

# Enhance Rebar detailing with Revit and Graitec Powerpack !

**Stevens CHEMISE**

BIM Industry Manager | @stevens\_chemise

**Daniel GHEORGHE**

Structural Specialist Engineer





# About the speaker

Stevens CHEMISE

Structural Engineer

BIM Industry Manager at Graitec Innovation , part of the Graitec Product Management Team

15 Years experience in several BIM Software companies

Main technical expertise on Revit, Navisworks, BIM 360 for Architects or structural engineer, workflow between Autodesk products and Graitec design software.



# About the speaker

Daniel GHEORGHE

Structural Engineer

Technical solutions consultant at Graitec Romania

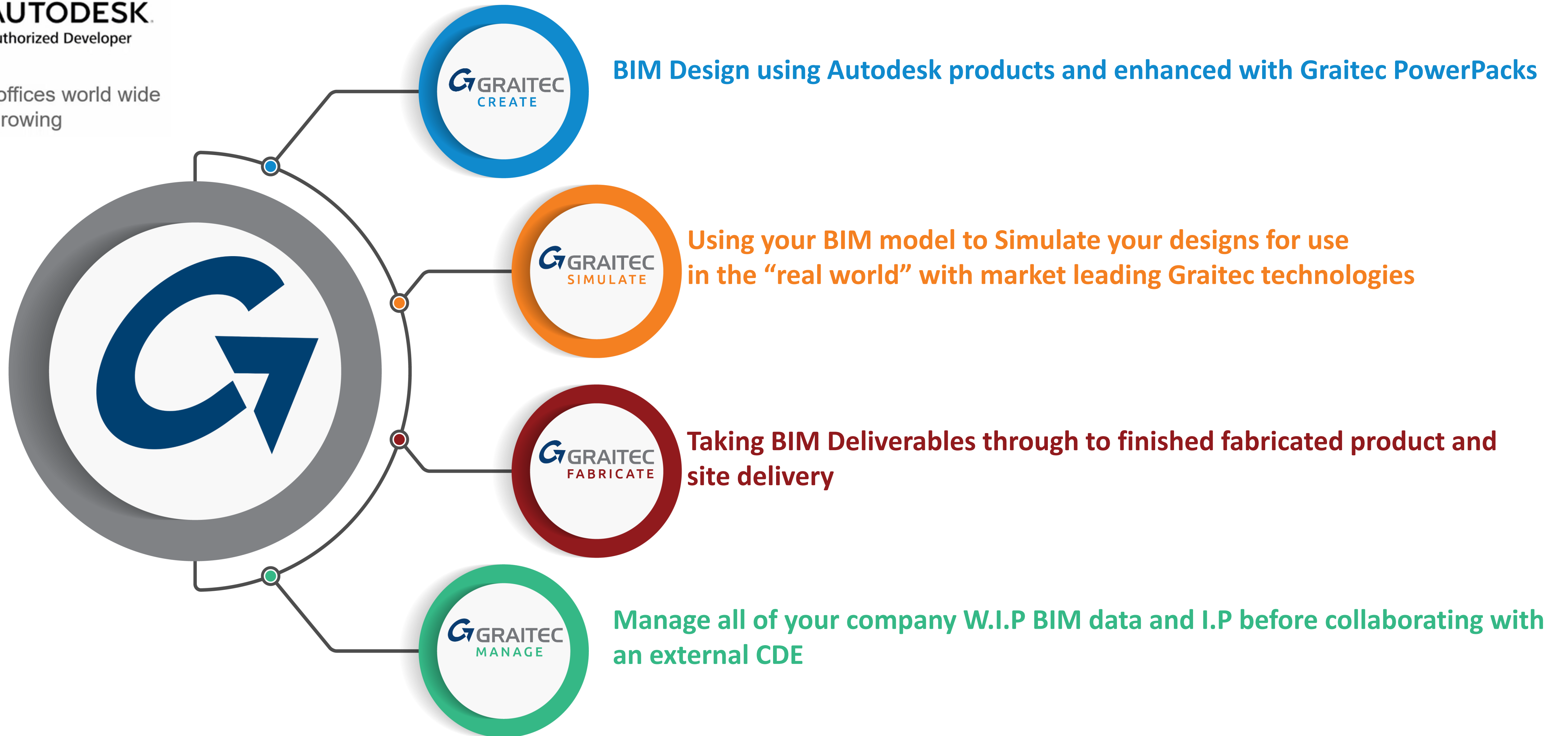
Part of the R&D and Sales departments

7 years experience with Revit Structure

Certified Professional and ATC Instructor

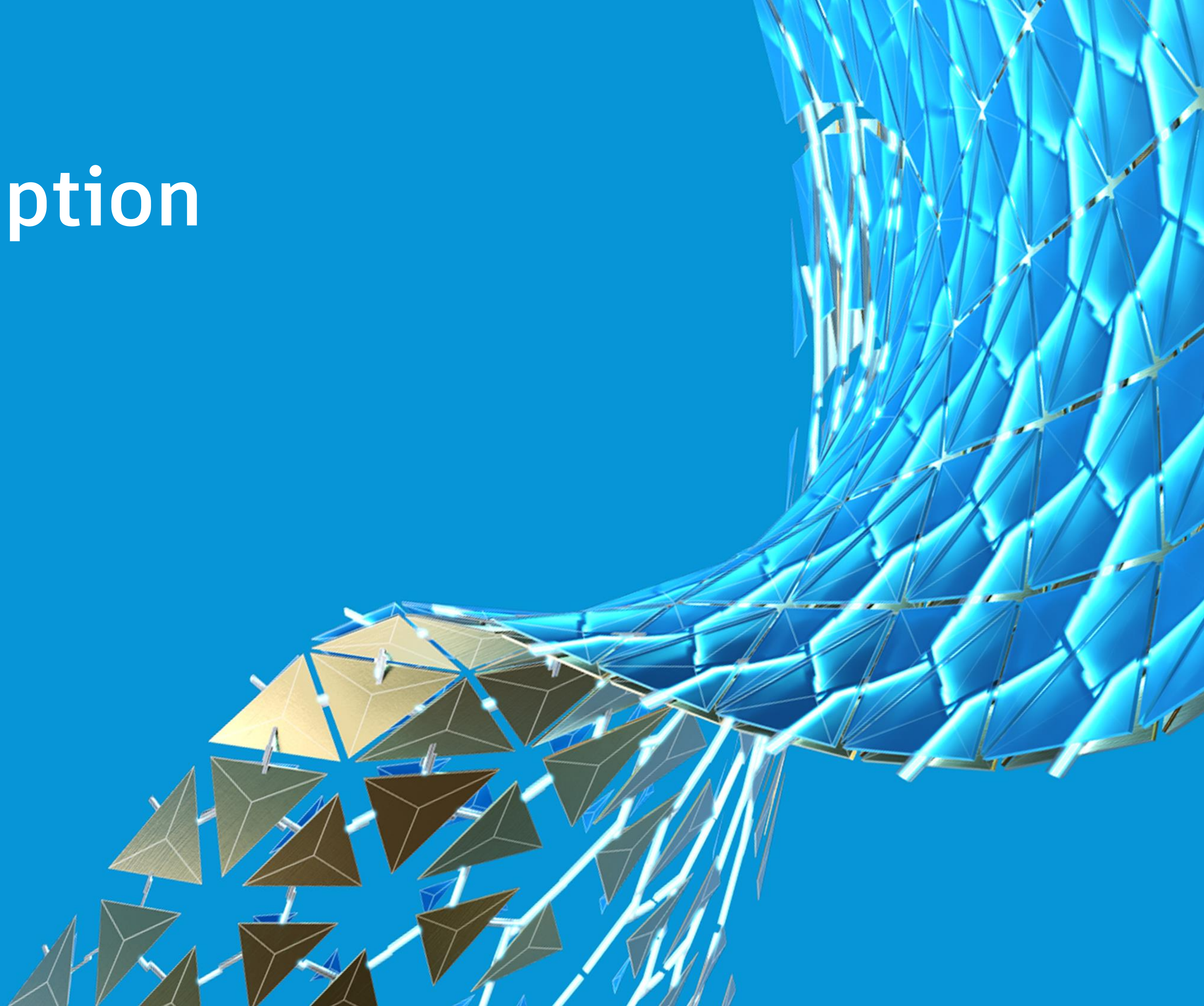
I use my structural engineering experience to develop and improve our solutions. Proficient with BIM 360, Dynamo for Revit, Advance Steel, Navisworks





