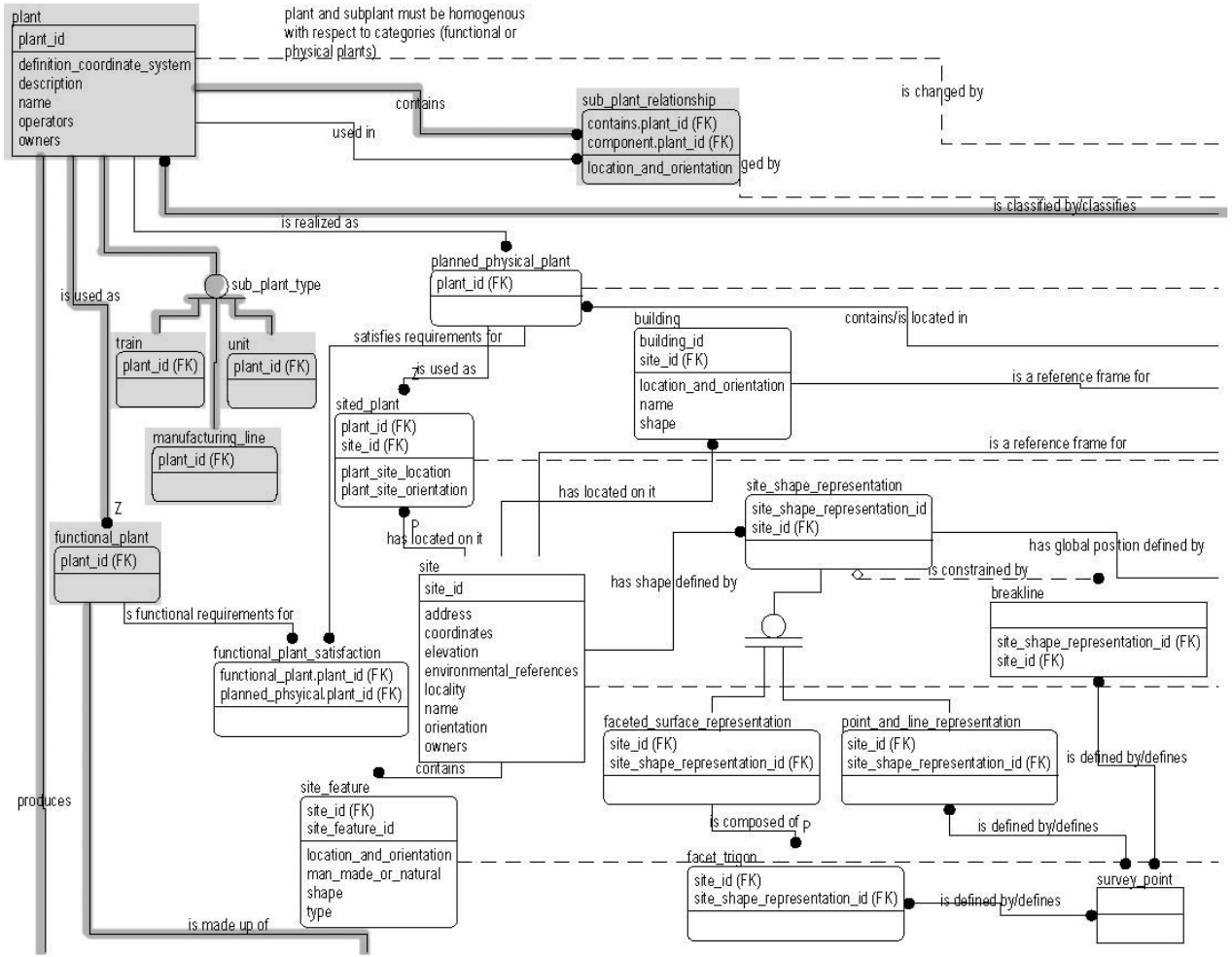
LEBENSLAUF

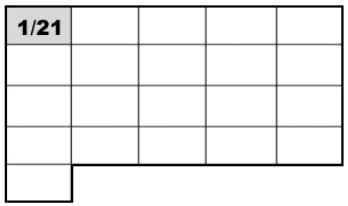
Name:	Jorge-León Posada-Velásquez	
Geburtstag:	21.02.1973	
Geburtsort:	Medellín, Kolumbien	
Schulbildung:	1979 – 1984	Grundschule (Primaria)
		Colegio Benedictino Santa María (Medellín, Kolumbien)
	1985 – 1990	Gymnasium (Secundaria)
		Colegio Benedictino Santa María (Medellín, Kolumbien)
Wehrdienst:	1991	Puerto Berrío, Kolumbien
Studium:	1992 – 1997	Maschinenbauingenieur (Ingeniero Mecánico)
		EAFIT Universität (Medellín, Kolumbien)
		Best Academic Record (Honors)
	1995 – 1996	Praktikum (6 Monate) - Kawasaki Heavy Industries
		Nishi-Akashi, Japan
Berufspraxis:	1996 – 1997	Mitglieder der CAD/CAM/CAE Forschungsgruppe
		EAFIT Universität (Medellín, Kolumbien)
	1998	DAAD Stipendium – Forschungsaufenthalt
		Fraunhofer Institut Graphische Datenverarbeitung
		Abteilung A2: Industrielle Anwendungen (Darmstadt)
	1998 – 2001	Wissenschaftlicher Mitarbeiter
		Fraunhofer Institut Graphische Datenverarbeitung
		Abteilung A2: Industrielle Anwendungen (Darmstadt)
	Seit 2001	Wissenschaftlicher Direktor
		VICOMTech Research Centre (San Sebastian, Spanien)

