



# PROCESS NETWORK VIDEO RECORDER

*Industrial process video recording and traceability management*



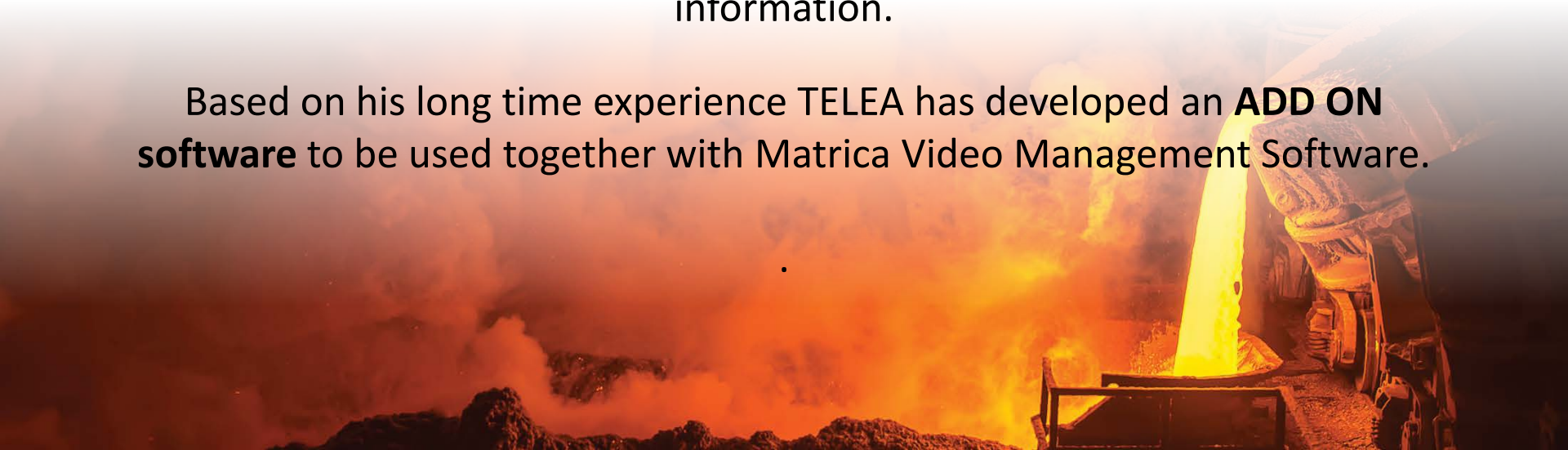
## MATRICA NVR2

During industrial process is sometimes important to record images coming from cameras and related it to the production code.

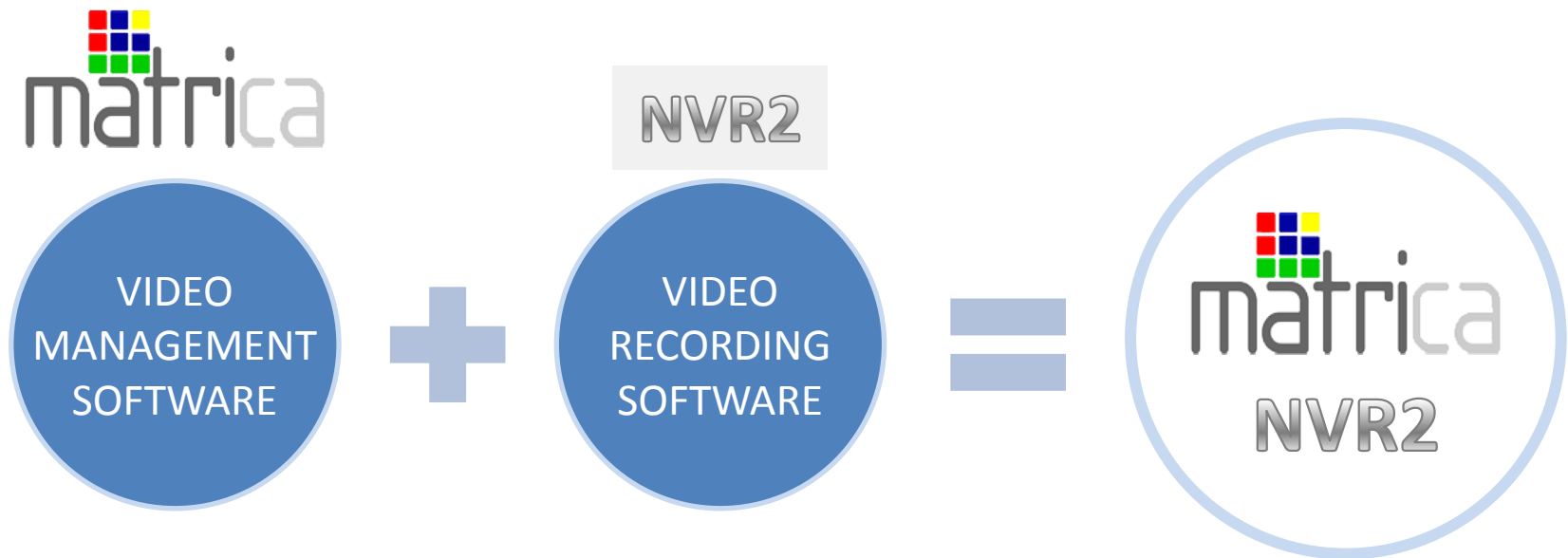
It is a key point for quality **traceability**.

