ICATT APPRENTICESHIP PROGRAM TRAIN.RETAIN.GROW.	Information
Date:	Tolerances and Fits– Exercises

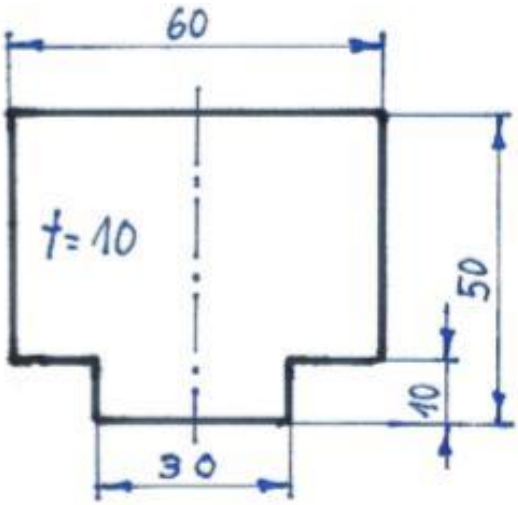
Exercise 1:

We are looking at the dimension 30mm.

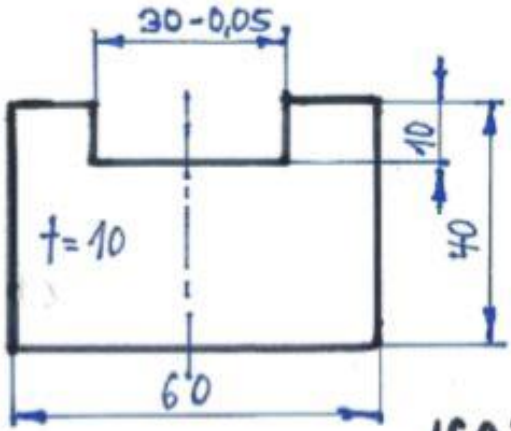
a) Calculate the tolerances and the important dimensions of this fit!
b) What kind of fit is it?
c) Show your result with a sketch ! (no solution provided yet)

Skizzen:

Part 1



Part 2



ISO 2768- f

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Exercise 1:

We are looking at the dimension 30mm.

a) Calculate the tolerances and the important dimensions of this fit!
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Solution: a)

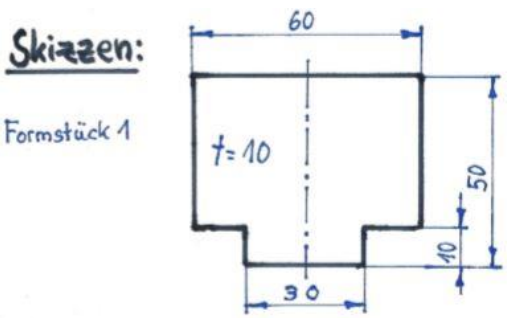
ISO 2768-f – general tolerances, Pg 81/112

Part 1:

Nominal size : 30mm
Upper deviation = es = +0.1 mm
Lower deviation = ei = -0.1 mm

Shaft max dimension = Gus = 30.1mm
Shaft min dimension = Gis = 29.9mm

Tolerances = Ts = Gus-Gis = 0.2mm

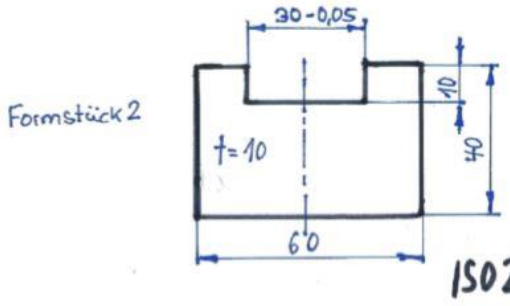


Part 2:

Nominal size : 30mm
Upper deviation = Es = +0 mm
Lower deviation = Ei = -0.05 mm

Hole max dimension = GuH = 30mm
Hole min dimension = GiH = 29.95mm

Tolerances = Th = Guh-Gih = 0.05mm



Solution b):

Max clearance
GuH – GiS = 30mm – 29.9mm = 0.1mm

Max interference
GiH – GuS = 29.95mm – 30.1mm = -0.15

According to TB => Transition fit