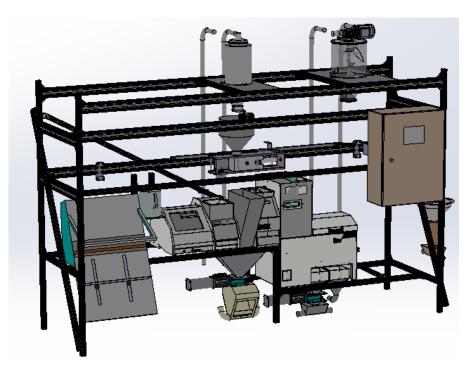


SARA 2020

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



AIR COMPRIME





1. Main screens

SARA - v2.0.16.0	SINTA 3	2	×
Analyza İstoric	Setter		

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

-	Analyza	and the second second	States Inc.	
-	Istoric	Analyza	Istoric	Setări

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.

OPERAȚIUNE								0000
								Agarat Agarat Agastr Qualuor Infrance SAA
UATR Ceresse SGRAU MOALE		QUATUOR Cereste WHEAT	. •	DIFRANCO Ceresia WHEAT				Figler
onitorizarea AQUATR		Nonitorizarea QUATUOR		Nonitorizarea INFRANEO		Nonitorizarea PLC		
sulat AQUATI		Resultat OUATUOR		Resultat INFRANCO		Internation PLC		ld. Data 04/08/2020 09:55:43:595 Angeres ceresses
cultat AQUATI component	résultat	Rezultat QUATUOR	resultat	Rezultat INFRANEO Constituant	Réputat	Teregisträri PLC Nu. Cuväntare	valoare	Data 04/08/2020 09:55:42:695
	résultat	Rezultat QUATUOR component	resultat		Résultát		valoare 0	Data 04/08/2020 De:15:42:495 Angeres ceresenor
	résultat		resultat		Résultát	Nu. Cuvântare		Data (04/07/2020 D0:55-05-05-05-05-05-05-05-05-05-05-05-05-0
	résultat		resultat		Résultat	Nu. Cuvântare 2 Avancement	Ø	Data 04.007.2020 05.15.61.695 Alegeres ceressee 2. Verritati pilmatrissi collumin 1. maj Sal, data este access
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	résultat		resultat		Résultat	Nu. Cuvintare 2 Avancement 120 Commande cycle 121 Statut Quatuor 122 Statut Aquatr	0 0 4 4	Data: De. 400, 2020 Die (55 et 3405) Regeres cerestero
	résultat		resultat		Résultat	Nu. Cuväntare 2 Avancement 120 Commande cycle 121 Statut Quatuor 122 Statut Acuatr 123 Statut Horare	0 0 4 4 4	Data [04:00/2020 Dirists 43:4045] Alegares ceresions Commission (data set of characteristic) (data mail join, data set on becase Cercede
	résatat		resultat		Résultat	Nu. Cuvântare 2 Avancement 120 Commande cycle 121 Statut Quatuor 122 Statut Apatuor 123 Statut Apatuor 123 Statut Miraneo 124 Dissage effectué	0 0 4 4 4 0	Data Decorrectors
	résultat		resultat		Résultat	Nuc Cuvintare 2 Avancement 120 Commande cycle 121 Statut Quartur 122 Statut Aquatr 123 Statut Argantr 124 Statut Argantr 125 Statut Argantr 126 Dosage effectue 127 Conic grain	0 4 4 4 0 1	Data: De. 400, 2020 Die (55 et 3405) Regeres cerestero
	résultat		resultat		Résultat	Nu Cuvintare 2 Avancement 120 Commande syste 121 Statut Quature 122 Statut Avante 123 Statut Avante 124 Dosage effectue 126 Dosage effectue 126 Coole grain 130 Dose Quature	0 4 4 4 0 1	Data Decorrectors
	résultat		vesutat		Résultat	Nu. Cuvlintare 2 Avancemt 2 Avancemt 120 Commande cycle 121 Statut Quature 122 Statut Quature 123 Statut Inframes 124 Dosage effectue 125 Choir gráin 180 Doses Quature 191 Doses Aputer	0 4 4 6 0 1 1 0 1	Data: OL-OR-2020 DIVESSED-605
	résultat		resultat		Résultat	No. Curvintare 2 Anancement 120 Commande cyclé 121 Statut Quartur 122 Statut Alcantr 123 Statut Alcantr 124 Statut Alcantr 125 Statut Alcantr 126 Statut Guartur 127 Statut Inframo 128 Statut Inframo 129 Columbra 120 Statut Inframo 120 Doses Inframo 120 Doses Statet 1	0 4 4 4 0 1 1 3 3	Data: OLADIZ 2020 DINESS CESSOS ARgeres ceresseur Control of an andress of a model of a specific and period and a specific a
	résultat		resultat		Résultat	Nu. Covletare Numcement 20 Anancement 20 Commande cycle 210 Commande cycle 22 Statut Quatuar 23 Statut Avantr 23 Statut Avantr 24 Statut Koantr 25 Optic Avantr 26 Optic Avantr 27 Optic Status 28 Optic Status 101 Donic Quatur 102 Donic Status 101 Donis Broc 102 Donis Broc	0 0 4 4 4 0 1 0 3 4	Data Detroit 2020 DecKs.et.sks Regeres ceresteer

