ISO 13399 Walkthrough

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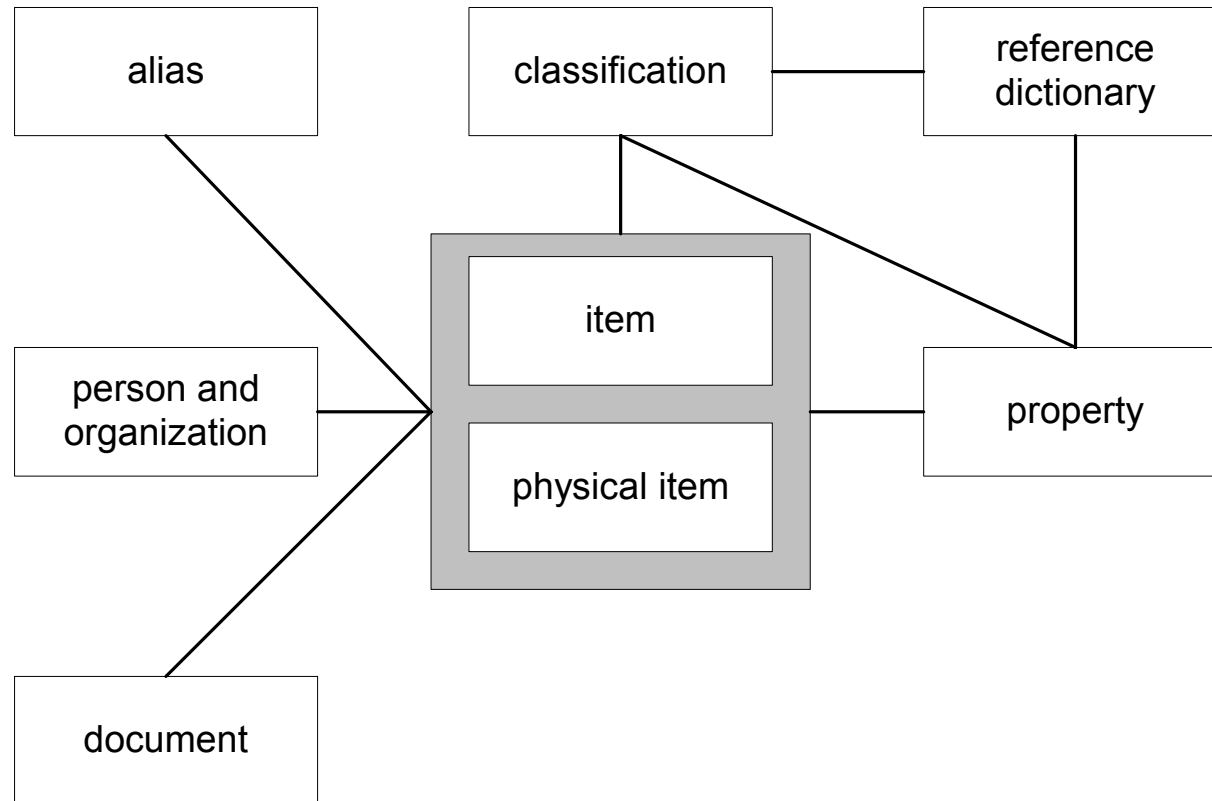### Poitiers 2003-10-28

Introduction

– ARM, AIM

– General model

     – Coupled with dictionary

– Dictionary

     – Classes

     – Categorized properties

– Hybrid approach

Overview of model

General model

- Must be general due to industry requirements
- Based on AP214
- Key aspects:
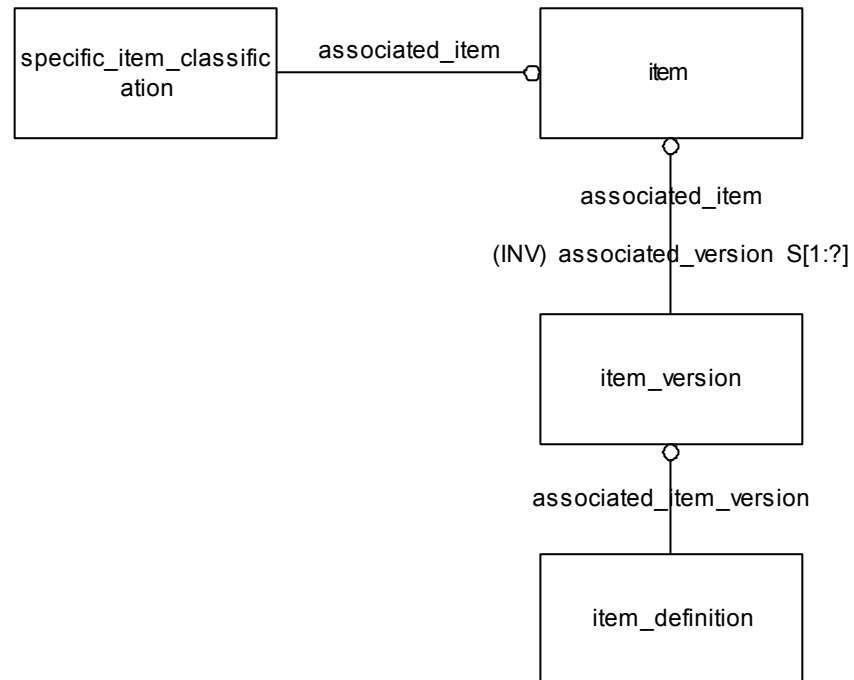 - Classification
  - Properties

