

camera model : mv-cl020-41gc
resolution : 2048 x 2
pixel size : 7um x 7um
sensor size : 14.336mm x 0.014mm

first, obj resolution

obj resolution = fov/pixel
= 270mm/2048
= 131um/pixel

then, set the Height FOV,

Height FOV = 170mm x 1000[um]/131um
= 1297

Image Format Control - Height (set the height)

then, line rate

speed(mm/s) = obj res x line rate(hz)
50 x 1000[um] = 131um x line rate
line rate = 381

Acquisition Control - Acquisition Line Rate (set the line rate)

then, setting encoder

encoder = obj res x sensor line / pulse
= 131um x 2 / 4[every 4 micron get one pulse]
= 65.5

Acquisition control - Trigger Source - Frequency convertor

Frequency convertor - predivider (set the encoder number)