This type of recording requires the capability of CCTV system to open a communication with automation system for receive the relevant information.

Based on his long time experience TELEA has developed an **ADD ON software** to be used together with Matrica Video Management Software.



# PROCESS VIDEO RECORDER



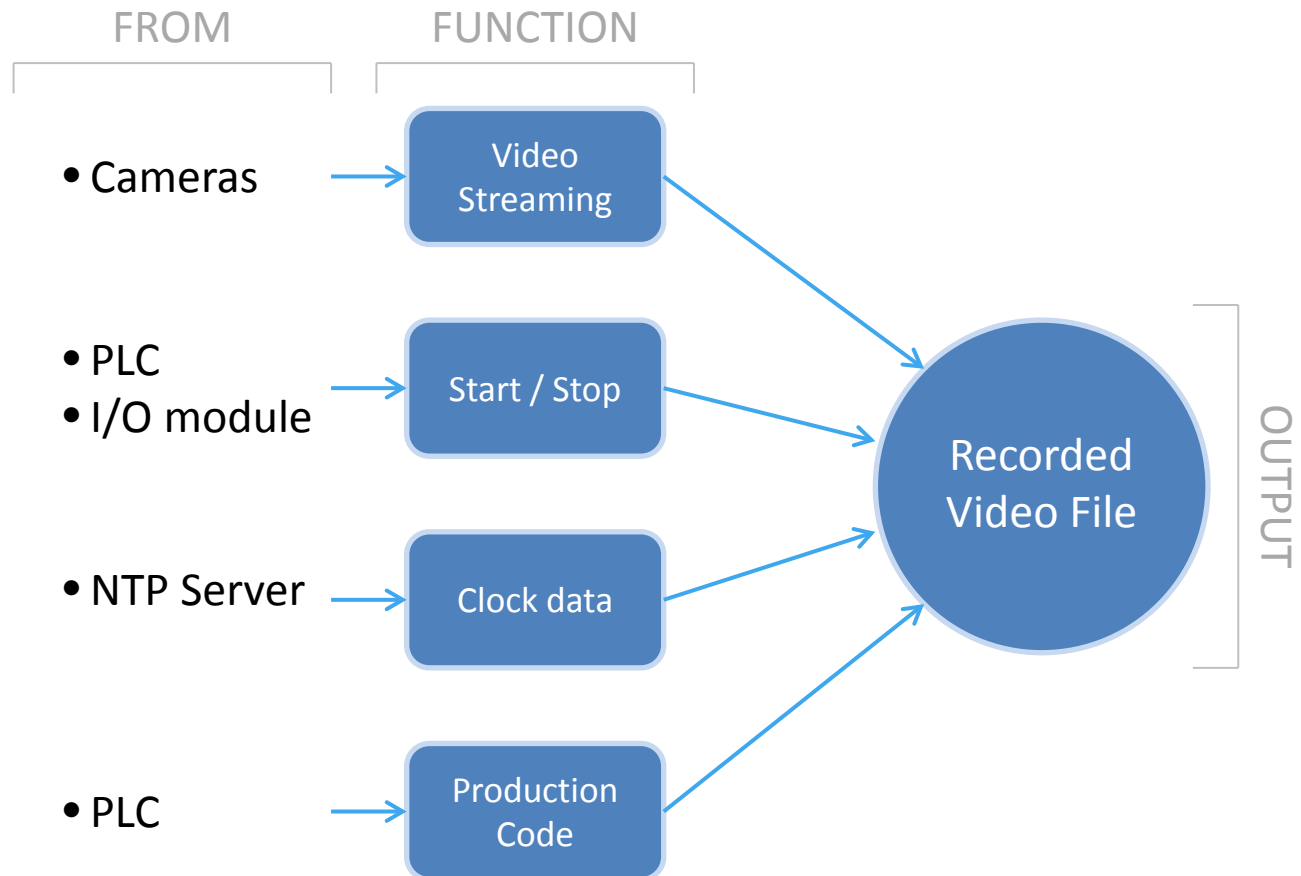




## KEY FEATURES

- **Live video streaming** coming from cameras connected to the network (VMS);
  - **Video streaming recording** functionality (NVR2);
  - Start/stop recording command based on I/O module;
- Start/stop recording commands from automation through Ethernet network;
  - **Storage of video recorded with production reference name;**
  - **Industrial communication protocols** available as ASCII, Modbus/TCP;
- **Video recorded search** based on data/time or production code reference;
  - **Time data synchronized** to the process clock server;