ARM - AIM

- There is an AIM
  - Please review!
  - A couple of known issues.
    - material_designation
    - classification_association_relationship
  - Most of the AIM is based on mappings from AP214
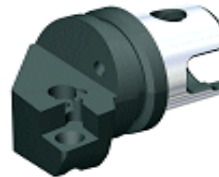
Item

Item

specific_item_classification

Cutting Tool
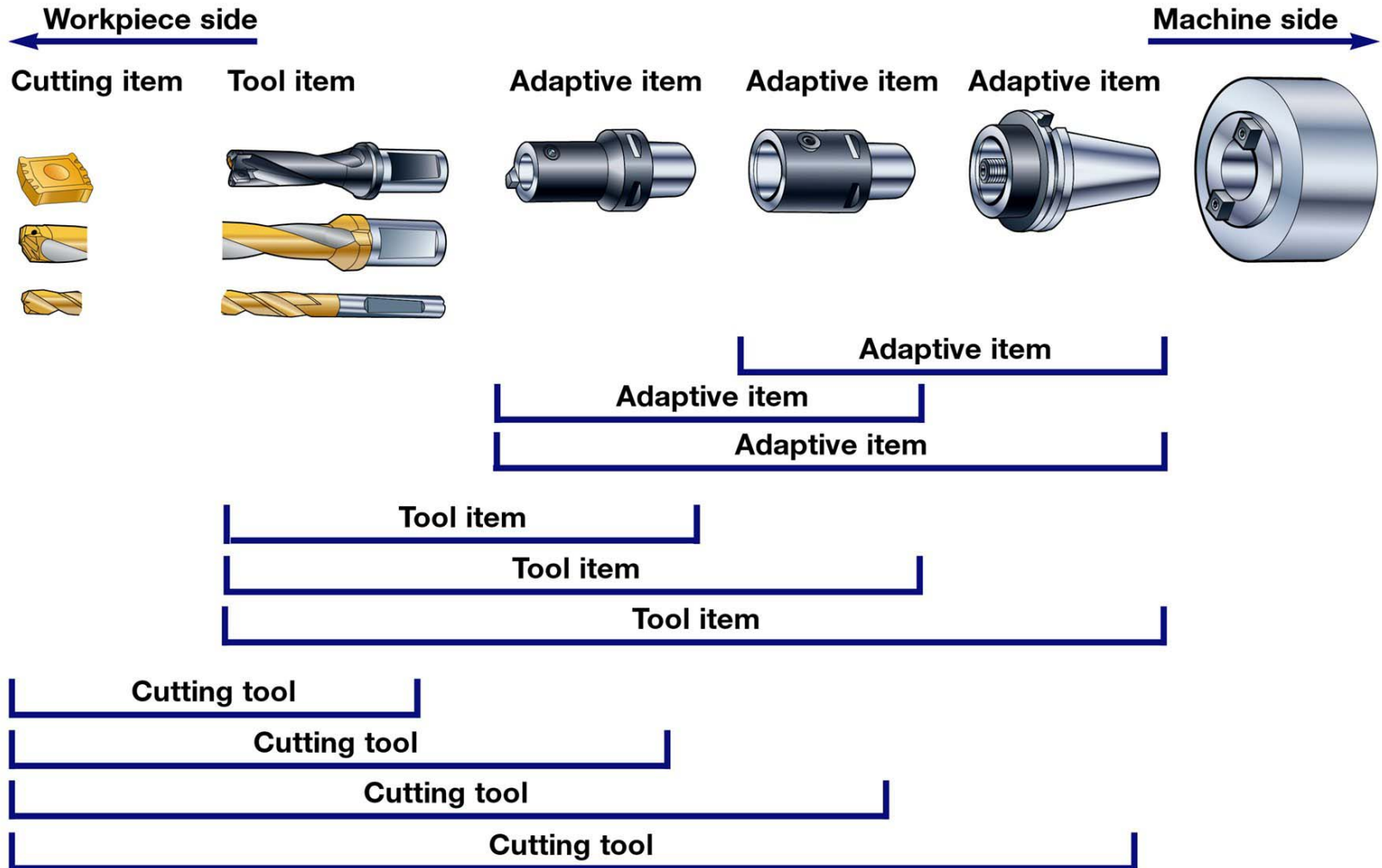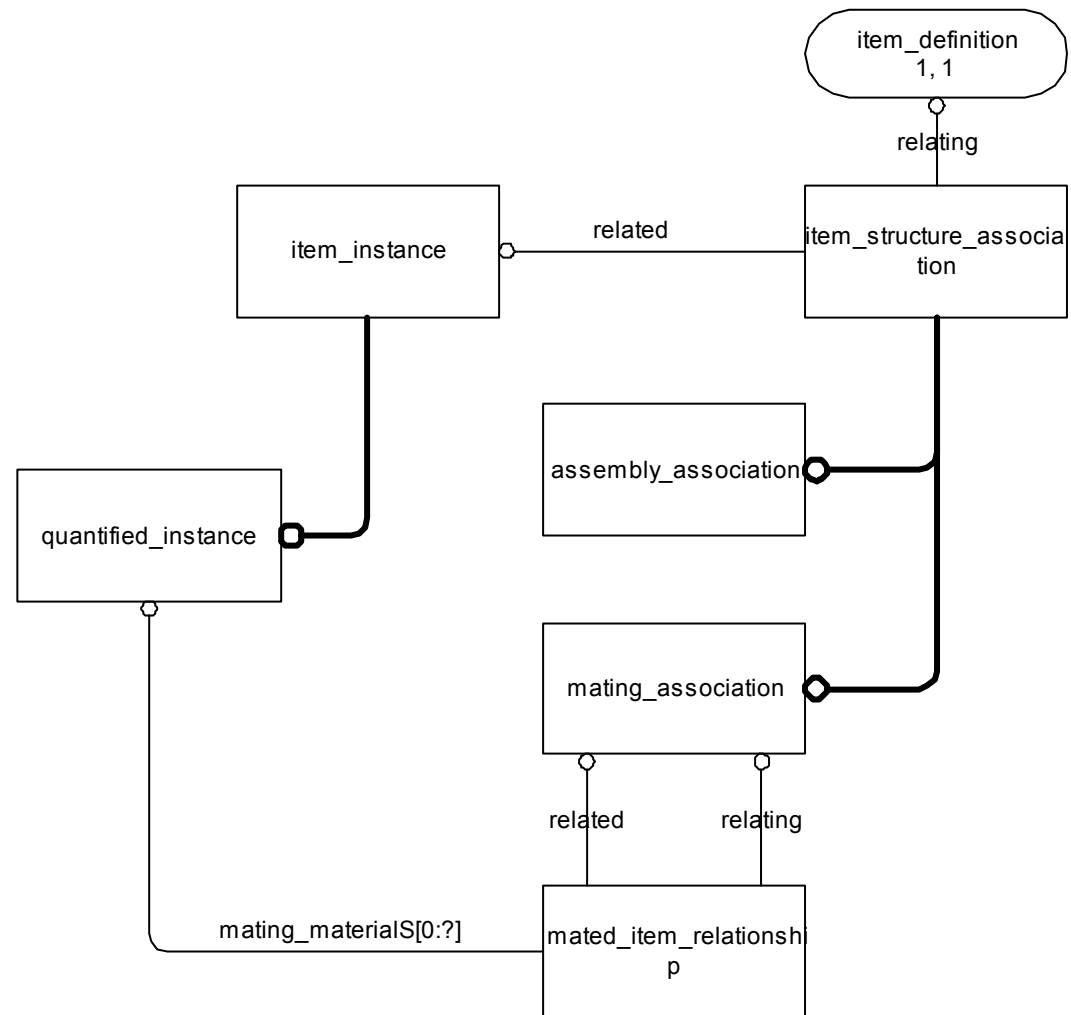
Cutting Item