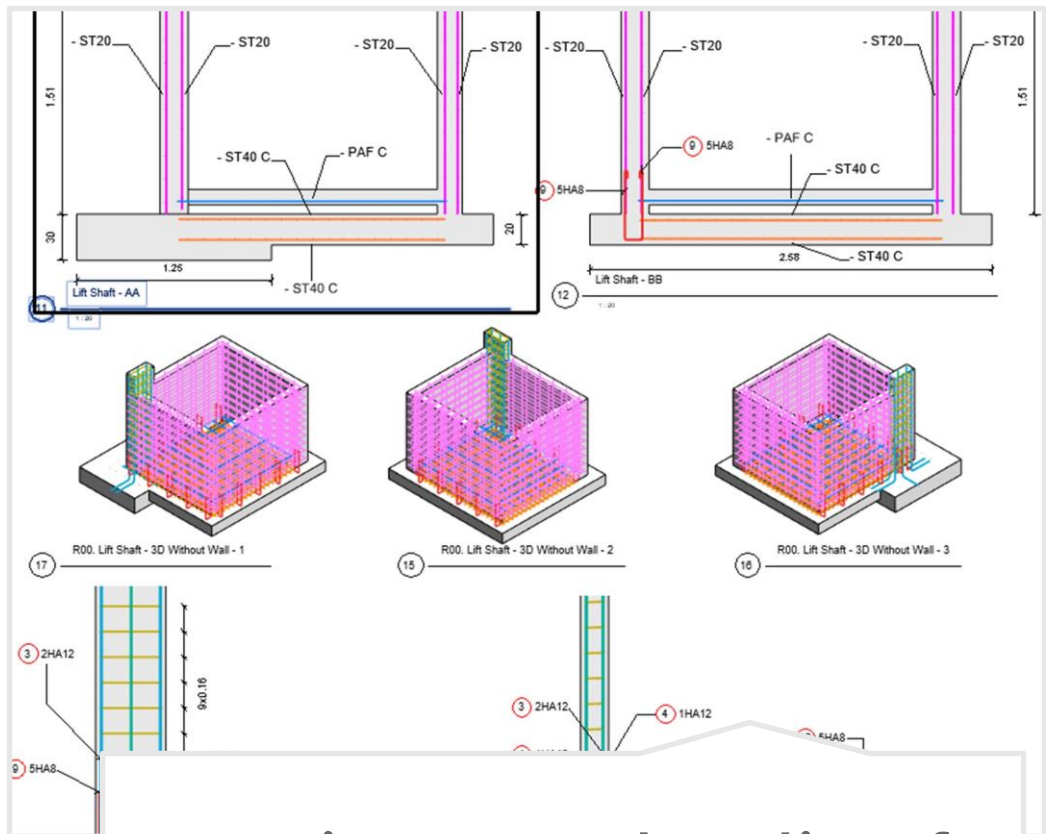


# Class Description

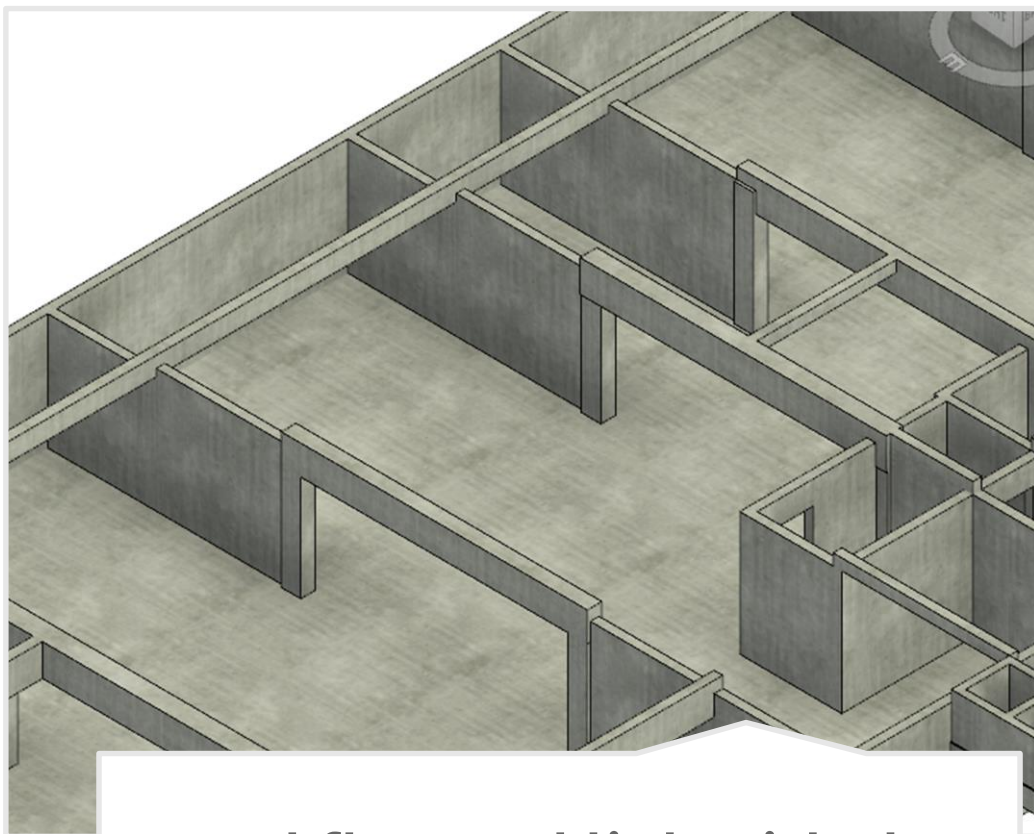




# 3D Reinforcement, why ?



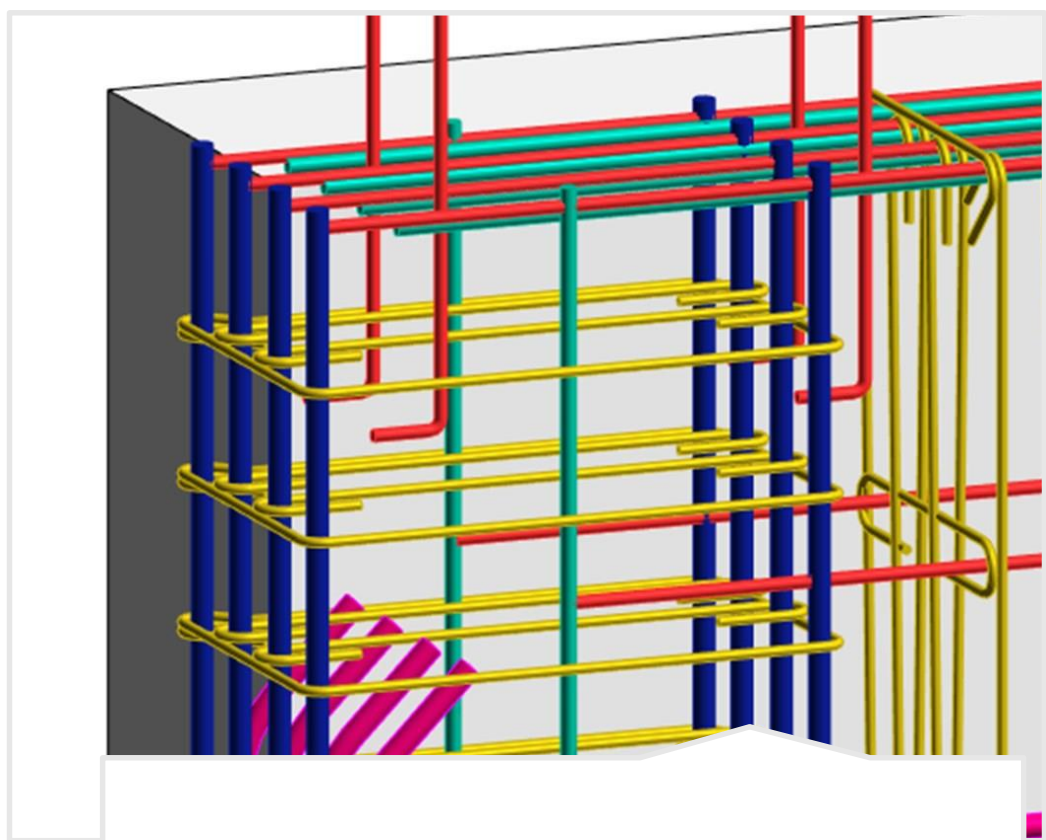
Consistency and quality of reinforcement drawings



