



# ¿CUÁNDO USAR DYNAMO?



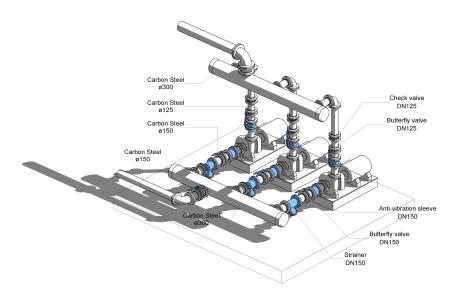
#### TIPOS DE RUTINA SEGÚN LA FRECUENCIA DE USO:

- Sistemáticas
- Ocasionales



#### **DYNAMO APLICADO A REVIT MEP**

- Numerosas categorías en Revit
- Familias con comportamientos muy diferentes
- Documentación gráfica específica para cada subdisciplina
- Modelos con una inmensa cantidad de elementos
- Estrictos requerimientos de iLOD
- Manejo masivo de parámetros





### **DYNAMO APLICADO A REVIT MEP**

	МЕР МО	DEL CATEGO	ORIES	
# -	NAME -1	CODE	TYPE 🔻	FUNCTION 💌
1	Air Terminals	ART	Terminals	RFA
2	Cable Tray Fittings	CTF	Networks	RFA
3	Cable Trays	CTR	Networks	System Family
4	Communication Devices	CDV	Devices	RFA
5	Conduit Fittings	CDF	Networks	RFA
6	Conduits	CDT	Networks	System Family
7	Data Devices	DDV	Devices	RFA
8	Duct Accessories	DUA	Networks	RFA
9	Duct Fittings	DUF	Networks	RFA
10	Duct Insulations	DUI	Networks	System Family
11	Duct Linings	DUL	Networks	System Family
12	Duct Placeholder	DPH	Networks	System Family
13	Ducts	DUC	Networks	System Family
14	Electrical Equipment	EEQ	Equipment	RFA
15	Electrical Fixtures	EFX	Terminals	RFA
16	Fire Alarm Devices	FDV	Devices	RFA
17	Flex Ducts	FDU	Networks	System Family
18	Flex Pipes	FPI	Networks	System Family
19	Lighting Devices	LDV	Devices	RFA
20	Lighting Fixtures	LFX	Terminals	RFA
21	Mechanical Equipment	MEQ	Equipment	RFA
22	Nurse Call Devices	NDV	Devices	RFA
23	Pipe Accessories	PPA	Networks	RFA
24	Pipe Fittings	PPF	Networks	RFA
25	Pipe Insulations	PPI	Networks	System Family
26	Pipe Placeholder	PPH	Networks	System Family
27	Pipes	PIP	Networks	System Family
28	Plumbing Fixtures	PFX	Terminals	RFA
29	Security Devices	SDV	Devices	RFA
30	Speciality Equipment	SEQ	Equipment	RFA
31	Sprinklers	SPK	Terminals	RFA
32	Telephone Devices	TDV	Devices	RFA



# TIPOS DE RUTINA SEGÚN EL OBJETIVO















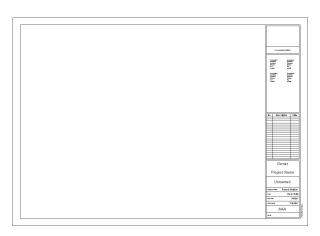
- Rellenado automático de información de carátulas de plano
- Renombrado masivo de ficheros PDF y modelos
- Modificación parcial de gran cantidad de archivos de texto
- Exportación a Excel
- Etc...





