

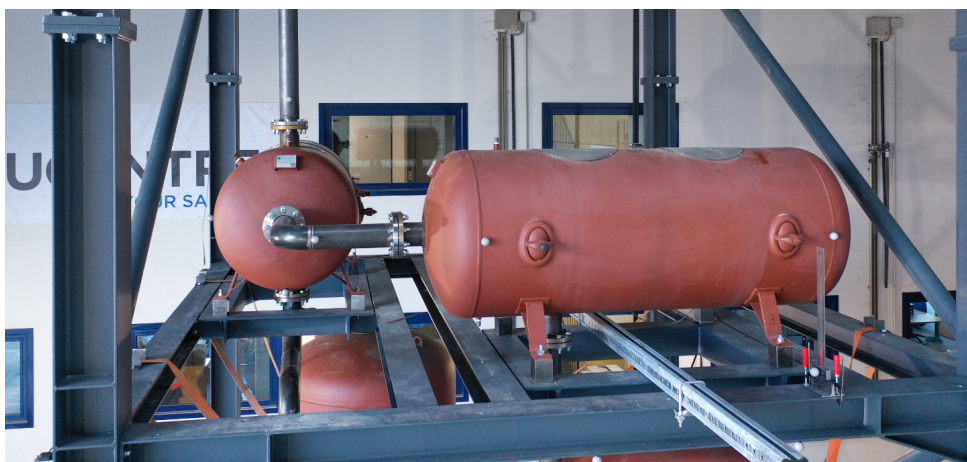
## System view



## Top roof level



## Level 2





## Level 1



## Level 0





## Support numbering

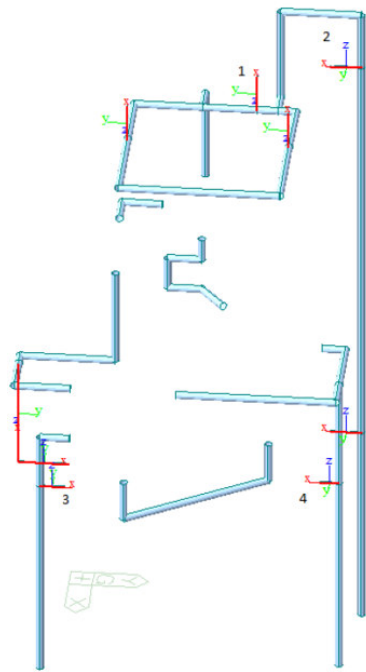


Figure 2 Fixed points of the piping layout

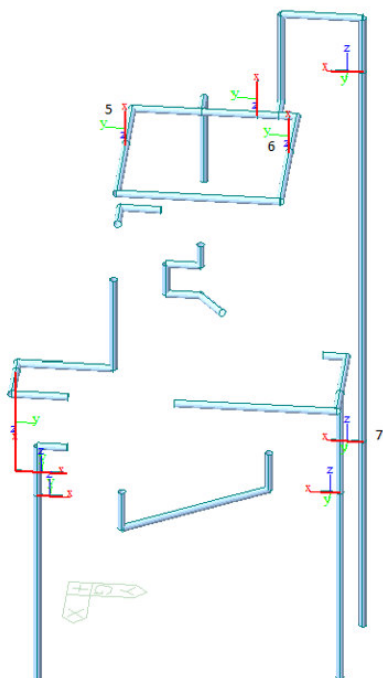
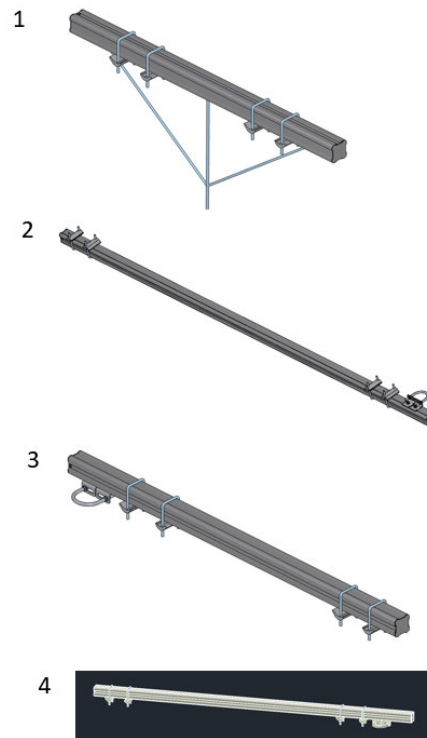
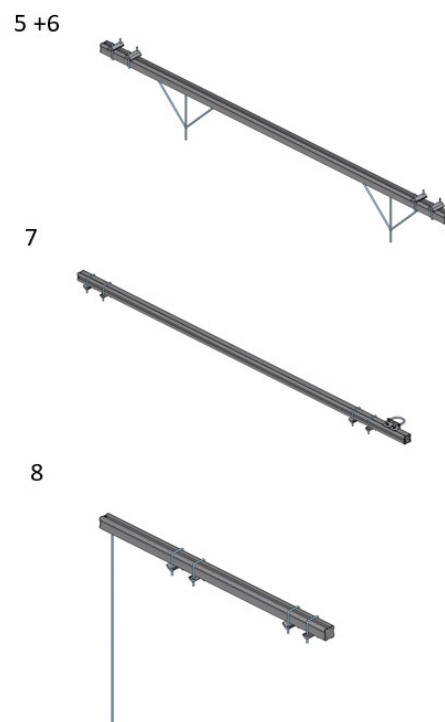
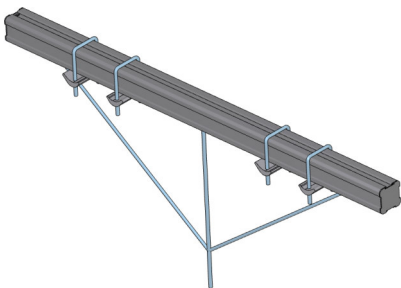


Figure 3 Guide supports



Support 1



Channels

Pos	Qty	Description	Item	Weight [kg]	Length [mm]	Beam No.
2	1	Girder MIQ-90 3m	2119866	15,271	1 645,000	1

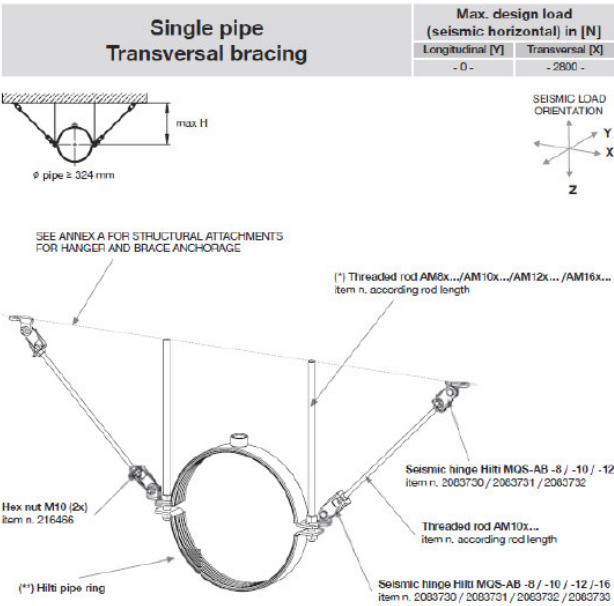
Structure connections

Pos	Qty	Description	Item	Weight [kg]	Node No.
3	4	Beam clamp MI-DGC 90	233860	4,062	3,3,4

Accessories

Pos	Qty	Description	Item	Weight [kg]	Length [mm]
1	2	Girder end cap MIA-EC90	432077	0,048	0,000

The modelling of braced pipe clamp connection together with the MIQ-90 channel is not feasible in Pofis software. Therefore, this braced pipe clamp connection is visualized below:  
The pipeclamp to be used is MP-MX 4".  
The vertical hangers are threaded rods M12 4.8 fixed with MIQM-M12 in the channel.  
Each diagonal brace is composed from two MQS-AB-12 connectors and an M10 4.8 threaded rod. The top diagonal connector is fixed in the channel with MIQM-M12.