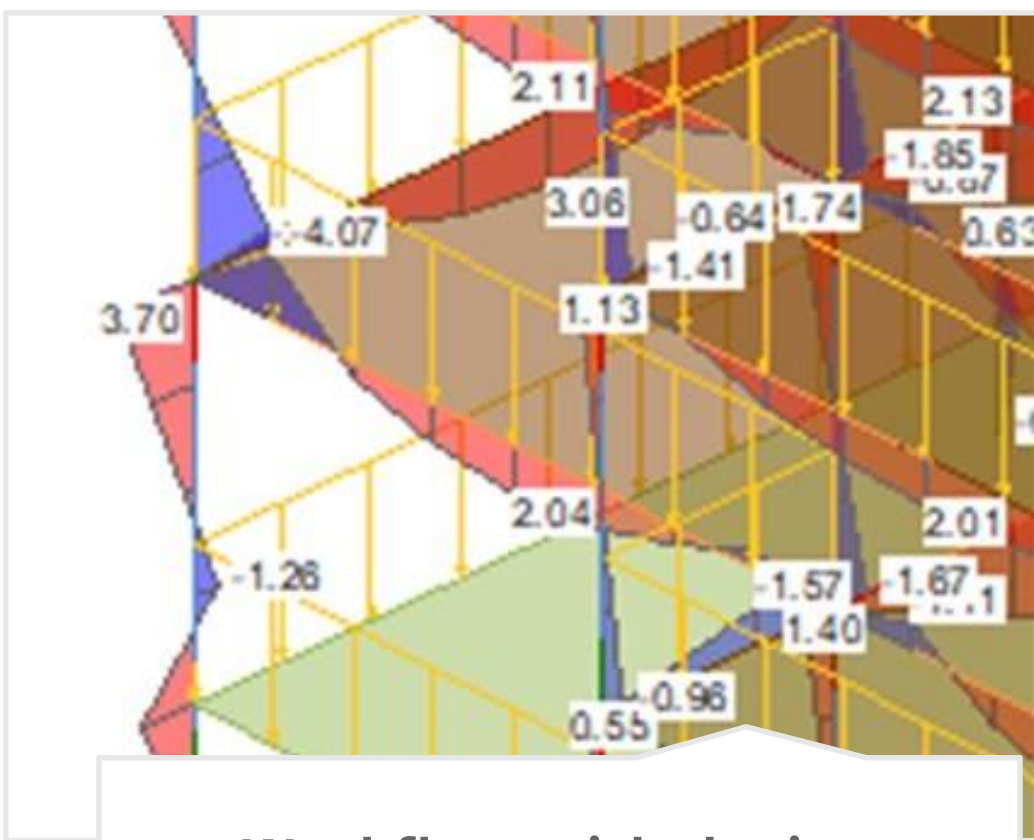
Workflow and link with the Revit formwork model

1	4	HA8 (B500A)	5.58	5500
2	19	HA6 (B500A)	1.94	810 810
3	2	HA8 (B500A)	5.79	5650
4	4	HA8 (B500A)	5.55	5500
5	2	HA8 (B500A)	1.23	1100
6	2	HA8 (B500A)	1.70	1700

Quantity take Off



Clash detection



Workflow with design software



Workflow with Fabrication



In this class, you will discover a set of effective tools to address rebar detailing topics within Revit using the PowerPack add-on.

First, you will measure added value of using wizard for **3D cage generation**, applied for usual linear elements such as **beams, columns and footings**, respecting common constructive disposal rules. Complementary tools to manage rebars during creation phase will be presented such as controlling rebar visibility or manipulating bars (trim, extend, copy or split bars...).

Then, standards reinforcement will be completed with additional bars placed around **openings and edges** for planar elements (**walls and slabs**). Automatic schedules will be created thanks to flexible and configurable templates.

To conclude, **reinforcement drawings** will be generated with specific commands, assisting users to choose right tittle blocks, to place views or schedules in final sheets. Drawings will be tuned with **bending details, automatic schemas** completing schedules and **end bar symbol**.

