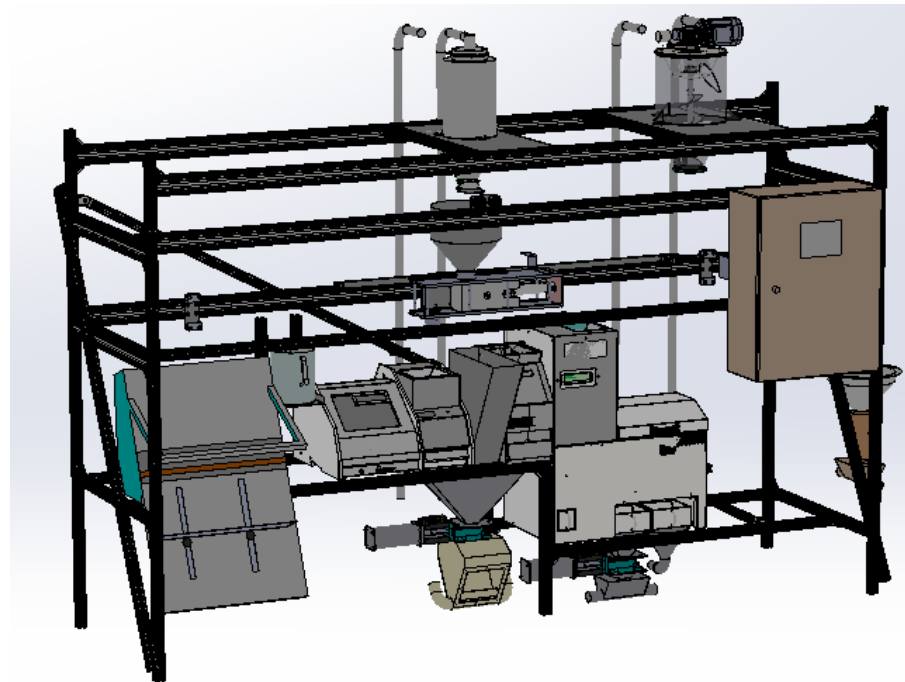# SARA 2020

Système Automatique de Réception et d'Analyse

OPERATING

PROCEDURE

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When a sequence is running, should it be in manual or automatic mode, any access to the working area should be forbidden.

You must take all necessary measures to avoid material or bodily injuries.

For any intervention, you must wear your personal protective equipment.

It is essential for any operation to be carried out on this equipment to be done by personnel who has received the appropriate training.

You must not attempt to operate the cylinders, the dosing trolley and any effector during sample transport (when the sample is in the operating cycle).
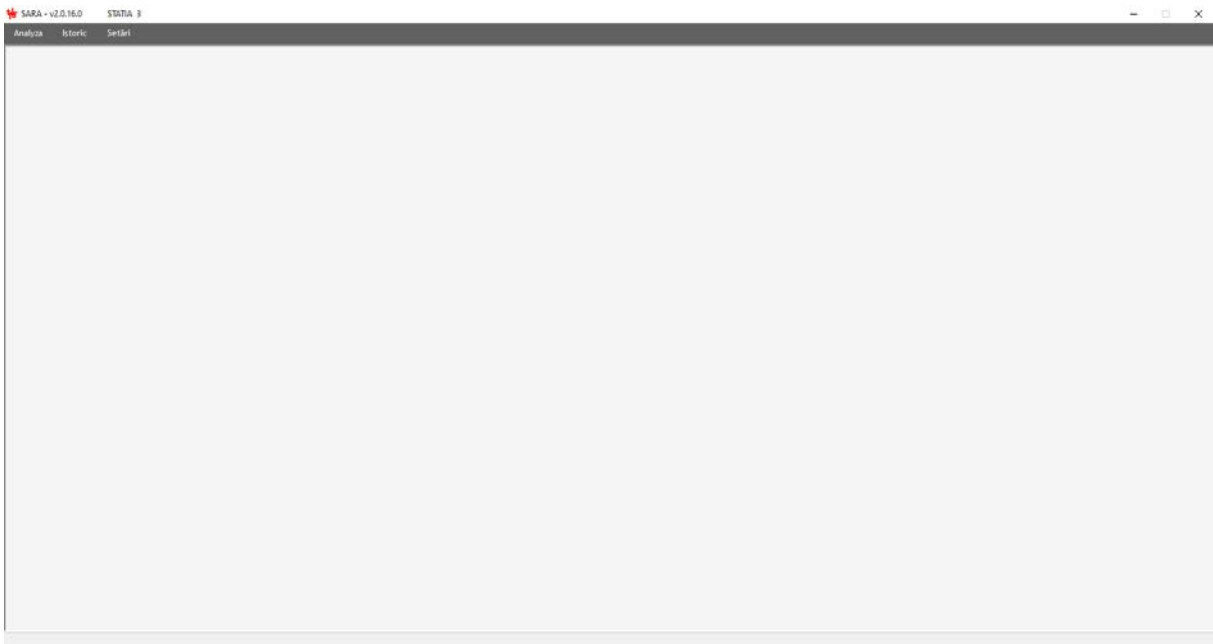
Before any operation of the SARA, make sure that no person or physical elements are in the linear rail translation area.
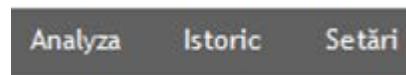
Beware of Residual Energies

The main screen allows the operator to choose between 2 main modes :

- Analyza
- Istoric

The Setari section shouldn't be available and is protected by a password. This section allows TPLG's operators to apply several specific settings to the program. These settings have already been optimized for Comvex's using.

