

Project Slussen: BIMeye is the time saving link for the electrical engineering company Rejlers, Sweden



CUSTOMER

Rejlers Sverige AB

CHALLENGES

To optimise the BIM process in the project planning and in construction

SOLUTION

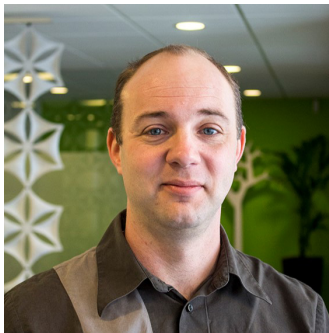
The BIMeye database solution

BENEFITS

BIMeye simplifies:

- Coordination of literature and labeling of luminaires
- Coordinated accounting to client and contractor
- Coordinated data on luminaires for design models (Multiple models per electrical consultant containing the same data)
- Information delivery to contractor

In the large Slussen project, Rejlers is one of two engineering consultants within electro engineering - the other supplier is the company ÅF. In order to ease the collaboration between the two suppliers, BIMeye has proven to be an efficient solution.



Jonas Libérth,
Rejlers Sverige AB:

"BIMeye allows us to invite both external and internal people in the project to join so they can describe their part of the project in the database."

According to BIM manager Jonas Libérth, the collaborative work in their field has been improved immensely by adding the BIMeye database solution to their working methods across the entire project - from pre-studies and planning to design, construction, project planning and project management.

At Rejlers there are 5 consultants simultaneously working in BIMeye. The fact that the other supplier ÅF is also working and sharing their work in the same database, makes the flow and collaboration much easier

and smooth. There are multiple models in the system and all data added in BIMeye will synchronise back into the original models in the BIM programs, such as Revit, ensuring that everything is constantly updated.

Slussen - an entirely model based project - no drawing files

In the case of the Slussen project, they have found BIMeye to be the link that combines two consultant companies within the same field (Rejlers and ÅF) making the collaboration within electro deliveries extremely smooth and cooperative.

Until now, Slussen has been a very good example on how to work with data instead of with files and drawings; the structural engineers have used asset manager in the Slussen project and the architects have used room manager and door manager from BIMeye, which has been an immense benefit for the handling of the overall information in the project.

Databased Workflow in the Slussen Project for Electro Engineers for Lighting Fixtures

Client:
Stockholm City

Main Design Consultant:
ELU-Konsult

BIM/VDC-Manager:
Tikab

Electrical Consultant:
Rejlers

Public Lighting consultant:
ÅF Lightning



Considering the size of the Slussen project there is a big need for the partners in the project to work closely together. With BIMeye, the two engineering companies obtain a common, transparent and efficient way of working with data management.

“BIMeye allows us to invite both external and internal people in the project to join so they can describe their part of the project in the database. The entire project is model based and all electrical data is entered into BIMeye and synched back to the BIM models in Revit”, Jonas libérth explains.

Each item is named with a litre according to the Swedish BIP code system. This way, the consultants can manage data on electro-products from many different models without producing any drawings at all. As a next step, a Navisworks model is produced to be used on the construction site where all the information on the products and items needed are visible through BIMeye.

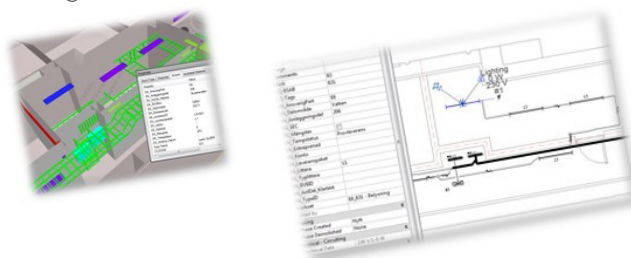
BIMeye; a choice by the engineers to streamline their design processes

According to Jonas Libérth, the implementation of BIMeye has been smooth. The solution was a wish from the engineers to be able to streamline their design processes all through the projects:

“The solution is easy to learn. Easier than Revit. That means that other users in Rejlers can easily do the description and reporting in BIMeye without knowing Revit. Both Rejlers and ÅF each has 5 BIMeye users. The description work and adding data really is efficient due to the possibility of sorting and filtering out the products and adding data to many products in one operation. For the customer’s validation and verification, we can take out traditional reports like lighting fixture reports just by using the data in BIMeye, instead of having to type everything manually”.

BIMeye apps are flexible - Room manager for requirements

Rejlers have been using the app requirement manager during the first year of the implementation. However, as they discovered that with room manager you can search out numbers, and as every space/room varies in description, they will change to this app for future data management of the requirements.





The latest development is the use of asset manager for creating reports of electrical fixtures.

The decision on using BIMeye for electro installations was based on a testing version on a small building project where they used BIMeye asset manager for lighting fixtures. As this was a success, it was decided to use and implement the solution in the big Slussen project for the handling of information on public lighting and construction. In this way, the two engineering companies can handle the information delivery simultaneously and according to the requirement specifications from the commissioner – in this case the municipality of Stockholm who have determined the look of the report layout.

“During this winter, we tested Asset manager for the electro parts with success and we have recently started using it in production. The purpose of it is to use it for handling the data of the public lighting of streets and other power constructions/switchboards in the city. Being two engineering companies in the Slussen project it is important to work in the same database - using the same tool to describe all information on all items, products and handlings in the process, where we can synch this data back into our respective programs. This enables us to deliver the data to the city in the formats according to their requirements (in pdf’s) as to the way they want data on the descriptions and documentation to look. The best way to work however would be to deliver the data in other formats than PDFs; our customer could for example use Excel or even better, have their own logins to BIMeye to access the data”, Jonas Libérth explains.