Tool Item

Adaptive Item

Assembly Item

Accesory Item

Categories of items

Workpiece side ←

Machine side →

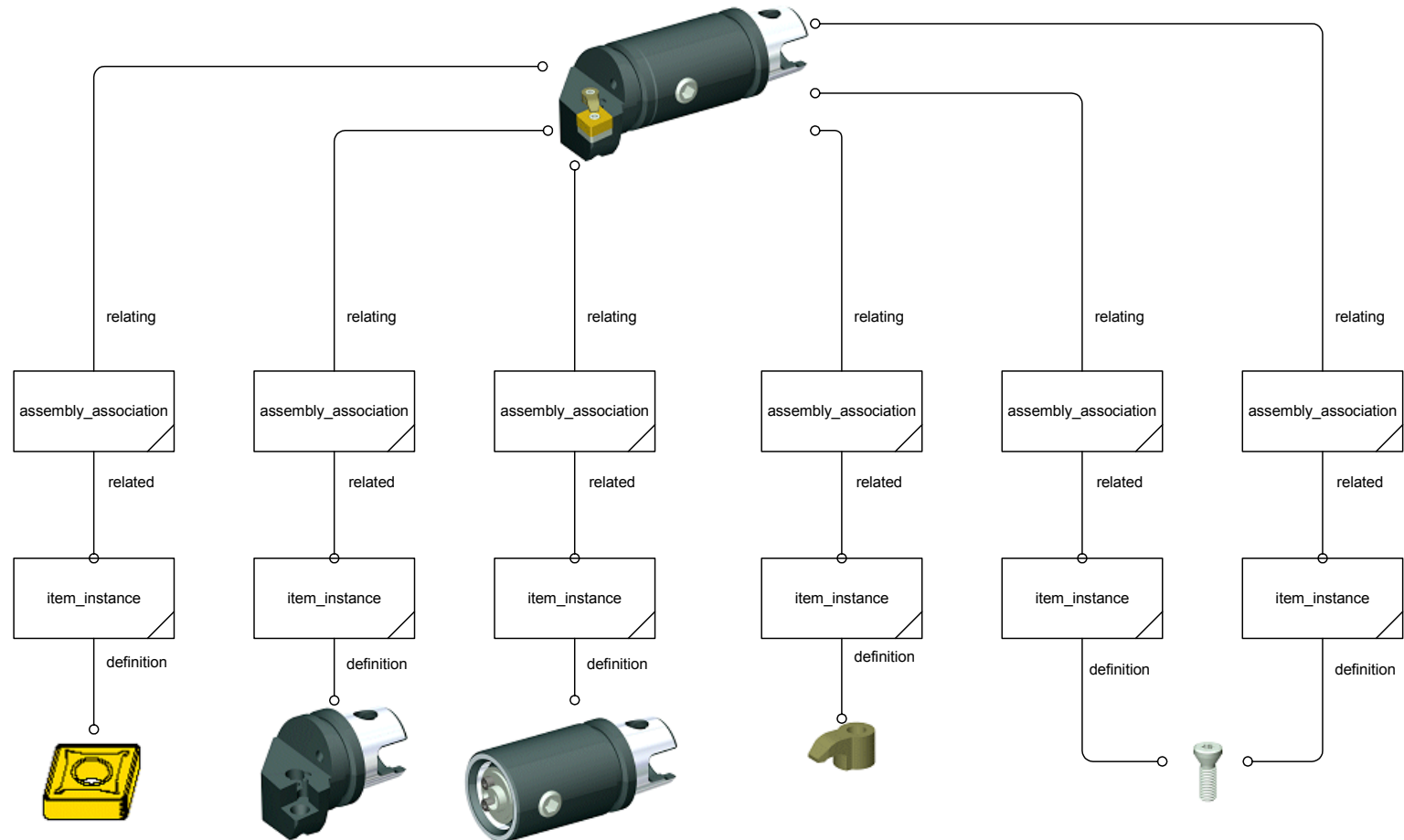