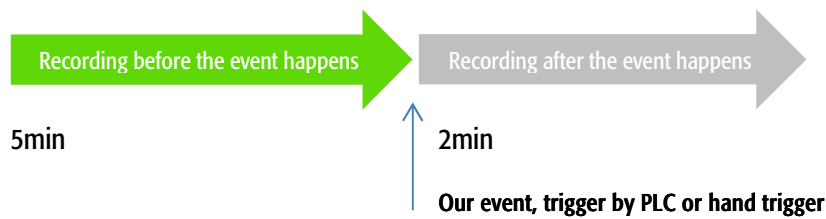According to Murphys law, problems in your productionline will not happen if a Engineer is arround. Therefore its importend to monitor the equipment 24/7. The easiest way to do this is to use one of our Streamingsystem, PROMON SCOPE or PROMON STUDIO – both Systems using the same technology for sequence recording. To give you a idea of the capability of this system, lets set up one! First question, if an event happens in the line, what is essential for me to understand the problemand to solve it:

Whats the time I need to be able to see before the problem occures first and can be recogised by the inline inspection system or PLC or even the operator, and how long do I need to record after a event happens:

Recording before the event happens   Recording after the event happens

5min   2min

Our event, trigger by PLC or hand trigger

This mean, we have to record a 7min sequense over all.

What if we have to record a 24/7 shift? No problem, since we know how long a "sequence of interest" is, we don't need to record the whole shift. We could adjust our sequence according our need, this means, set a pre-trigger recording to 5min and post-trigger recording to 2min. Our PROMON Software will now generate a circular buffer as follow (symbolic):
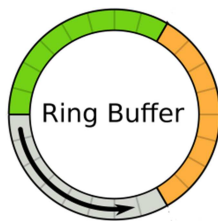

GREEN: Our PRE-Trigger Images in the Circular buffer – exactly 5minutes
ORANGE: Older Images, will be overwritten with the Images defined in the POST-Trigger – exactly 2 minutes.
GREY: In this diagram, recording has just started

Arm the system and let it run. If an event happens, PROMON will write the recorded sequence on a special folder on the hard drive, and if you wish, rearm itself for the next event that's might happen during the shift.

To define the needed Harddrive capacity, you have to know how many sequences you would like to capture, without deleting the old ones:

For example: 10 sequences with a length of 6 minutes @ fullspeed (PROMON 501), you will need 500 GB free HDD space.

If you're replaying one of those recorded sequences, you will find a small red arrow in the timeline, which indicate your event trigger in the sequence (and there we find our GREEN and GREY arrow again):
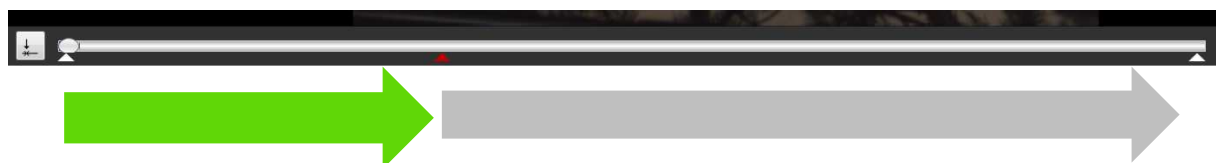
With this technology, there is no need to record 24/7 the whole process.

Please keep in mind, high-speed events happen within a few seconds, in most of the applications, a recoding time of 30s is more than enough.