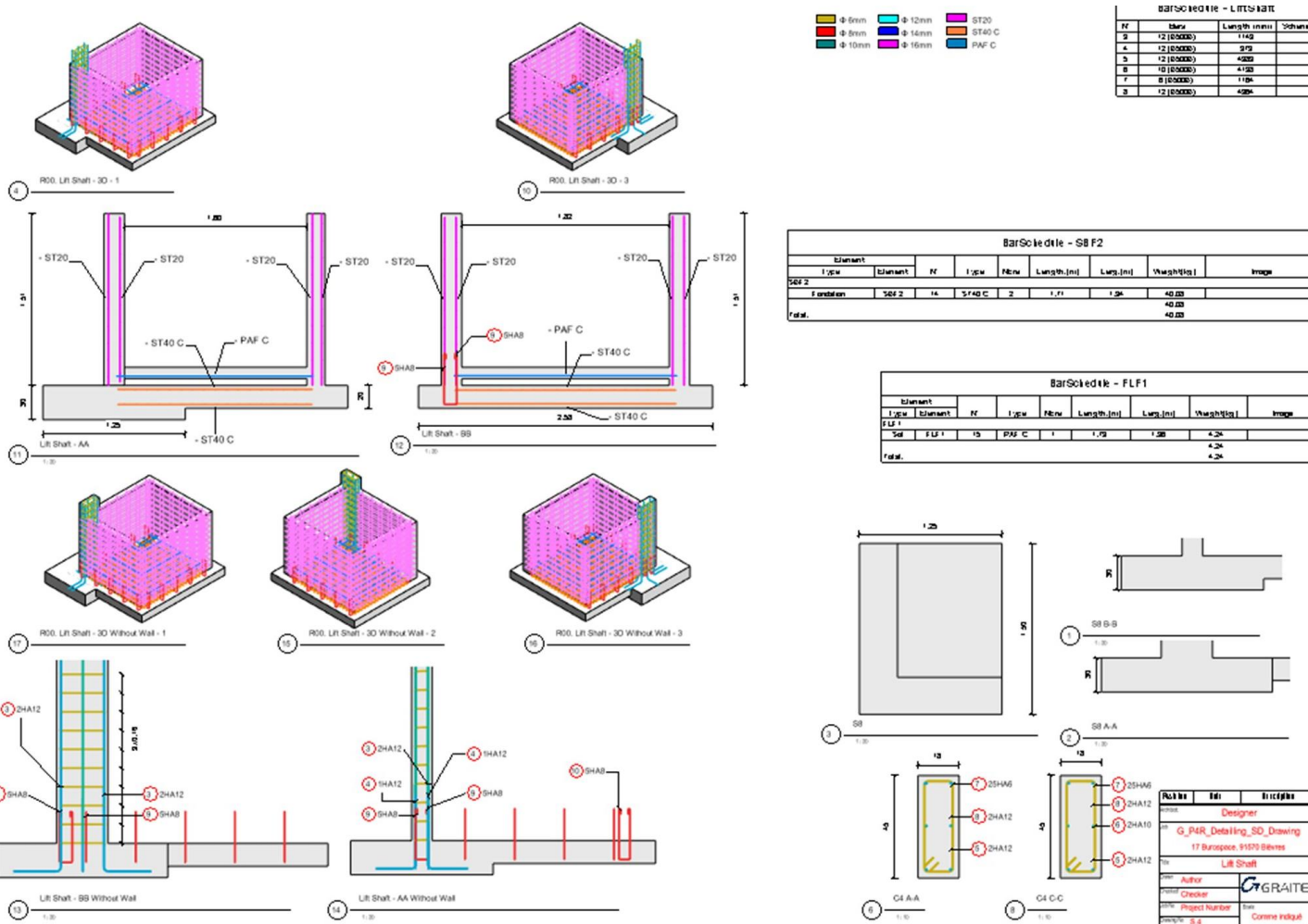
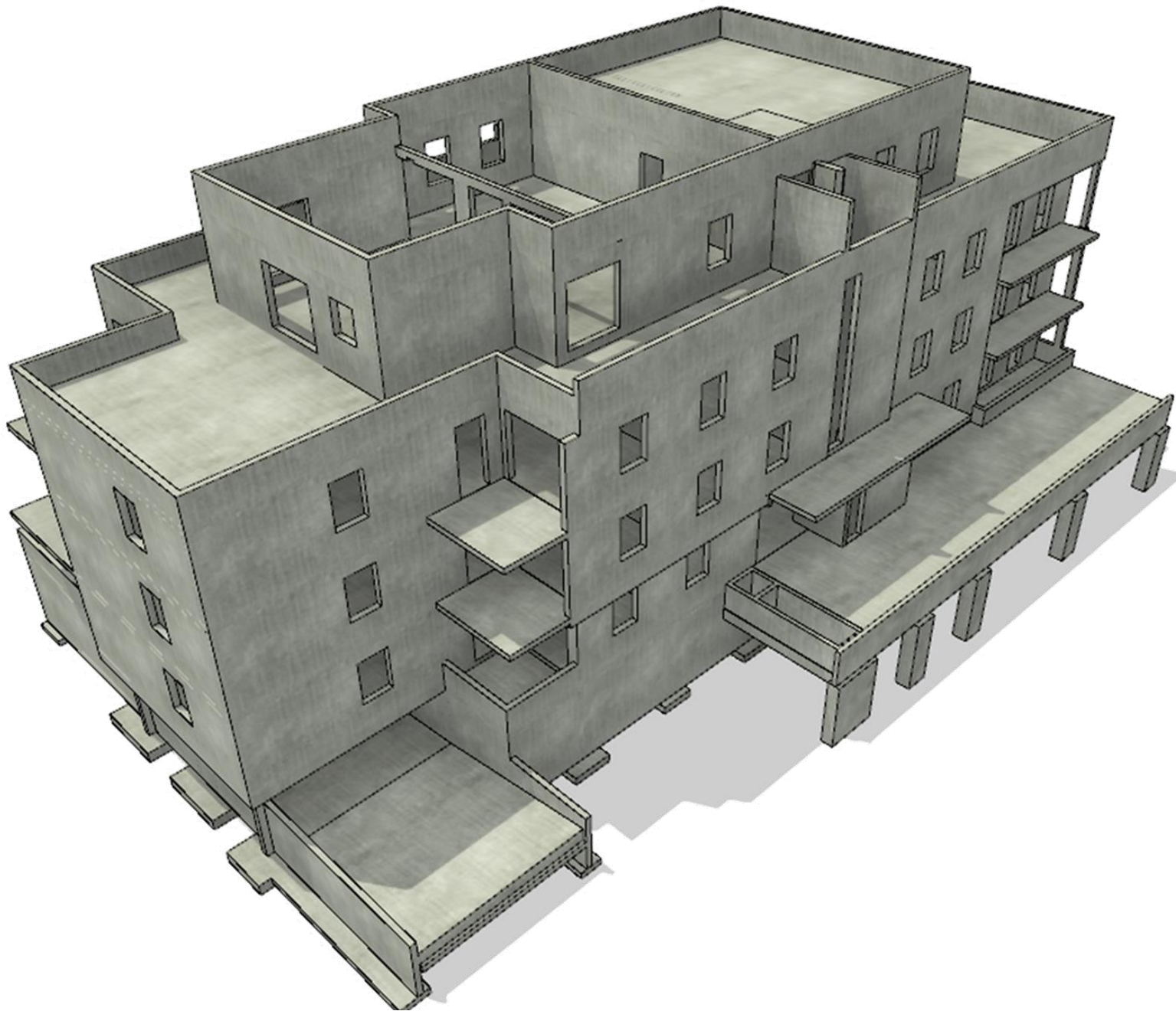
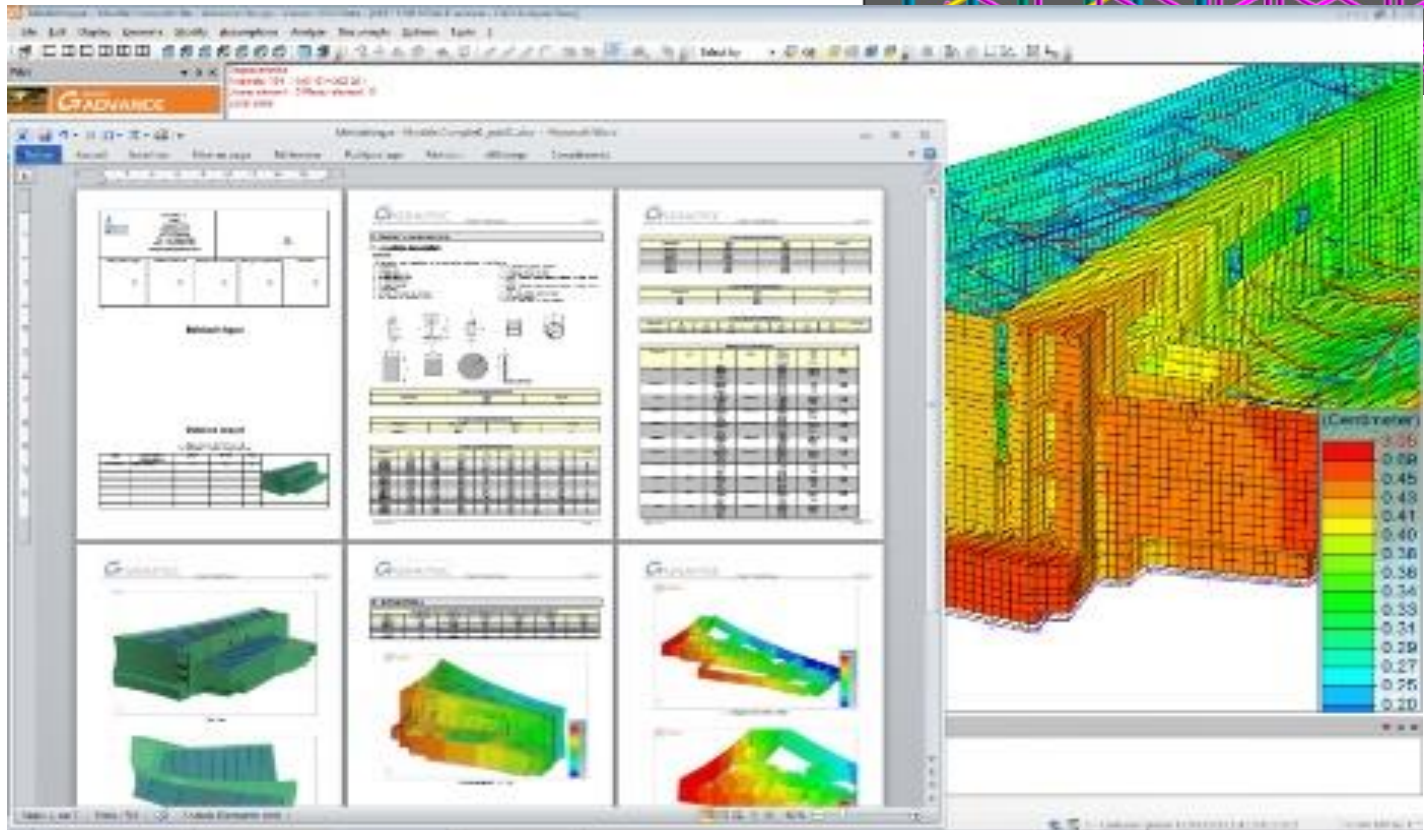
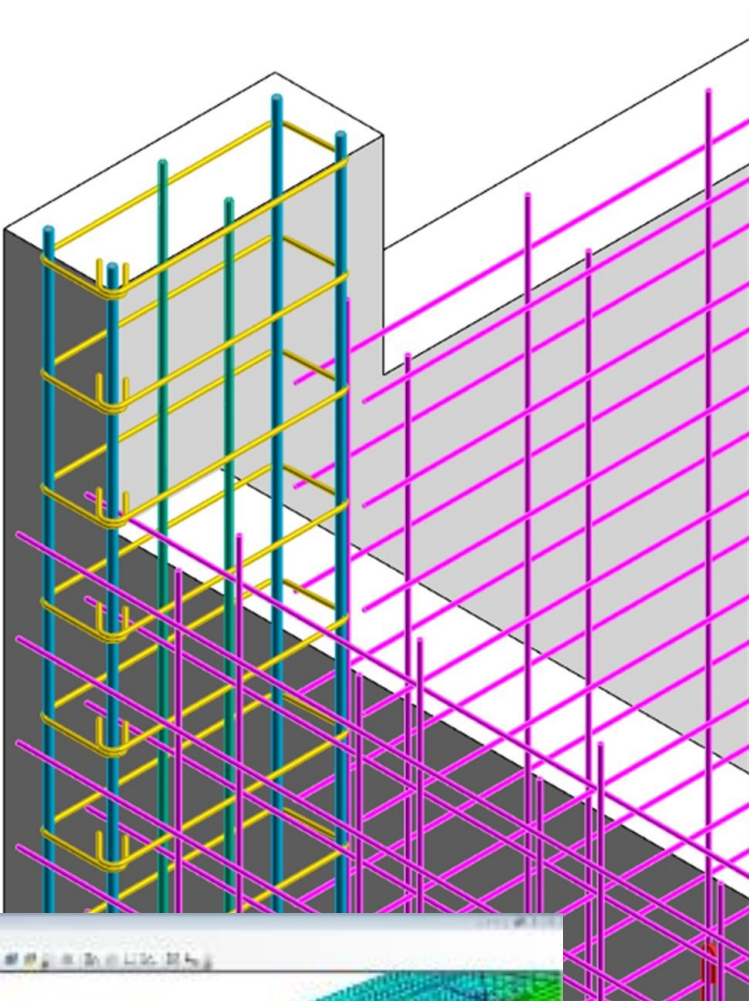
# Learning Objectives

