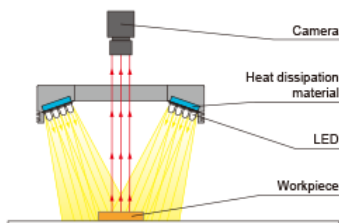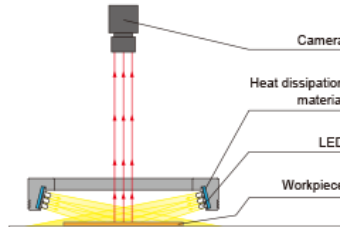## FORM FACTORS

Machine vision lighting comes in many shapes, each producing certain illumination effects. This list covers the most common light shapes used in the industry.
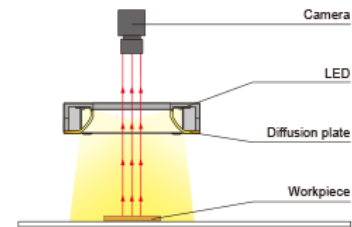
RING LIGHT

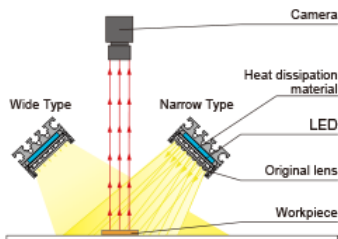**Effect:** Multipurpose bright-field illumination

LOW-ANGLE RING LIGHT

Effect: Dark-field illumination for highlighting surface features
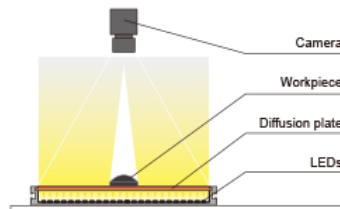
DIFFUSE RING LIGHT

Effect: Even illumination with reduced shadowing
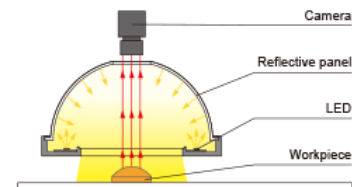
BAR LIGHT

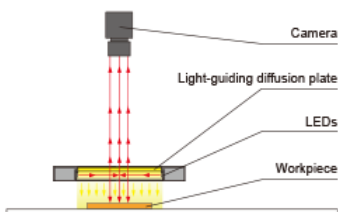**Effect:** Flexible bright-field/dark-field lighting, depending on position and angle

FLAT LIGHT

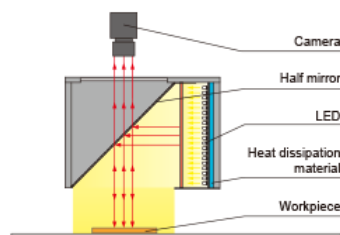**Effect:** Images silhouettes and outlines transparent objects

DOME LIGHT

Effect: Shadow-less light to make uneven surfaces appear flat
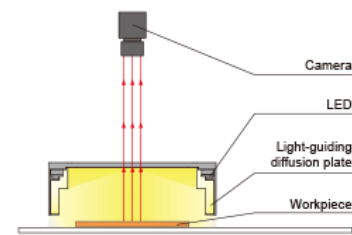
FLAT DOME LIGHT

Effect: Dome illumination in thin, flat design without camera hole
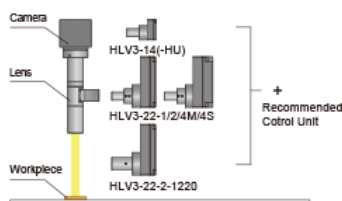
COAXIAL LIGHT

Effect: Uniform bright-field light for shiny surfaces

SQUARE LIGHT

Effect: Flexible bright-field/dark-field lighting, especially suited for square/rectangular objects
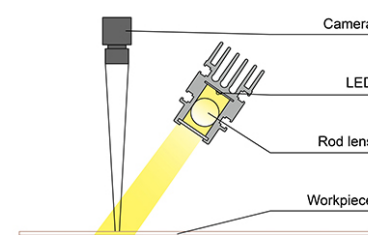
SPOT LIGHT

Effect: Directional illumination to light a specific place on the object

LINE LIGHT (HIGH UNIFORMITY)
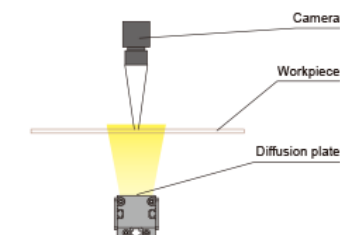
Effect: Diffused illumination for line-scan inspection

LINE LIGHT (HIGH ILLUMINANCE)

Effect: Focused illumination for line-scan inspection

LIGHTING SOLUTION
LED ILLUMINATION FOR MACHINE VISION

CCS — Creating Customer Satisfaction

Imaging Different Workpieces with Common Light Shapes

Imaged workpiece / Light Unit in use	Metal part (automotive part)	Circuit board (electronic part)	Can (food)	PET bottle (drink)
Ring Lights				
LDR2 series				
LDR2-LA series				
LDR-LA1 series				
High-angle HPR2 series				
Low-angle HPR2 series				
Coaxial Lights — LFV3 series				
Dome Lights — HPD2 series				
Flat Dome Lights — LFX3 series				
Flat Lights — TH2 series				
Bar Lights — LDL2 series				

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