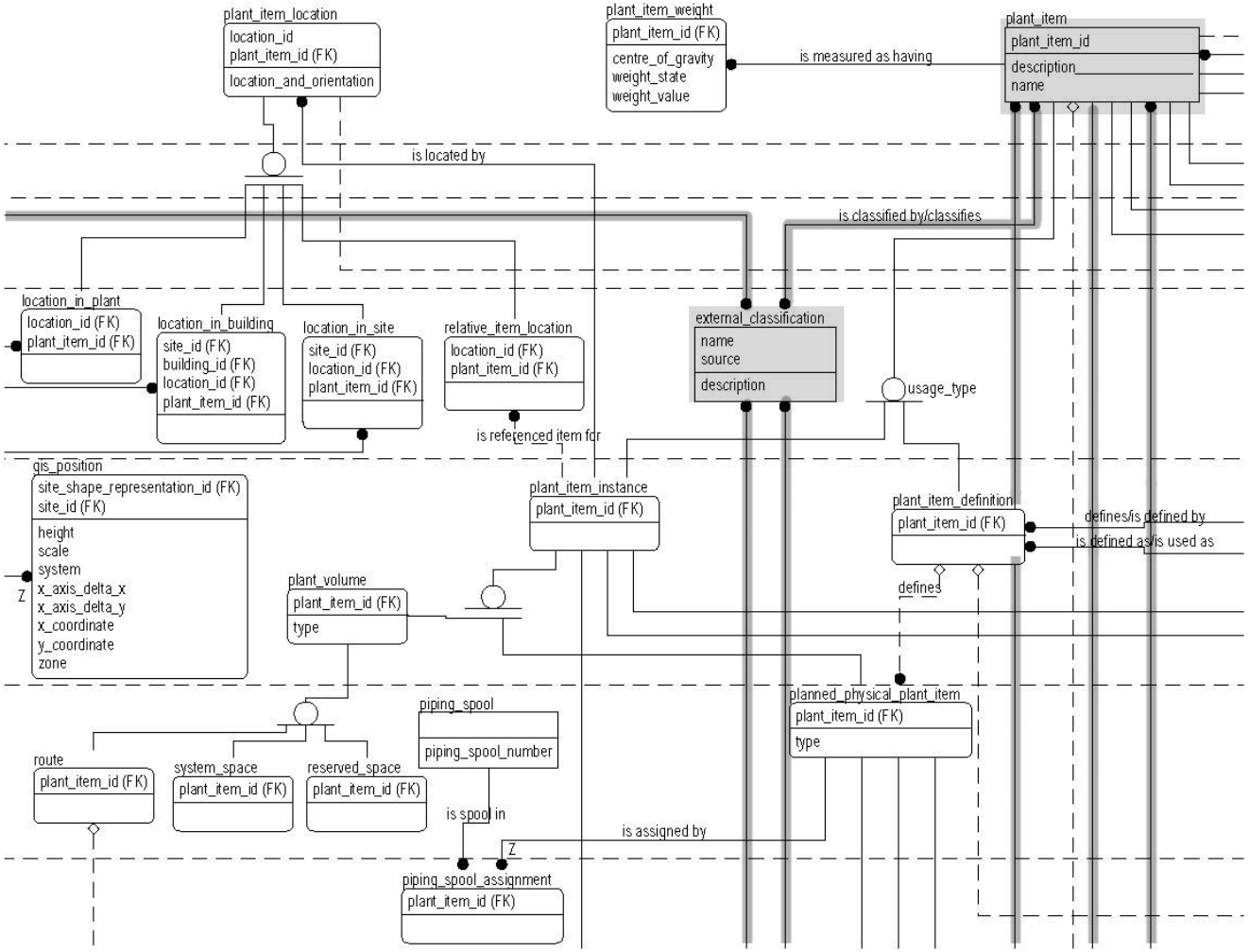
ANNEX I

IMPLEMENTED CONCEPTS AND RELATIONSHIPS OF THE ISO-STEP 10303 AP-227 STANDARD FOR THIS RESEARCH

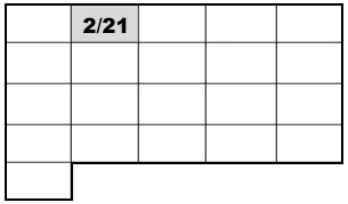


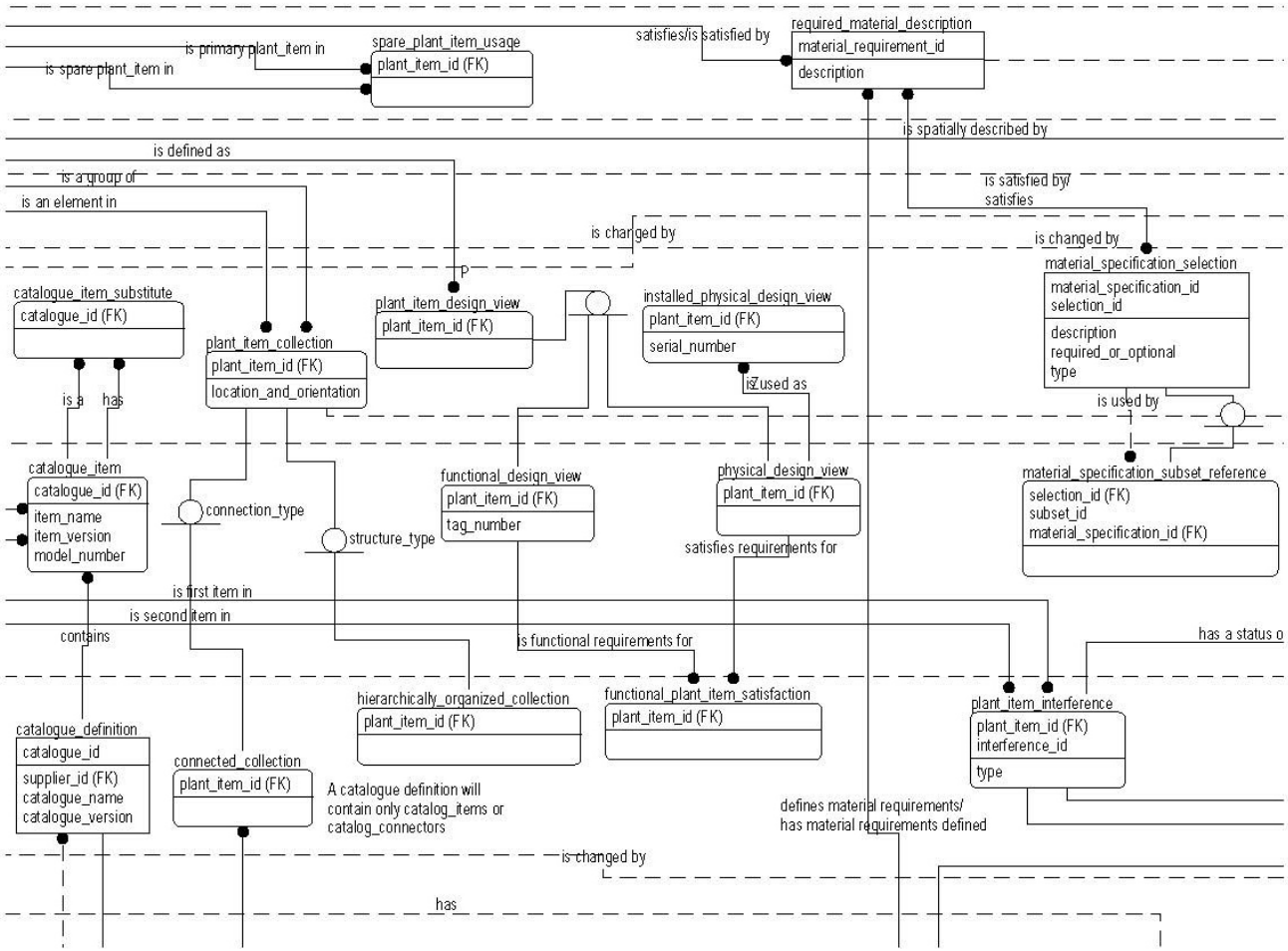
Mapped Classes from ISO - STEP 10303 - AP227 (1/21)



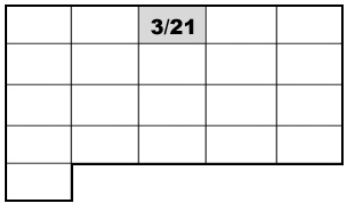


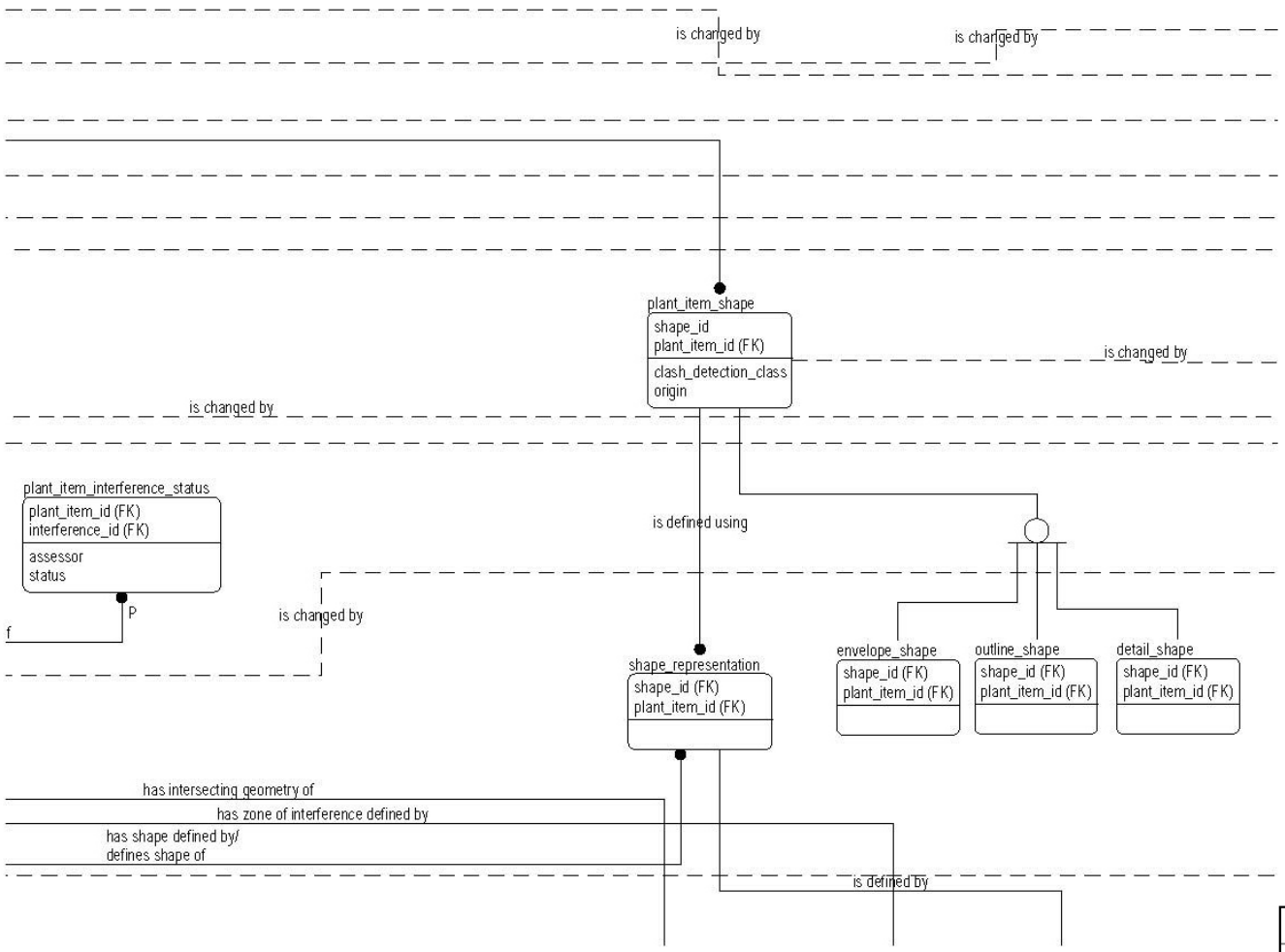
Mapped Classes from ISO - STEP 10303 - AP227 (2/21)

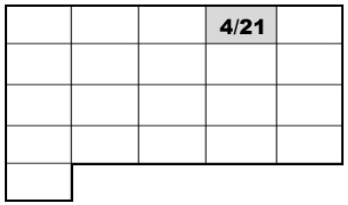




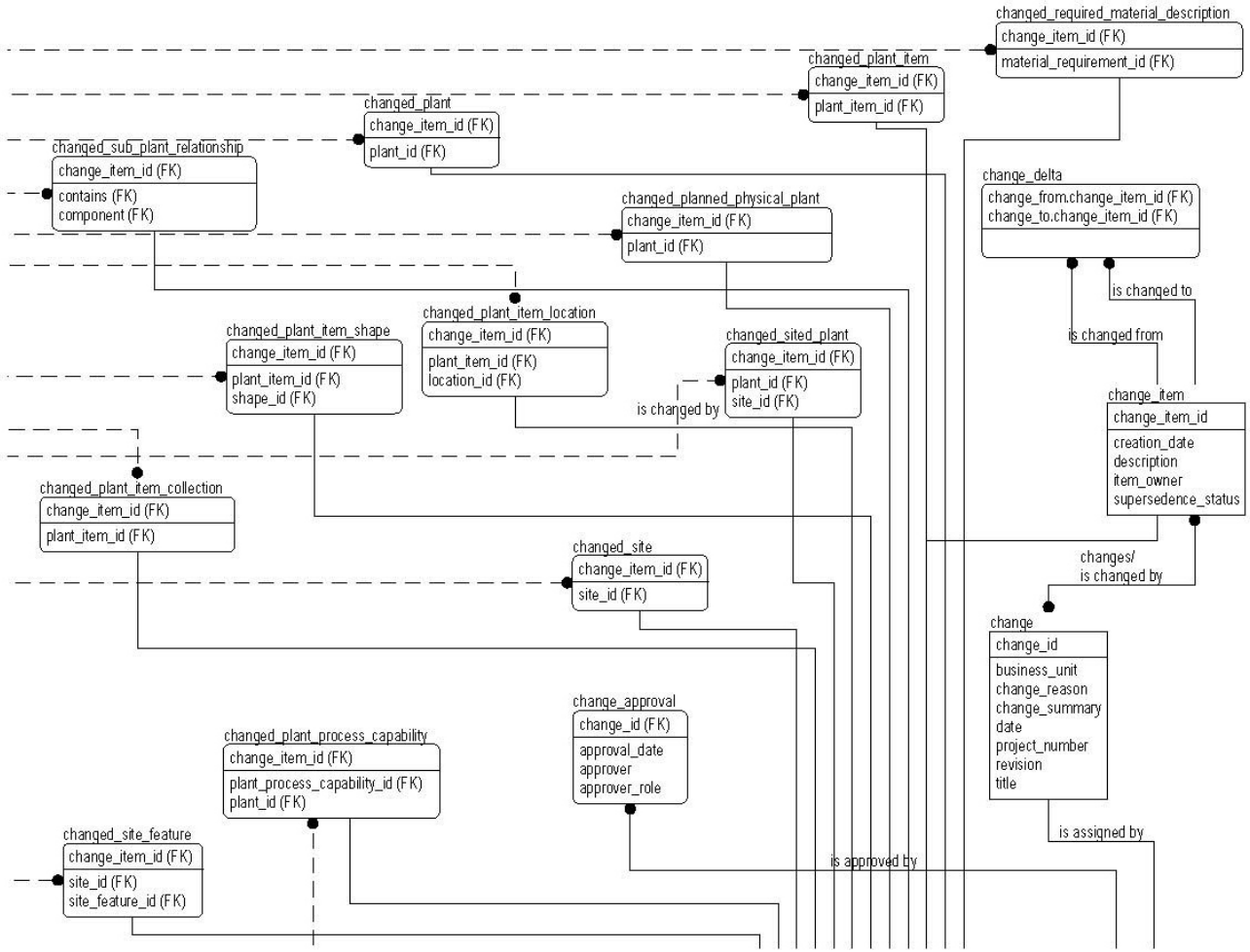
Mapped Classes from ISO - STEP 10303 - AP227 (3/21)



