

## Image dimensions calculation(micrometer)

Standard images-PIV(SRM):

Given:

$$X = 22.2\text{cm}$$

$$Y = 14.9\text{cm}$$

### **1) PIV1 → 3μm**

$$4\text{cm} = 3\mu\text{m}$$

$$X: 22.2\text{cm} = 16.65\mu\text{m} (\sim 16.6\mu\text{m} \text{ approx})$$

$$Y: 14.9\text{cm} = 11.175\mu\text{m} (\sim 11.2\mu\text{m} \text{ approx})$$

### **2) PIV2 → 2μm**

$$3.7\text{cm} = 2\mu\text{m}$$

$$X: 22.2\text{cm} = 12\mu\text{m}$$

$$Y: 14.9\text{cm} = 8\mu\text{m}$$

### **3) PIV3 → 1μm**

$$2.6\text{cm} = 1\mu\text{m}$$

$$X: 22.2\text{cm} = 8.5\mu\text{m}$$

$$Y: 14.9\text{cm} = 5.7\mu\text{m}$$

DS images:

Given:

$$X = 17.2\text{cm}$$

$$Y = 14.9\text{cm}$$

1) DS-115-003 ->  $10\text{ }\mu\text{m}$

$$4.6\text{cm} = 10\text{ }\mu\text{m}$$

$$X: 17.2\text{cm} = 37.4\text{ }\mu\text{m}$$

$$Y: 14.9\text{cm} = 32.4\text{ }\mu\text{m}$$

2) DS-115-004 ->  $5\text{ }\mu\text{m}$

$$5.7\text{cm} = 5\text{ }\mu\text{m}$$

$$X: 17.2\text{cm} = 15\text{ }\mu\text{m}$$

$$Y: 14.9\text{cm} = 13\text{ }\mu\text{m}$$

3) DS-115-005 ->  $2\text{ }\mu\text{m}$

$$4.6\text{cm} = 2\text{ }\mu\text{m}$$

$$X: 17.2\text{cm} = 7.5\text{ }\mu\text{m}$$

$$Y: 14.9\text{cm} = 6.5\text{ }\mu\text{m}$$