## KEY FEATURES



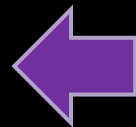
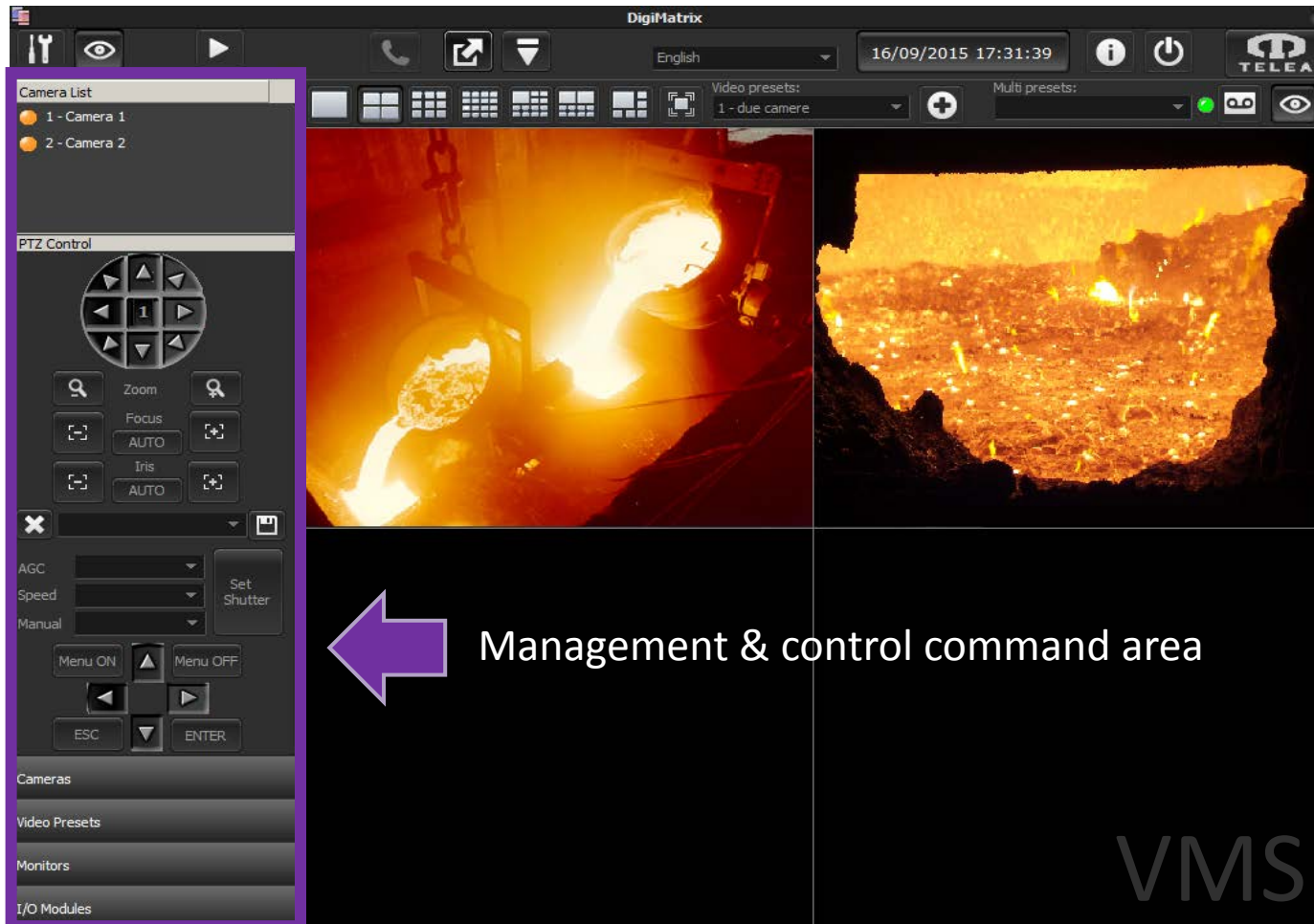


## KEY BENEFITS

- **Traceability** of the process thanks to the product
  - **Quality** assurance tool
- **Save money** by reducing access time to recordings