- **Generate parametric rebar cages for RC members, including automatic constructive disposals.**
- **Generate bars and fabrics schedules and get quantity takeoff in few clicks!**
- **Edit Rebar in your Revit Model : split, crank, copy rebar, visibility ...**
- **Custom and tune final rebar drawings with dedicated detailing tools.**



# Typical personas

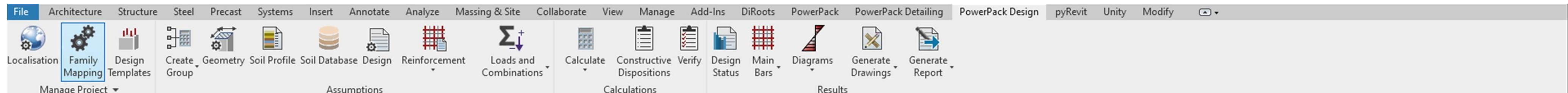
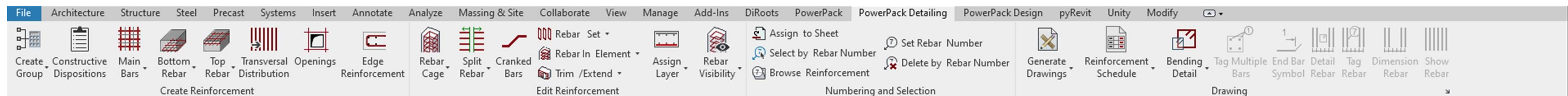
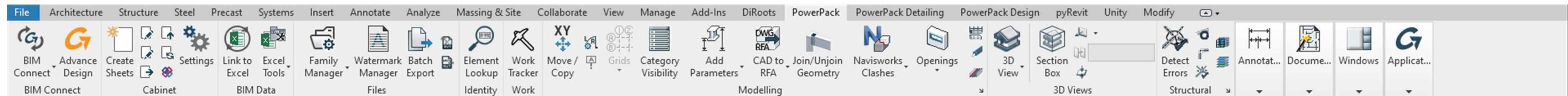
- Rebar Draftsmen
- Rebar detailers
- Structural engineers
- BIM Modeler
- BIM Manager for structural project





# WHAT IS POWERPACK FOR REVIT ?

- The GRAITEC PowerPack provides a broad suite of unique commands and functionality to significantly increase productivity when working with Autodesk® Revit®





# WHAT IS POWERPACK FOR REVIT ?

**8**

**LANGUAGES**

Constructive  
Dispositions, Design  
codes ....

**+80**

**TOOLS FOR ALL REVIT  
USERS**

For Architects, MEP,  
Structural users ( Link To  
Excel, Family Manager,  
Element lookup ...)