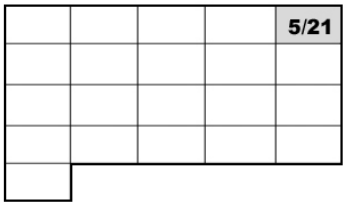


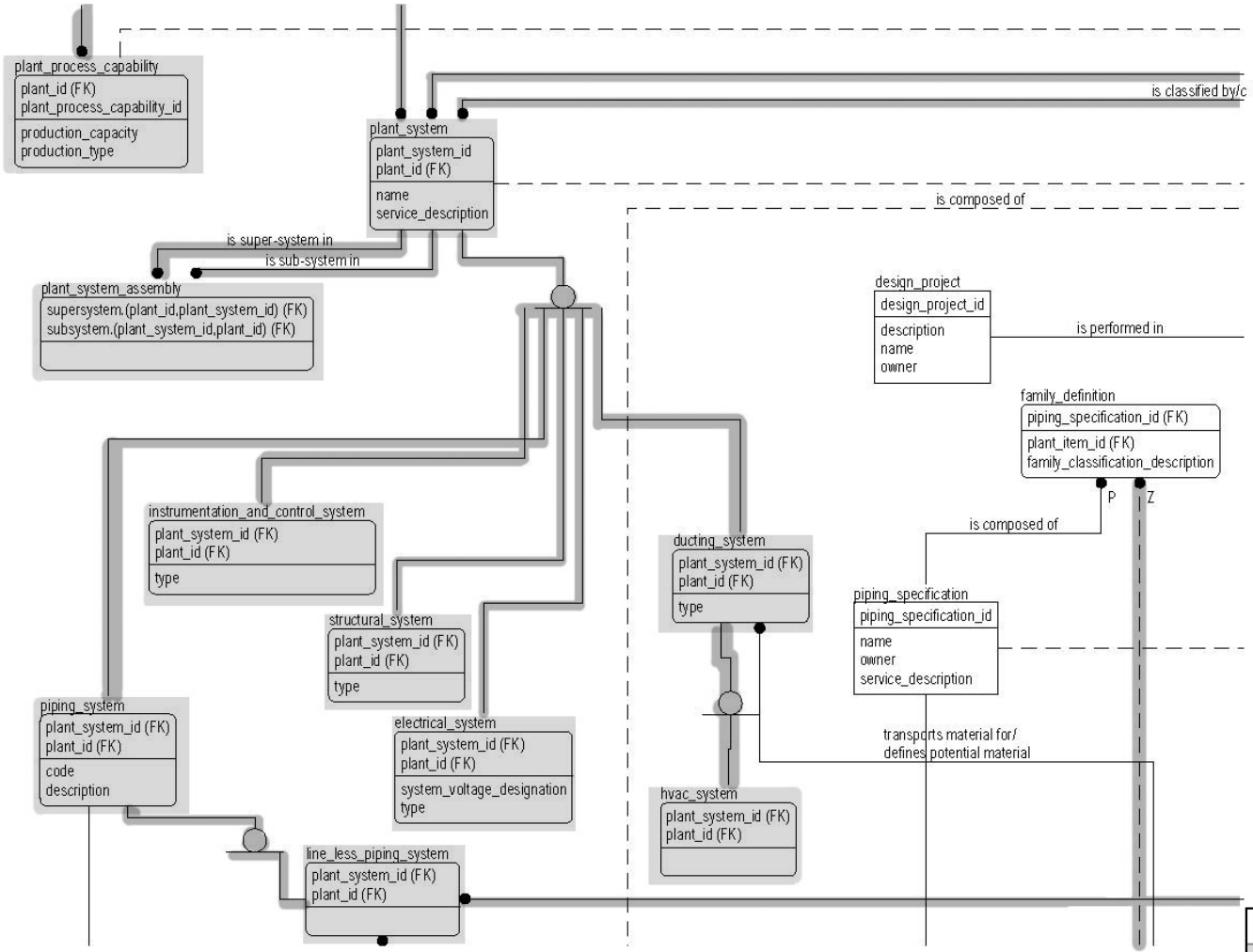


Mapped Classes from ISO - STEP 10303 - AP227 (4/21)



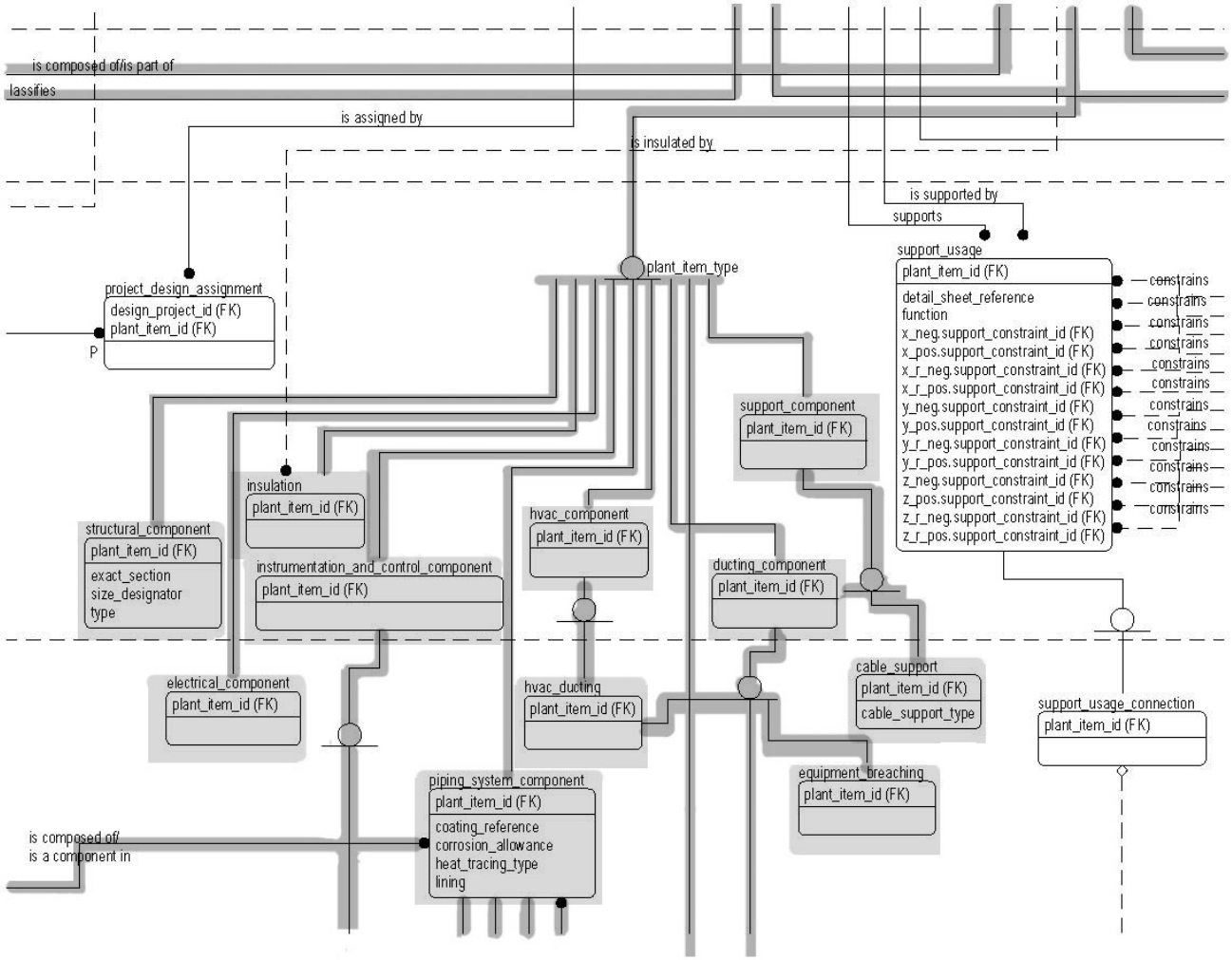
Mapped Classes from ISO - STEP 10303 - AP227 (5/21)