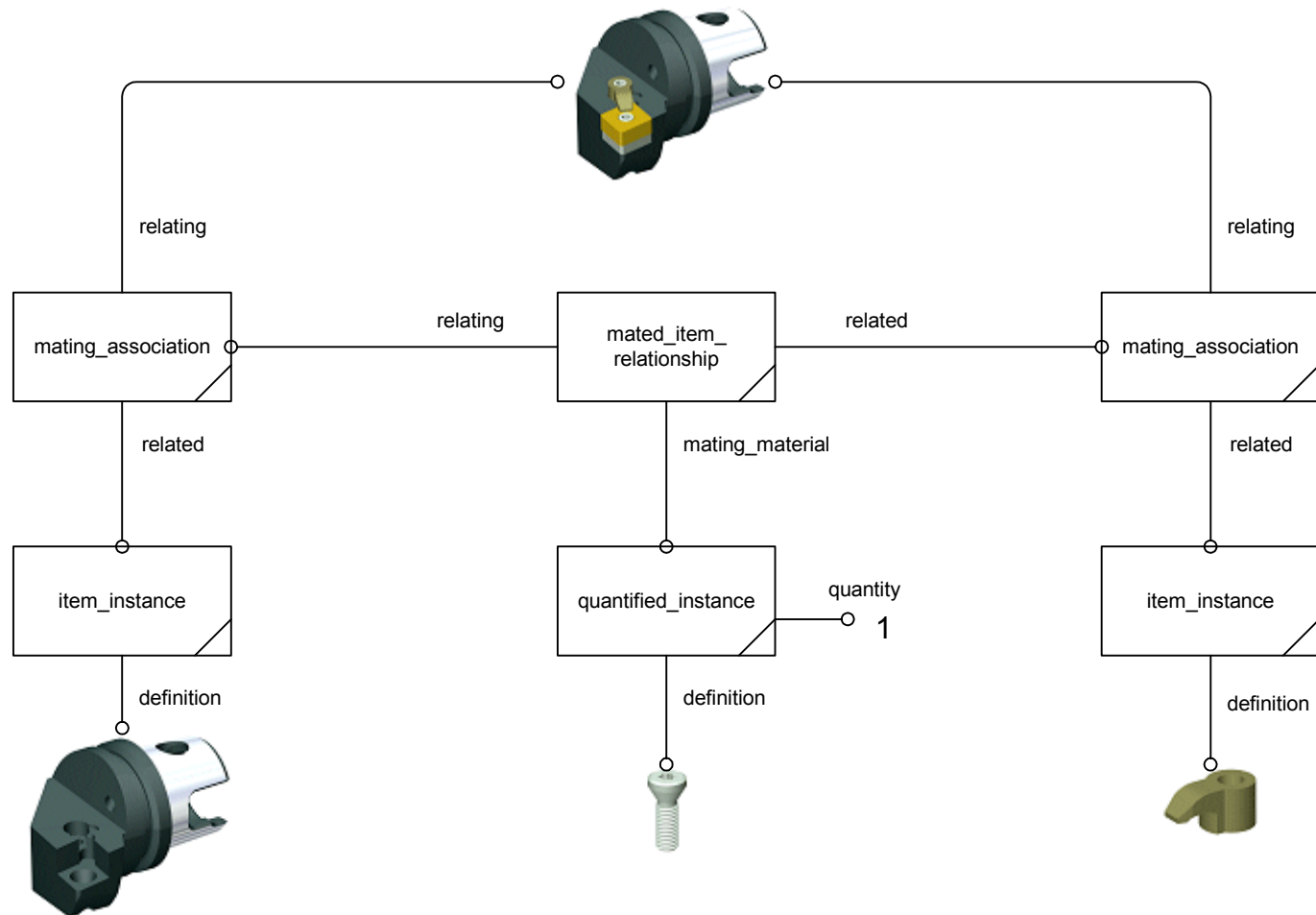Cutting item · Tool item · Adaptive item · Adaptive item · Adaptive item