ANALYZA

ANALYZA screen is the main screen used by the operators. It allows to manage the analyzing process following the operator's needs.

ISTORIC

ISTORIC screen allows the operator to access all the needed information related to previous analyzes, showing all the results depending on the ID, date & time, and selected devices.

2. ANALYZA – operating procedure

Before launching the system, the operator needs to make sure all the devices are connetced to the software & ready for processing. The green lights should be apparing in the following way :
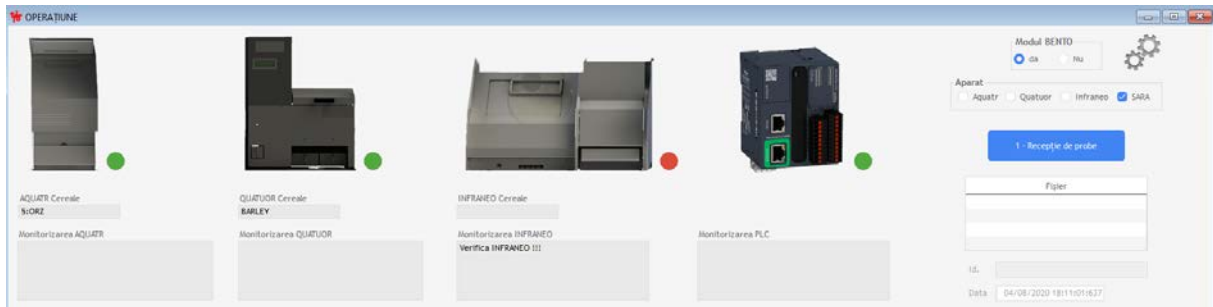

If some of the devices aren't connected, you will notice a red light as following :

- Quatuor & AquaTR :

The connecting cables should be checked. If the cables are connected properly, then the operator should close & open the ANALYZA window several times, until having these devices connected to the software.

- Infraneo :

The connecting cables should be checked. If the cables are connected properly, then the operator should close the ANALYZA window, and use the Infraneo connecting procedure as following :

On the main screen of the INFRANEO, please double-click on the connecting icon until having it red. Then, double-click again until having it green. Please note that a bar can appear on the computer icon, which has no impact on the functionning.

Once finished, the operator should open the ANALYZA screen again : all the devices will be connected.
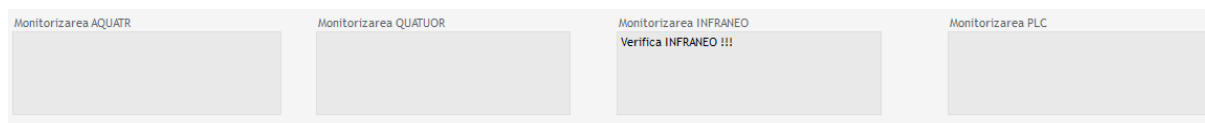
The operator should select the processing mode first. Modul BENTO will allow the operator to receive & process a csv file including all the information about the incoming truck. Instead, by selecting NU, the operator will have to fill the ID & GRAIN blanks manually.

The operator should then select if he wants the SARA to dose the sampe automatically, or if he prefers to dose manually in each device ; in this case the devices in question should be selected.

Then, the type of grain should be selected. Please note that the selection will take a few seconds, the time to make the change of each device.

The operator is also asked to select the needed type of processing : raw or clean grain.

FInally, before launching the cycle by clicking on the icon 3, the operator will have to enter the needed amount of doses on each device. Please note that it is possible to enter 0 doses ; in this case the device in question will be removed out of the cycle.

The monitoring screens will allow the system to commincate with the operator, by showing error messages if any.

The full list of possible errors will pe provided to the users.

The results will then be appearing on the screen below, at the end of the cycle :

Rezultat AQUATR		Rezultat QUATUOR		Rezultat INFRANEO	
Parametri	rezultat	Parametri	rezultat	Parametri	rezultat

Examples :

BENTO Modul on NU, the operator has to enter the data manually. The SARA has been selected, which means that the devices will be fed automatically. The cycle will be short, as only the AquaTR & Infraneo will be dosed, as asked by the operator.

BENTO Modul on NU, the operator has to enter the data manually. The SARA has not been selected, which means that the devices will be fed manually. The cycle will include all the selected devices. The number of doses has no meaning, as all of the devices should be fed manually.

The end of the analyzing process will be announced to the operator by a short message appearing on the screen. The results will appear, and can be found in the ISTORIC section later.

« THE HAND ICON ISN'T APPEARING »

Issue :

The operator launches the cycle, but the hand icon sin't appearing on the SARA's control pannel.

Solution :

The presence of the goblet is mandatory, this must be checked first. The operator should also check the sensor in question to see any damages.

The operator should check the safety laser, and to make sure nothing is interefering with it.

Finally, the sensor of the small cyclone (clean grain) must be checked. If the sensor moved (due to vibrations, or any human interference), it should be fixed back at its initial place.

Once done, the hand icon will be appearing on the screen.

« THE SARA ISN'T COMMUNICATING WITH THE PLC »

Issue :

The operator launches the cycle, but the hand icon sin't appearing on the SARA's control pannel & an error message appears.

Solution :

The « emergency stop » retsart should be applied. The procedure will be describe in a short video.

The emergency stop button has to be pushed, then pulled. The operator should then press the restart icon in the MANUAL MODE screen, on the control pannel.

« AN ERROR IS APPEARING ON THE MONITORING SCREEN »

Issue :

The monitoring screen shows a message related to one of the devices.

Solution :

An error number will appear on the screen. The operator should follow the procedures explained on the « list of errors » linked to this file.