Autodesk Revit MEP, Naviate .. and BIMeye

Rejlers have been working with Autodesk Revit MEP for electrical for many years.

“This is a perfect solution and as we have added the program Naviate from Symetri as an add-in, we have saved a lot of time and money during the years.

“With the BIMeye solution as a new tool we know we will be even stronger in the competition as we can:

- deliver much higher data quality,*
- save time, cutting down manual work*
- involve people, both internal and external*
- handle models centrally*
- have all information in one place*
- search and filter data and values*
- synch data between BIMeye and the Revit model - or any other BIM program”*

The database may be easy to work with for Jonas Libérth as he has a profound interest in it and is used to working with this sort of tools. Having said that he adds:

“We have a mission that we want to be pioneers within the field. We want to have the best solutions so we need to test the new inventions, which is what we have been doing here. Our experience is that our collaboration with other partners in the project is running smoothly and this tells me that the people we have invited to use it find it applicable as well”.

Integration with other databases - Dialux

For lighting products, Rejlers use the Dialux database and synch it through Revit to BIMeye where they handle all information.

“Every item has its own litre number and the data on Revit families and article numbers are collected easily through BIMeye”, Jonas Libérth explains.

BIMeye is the new time saving method for future projects

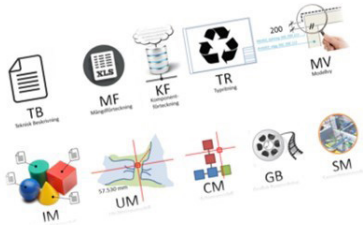
At Rejlers it was not the commissioners requirements that led to use of BIMeye but the users, the engineers, the architects and the contractors who all have chosen BIMeye to obtain a more efficient work methodology; to be able to work efficiently with data management and information delivery.

“The way you structure the information in BIMeye is unique. You work directly in the model - outside Revit - and we can filter and search on values and data, which is a great benefit, instead of having to search manually in spreadsheet,” says Jonas Libérth.

Benefits at a glance:

- Report in pdf of lighting fixtures
- Reports of technical specifications
- Reports of electrical panels / switchboards
- Easy to sync back to BIMeye and Revit
- We use BIMeye for descriptions and push back to Revit with the new information.
- Through Navisworks the workers on the construction site can access all information
- A smooth collaboration between two different companies working on the project
- Databased instead of manually in word.
- Automatic retrieval of group reports.
- Data is typed into the database and can be used for delivering better products
- Ability to synch and use the data in the model.
- Ability to control all data
- Easy to layout excel from BIMeye for switchboards
- Details on doors to synch back to BIMeye and Revit
- Description in BIMeye and data back to Revit
- Easy structure information on model level outside Revit.
- You can search and filter your data

According to Jonas Libérth, the app Door Manager will be the next app to implement. As the electrical engineer, Rejlers is involved in this new process with the issues and requirements for electro and security around the doors in the project. Many doors need admission systems and the database structures the requirements for each door in the model.



Stockholms stad		RUMSFUNKTIONSPROGRAM		2016-03-01	2016-03-01
Stockholm Land		Slussen Land		03	02
Kategori		RFP nr		2017-03-22	
Leverans		Kategori			
Mät enhet		Mät enhet			
Rumsnummer		Rumsnamn		Area m ²	
L444002		ATRUM		118.8	
L444003		ATRUM		118.79	
TÄLJEN		Pisser normal (st)			
SÖRKLJUV		Dörröndörr			
TEMPERATURKLIMAT		Temperatur sommar (max/min)		20/28 °C	
LJUD		Luftfuktighet			
BYGG		Social			
LÅSTYR		Punktlås (A)			
BEHANDLINGSDIAGRAM		Sporer			
TÄRNING		Fäns			
INTELLIKT		Värmepump (Självt)			

RL_TypeID	Armskild	Specifikation	Armskild	Rev
EA1101-V		Fabrikat: Fagerhult Typ: Alfa klar Anv: 12345 Drift: HF On/Off Slysförm: IP44 Belysning: 2X28W Antal: 1		
EA1101-V		Fabrikat: Fagerhult Typ: Alfa klar Anv: 12345 Drift: HF On/Off Slysförm: IP44 Belysning: 2X28W Antal: 17	Monteras mot vägg	
EA1102-V		Fabrikat: Fagerhult Typ: Alfa klar Anv: 12345 Drift: HF On/Off Slysförm: IP44 Belysning: 2X28W Antal: 5		
		Fabrikat: Mlux Typ: LP LED Anv: 12345 Drift: HF On/Off Slysförm: IP65 Belysning: LED 2X1W Antal: 1	Monteras ock tak, ett uk stage eller ränna	
		Fabrikat: Fagerhult Typ: Alfa klar Anv: 12345 Drift: HF On/Off Slysförm: IP44 Belysning: 2X28W Antal: 52	Monteras ock tak, ett uk stage eller ränna	
		Fabrikat: Philips Typ: CoreLine Anv: 12345 Drift: HF On/Off Slysförm: IP44 Belysning: LED 2x1W Antal: 1		