Structure

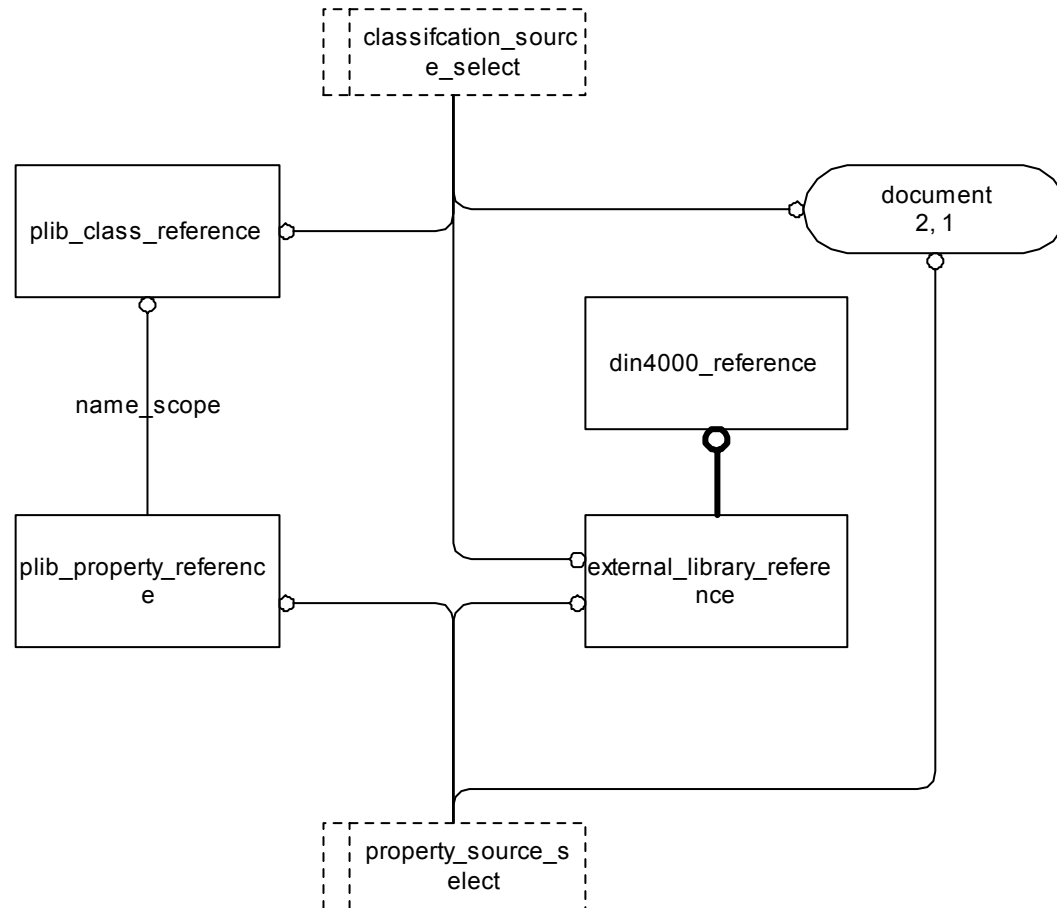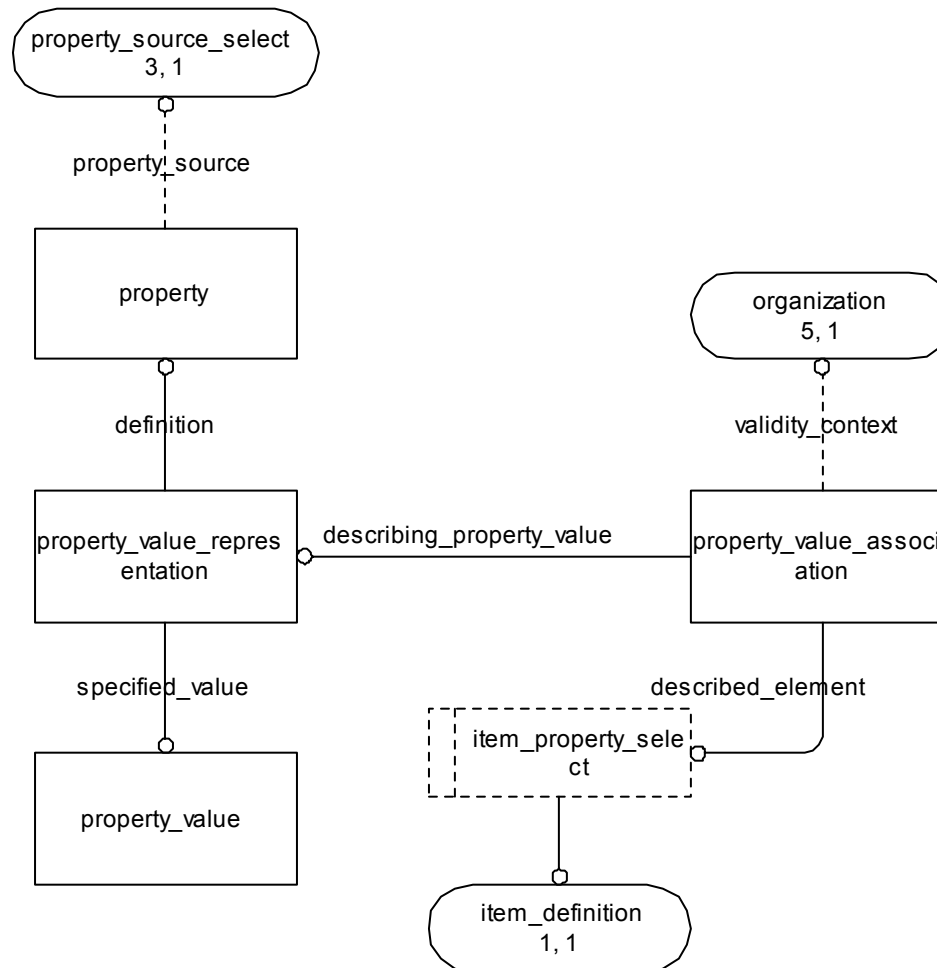# Assembly structure