## Support 2



### Channels

Pos	Qty	Description	Item	Weight [kg]	Length [mm]	Beam No.
2	1	Girder MIQ-90 6m	2119867	42,238	4 550,000	1

### Structure connections

Pos	Qty	Description	Item	Weight [kg]	Node No.
3	4	Beam clamp MI-DGC 90	233860	4,062	3,3,4

### Fixations

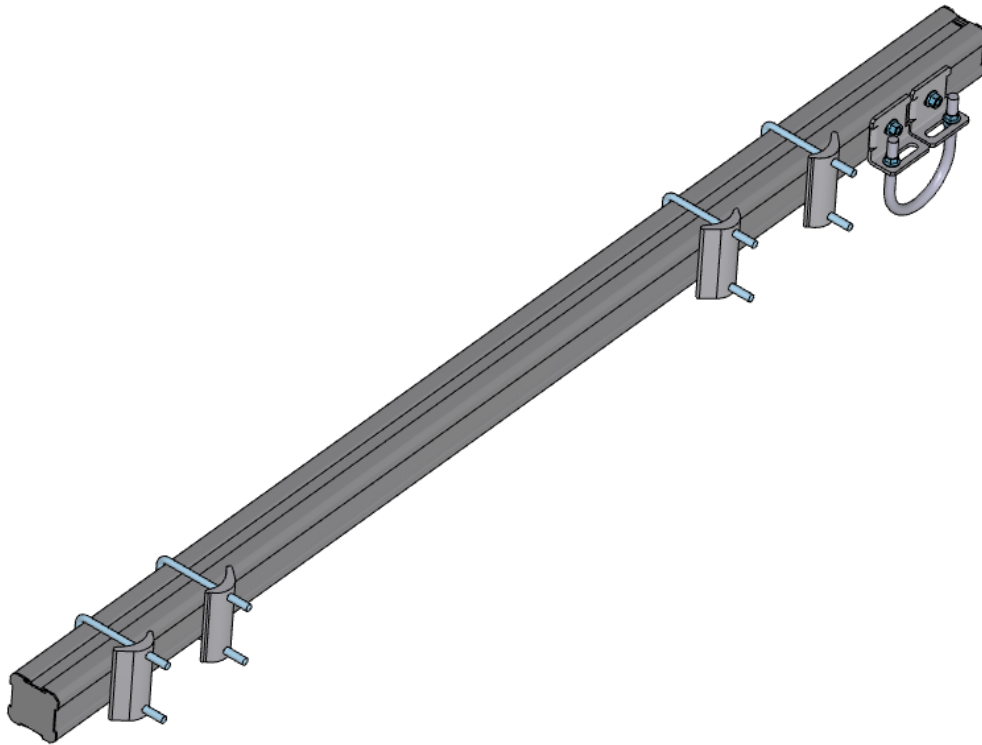
Pos	Qty	Description	Item	Fixation text
4	1	U-bolt MI-UB 100-M16	431592	
5	1	Connector U-bolt MIC-UB90-M16	304834	

### Accessories

Pos	Qty	Description	Item	Weight [kg]	Length [mm]
1	2	Girder end cap MIA-EC90	432077	0,048	0,000



## Support 3



### Channels

Pos	Qty	Description	Item	Weight [kg]	Length [mm]	Beam No.
2	1	Girder MIQ-90 6m	2119867	19,494	2 100,000	1