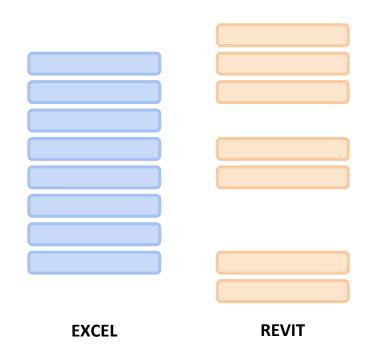






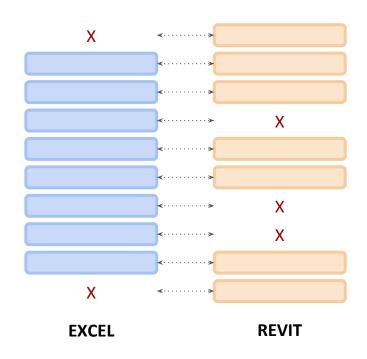






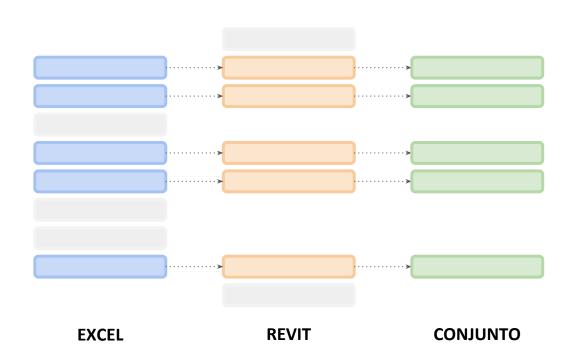
















#### • PARÁMETROS DE CARTELAS DE PLANO:

**30** PLANOS POR DISCIPLINA Y BLOQUE

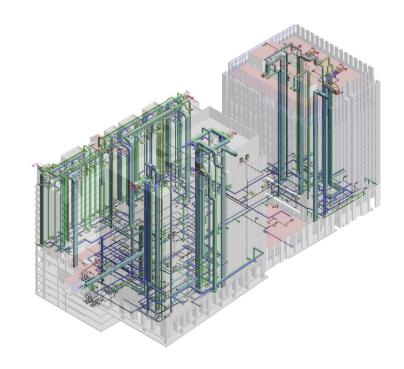
5 DISCIPLINAS POR BLOQUE

**9** BLOQUES

 $30 \cdot 5 \cdot 9 = 1350 PLANOS$ 

**32** PARÁMETROS POR PLANO

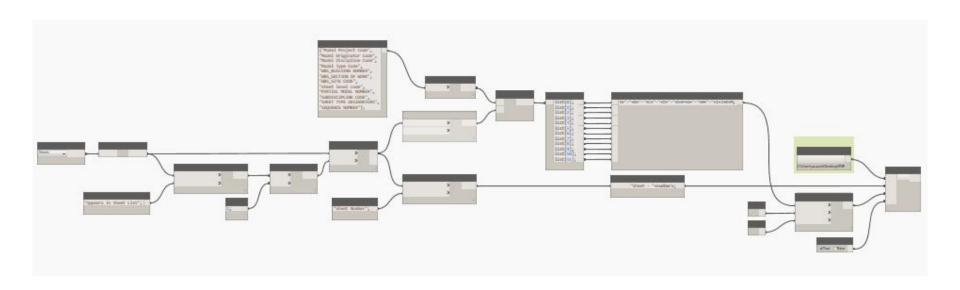
**TOTAL = 43200 DATOS** 







#### • RENOMBRAR PDF







#### • RENOMBRAR PDF

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🔀 R003-TEJ-MHV-	MD3-03BDUMG-ZZ-0000X_detached - Sheet - 00-02201 - UMG - 03 - MIX US.
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🔁 R003-TEJ-MHV-	MD3-03BDUMG-ZZ-0000X_detached - Sheet - 01-02201 - UMG - 03 - MIX US.
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	MD3-03BDUMG-ZZ-0000X_detached - Sheet - AA-01707 - UMG - 03 - MIX U



Nombre	<u> </u>
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#### • REQUERIMIENTOS ILOD

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		PARAMETERS (X) Instance Parameter (*) Type Parameter															30	ELEN	MENTS	s																NOT		
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MES	Mechanical	Balancing Damper Included	X							X																- 8				1								
MES	Electrical	Bursar Short Circuit Rating														Χ		<u> </u>																				
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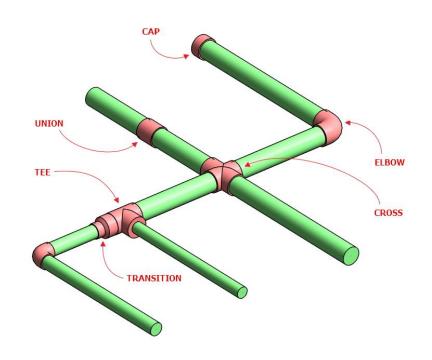


