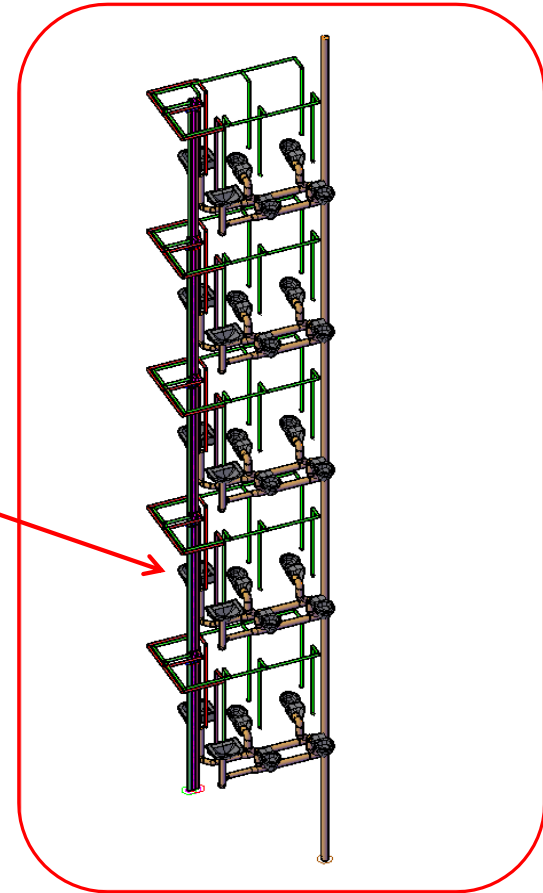
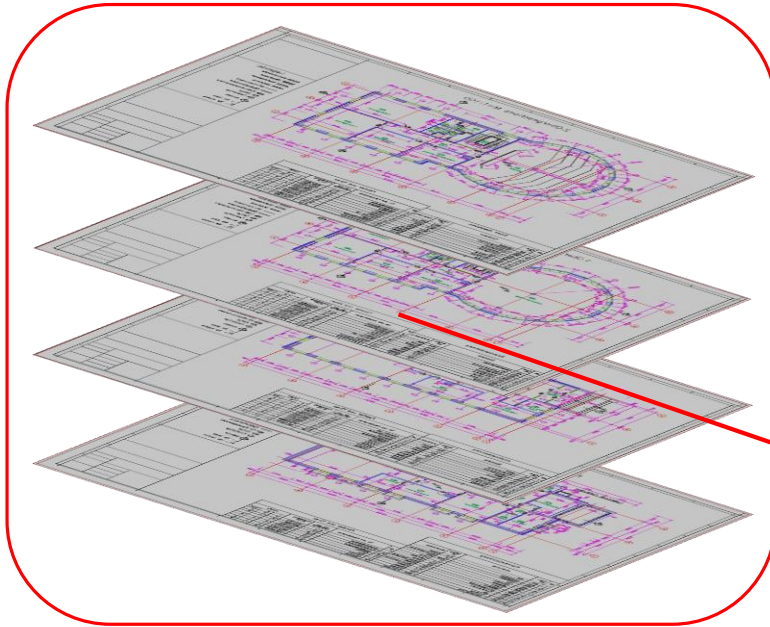
Versorgungsdruck :	0,7 m	mbar	Water meter :	mbar
dpGeo :	65,0 mbar		Instruments :	mbar
Ruhedruck :	-65,0 mbar		Min. flow pressure :	1000,0 mbar
			available Pressure :	-1065,0 mbar
I * R + Z : 20,66 * 4,82 = 25,5 mbar				

Line	Name	Measurements			Sum flow rate	Max. flow rate	r. Flow-velocity	R-value	Mn. flow press.	Pressure loss
		I	DN	DA x s						
Washbecken 3d										
SANTAR-STANDARD										
1.0	Op geo. Height differe									65,0
1.1	Line	0,05	15	21.0x2,5	0,07	0,07	0,3	1,6		0,1
1.2	Line	0,35	15	21.0x2,5	0,07	0,07	0,3	1,6		1,1
1.3	Branch	0,12	15	21.0x2,5	0,07	0,07	0,3	1,6		2,9
1.4	Line	0,06	15	21.0x2,5	0,07	0,07	0,3	1,6		3,0
1.5	Line	0,53	15	21.0x2,5	0,07	0,07	0,3	1,6		3,8
1.6	Line	1,00	15	21.0x2,5	0,07	0,07	0,3	1,6		5,9
1.7	Tee (Passage)	5,08	15	21.0x2,5	0,07	0,07	0,3	1,6		16,3
1.8	Line	2,76	15	21.0x2,5	0,07	0,07	0,3	1,6		20,7
	Sum of pressure loss									1085,7