### Structure connections

Pos	Qty	Description	Item	Weight [kg]	Node No.
3	4	Beam clamp MI-DGC 90	233860	4,062	3,4,4

### Fixations

Pos	Qty	Description	Item	Fixation text
4	1	U-bolt MI-UB 100-M16	431592	
5	1	Connector U-bolt MIC-UB90-M16	304834	

### Accessories

Pos	Qty	Description	Item	Weight [kg]	Length [mm]
1	2	Girder end cap MIA-EC90	432077	0,048	0,000

## Support 4



### Channels

Pos	Qty	Description	Item	Weight [kg]	Length [mm]	Beam No.
2	1	Girder MIQ-90 6m	2119867	28,777	3 100,000	1

### Structure connections

Pos	Qty	Description	Item	Weight [kg]	Node No.
3	4	Beam clamp MI-DGC 90	233860	4,062	3,3,4

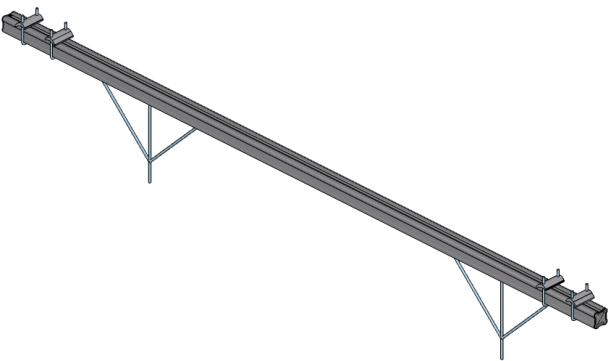
### Fixations

Pos	Qty	Description	Item	Fixation text
4	1	U-bolt MI-UB 100-M16	431592	
5	1	Connector U-bolt MIC-UB90-M16	304834	

### Accessories

Pos	Qty	Description	Item	Weight [kg]	Length [mm]
1	2	Girder end cap MIA-EC90	432077	0,048	0,000

Support 5+6



Channels

Pos	Qty	Description	Item	Weight [kg]	Length [mm]	Beam No.
2	1	Girder MIQ-90 6m	2119867	38,989	4 200,000	1

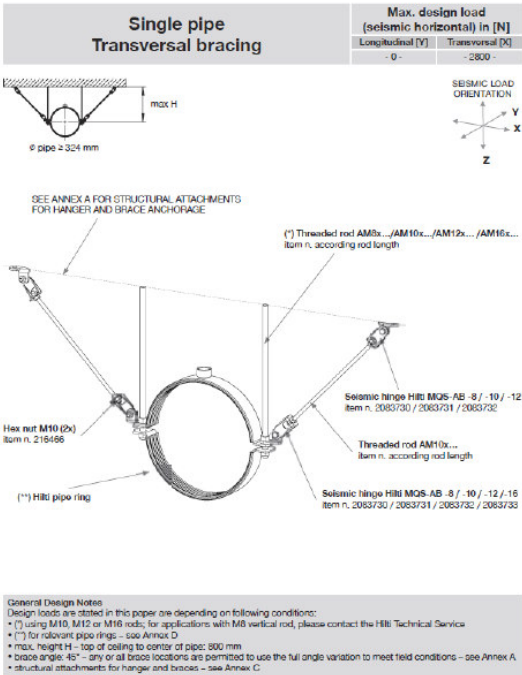
Structure connections

Pos	Qty	Description	Item	Weight [kg]	Node No.
3	4	Beam clamp MI-DGC 90	233860	4,062	3,3,4

