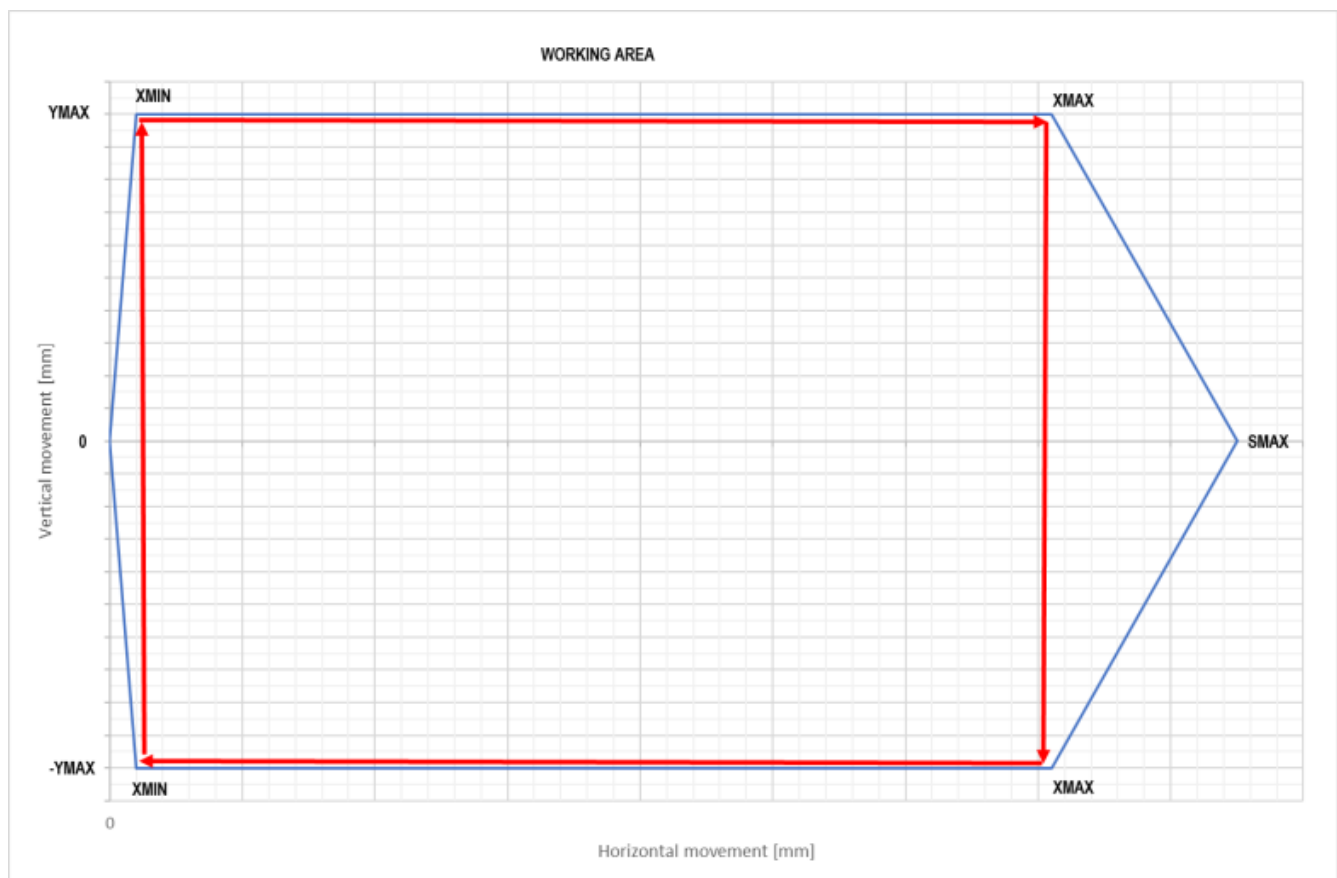# Working area

The working area inside the Red rectangle in the graph below can be calculated using the following formula.

XMIN = 10 mm.

SMAX = Linear motor total stroke.

YMAX = Robot_arm_length x SIN(40°). For example with arm length of 175mm ⇒ 110mm, -YMAX = -110mm.

XMAX = SMAX - (Robot_arm_length / 2). For example Smax = 425mm - 87,5mm ⇒ 337 mm.