Generate lists in Excel

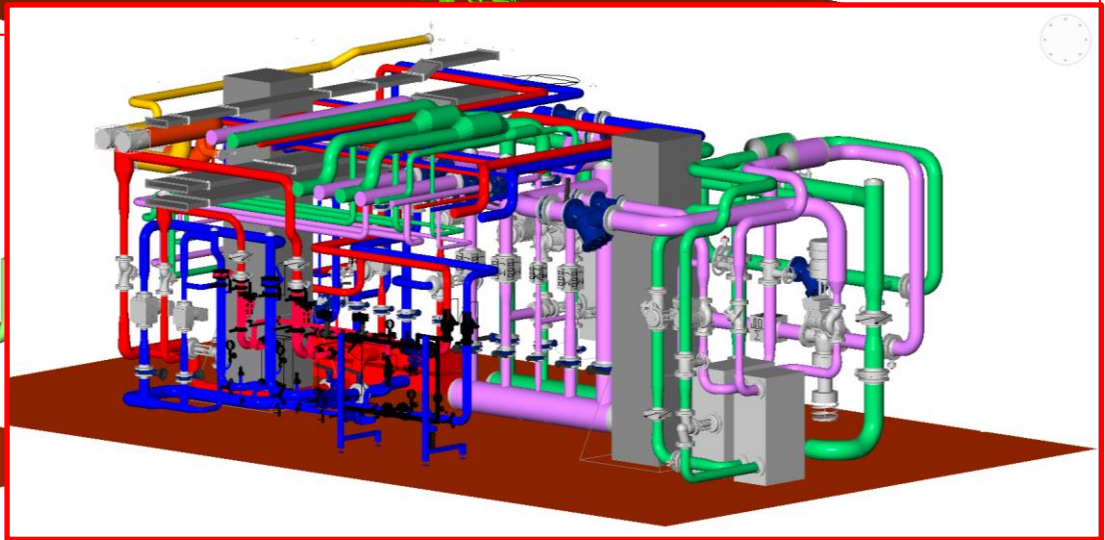
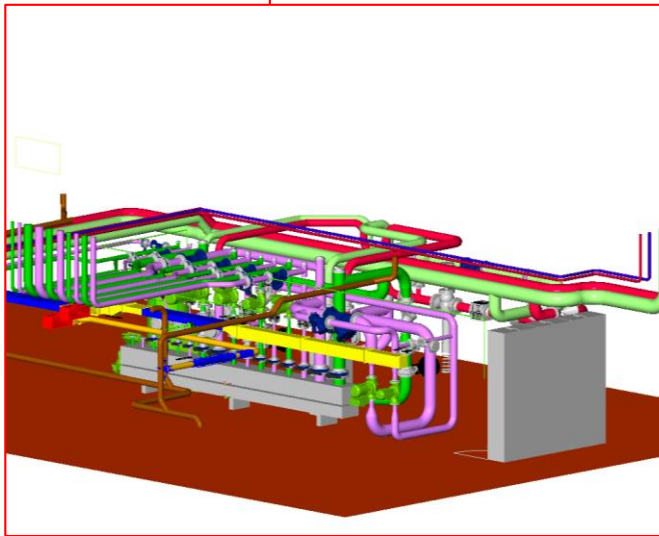
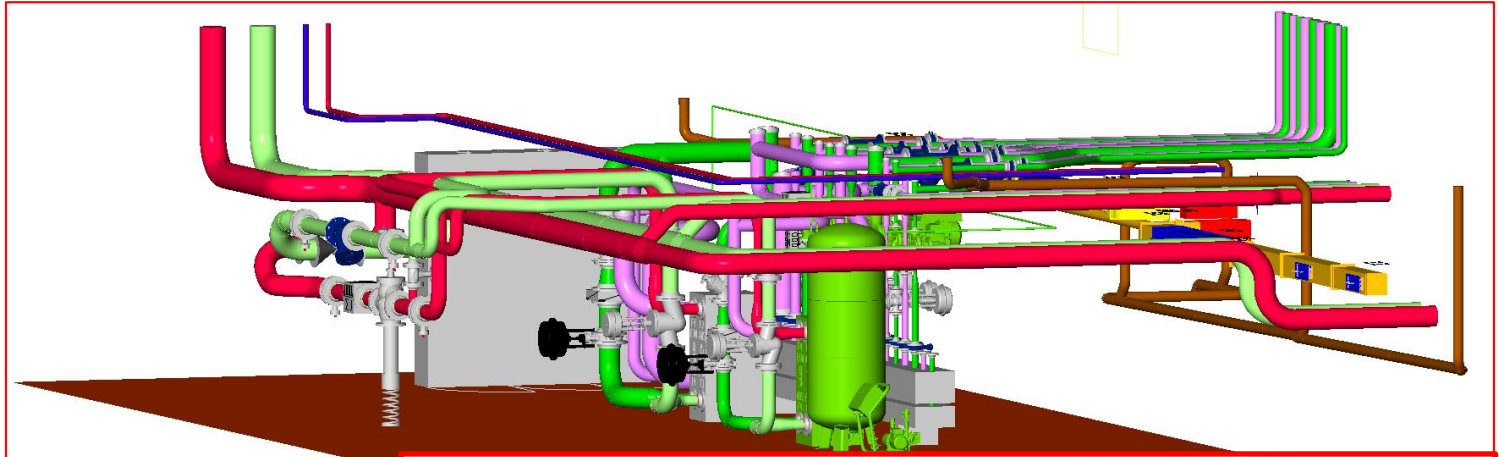


Main Advantages of AX3000



Overall drawing workflow

Main Advantages of AX3000



Compatible to all CAD systems



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