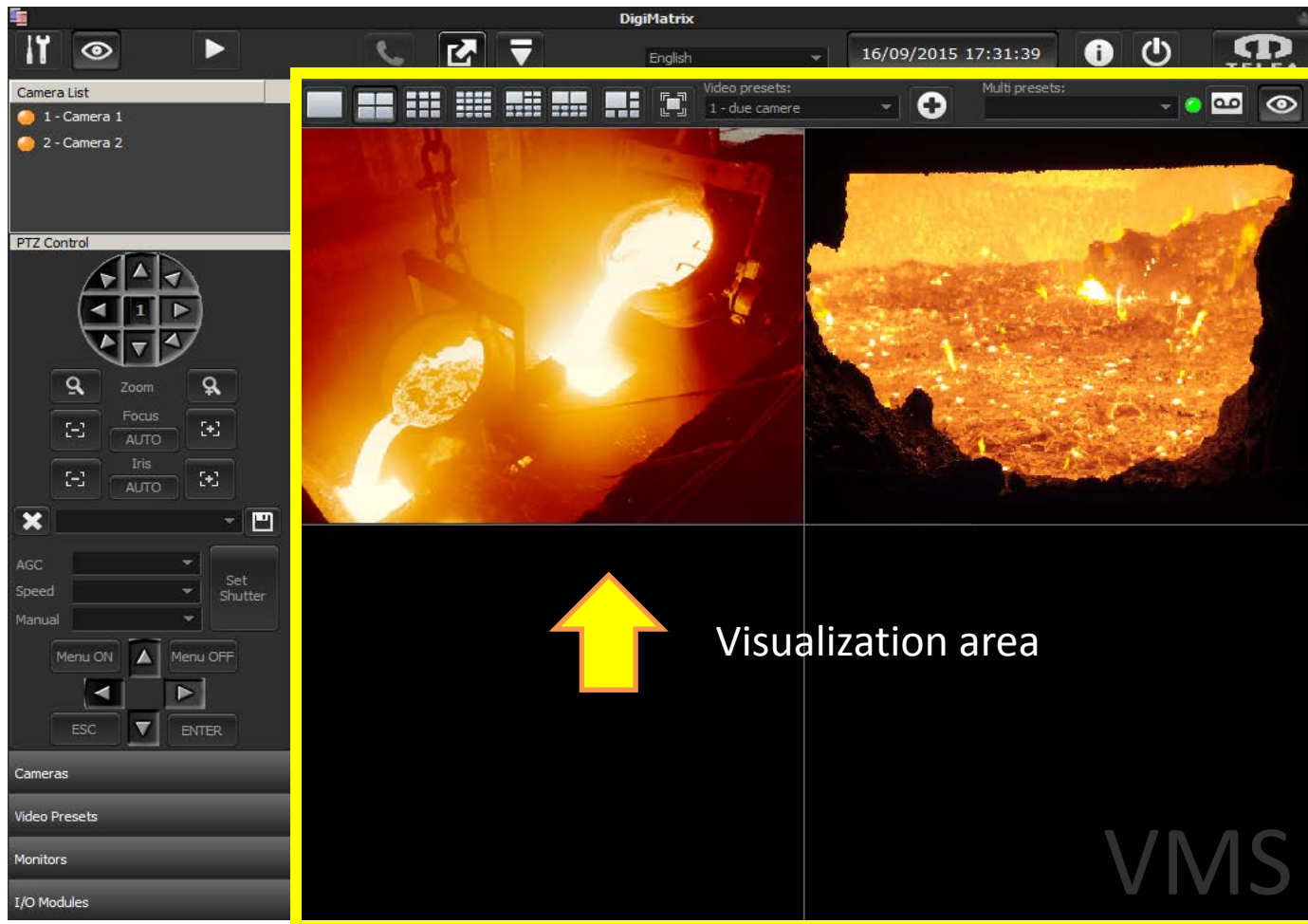
# VMS: OPERATOR INTERFACE



Management & control command area

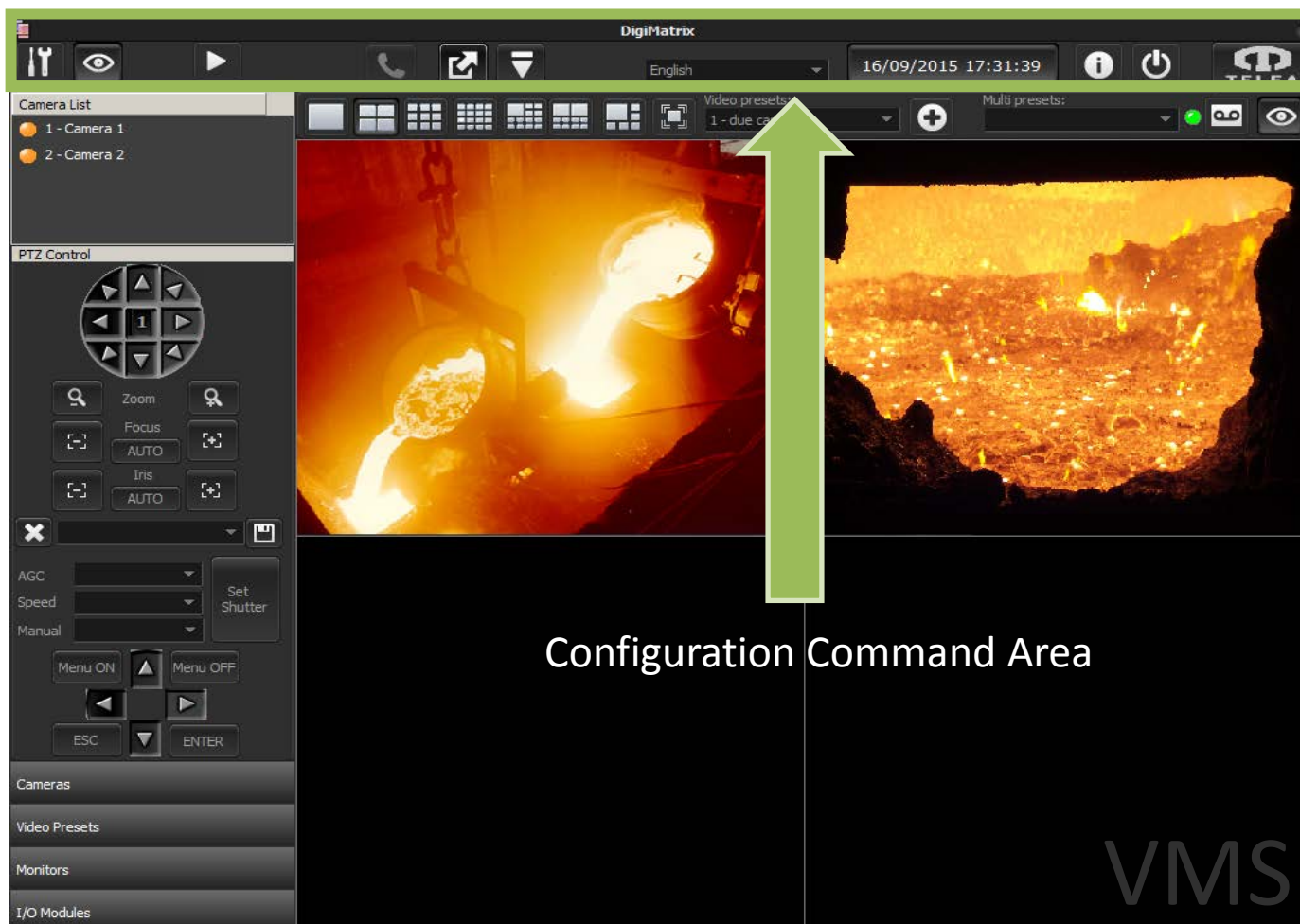
VMS

# VMS: OPERATOR INTERFACE

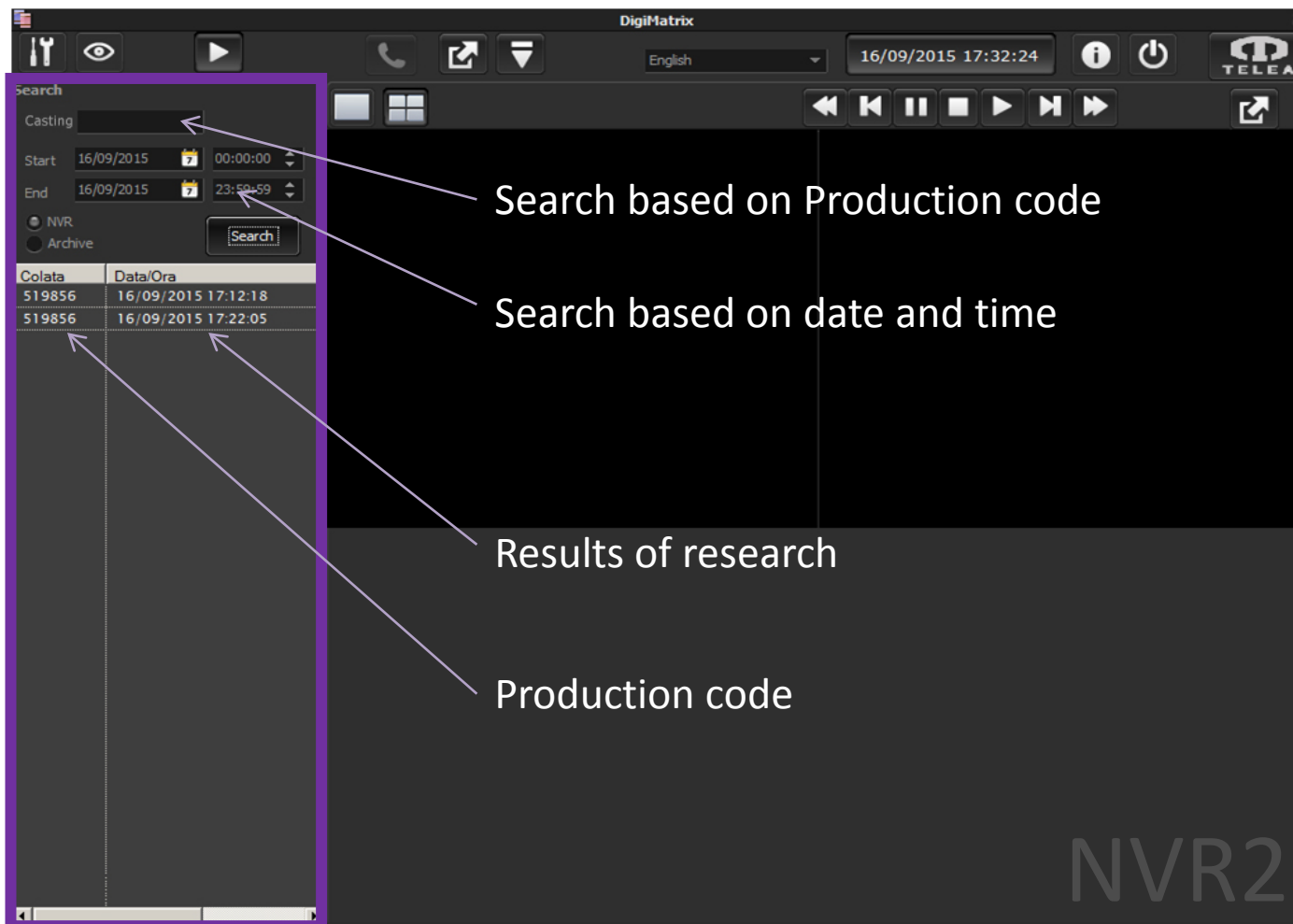




# VMS: OPERATOR INTERFACE



## NVR2: OPERATOR INTERFACE



