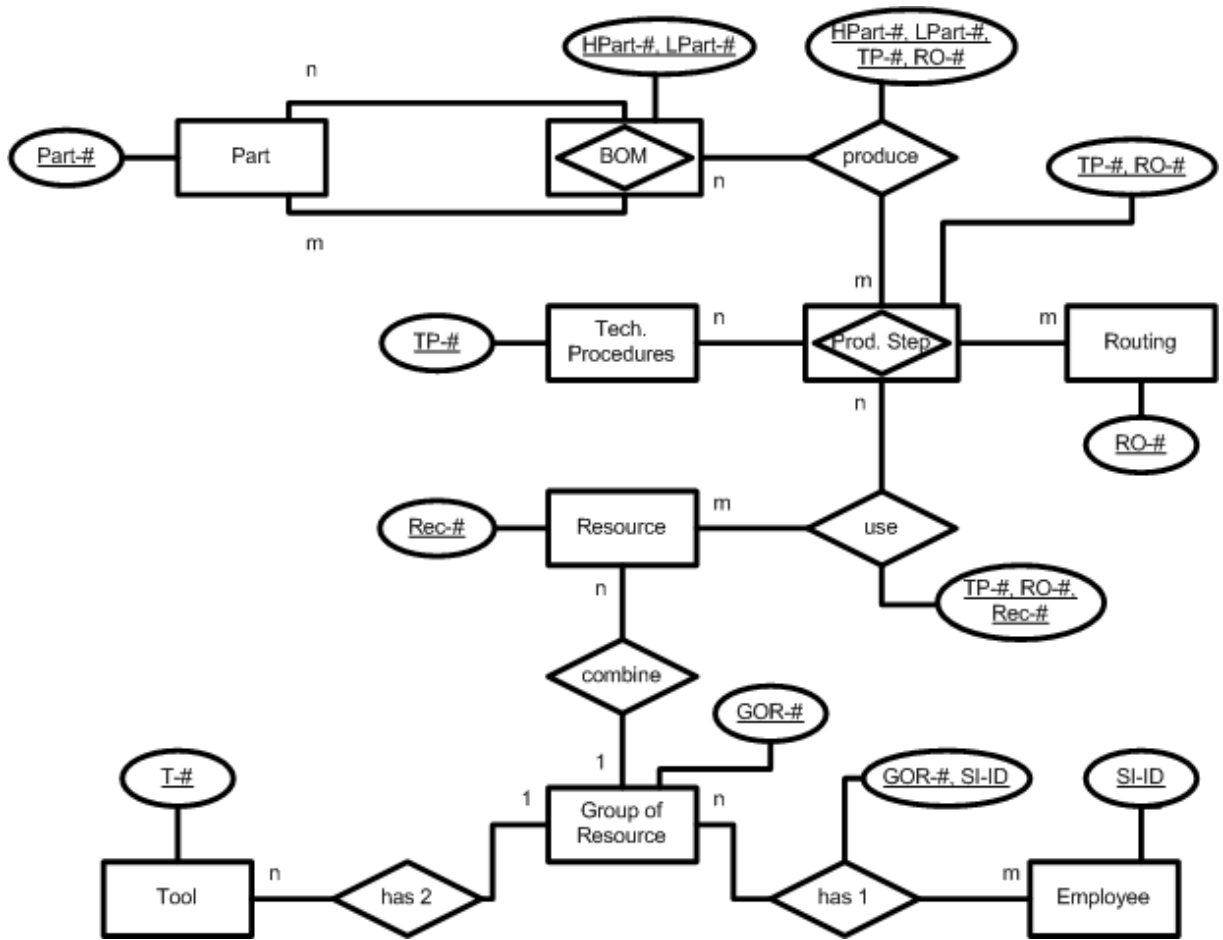


## PPC

Source: [Hohe99], adapted by Farid El Masri, adjusted by Gerhard Pokorny

### **Transfer the following verbal description into an ERM:**

- a) Parts (Part-#) are connected by a hierarchical bill of materials structure.
- b) On a technical level there are individual technical procedures (TP-#), which can be used as a production step in routings (RO-#). A routing consists of several technical procedures; a technical procedure can be used in several routings.
- c) A production step physically produces one or more items of the bill of materials structure. For complex parts, items of the bill of materials structure need to be produced in several production steps.
- d) The number of resources (Rec-#) is combined into groups of resources (GOR-#) (a resource can be assigned only to one group of resources).
- e) Each group of resources has several employees (SI-ID) and tools (T-#). Tools are definitely assigned to a group of resources. Employees, however, can be assigned to several groups of resources.
- f) A production step can use one or more resources. Resources are required in several production steps.



BOM

<u>HPart-#</u>	<u>LPart-#</u>	...

Part

<u>Part-#</u>	...

Tech. Procedures

<u>TP-#</u>	...

Prod. Step

<u>TP-#</u>	<u>RO-#</u>	...

Routing

<u>RO-#</u>	...

Group of Resources

<u>GOR-#</u>	...

produce

<u>HPart-#</u>	<u>LPart-#</u>	<u>TP-#</u>	<u>RO-#</u>	...

Employee

<u>SI-ID</u>	...

Resource

<u>Rec-#</u>	<u>GOR-#</u>	

use

<u>TP-#</u>	<u>RO-#</u>	<u>Rec-#</u>	...

Tool

<u>T-#</u>	<u>GOR-#</u>	...

has 1

<u>GOR-#</u>	<u>SI-ID</u>	...