Accessories

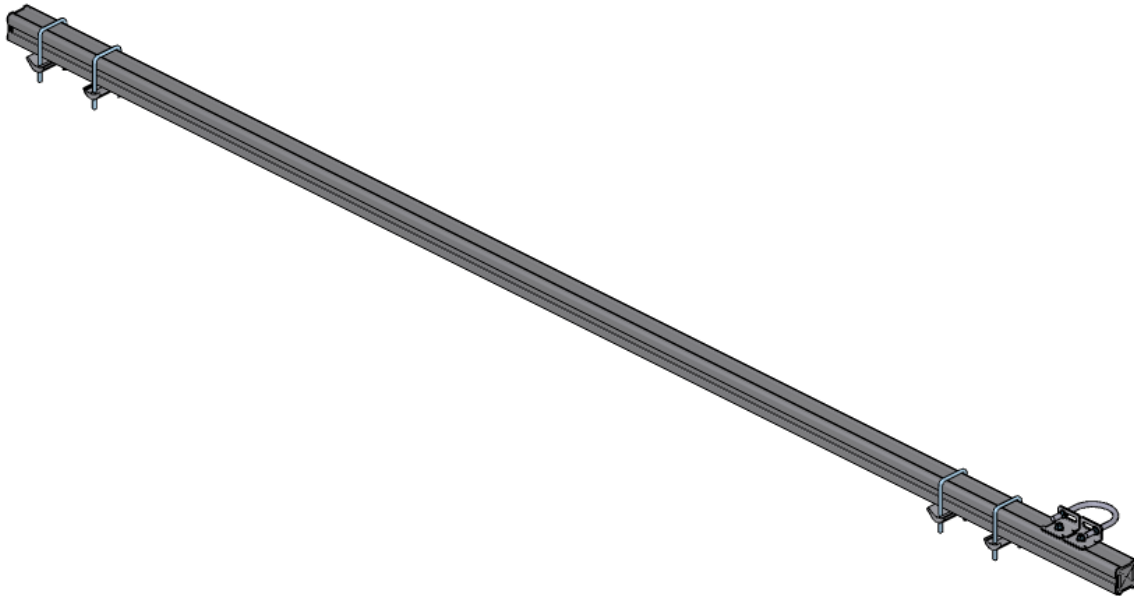
Pos	Qty	Description	Item	Weight [kg]	Length [mm]
1	2	Girder end cap MIA-EC90	432077	0,048	0,000

The modelling of braced pipe clamp connections together with the MIQ-90 channel is not feasible in Pofis software. Therefore, the braced pipe clamp connections are visualized below:  
The pipeclamp to be used is MP-MX 4".  
The vertical hangers are threaded rods M12 4.8 fixed with MIQM-M12 in the channel.  
Each diagonal brace is composed from two MQS-AB-12 connectors and an M10 4.8 threaded rod. The top diagonal connector is fixed in the channel with MIQM-M12.





## Support 7



### Channels

Pos	Qty	Description	Item	Weight [kg]	Length [mm]	Beam No.
2	1	Girder MIQ-90 6m	2119867	42,238	4 550,000	1

### Structure connections

Pos	Qty	Description	Item	Weight [kg]	Node No.
3	4	Beam clamp MI-DGC 90	233860	4,062	3,3,4