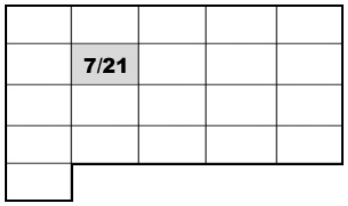


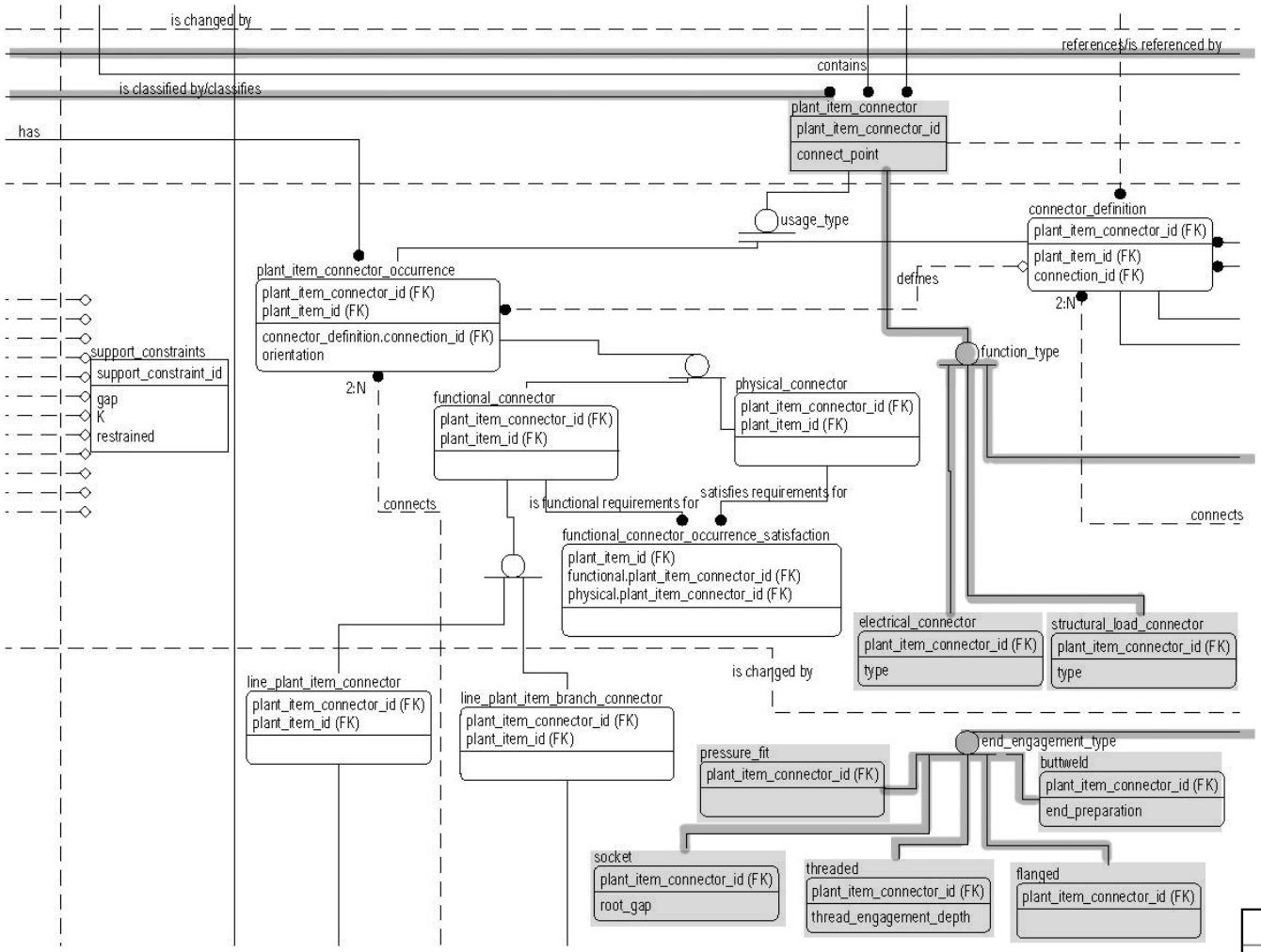
6/21				

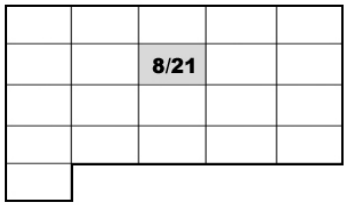
Mapped Classes from ISO - STEP 10303 - AP227 (6/21)



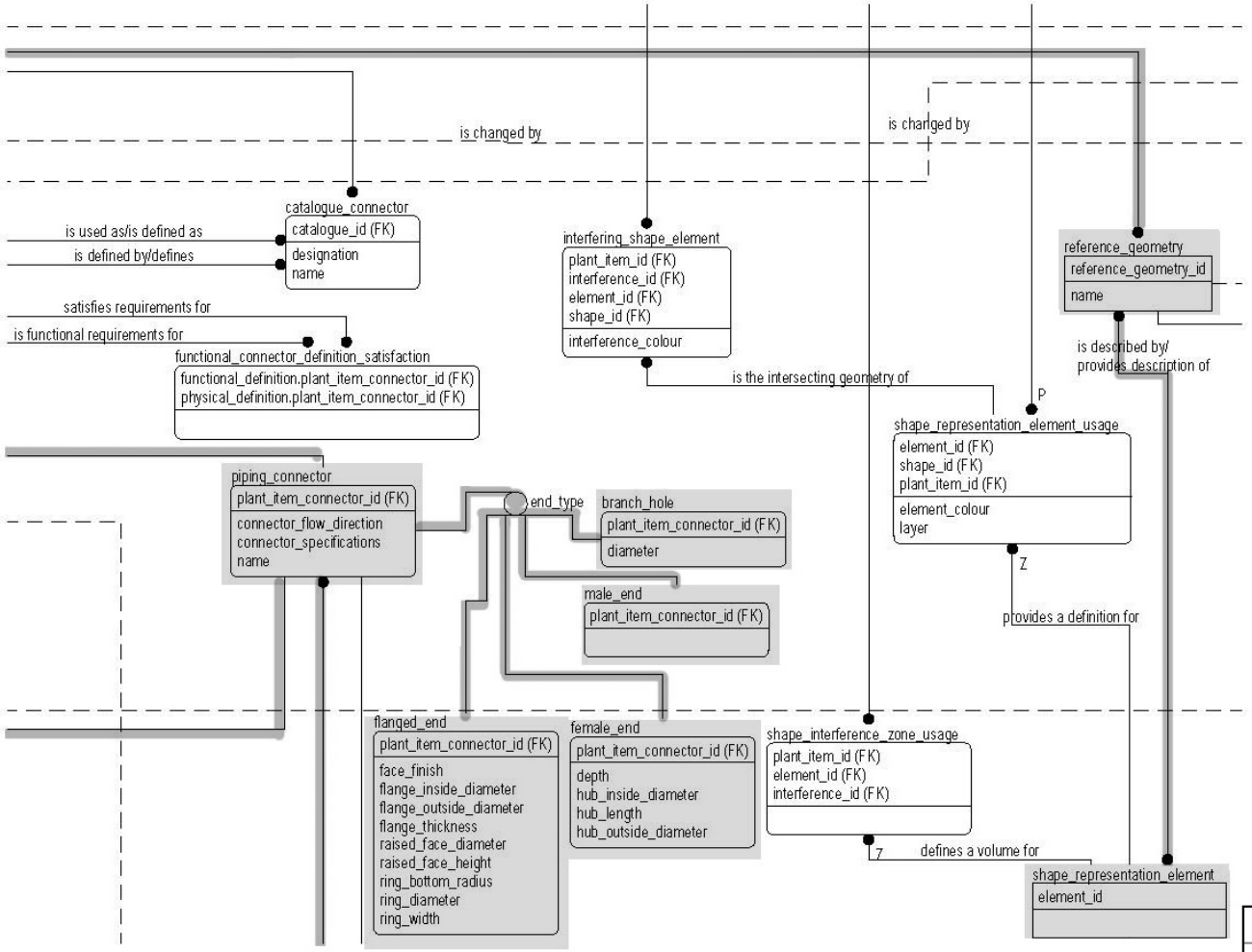
Mapped Classes from ISO - STEP 10303 - AP227 (7/21)



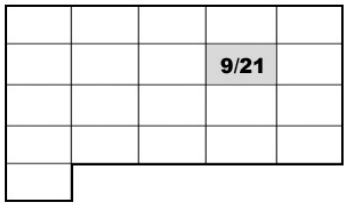


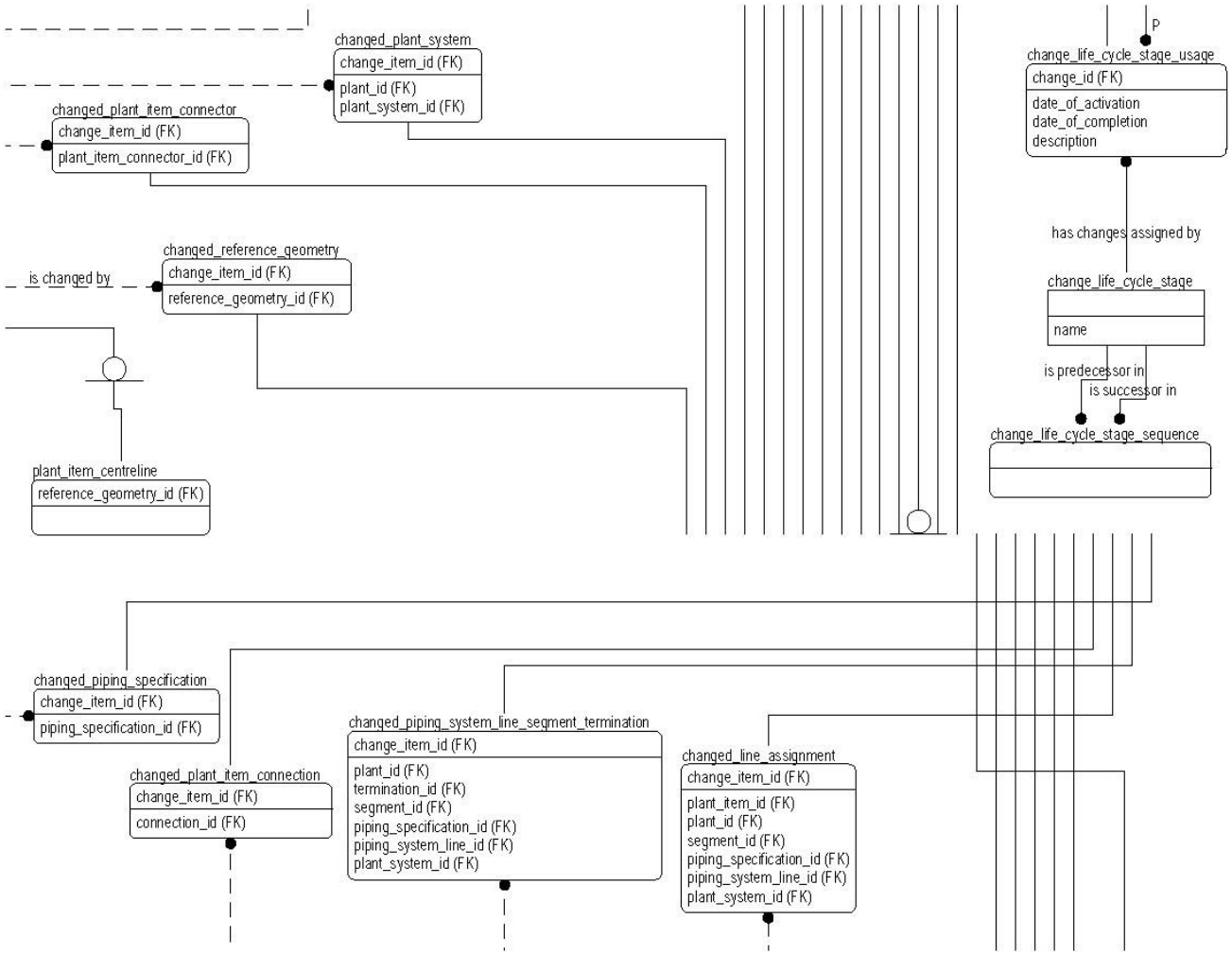


Mapped Classes from ISO - STEP 10303 - AP227 (8/21)