Mating structure

Coupled with dictionary

– Terminology and definitions can be kept separate from the information model
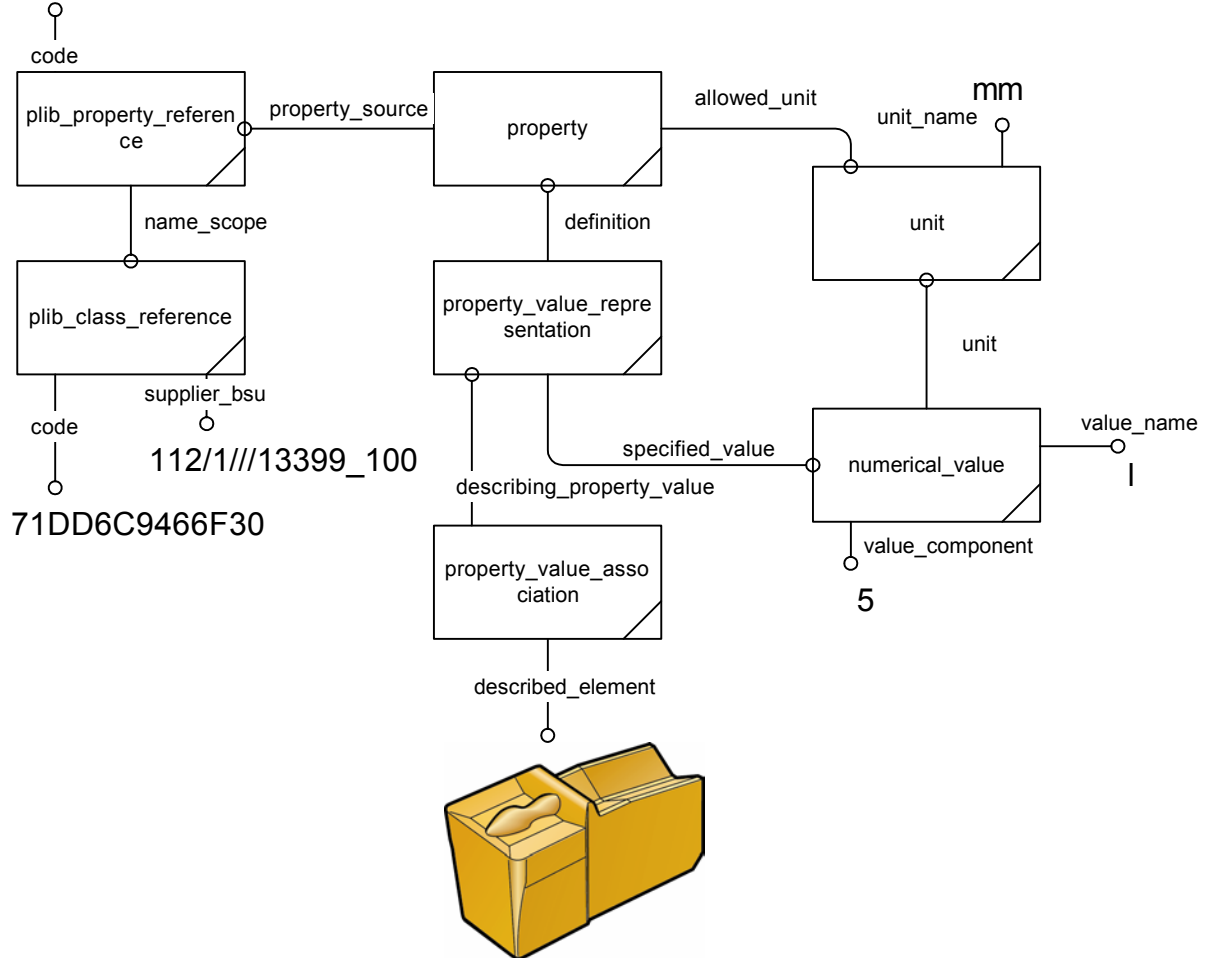
Coupled with dictionary