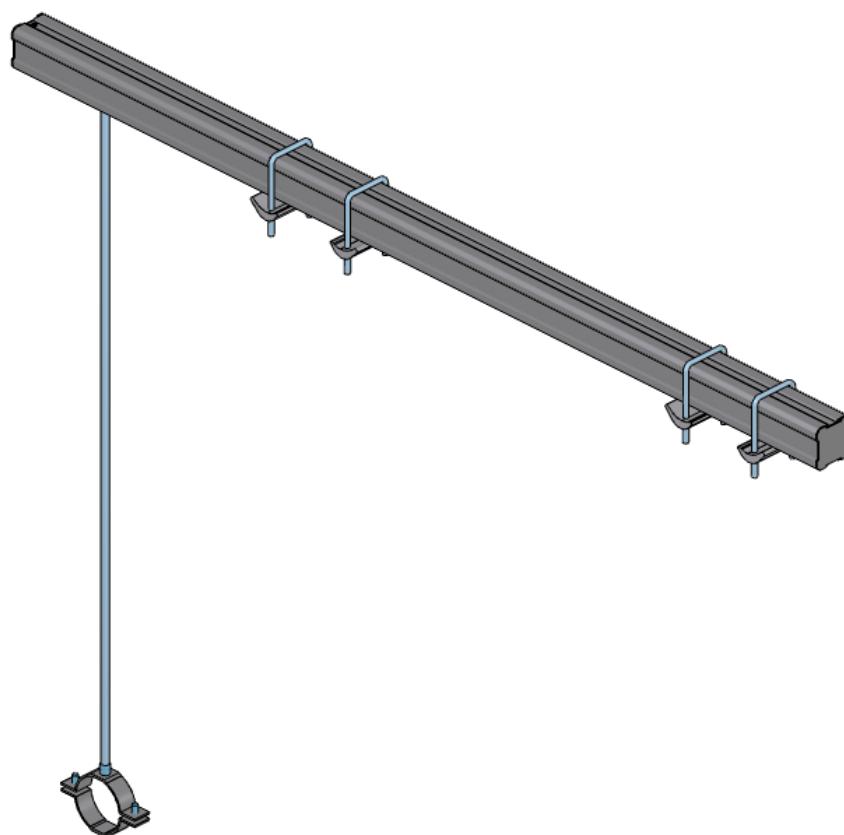
### Fixations

Pos	Qty	Description	Item	Fixation text
4	1	U-bolt MI-UB 100-M16	431592	
5	1	Connector U-bolt MIC-UB90-M16	304834	

### Accessories

Pos	Qty	Description	Item	Weight [kg]	Length [mm]
1	2	Girder end cap MIA-EC90	432077	0,048	0,000

## Support 8



### Channels

Pos	Qty	Description	Item	Weight [kg]	Length [mm]	Beam No.
2	1	Girder MIQ-90 6m	2119867	19,958	2 150,000	1

### Structure connections

Pos	Qty	Description	Item	Weight [kg]	Node No.
3	4	Beam clamp MI-DGC 90	233860	4,062	3,3,4

### Fixations

Pos	Qty	Description	Item	Fixation text
4	1	Heavy-d. pipe ring MP-MX-F 4" M16	374946	
5	1	Pipe ring saddle MQA-M16-F	304141	

### Accessories

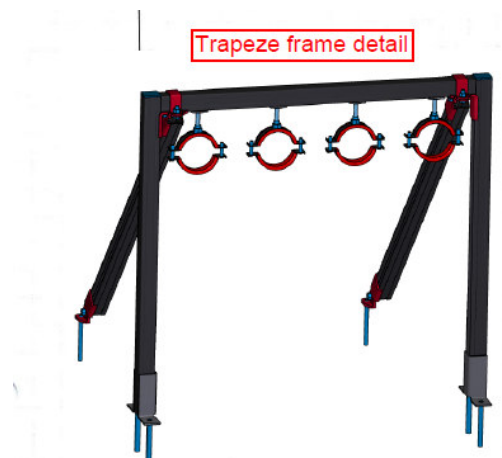
Pos	Qty	Description	Item	Weight [kg]	Length [mm]
1	2	Girder end cap MIA-EC90	432077	0,048	0,000
6	1	Hexagon nut M16-F DIN 934 8	2184527	0,030	0,000
7	1	Threaded rod AM16x2000-F 4.8	304777	2,610	1 475,000

## **Supports at the top: Pipe rack A**

2 x Trapez frame: 80 x 80 cm, MQ 41 channels + 1 x 45° bracing



2 x Trapez frame: 80 x 80 cm, MQ 41 channels + 2 x 45° bracing



6 x MIQ-90, L = 1,20m

4 x MIQ-90, L = 2,0m

24 x MI-DGC 90

20 x Butterfly nuts MIQM-M12 + M12 Schraube

12 x MQZ-L13 perforated plate + M12 nut