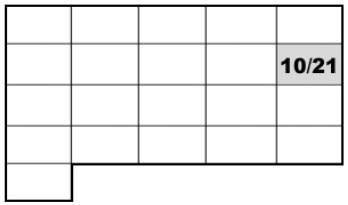


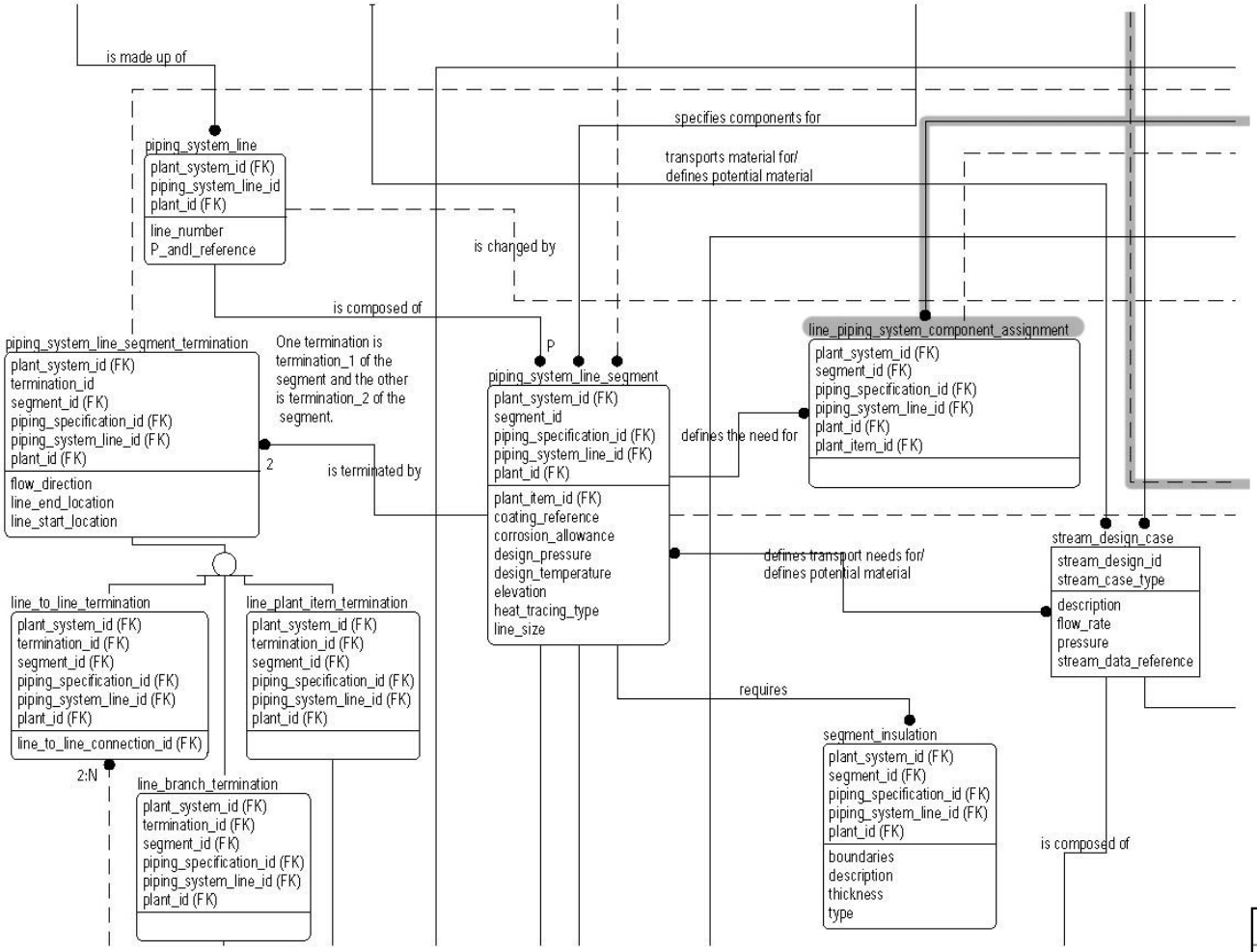
Mapped Classes from ISO - STEP 10303 - AP227 (9/21)



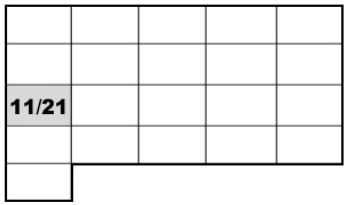


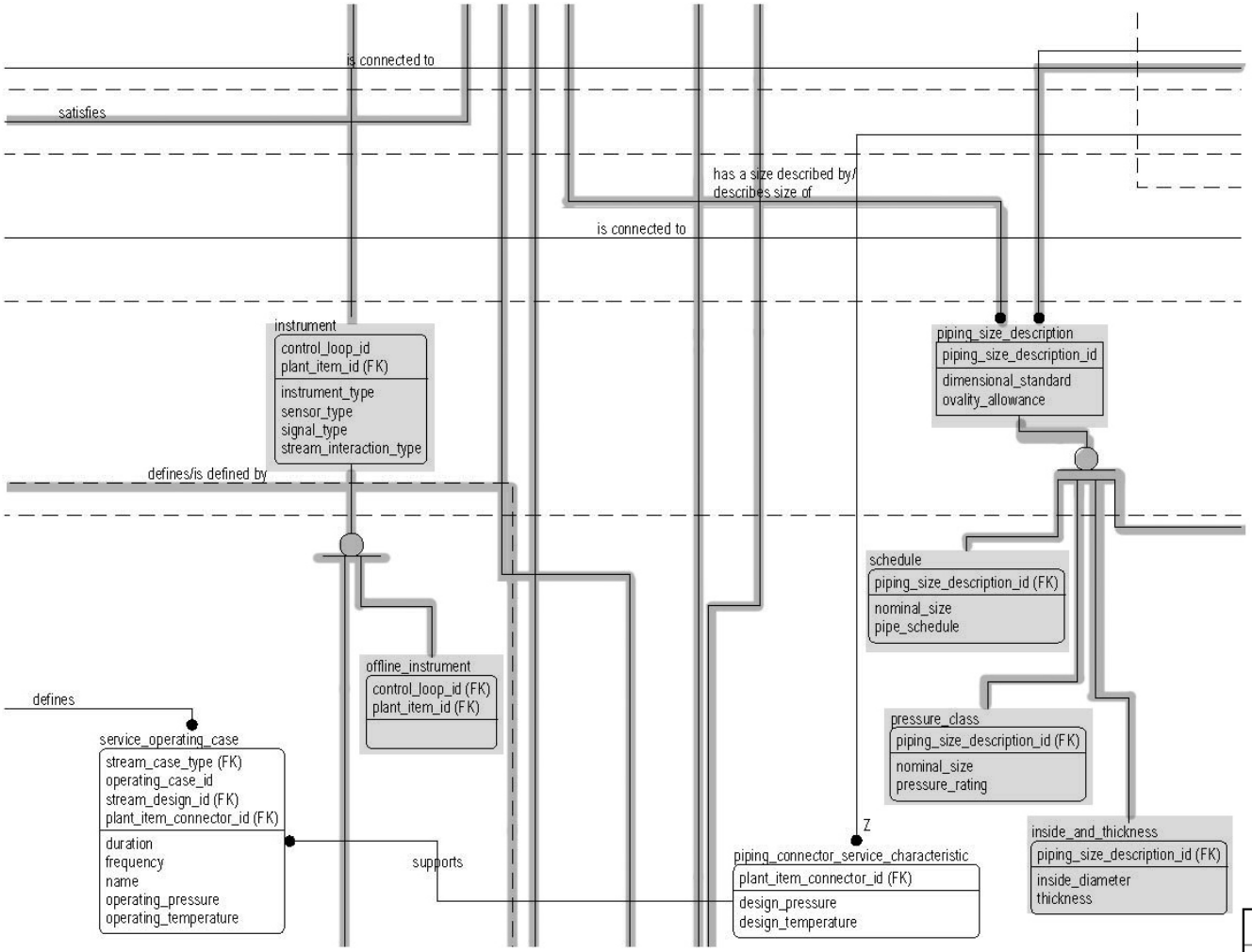
Mapped Classes from ISO - STEP 10303 - AP227 (10/21)