**+50**

**DEDICATED TOOLS FOR  
REBAR DETAILING**

Features to speed up  
rebar cages generation  
and detailing drawings

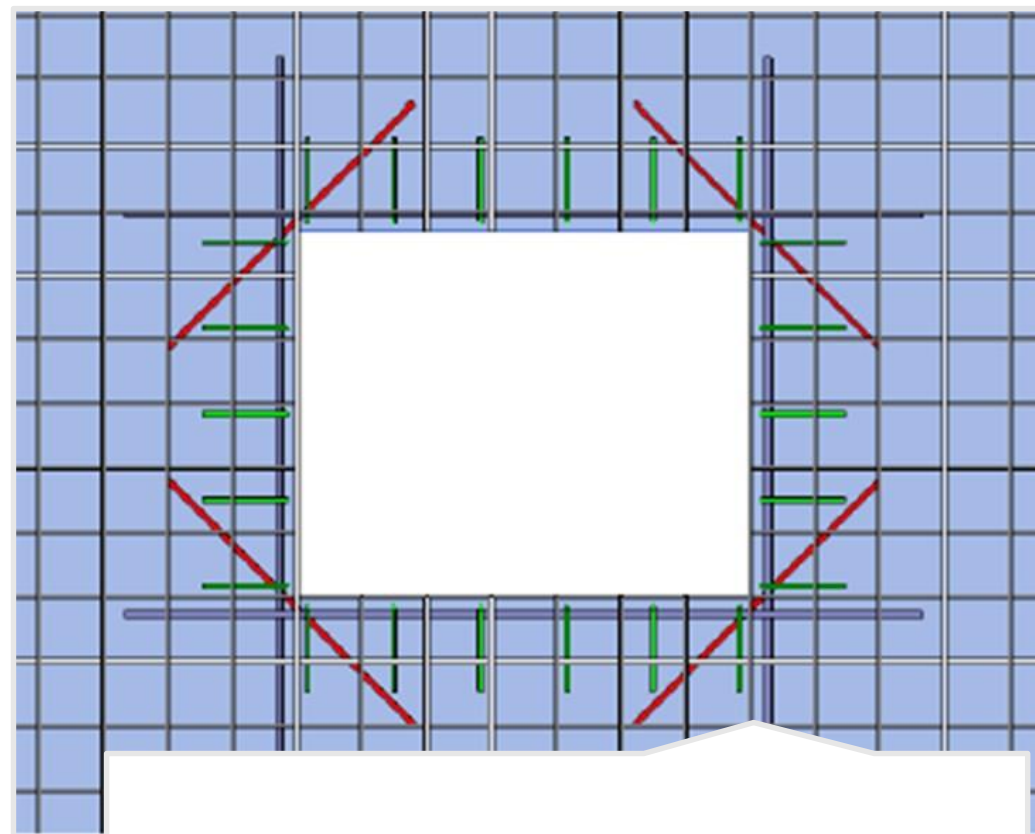
**+20000**

**USERS**

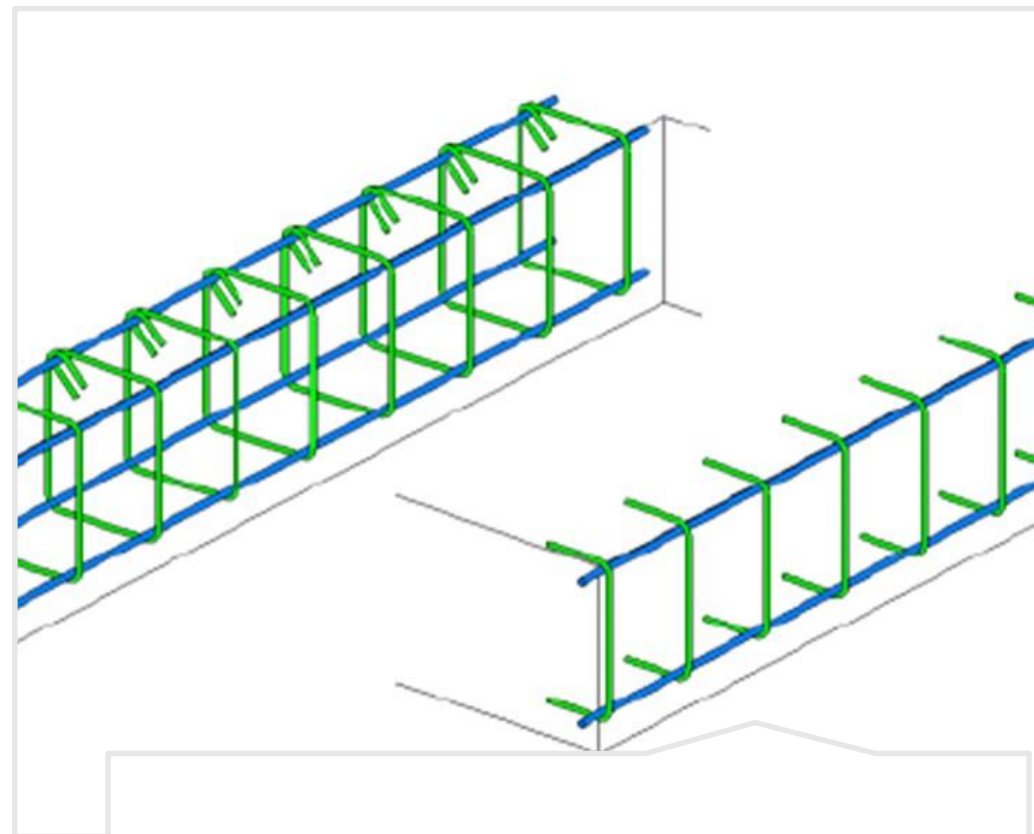
Revit users around the  
globe



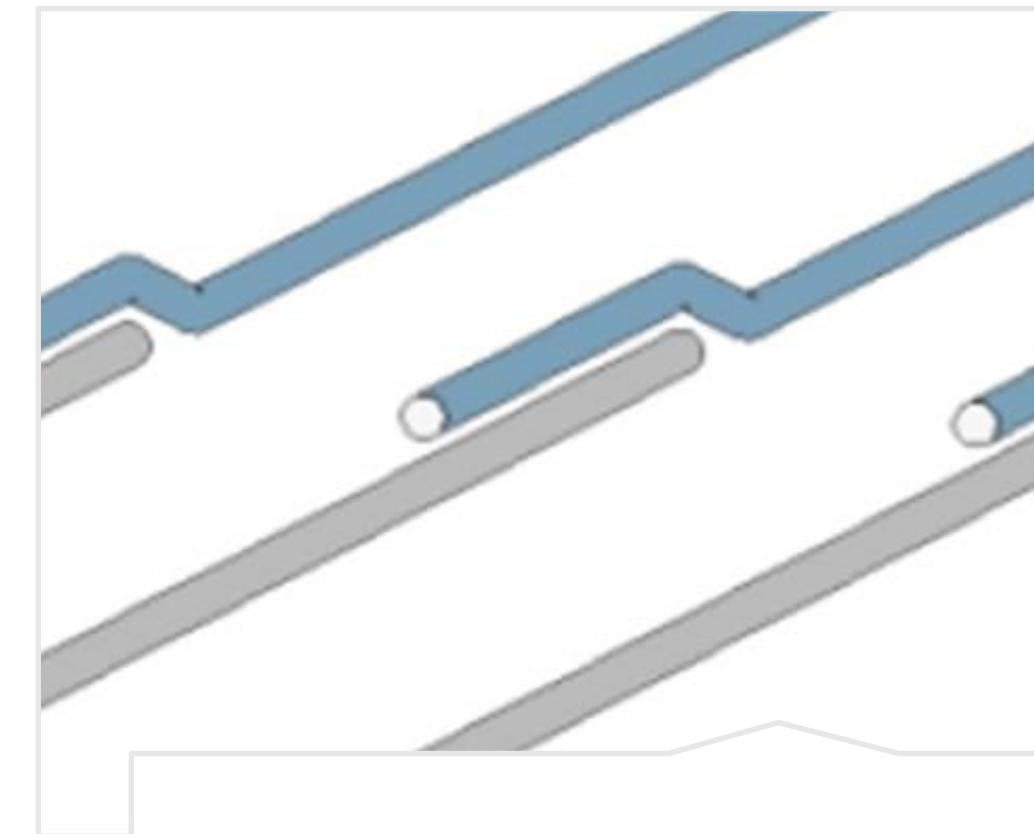
# NEW FEATURES



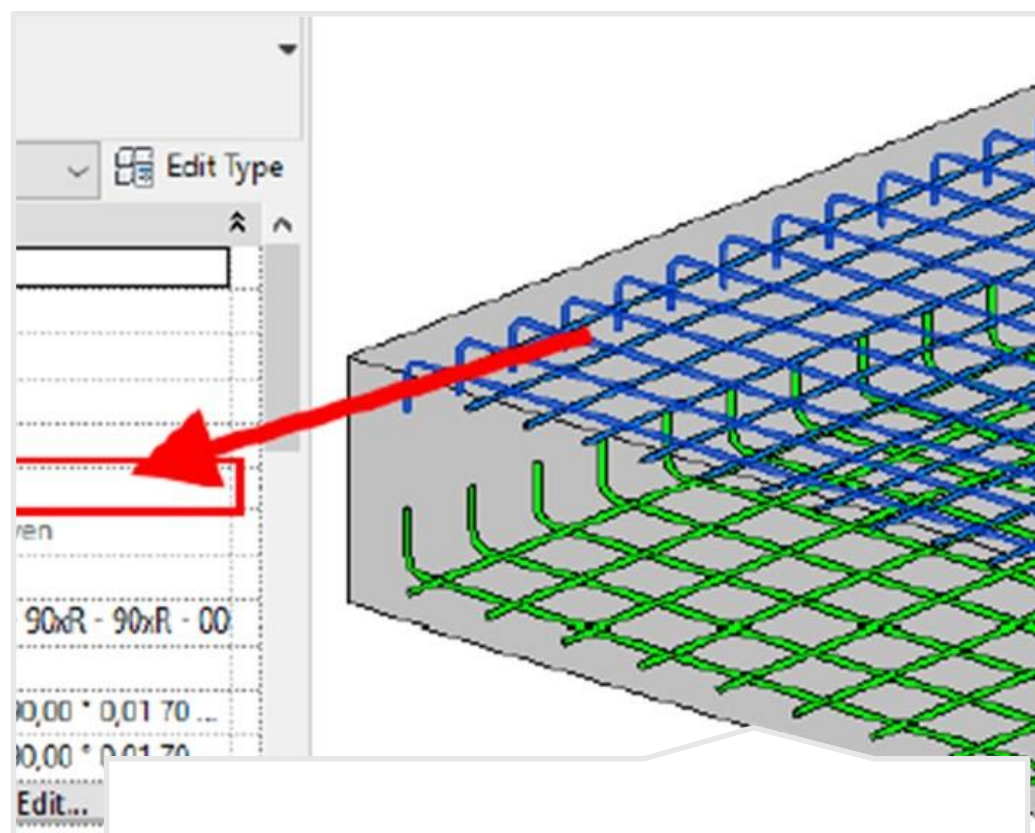
Opening



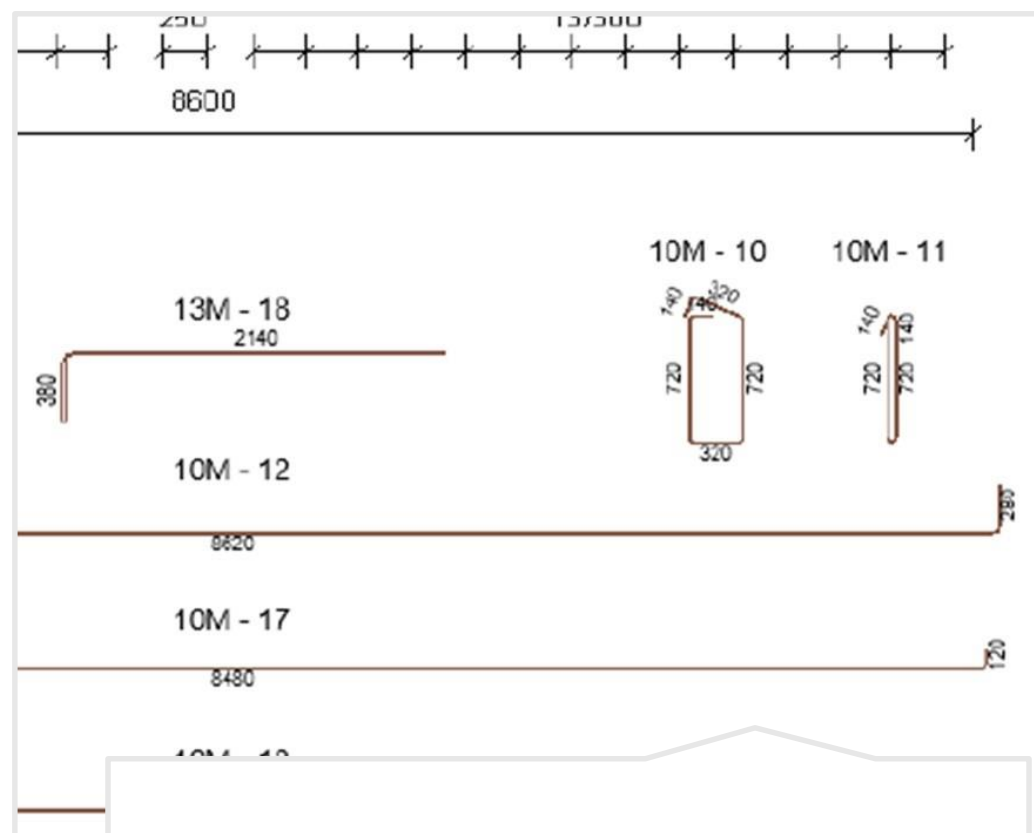
Edge



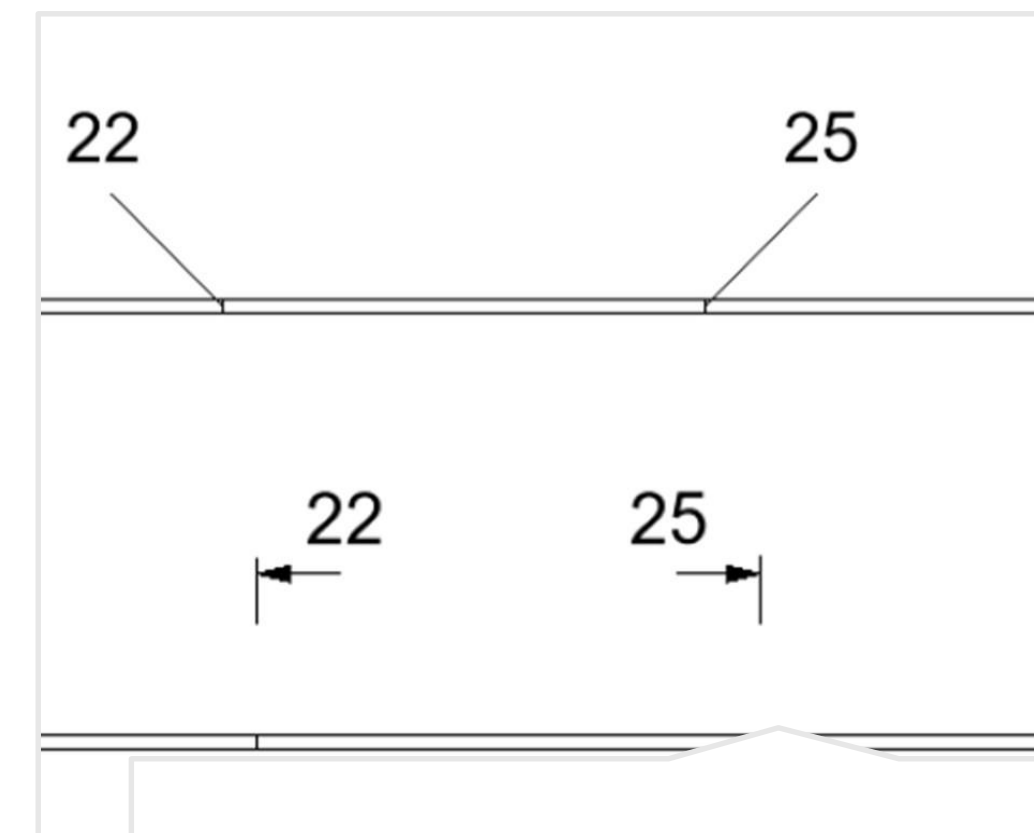
