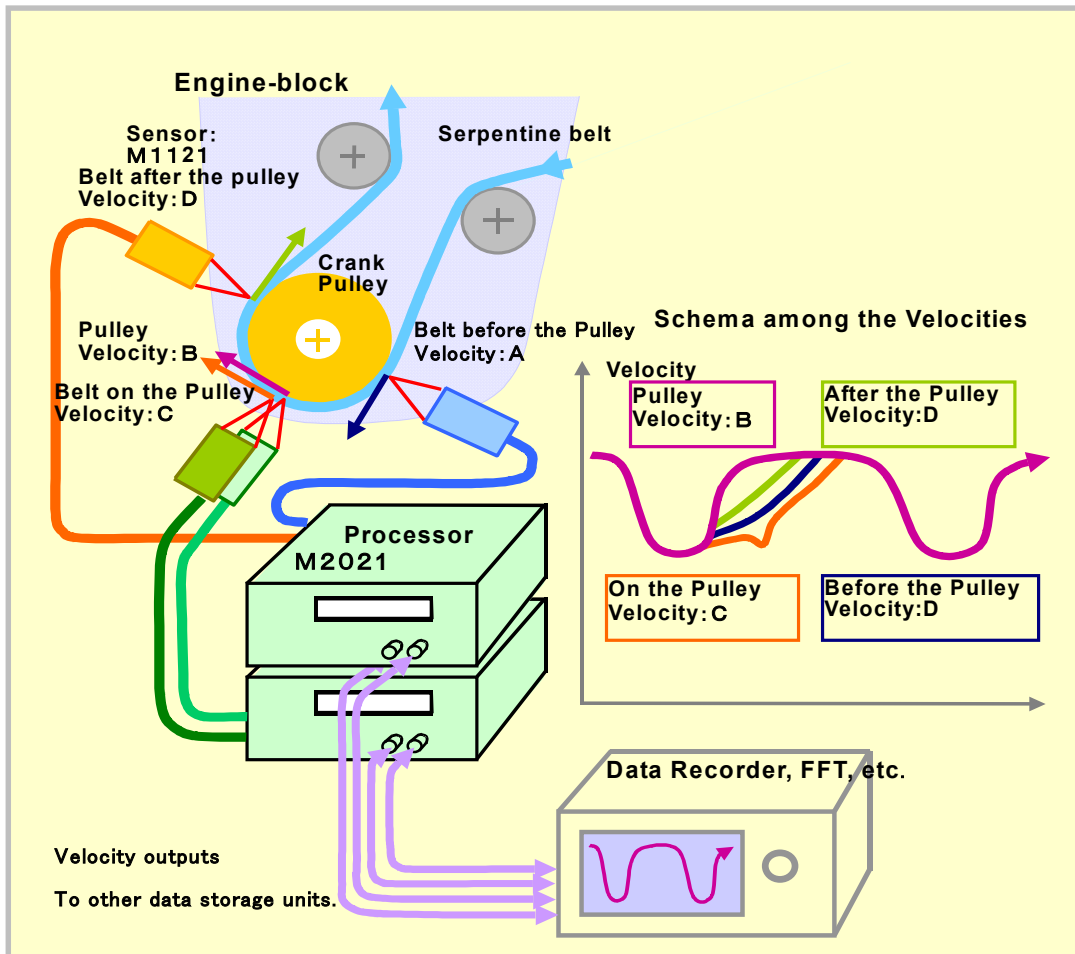


MODEL-2021 Application

Automobile: Measurement Slip between a Pulley and a Belt.



The figure pictured above is a diagram of the measurement of **stretching behavior on a serpentine belt** for automobile by using **2-channel Laser Doppler Velocity Meter MODEL-2021**.

For automobile engines, a belt for driving auxiliary machine is very important part. This belt is used under hard condition therefore some **slip of belt** may occur due to a problem of control of tensions or other factor.

And this slip also makes **harsh noise**, which is so unpleasant that it may be a subject of a **user claim** not only for the deterioration in function or durability of belt but also for **spoiled quality of premium image of a car**.

An existing high-speed camera can check some behavior on a belt, but it is still difficult to detect and observe the velocity data of belt quantitatively during stretching.

MODEL-2021 uses the optical method for velocity measurement. This method is **Non-contact measuring** system therefore the measurement does not require the alignment of axes and coupling such as for a rotary encoder.

The measurement result by using this system has **no interference from colors and any other status on the surface of the object**, and also this optical measuring method does not apply any pressure on rotations. This feature is available for **detecting imperceptible value of velocity variation**.