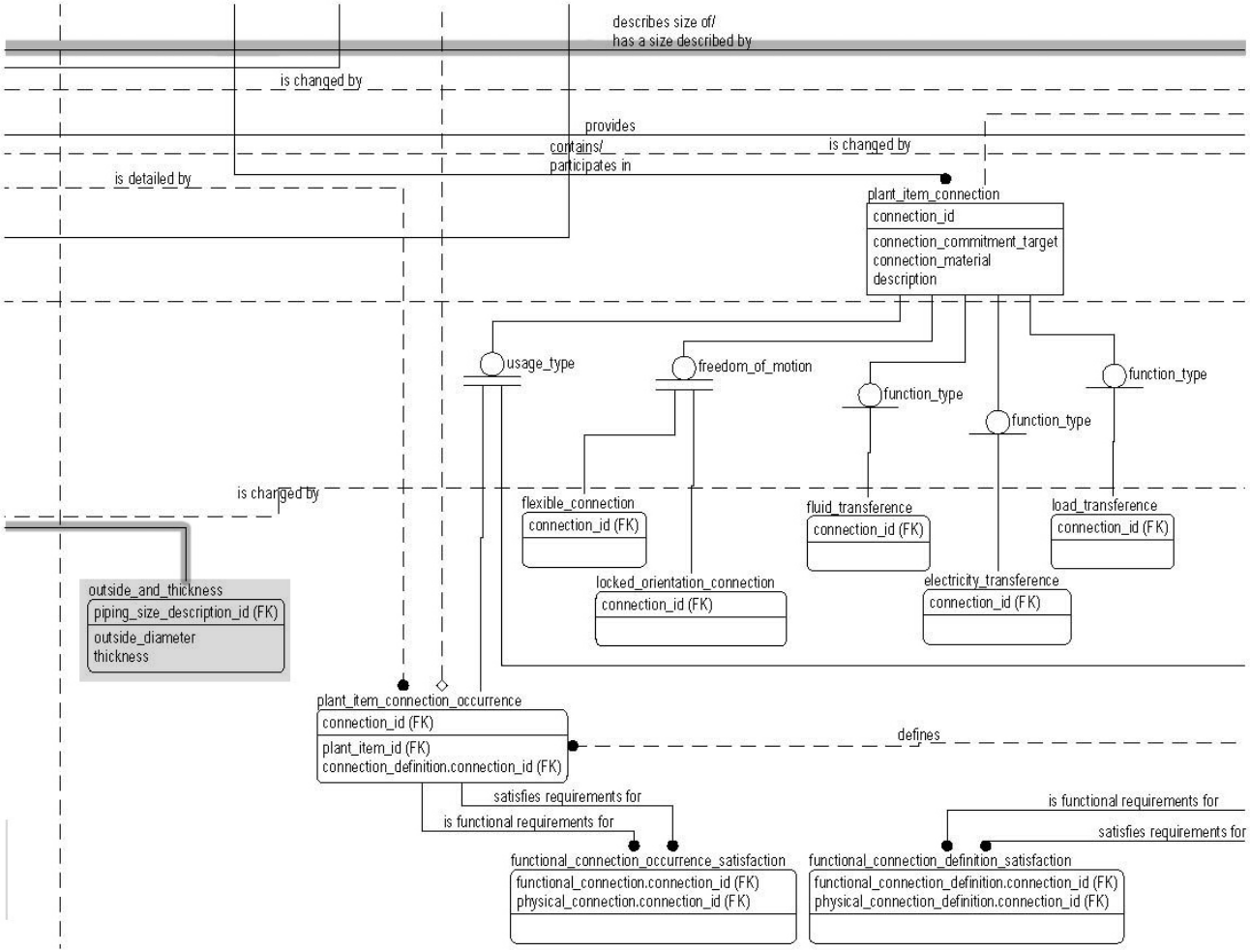


Mapped Classes from ISO - STEP 10303 - AP227 (11/21)

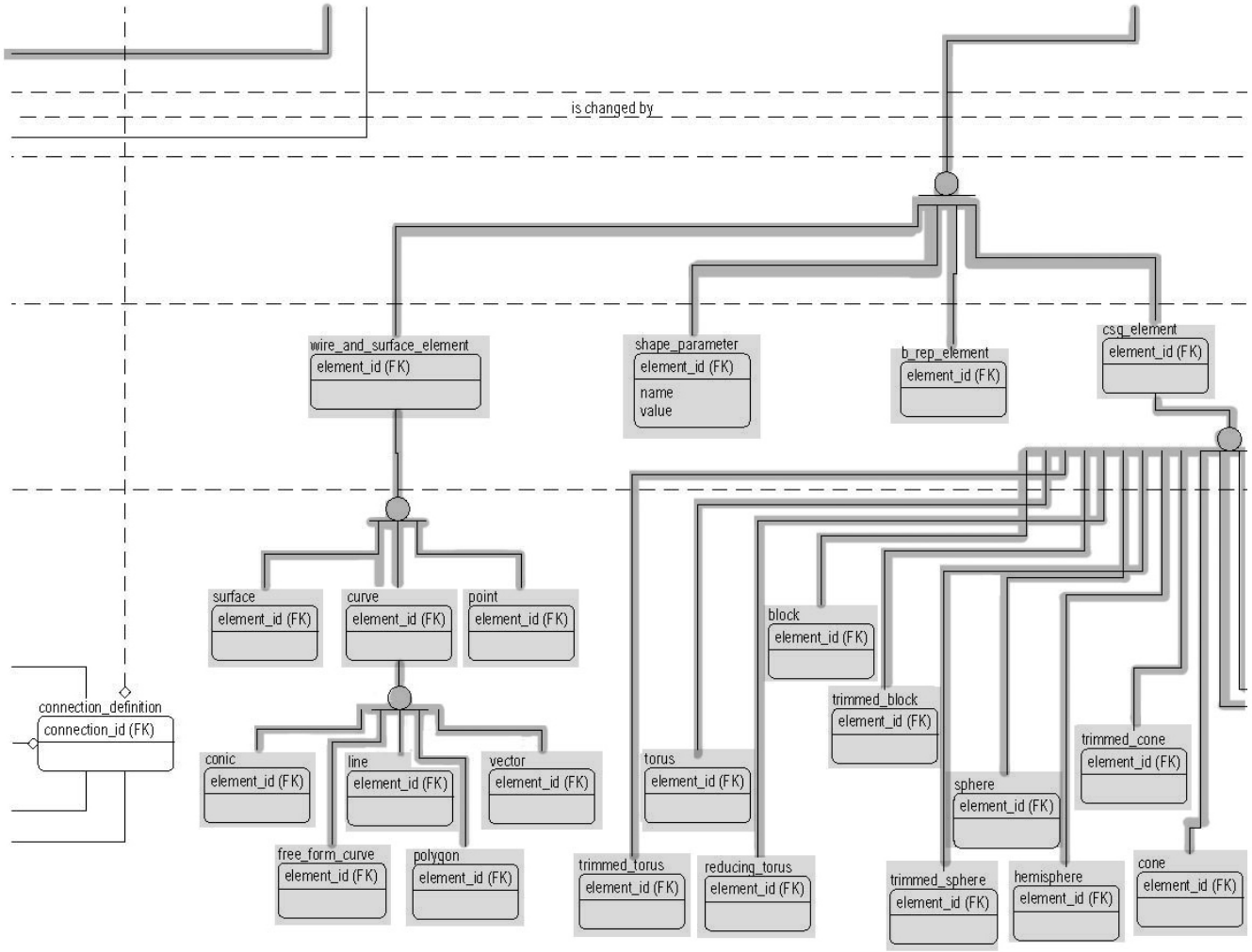




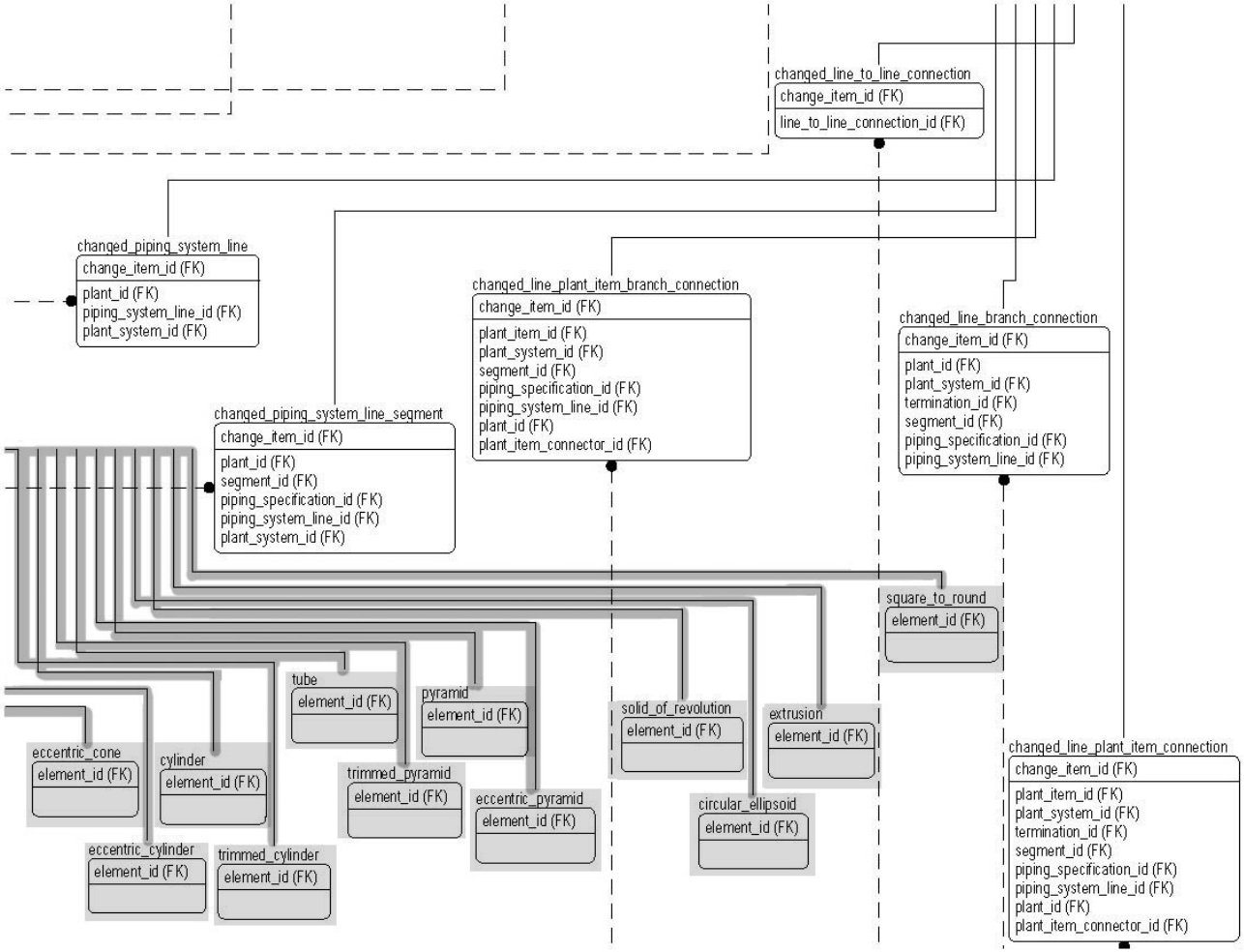
Mapped Classes from ISO - STEP 10303 - AP227 (12/21)