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													- 0	x
analize										Re.	ezultate			
	1	1		Name	r de doze						Aperat	component	Valoare	
Rod	td.	P Data P	3 Cereale	P. Quatoor	Apustr	Infrarieo	Beier	Sec 1	5ac 2	2 5	kquatr	Humidités	12.3	
Manual	test	04/08/2020 18:27:03:978		4	3					TT 22	Aquatr	Poids spécicifique	80.7	
Manual	testy	04/08/2020 18:22:45:779			1 3	1				1 3	Aquatr	Température	29.6	
Manual	FGHFGH	04/08/2020 18:07:36:972		3	- 3	5	4				Quatuor	Impuretés	1.1	
Manual	ron on	04/08/2020 15:51:06:314			1 3	5				6	Quatuor	Grains cassés	3.9	
Manual		04/08/2020 15:47:08:642			1.	1				1	Quatuor	Impuretés - Grains cassés	5.0	
Manual	91237	04/08/2020 15:28:59:833		3	1.	1				4	Quatuor	Bon grain	95.0	
Manual	10660	04/08/2020 15:23:46:568		1		1		- 7		1	infraneo	Uniditate(%)	011.30	
Marrual	50835	04/08/2020 14:27:23:149				1	1	- 2		1	Infraneo	Proteina(%)	012.90	
Manual	40524	04/08/2020 14:21:14:492					-	- 7		1	Infraneo	Gluben(1E)	028.00	
Marical	20519	04/08/2020 14:14:48:523				-		- 1		1 31	infraneo	Guten manuel	022.80	
Marrual	32275	04/08/2020 14:11:07:963			1.1.5	1.1	1	- 1		1	infraneo.	W	339.00	
Narval	20825	04/08/2020 14:03:12:611				1.1		- 2		1	Infranco	Artidan(%)	080.10	
Mariuat	20825	04/08/2020 13:59:48:594					1.12	- 2		1	Infraneo	Zeleny	053.00	
Marrual	40650	04/08/2020 13:55:16:611		3	1 G			1						
Marrual	21211	04/08/2020 13:45:21:495						- 1						
Marriual	21211	04/08/2020 13:38:27:250			1.1			- Q						
Manuat	32531	04/08/2020 13:24:43:658			1		4							
Méricult	111	04/08/2020 12:34:04:670			1	3	4	- 2	4					
Merculi	411	04/08/2020 12:31:14:339		3		3	1.1	1	1					
Mercuel	5555	04/08/2020 12:30:39:589				- 3								
Marnull	\$555	04/08/2020 12:08:49:536												
Matrual		04/08/2020 12:04:33:371	Orz furajev		3	3								
Marrual		04/08/2020 12:01:46:555			3	3								
Manual		04/08/2020 11:58:53:115			3	3								
Mamual		04/08/2020 11:29:01:810	Grau		3	3								
Manual		04/08/2020 11:33:36:673	Grau		3	13								
Manual	111	04/08/2020 11:11:10:952	Org furajer		3	3								
Manual	111	04/08/2020 11:05:53:400			3	3								
Namual	100	04/08/2020 11:01:16:246			3	3								
Marsuni	jhkh	04/08/2020 03:36:00:322	Grau		3	3		- 4						
Mornaul	jhkh	04/08/2020 03:29:12:361	Grau		13	3		- 4						
Marrial	jhkh	04/08/2020 03:20:51:160	Grau		3	10	4	- 4	6					

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 :

OPERAȚIUNE				
The second se		h		Aparat
				Aquata: Aquatr Quatuor Infranco 💋 SARA
				. 1 - Recepție de probe :
AQUATR Cereale	QUATUOR Cerevile	DIFRANEO Cereste		Figier
Monitorizarea AQUATR	Monitorizarea QUATUOR	Monitorizarea INFRANEO	Monitorizarea PLC	
Aquatr non connecté III	Quatuor non connecté III	Verifica INFRANEO !!!		
				ld.
				Data 04/08/2020 18:15:00:656





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.