#### • REQUERIMIENTOS ILOD

#### ➤ Clash Priority:

Consiste en asignar un nivel de importancia de colisión a cada elemento

$$\emptyset$$
 = Pipe Nominal Diameter  
 $\emptyset < 15 \rightarrow C$   
 $15 \le \emptyset < 100 \rightarrow B$   
 $\emptyset \ge 100 \rightarrow A$ 

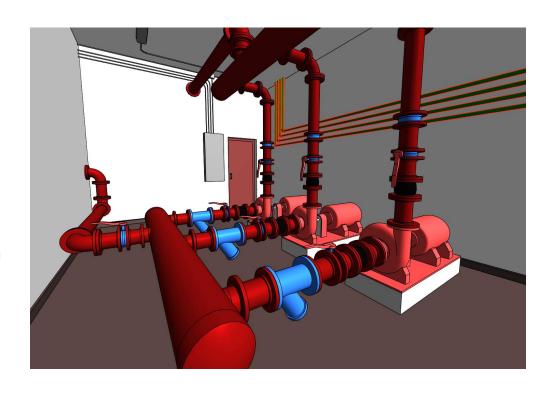






#### • REQUERIMIENTOS ILOD

- Uniclass
- > Tipología
- Habitación/Espacio
- > Zona
- Datos Mecánicos
- Datos Eléctricos
- > IDs de Equipo
- Códigos de Unidad de Obra
- Worksets
- ➤ etc...









#### • ¿CUÁNDO PLANTEAR RUTINAS DE MODELADO?

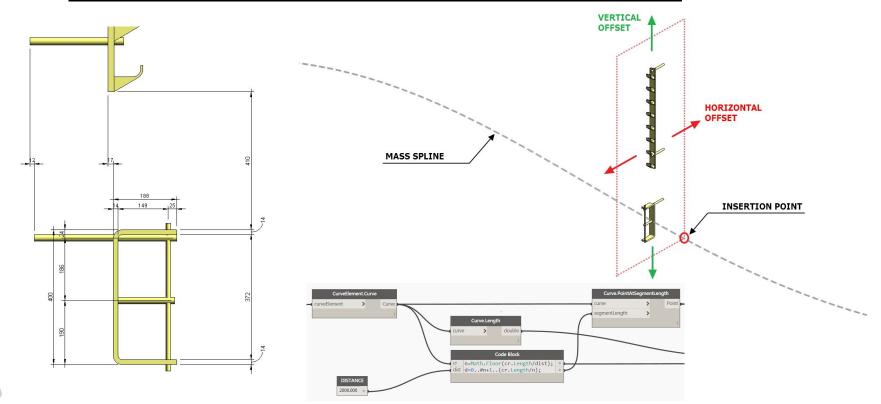
- Conjunto de elementos repetitivos
- Elementos de geometría "poco" común
- Modelado complejo
- Métodos tradicionales poco eficientes

ES NECESARIO VALORAR LA RELACIÓN TIEMPO/RESULTADOS DE CREAR UNA RUTINA DYNAMO PARA MODELADOS.