Cranked Bar



Layers



Bending details



End Bar Symbol

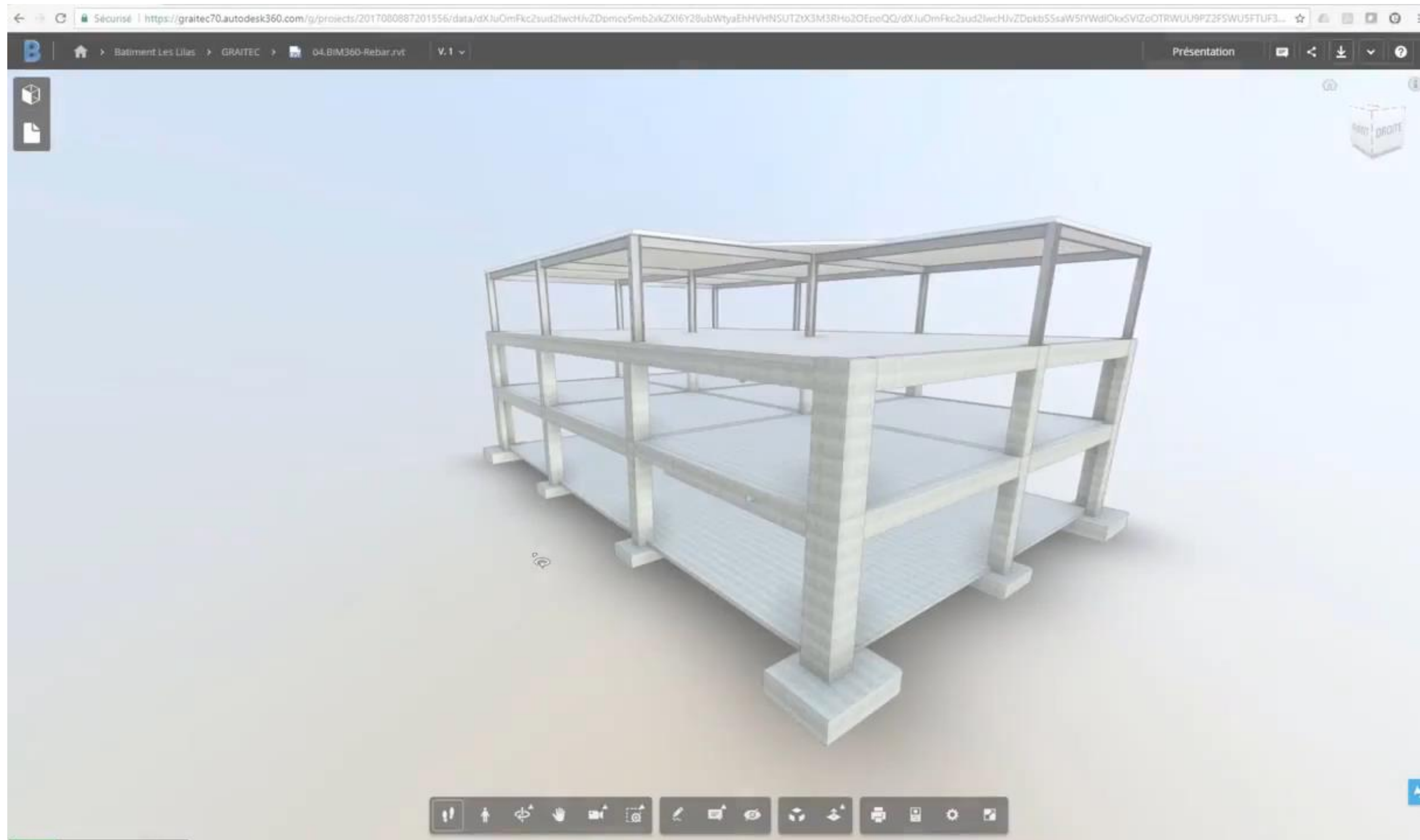


LIVE DEMO





# PUBLISH MODEL WITH BIM 360

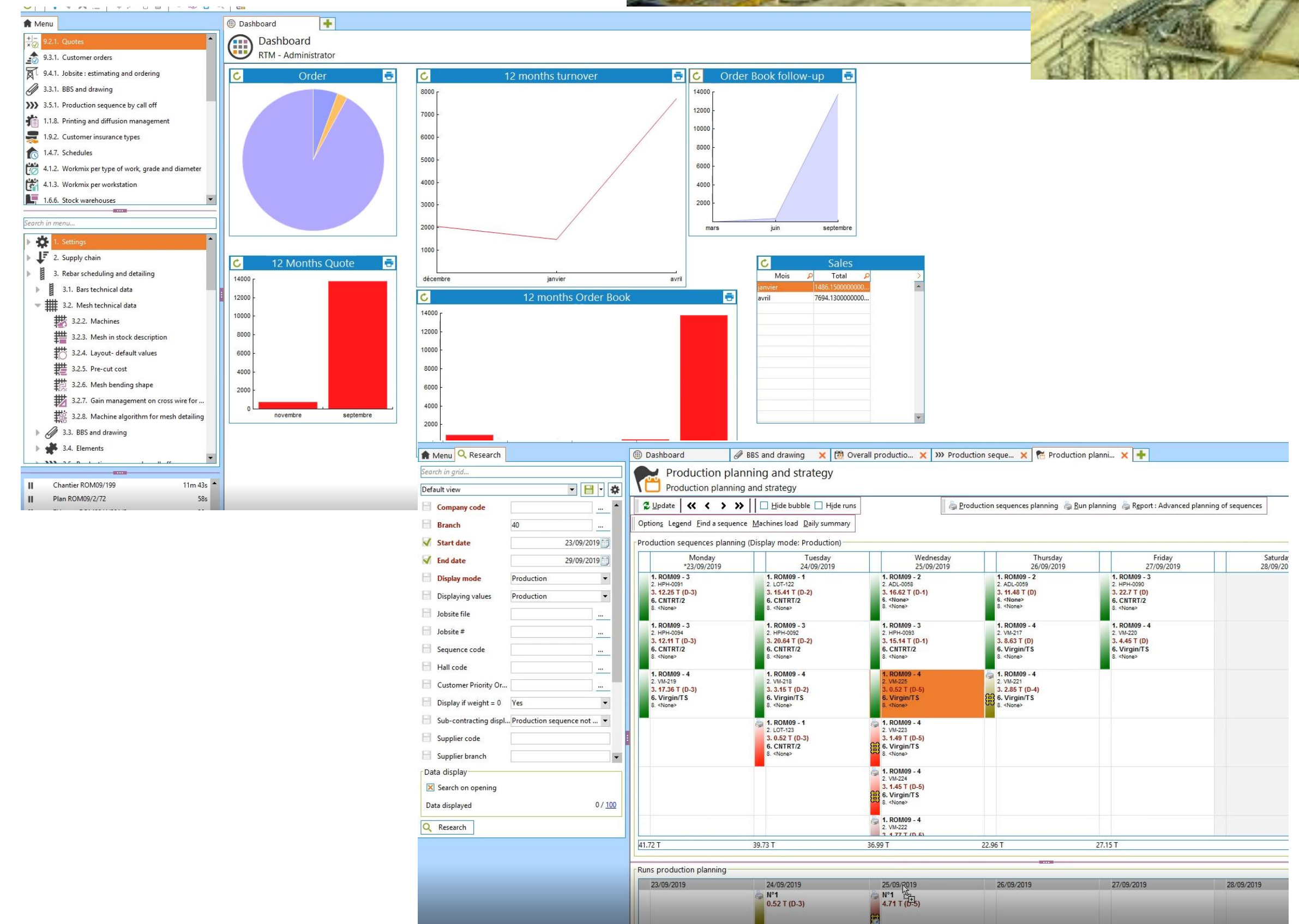




# Link to Fabrication

Arma+ is a full integrated Rebar and Steel Workshop Management system (MIS), existing since more than 30 years, able to complete production control

- Automated allocation and routing of jobs