The screenshot displays the NVR2 Operator Interface. At the top, there is a toolbar with various icons and a status bar showing the date and time (16/09/2015 17:32:24). Below the toolbar, there is a search panel with the following fields:

- Casting: [Empty text field]
- Start: 16/09/2015 00:00:00
- End: 16/09/2015 23:59:59
- Radio buttons for NVR and Archive
- Search button

Below the search panel, there is a table with the following data:

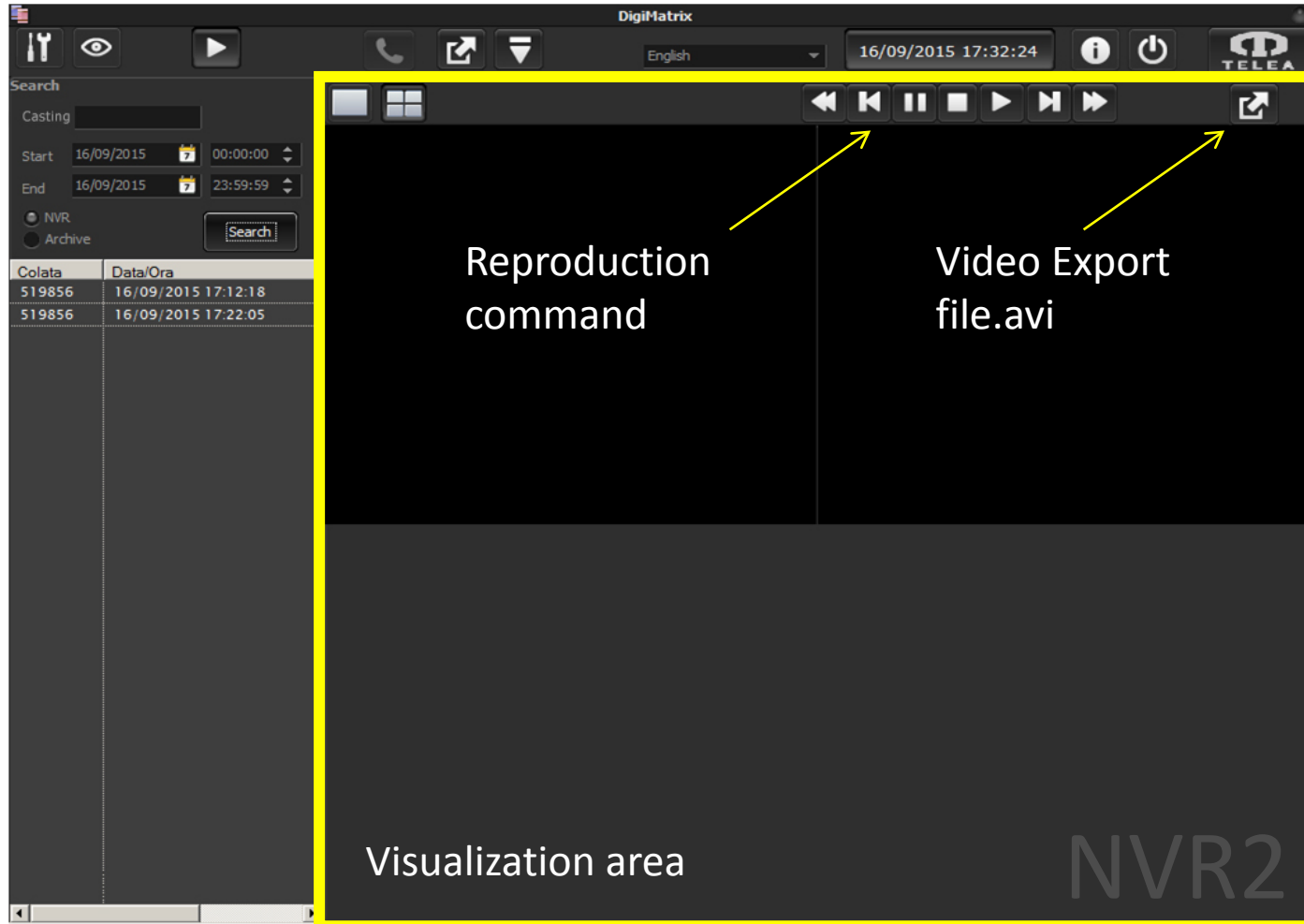
Colata	Data/Ora
519856	16/09/2015 17:12:18
519856	16/09/2015 17:22:05