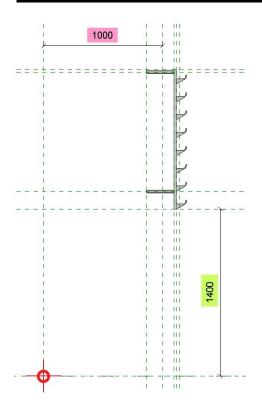
#### MODELADO DE SOPORTES DE CABLES EN TÚNELES DE METRO

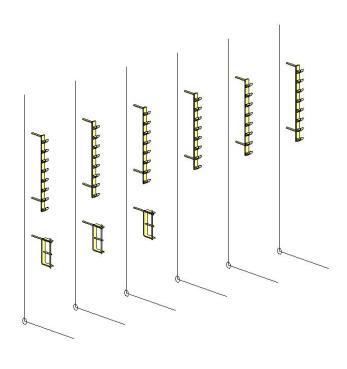






#### MODELADO DE SOPORTES DE CABLES EN TÚNELES DE METRO

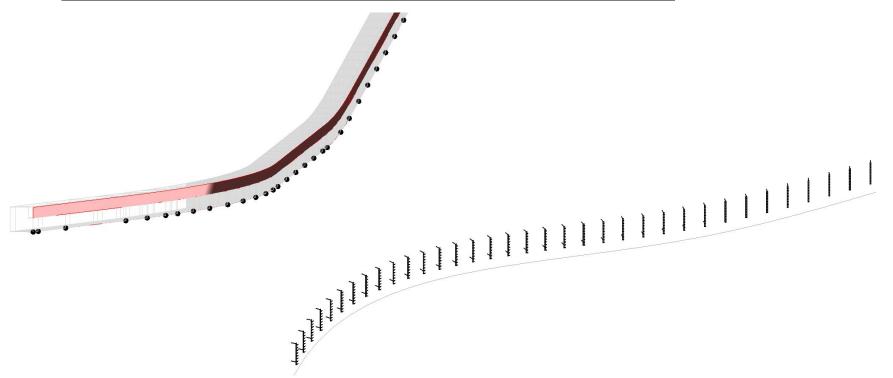








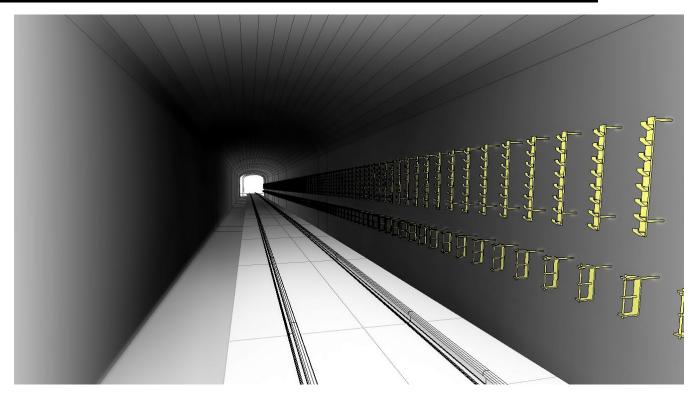
MODELADO DE SOPORTES DE CABLES EN TÚNELES DE METRO







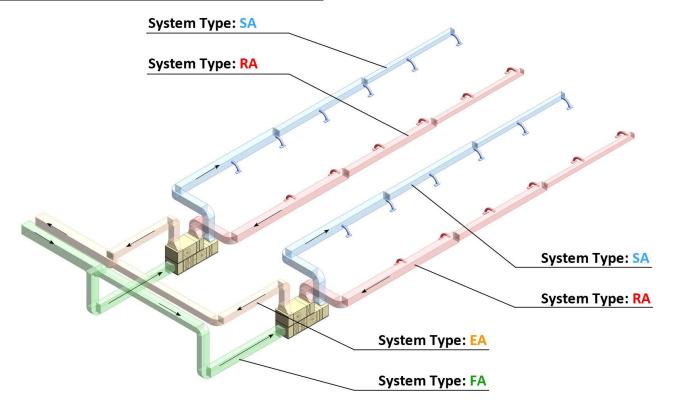
• MODELADO DE SOPORTES DE CABLES EN TÚNELES DE METRO





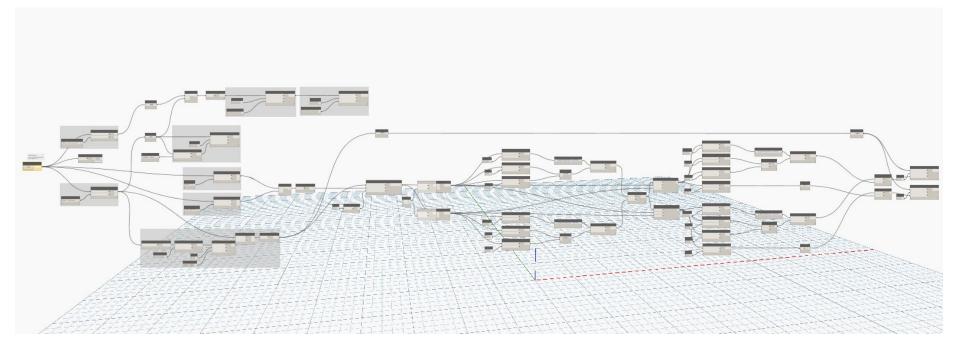






