

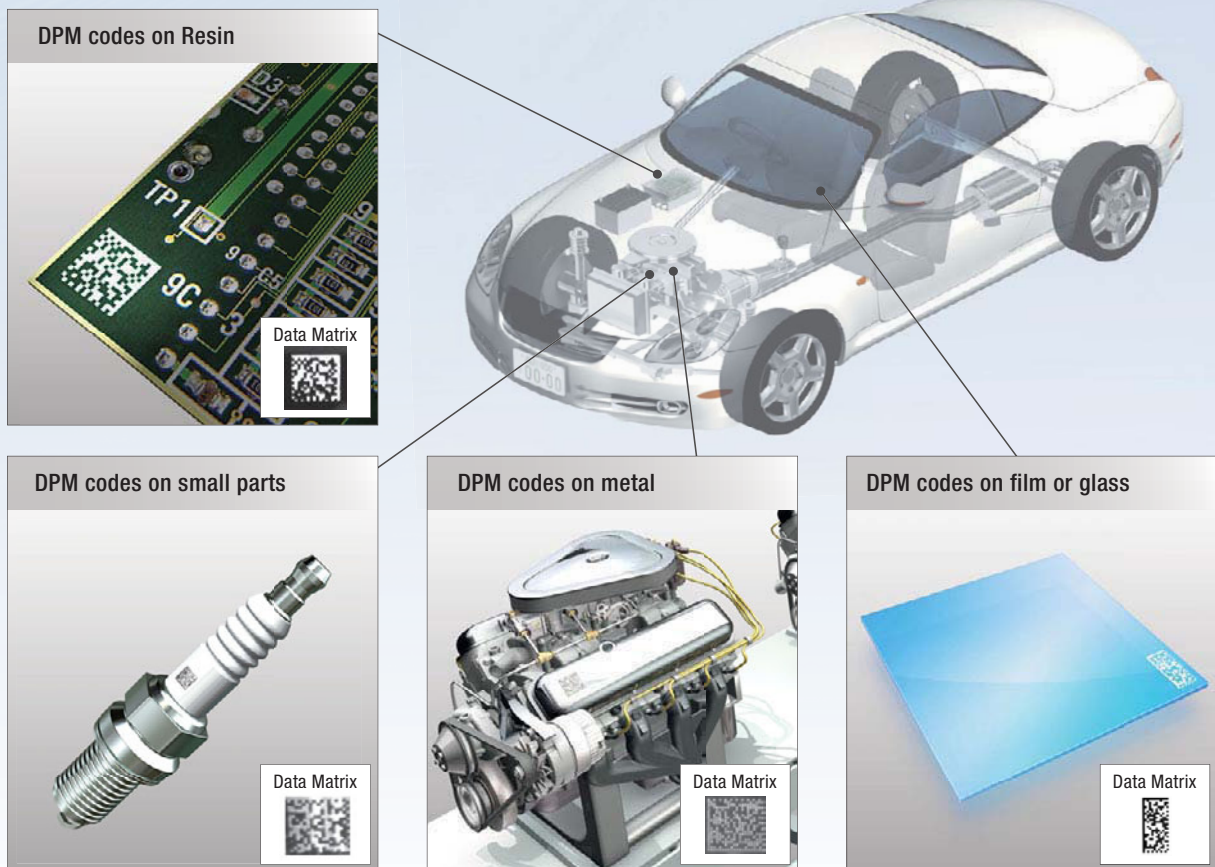
There are many instances when different barcode or 2D code systems are used together in the same manufacturing process. Code printing quality can also vary due to imperfect printing or low contrast.

The FQ-CR Series handles these and many other conditions.

The FQ-CR Series can be easily introduced without using different code readers and operating procedures for each of the different processes.

Reads Direct Part Marking (DPM) Codes

2D Code Reader for
Direct Part Marking (DPM) codes **FQ-CR2 Series**



Easily reads difficult codes

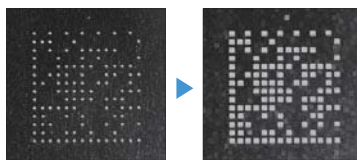
FQ-CR2

Just read the code and register it, and then let the following functions automatically tune the settings.