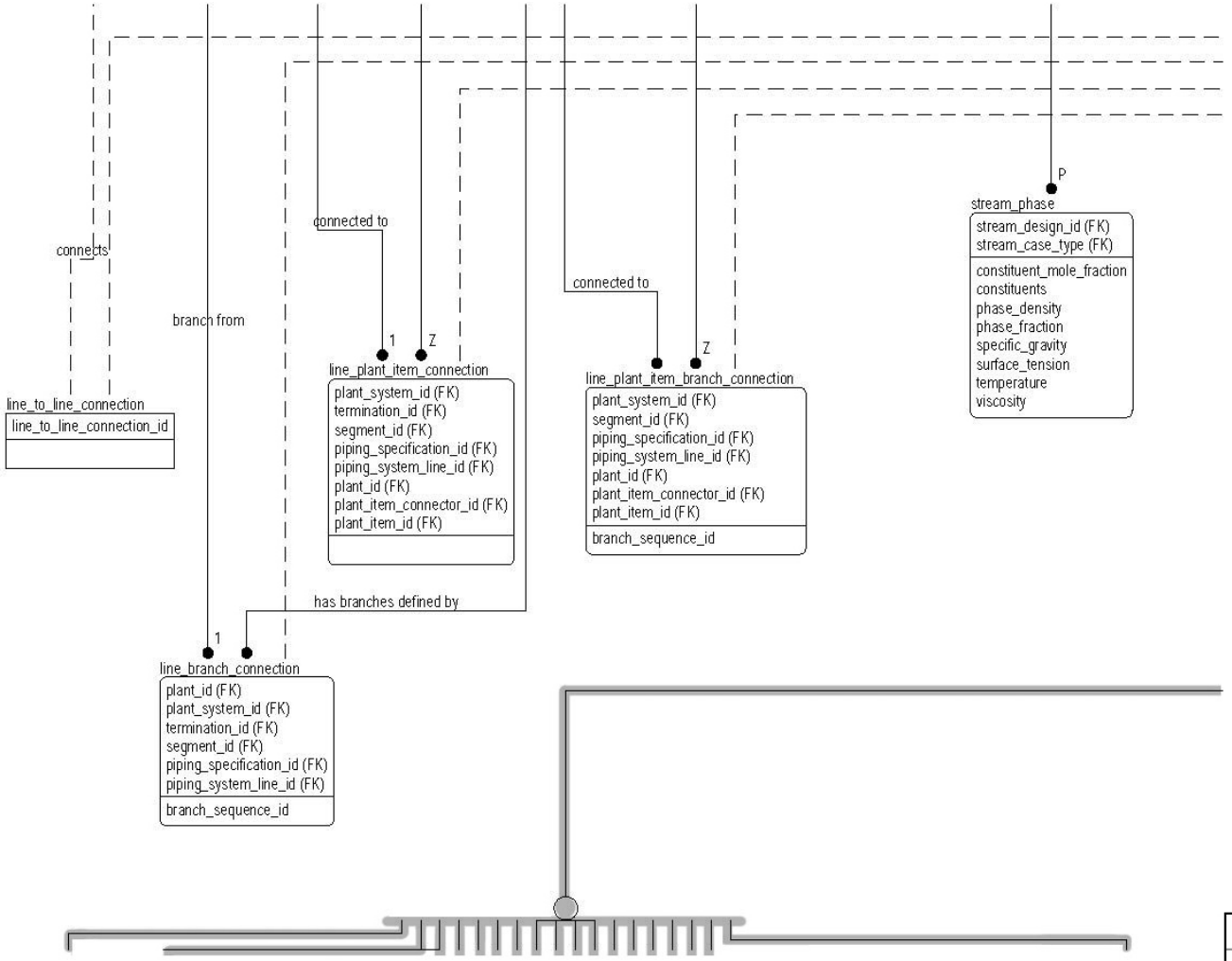
Mapped Classes from ISO - STEP 10303 - AP227 (13/21)



Mapped Classes from ISO - STEP 10303 - AP227 (14/21)

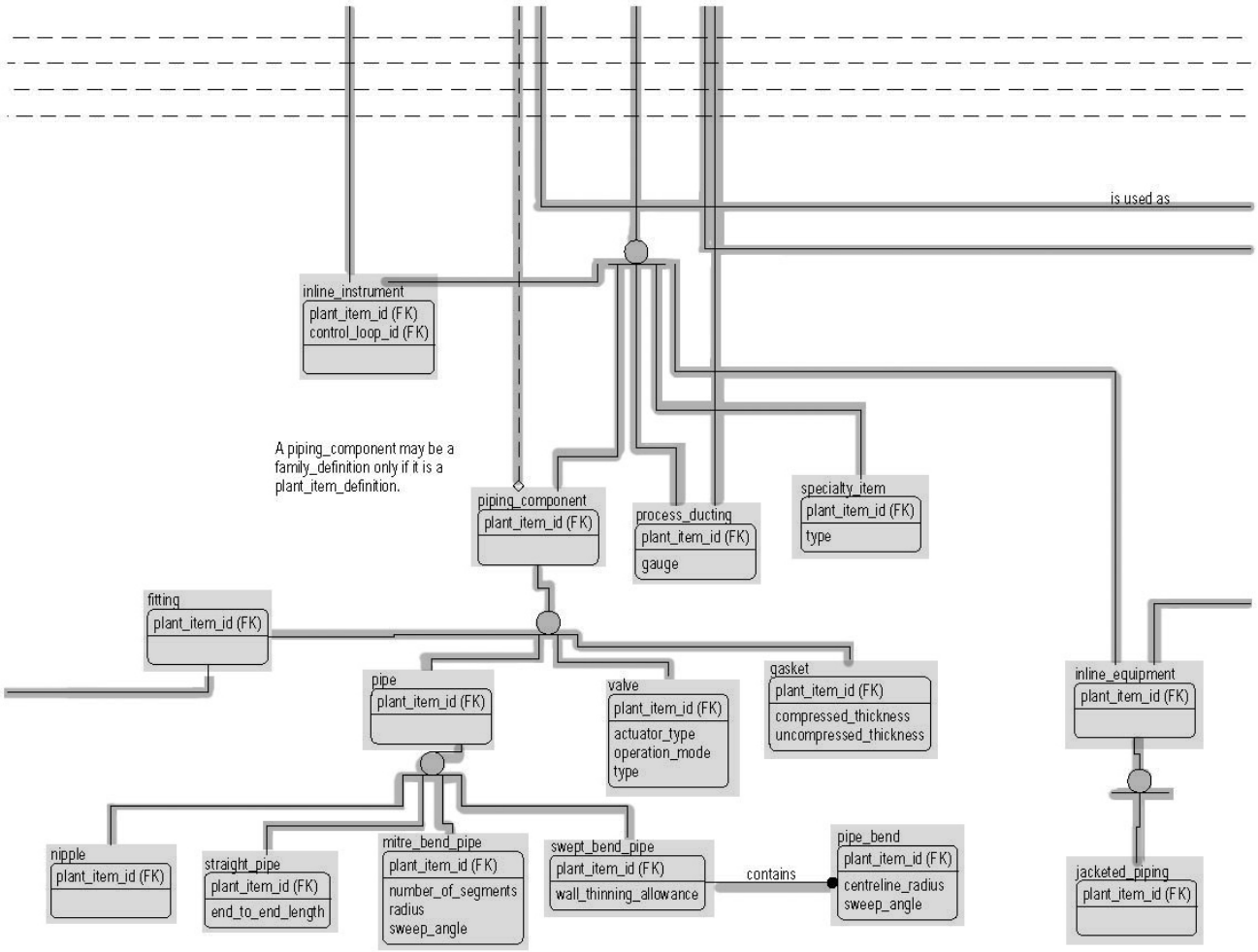


Mapped Classes from ISO - STEP 10303 - AP227 (15/21)

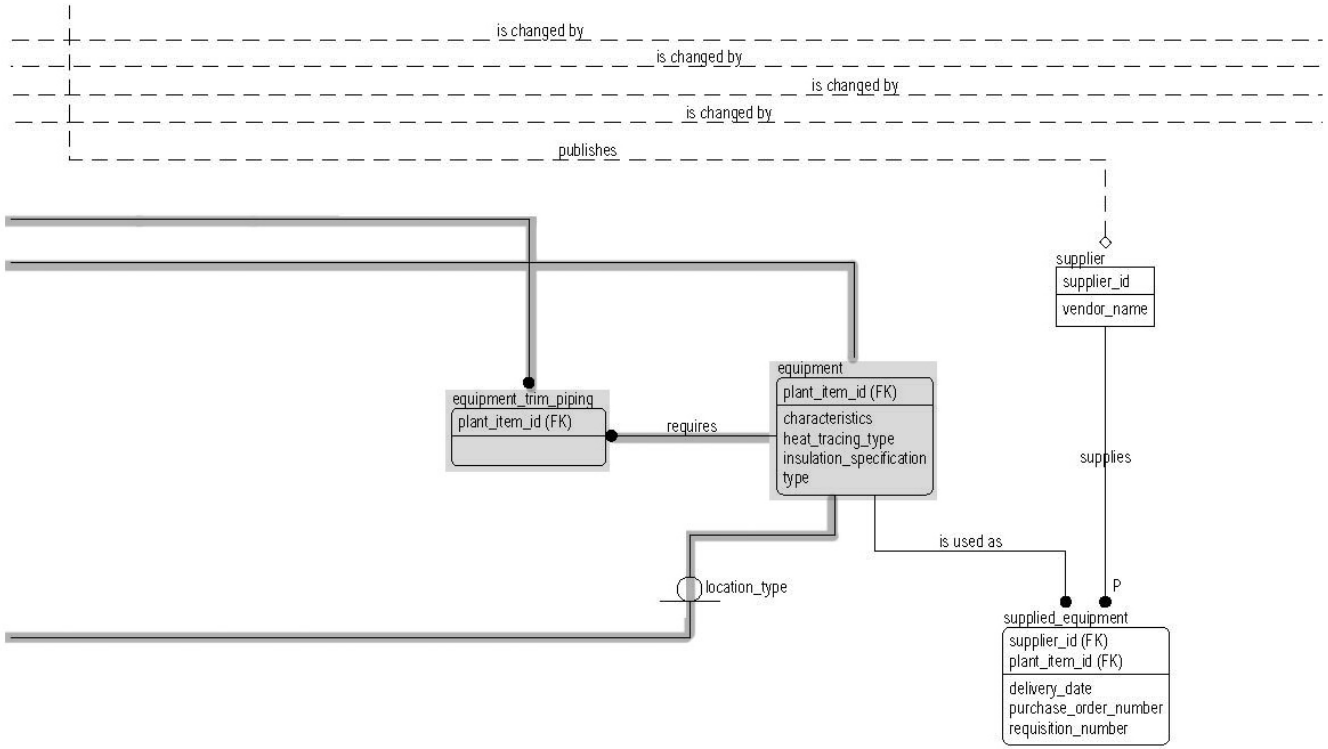


Mapped Classes from ISO - STEP 10303 - AP227 (16/21)