W OPERATIONE				
				Modul BDHTD a a Nu Aparat Aquatr Quatuor Infrance S 58A 1 - Receptor de protor
AQUATR Ceresle 5:082	QUATUOR Cereale BARLEY	INFRAIED Cereale		. Pipter
Monitorizarea AQUATR	Monitorizarea QUATUOR	Monitorizarea INFRANEO Ventica INFRANEO III	Monitorizarea PLC	16.
				Data 04/08/2020 18111011637

- 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 :

PRODUCT	BARLEY	1.16	•	
	Display			Print last analyse EMPTYING
Al None Al	SAMPLE NAME	MOISTURE	PROTEIN	
- 0109/2020 11.08	SampleDefaultName	12.5	10.5	COMMENT
0 2020 11:13	SampleDefaultName 1	12.8	9.5	1111111
C 04/ 020 12:01	SamploDetaultName 2	12.5	9.7	The State of State of State
- 40. 30 12:03	SampleDefaultName 3	12.2	10.6	
	SampleDetaultName 5	12.6	10.0	
D4/08/2020 12:23	SampleDefaultName 6	12.8	9.9	
04/08/2020 12:27	SampleDetaultName 7	12.3	9.8	
04/08/2020 12:29	SampleDetaultName 8	12	10.2	
04/08/2020 12:32	SampleDefaultName 9	12.8	10.2	
04/08/2020 15:49	SampleDefaultName 10	T2.0		
04/08/2020 15.52	SampleDetaultName 11	12.3	10.5	
Delete Samples	EXPORT RESULTS	USER	MAINT	ENANCE EXPERT
	LYSE			i, Found New Hardware X
	A			USB Human Interface Device

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.





Modul BENTO da Nu
Aparat
🗌 Aquatr 🗌 Quatuor 🗌 Infraneo 🥑 SARA
1 - Recepție de probe
Fining
Fișier
Id.
Data 04/08/2020 18:11:01:637
Alegerea cerealelor
· · · · · · · · · · · · · · · · · · ·
2 - Verificați și modificați opțiunile de mai jos, dacă este necesar
Cereale
O Brut O Curatat
Număr de doze
Quatuor 0 Aquatr 0 Infraneo 0
Cana 0 Martor 1 0 Martor 2 0
3 - Începerea ciclului

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.

Monitorizarea AQUATR Mor	nitorizarea QUATUOR	Monitorizarea INFRANEO	Monitorizarea PLC
		Verifica INFRANEO !!!	

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 :

INFRANEO Cereale BARLEY Monitorizarea INFRANEO eroare : R;104 eroare necunoscuta





Rezultat AQUATR		Rezultat QUAT	UOR		F	Rezultat INFRANEO			
Parametri	rezultat	Pa	rametri	rezultat		Parametri	rezultat		

Examples :

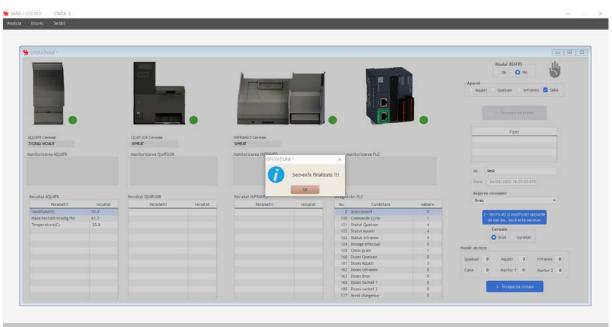
			Modul BENTO da ONu	4
Ap	oarat —			
	Aquat	r (Quatuor 🗌 Infranc	eo 🗹 SARA
			1 - Recepție de probe	
			Finier	
			Fişier	
			-	
	ld.	te	st	
	Data	0	4/08/2020 18:22:45:779	
	_	a c	erealelor	
	Grau			Ŧ
		v	erificați și modificați opl	tiunilo
			enncați și modificați opț e mai jos, dacă este nece	
			Cereale	
			🔾 Brut 📄 Curatat	
Număr	r de doz	e		
Qua	tuor	0	Aquatr 3	Infraneo 2
_				
Can	a	0	Martor 1 0	Martor 2 0
			3 - Începerea ciclului	

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.

Modul BENTO da O Nu
Aquatr 🥑 Quatuor 🕑 Infraneo 🗌 SARA
1 - Recepție de probe
Fişier
ld. test
Data 04/08/2020 18:27:03:978
Alegerea cerealelor
Grau 🔻
2 - Verificați și modificați opțiunile de mai jos, dacă este necesar
Cereale
O Brut O Curatat
Număr de doze
Quatuor 0 Aquatr 3 Infraneo 0
Cana 0 Martor 1 0 Martor 2 0
3 - Începerea ciclului

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.





3. Troubleshooting



« 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.