Depending on the conditions of the code, the automatic retry and code error correction functions let, essentially anyone, easily adjust the settings.

Filter function

Three stages of filtering are automatically selected for the read image from Smooth, Dilate, Erosion, and Median filtering.



Before Dilate

After Dilate

Retry function

You can retry the settings until reading is successful while automatically changing the exposure time and other reading parameters.



Before Retry

After Retry

Code Error Correction

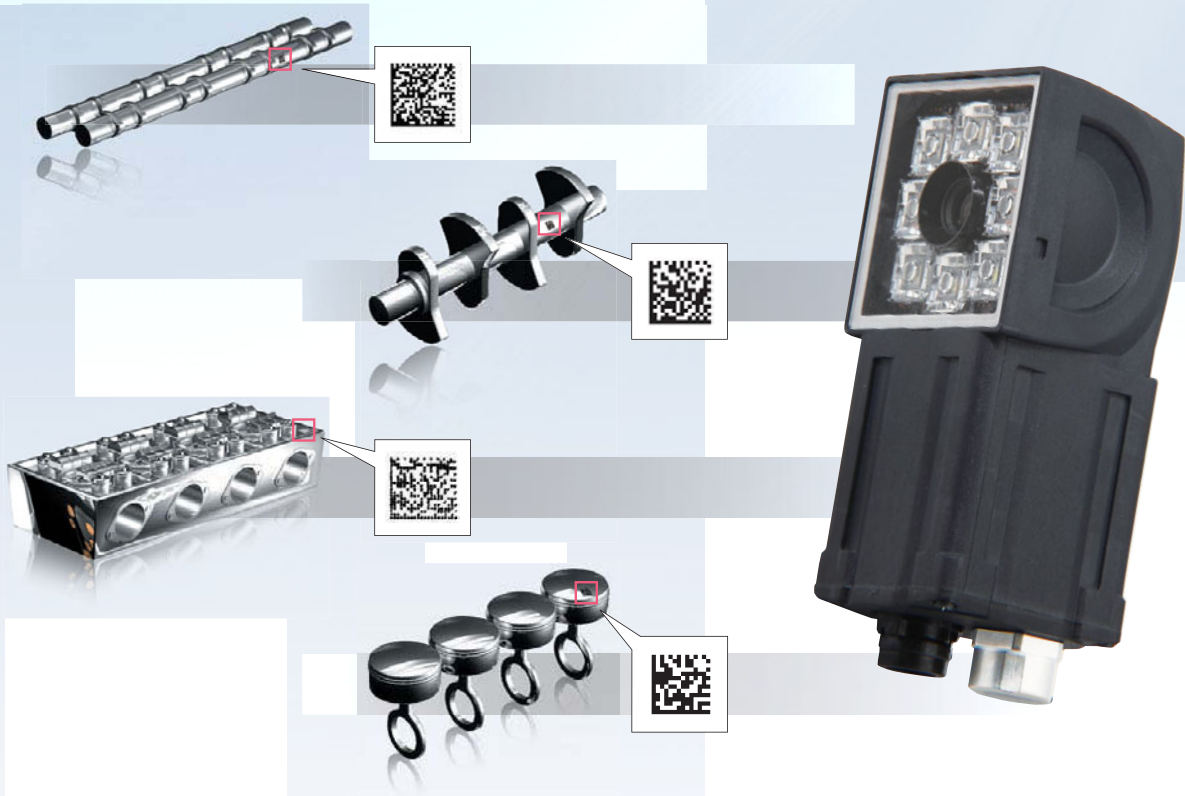
Code omissions and errors are automatically corrected when the code is read.



Before Processing

After Processing

OMRON's Unique Algorithm Provides Superior Reading Ability for Direct Part Marking codes



Removal of Printing Irregularities or Noise

Filter function

You can apply up to three of the four unique filters developed by OMRON in the desired order to remove printing irregularities and noise, in order to achieve a stable reading.

Types of Filtering

Smooth	Smooths the image.	Erosion	For white codes, reduces the cell size. Effective for reading separated dot codes.
Dilate	For white codes, increases the cell size. Effective for reading codes with cell spreading.	Median	Removes noise.

Combining Filtering

Erosion and dilation can be combined to connect dots without changing the dot thickness.