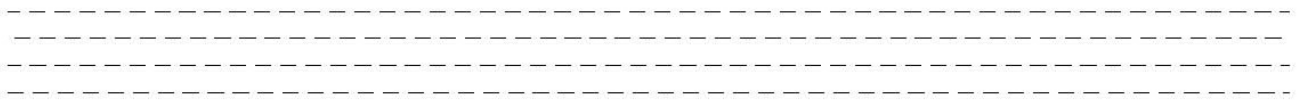
16/21



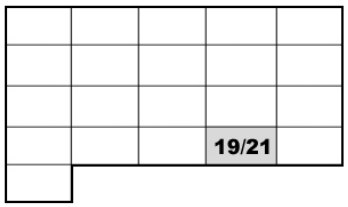
Mapped Classes from ISO - STEP 10303 - AP227 (17/21)

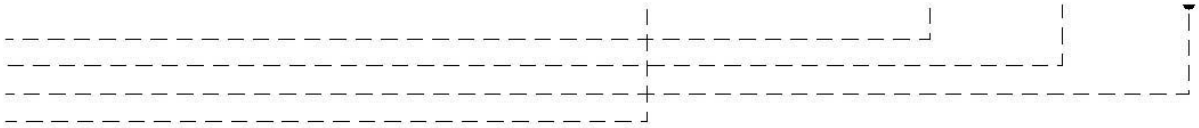


Mapped Classes from ISO - STEP 10303 - AP227 (18/21)

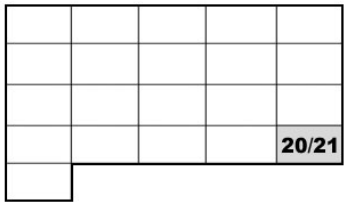


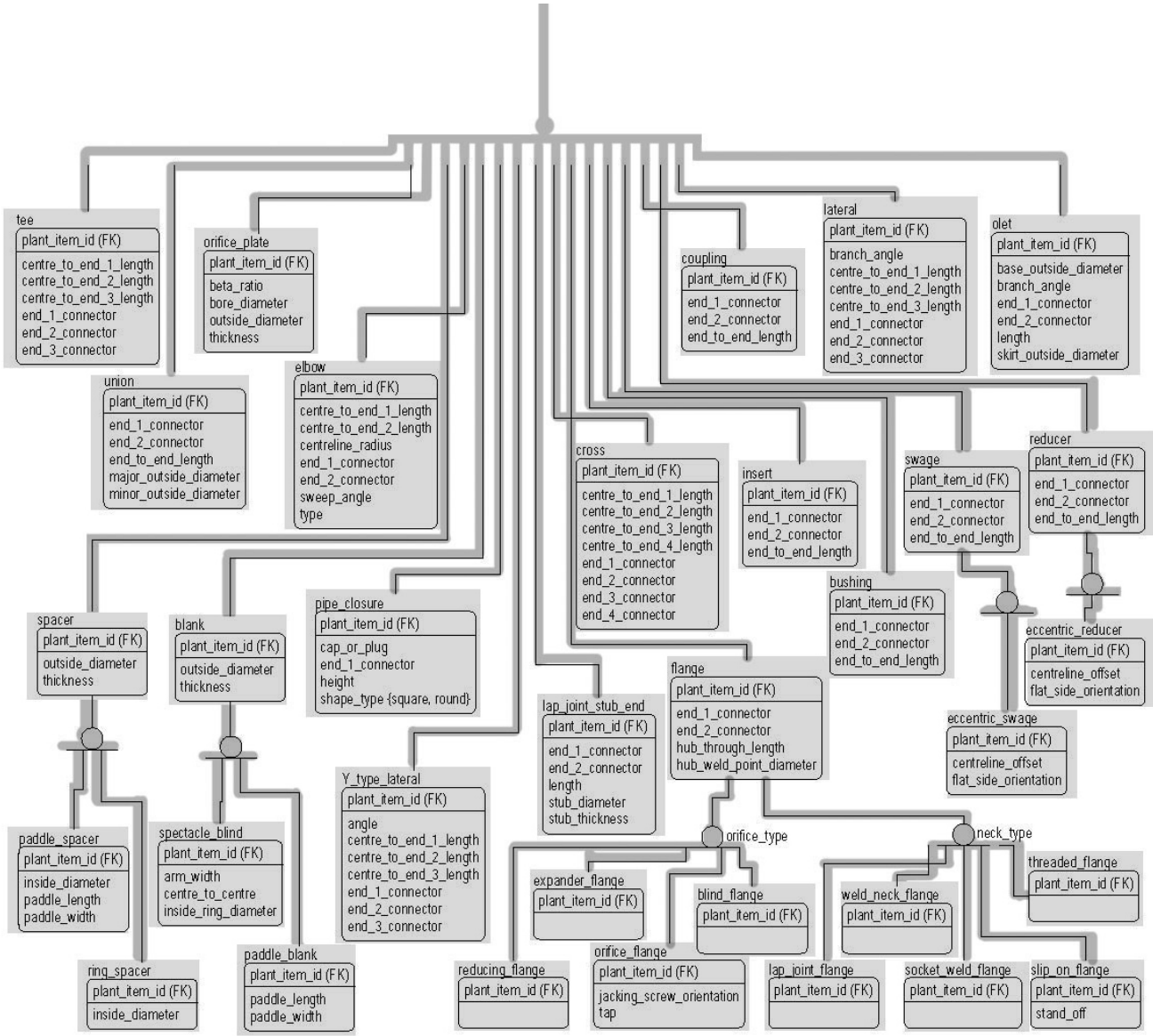
Mapped Classes from ISO - STEP 10303 - AP227 (19/21)



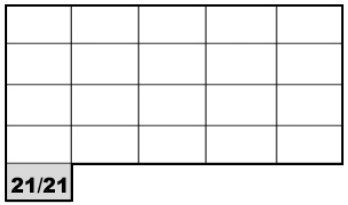


Mapped Classes from ISO - STEP 10303 - AP227 (20/21)





Mapped Classes from ISO - STEP 10303 - AP227 (21/21)



ANNEX II

QUESTIONNAIRES FOR USER TEST FEEDBACK

Evaluation form of interaction and task performance

(0 = useless or very difficult, 7 = useful or very easy)

1. User tools - Grade the following tools from 0 to 7

	TOOL
1.1	Mouse movement, forward and backwards
1.2	Mouse movement, up and down
1.3	Mouse movement, rotation
1.4	Alternative mode (examiner)
1.5	Right button (Wire frame mode)
1.6	Right button (Points mode)
1.7	Button (Full Screen)
1.8	Movement wheels
1.9	Zoom factor (Camera)
1.10	Save/Recover, camera position
1.11	Model's global perspective (fit)
1.12	Get close to an element (Seek)
1.13	Hierarchical view (Tree view)
1.14	Graphical environment selection
1.15	Selection and hierarchical view coordination.
1.16	Translation manipulator (Transform box)
1.17	Rotation manipulator (Center ball)
1.18	Element data (Part data)
1.19	Standard file options
1.20	Measuring tool (Measure)
1.21	Parts family catalog

2. A design error will be shown, you are asked to find it.

   2.1. How do you qualify the ease to find the design error showed?

   2.2. Mark the time you used (mm.ss).

   2.3. Do you think that visual inspection if useful in order to find such problems?

3. Use the walk model to move to the four corners of the model

   3.1. How do you grade the ease of navigation?

   3.2. Mark the time you used (mm.ss)

4. You will be shown an element, search it in the model and select it (take into account that several instances of the same element can be in the model, just select one of them)

   4.1. How do you grade the ease of finding the element?

   4.2. Mark the time you used (mm.ss).

5. User Interface

   5.1 Do you consider that in the user interface the language is an important thing?

6. Windows Paradigm

   6.1. Do you think that for the user interface the Windows paradigm is followed?

Evaluation form of semantic symbols and semantic factors

(0 = useless or very difficult, 7 = useful or very easy)

7. Use the Walk mode to navigate the model.

   7.1. How do you grade the ease of movement?

   7.2. How do you grade the quality of the elements contained in the model?

8. Open the indicated model.

   8.1 How do you grade the ease of movement?

   8.2. How do you grade the quality of the elements contained in the model?

9. Mention at least 5 engineering elements that you can identify in the model.

10. Do you notice any change in the model?

    10.1. Which changes do you notice?

    10.2 Please grade the changes

11. Are you able to identify valves in the model?

    11.1. How do you compare the experience of navigation and element identification between the two models?

12. (*With a previous explanation of the semantic and aesthetic factors*) grade each one form 0 to 7 in the following table.

Aesthetic Factor

Elements in the model	Valve	Elbow	Flange
Without compression			
Semantically compressed			

Semantic Factor

Elements model	Valve	Elbow	Flange
Without compression			
Semantically compressed			