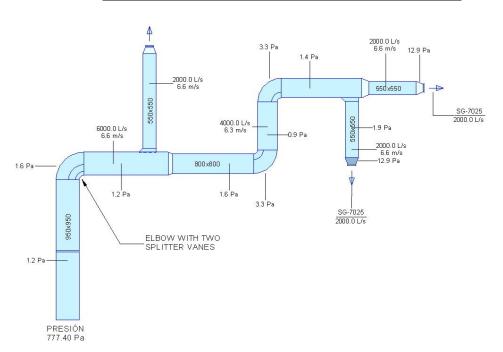


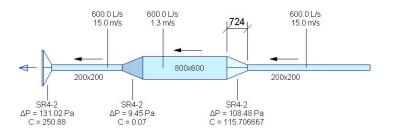
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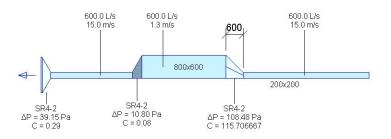


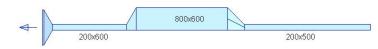






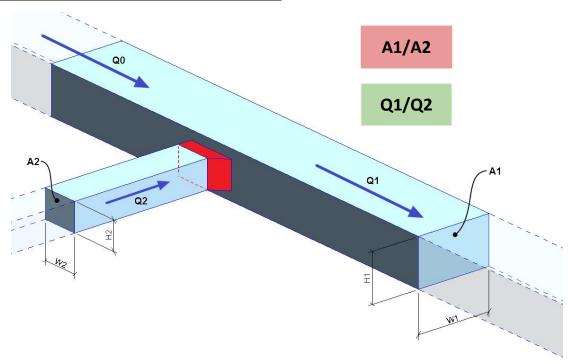








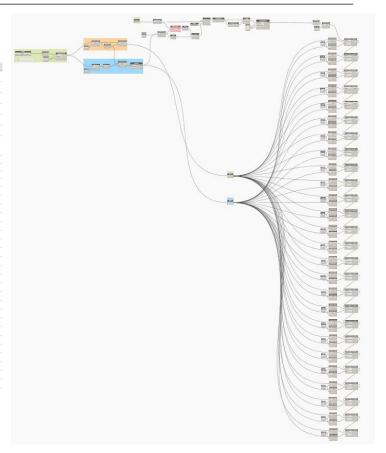








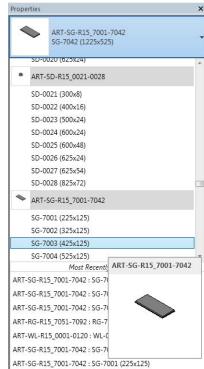
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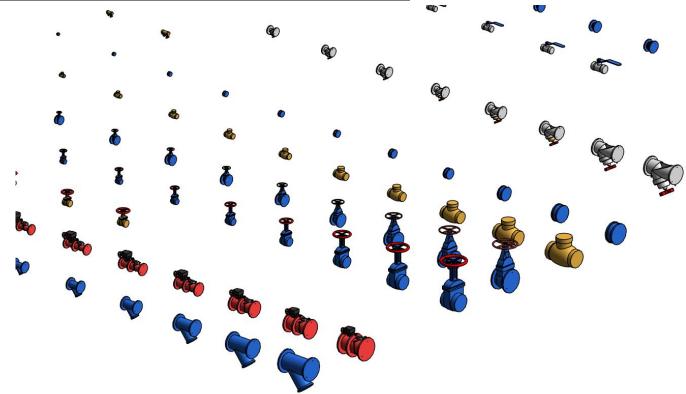






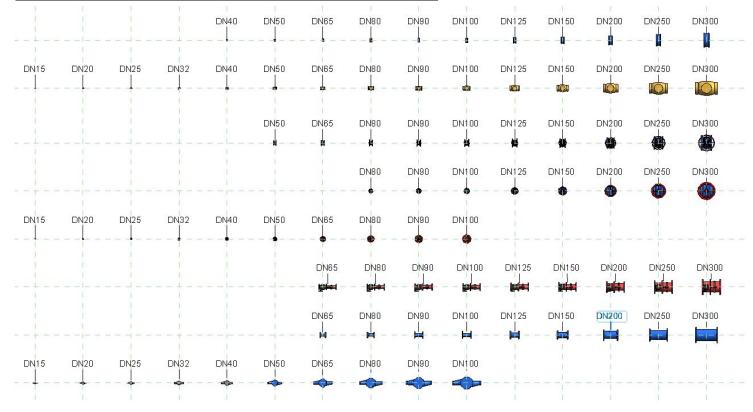














# GRACIAS