Annotations with arrows point to the following elements:

- Search based on Production code (points to the Casting field)
- Search based on date and time (points to the Start and End fields)
- Results of research (points to the table)
- Production code (points to the first column of the table)

NVR2

## NVR2: OPERATOR INTERFACE

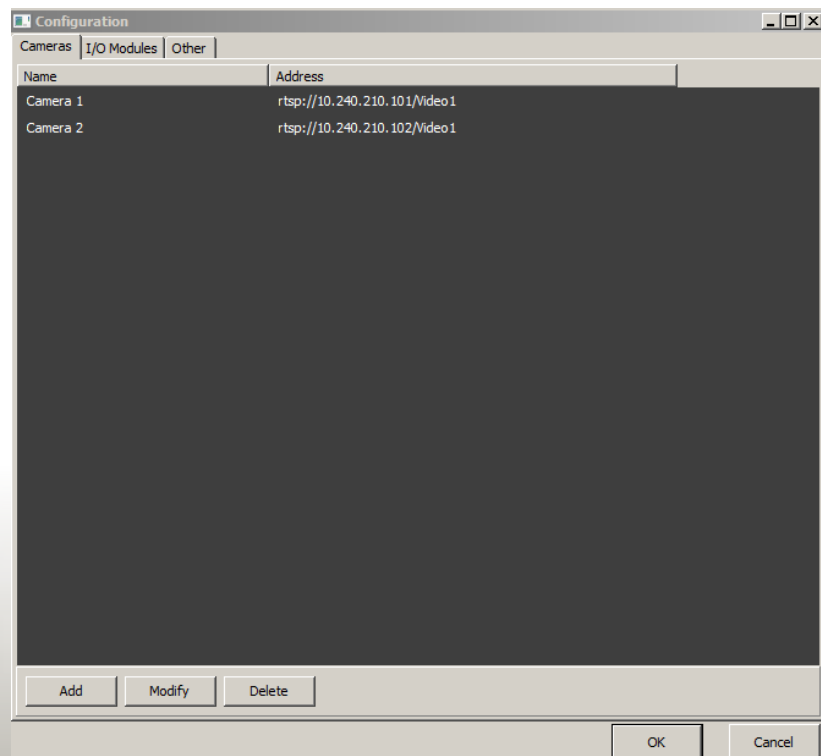


The screenshot displays the NVR2 Operator Interface. The top bar includes the title 'DigiMatrix', language 'English', and a timestamp '16/09/2015 17:32:24'. The left sidebar contains search filters: 'Casting', 'Start' (16/09/2015 00:00:00), 'End' (16/09/2015 23:59:59), and radio buttons for 'NVR' and 'Archive'. A table below the filters shows search results:

Colata	Data/Ora
519856	16/09/2015 17:12:18
519856	16/09/2015 17:22:05

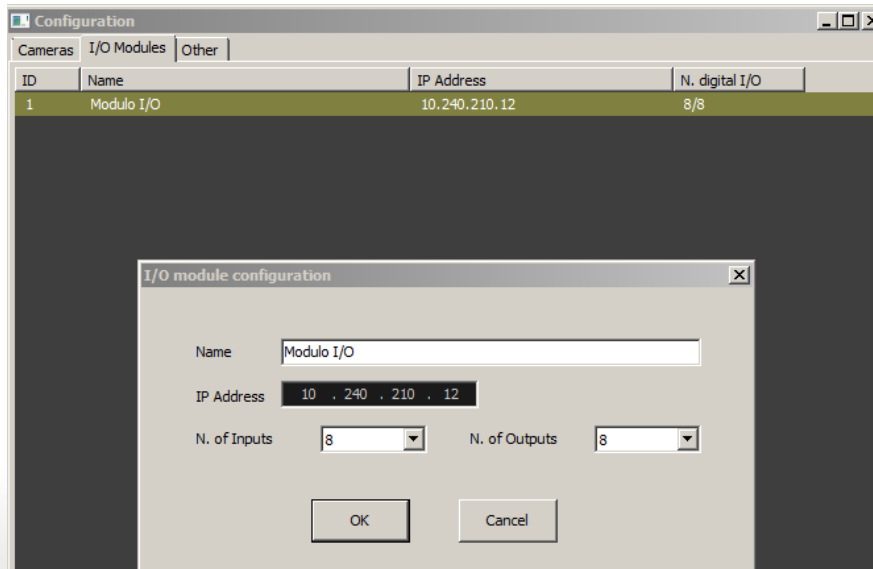
The main area is a video player with a playback control bar at the top. The control bar includes buttons for play/pause, stop, and next. Two yellow arrows point from the text labels to the play/pause and next buttons. The text 'Reproduction command' is positioned to the left of the play/pause button, and 'Video Export file.avi' is positioned to the right of the next button. The bottom of the player area is labeled 'Visualization area'. The text 'NVR2' is visible in the bottom right corner of the interface.