Properties

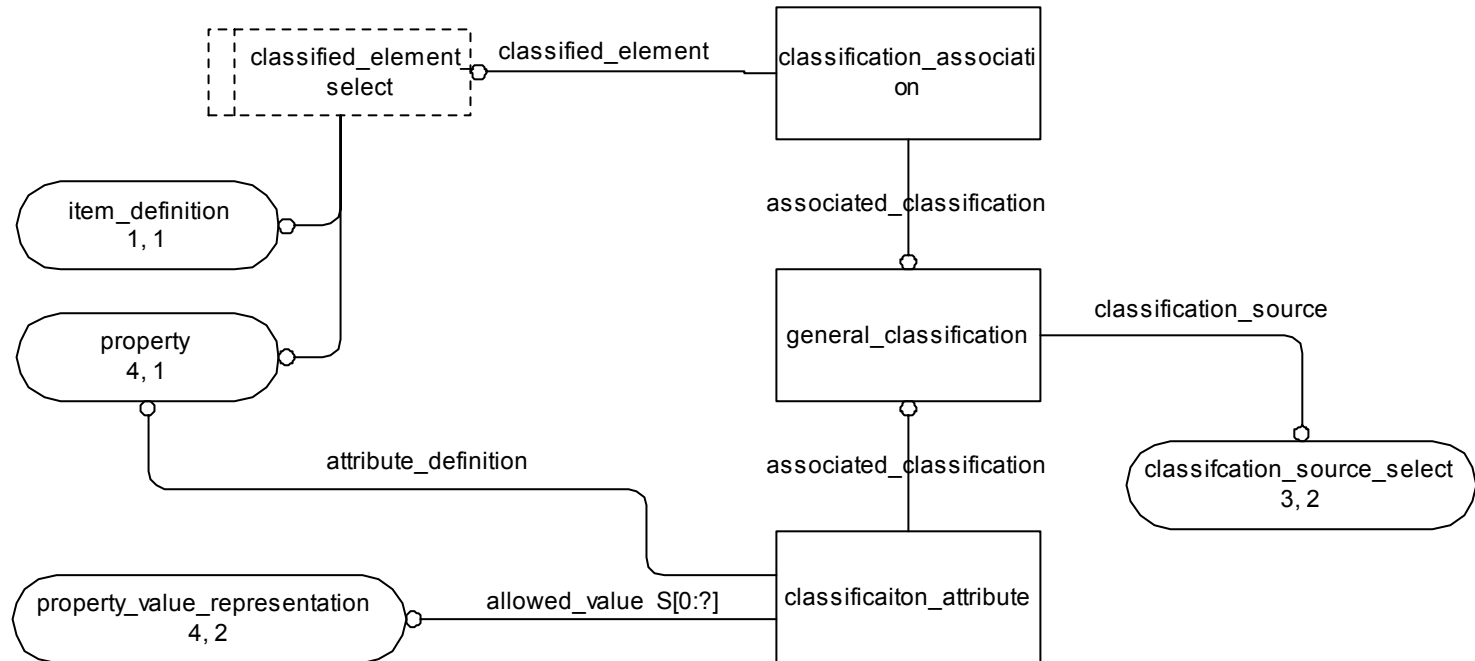property_source_select
3, 1

property_source

property

definition

organization
5, 1

validity_context

property_value_representation

describing_property_value

property_value_association

specified_value

described_element

property_value
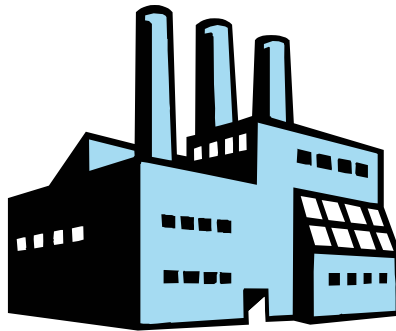
item_property_select

item_definition
1, 1

Properties
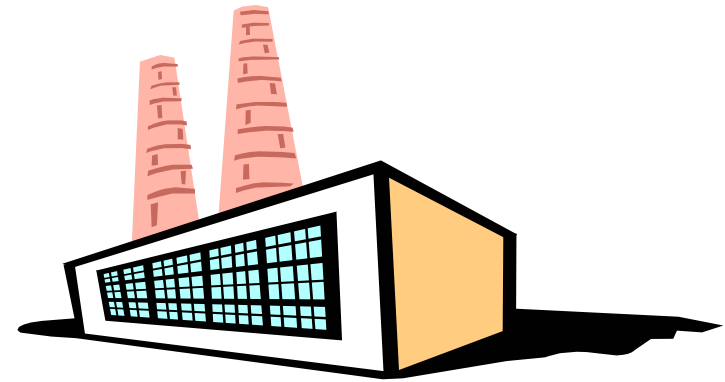
Classification

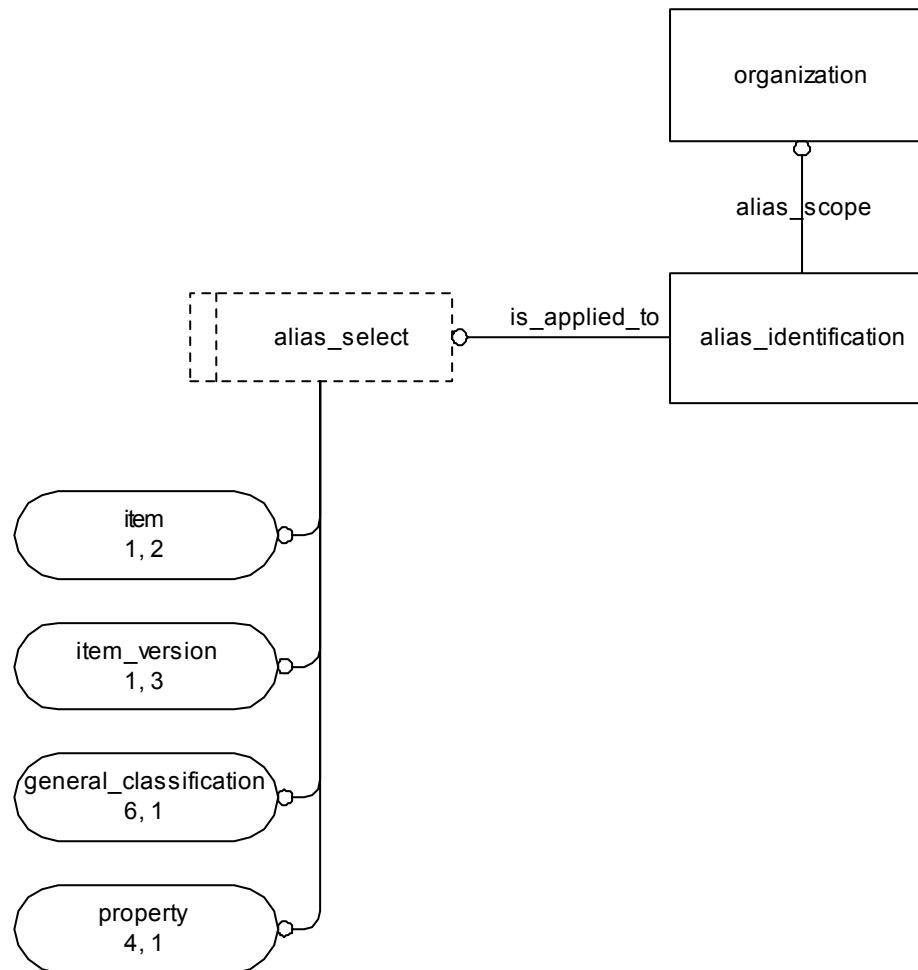# Different id in different contexts

Factory A

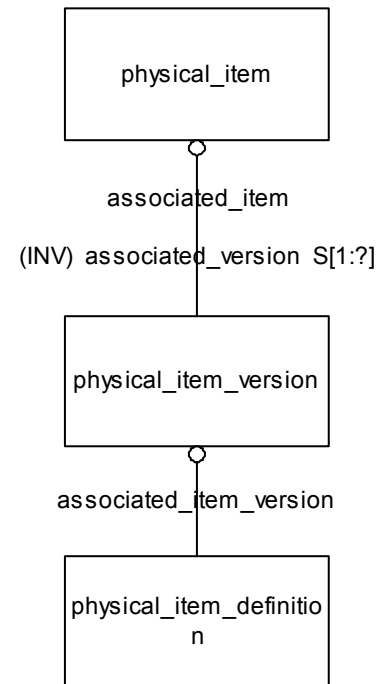Factory B

ABC123

XYZ789

Alias