- Optimization of the rebar cages for fabrication
- Time assessment and workload calculation
- Stock management
- Material traceability and optimization
- Material optimization
- Project and delivery planning management





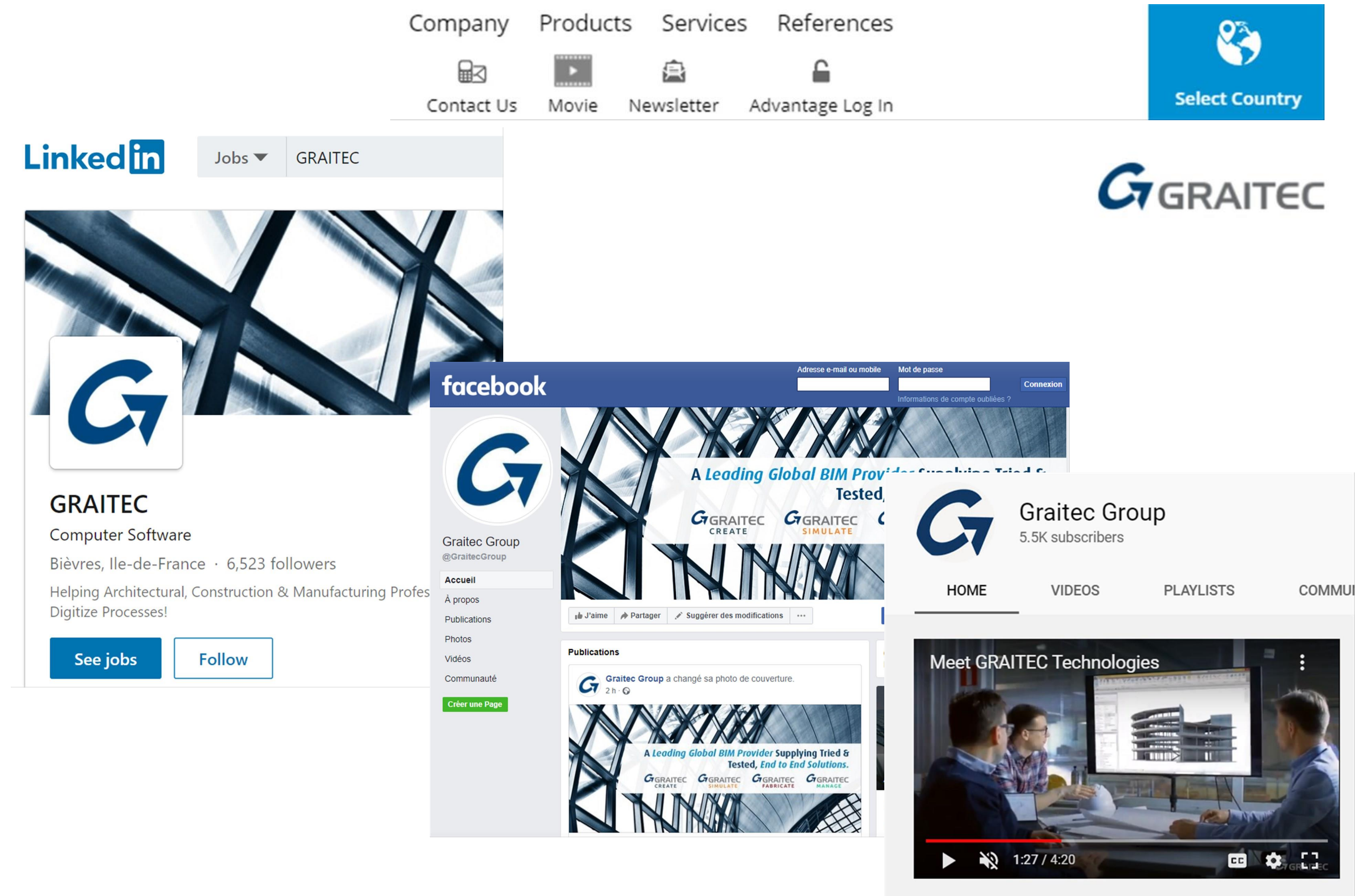
# Additional ressources @Graitec\_group

- [WWW.GRAITEC.COM](http://WWW.GRAITEC.COM)

- [LINKEDIN](#)

- [YOUTUBE](#)

- [FACEBOOK](#)







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