## NVR2: CAMERA CONFIGURATION



- Up to 16 cameras can be added
- RTSP video streaming managed

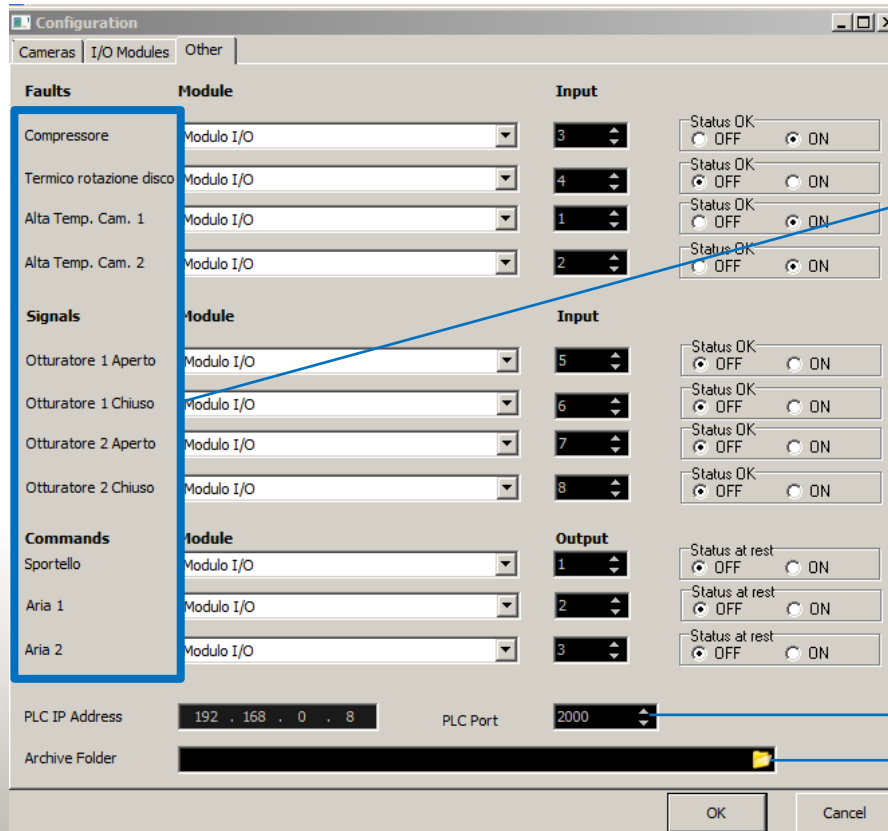
## NVR2: I/O MODULE CONFIGURATION



- Up to 2 I/O module can be added
- Multiple input/output for each module can be managed
- MOXA brand compatible



## NVR2: OTHERS CONFIGURATION



The screenshot shows the 'Configuration' window with the 'Other' tab selected. The window is divided into several sections: 'Faults', 'Signals', and 'Commands'. Each section has a 'Module' dropdown menu, an 'Input' or 'Output' dropdown menu, and a 'Status OK' or 'Status at rest' section with radio buttons for 'OFF' and 'ON'. At the bottom, there are fields for 'PLC IP Address' (192 . 168 . 0 . 8), 'PLC Port' (2000), and 'Archive Folder' (empty). The 'Archive Folder' field is highlighted with a yellow cursor.

Section	Item	Module	Input/Output	Status
Faults	Compressore	Modulo I/O	3	Status OK: OFF (selected), ON
	Termico rotazione disco	Modulo I/O	4	Status OK: OFF (selected), ON
	Alta Temp. Cam. 1	Modulo I/O	1	Status OK: OFF (selected), ON
	Alta Temp. Cam. 2	Modulo I/O	2	Status OK: OFF (selected), ON
Signals	Otturatore 1 Aperto	Modulo I/O	5	Status OK: OFF (selected), ON
	Otturatore 1 Chiuso	Modulo I/O	6	Status OK: OFF (selected), ON
	Otturatore 2 Aperto	Modulo I/O	7	Status OK: OFF (selected), ON
	Otturatore 2 Chiuso	Modulo I/O	8	Status OK: OFF (selected), ON
Commands	Sportello	Modulo I/O	1	Status at rest: OFF (selected), ON
	Aria 1	Modulo I/O	2	Status at rest: OFF (selected), ON
	Aria 2	Modulo I/O	3	Status at rest: OFF (selected), ON

Faults Input, Signal Input and Commands info to be managed through Matrica VMS

PLC address for data exchange

Archive folder for recorded files storage