Use of cutting tool data in the real world

– The properties of tools are measured
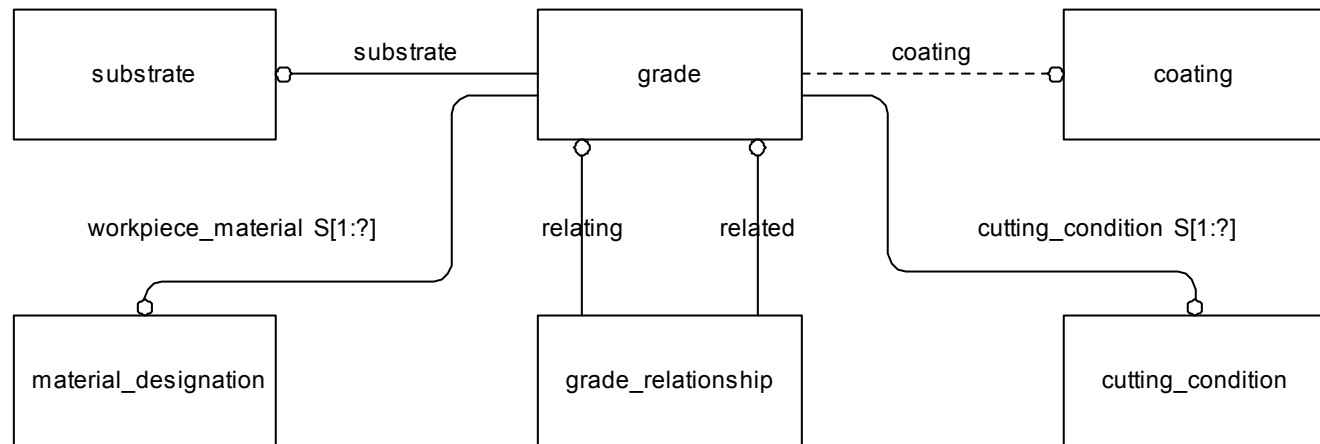– The same property will have different values for each and every tool

Physical items

physical_item

associated_item

(INV) associated_version S[1:?]

physical_item_version

associated_item_version

physical_item_definition

And more…

– Ownership
– Effectivity
– Document

Grade

Mapping

- – grade, substrate and coating map to product_definition
- – The relationships map to product_definition_relationship
- – cutting_condition map to representation

Questions?

– Questions
– Discussion