



HR-51215 Kastav
Jardasi 65
Tel +385/51/ 545-810
Fax +385/51/ 545-811
E-mail: rijeka@montelektro.com

MONTELEKTRO
www.montelektro.com

HR-10090 Zagreb
Malešnica 3/5
Tel.: +385/1/ 3909 020
Fax.: +385/1/ 3909-021
E-mail: zagreb@montelektro.com

REFERENCE LIST IN THE FIELD OF AUTOMATION

FOOD, CHEMISTRY, PHARMACY

"PLIVA"

ZAGREB, Croatia

- Long term cooperation in engineering, design, equipment delivery, automation and commissioning with Croatian leading chemical and pharmaceutical industry:
- 1993. - Line 1:
- SIMATIC S5 100U; 23DI; 16DO
 - 1993. - Line 2:
- SIMATIC S5 100U; 40DI; 28DO
 - 1994. Liquid medicament Geomicyn:
- Batch process - program, start up:
- SIMATIC S5 115U; CP524 3 PCs (for communication with weighing units); weighing units SIEMENS SIWAREX P - 2 PCs; 128DO; 128DI; 16AD; 8AO; OP15 B (operation panel); control and monitoring with INTELLUTION FIX dMACS
 - 1994. - CEDEVITA - thermo tunnel for bottle packing - project, program, erection, start up:
- SIMATIC S5 102U; 32DI; 32DO
 - 1995. - CEDEVITA - weighing and batching system for 6 weighing units - project, program, erection, start up:
- 3 x SIMATIC S5 103U; 32DI; 32DO; OP5
- 6 x weighing units SIWAREX P
 - 1995.-1996. - Chemical store - project, program, start up:
- SIMATIC S5 115U; COROS OP35
 - 1995.-1996. - Yeast production plant automation:
- fermentation control in 4 bioreactors
- supervising of media condition and yeast milk tanks
- project, program, and commissioning: 4 x SIMATIC S5 135U; 4 x COROS OP35; PC supervision station with FIX dMACS
 - 1996. - Vitamin C packing - supervising system and production report generating



- 1996. - Batch dosing system project and automation for the animal feed additives production plant
- SIMATIC S5 103U; SIWAREX P weighing; OP35; PC supervision station with FIX dMACS
- 1996. - Animal food factory automation
- S5-103U, OP35
- 1996. - Ethanol and Acetone dosing system in the cosmetic factory
- 1996. - Supervising and control of the tampon zones (between safe and hazardous area) in chemo-pharmaceutical factory
- FIX dMACS; SIMATIC S5 135U
- 1996. - Project and commissioning of granulation machine in animal feed additives production (Ex)
- SIMATIC S7 300; OP25; link on PC supervising station
- SIEMENS MIDIMASTER 37kW frequency converter
- 1996. - Moisture and temperature supervision in the medicine products storage
- 1996. - Project and commissioning of the two speed variable drives for the reactor agitators in the multipurpose synthesis plant (Ex); ABB frequency converters 1kW; ACS 300
- 1996. - Consulting and project of energetic part of the new multipurpose synthesis plant - AZITROMICIN
- speed variable drives - total power 600kW; cooling and heating media plant; chilled and recuperation water plant
- 1997. - Automation of grinding and transporting in silos in cattle food plant.
- S5-103U, OP35
- 1997. - Project for the research institute.
- 1997. - Cosmetics plant reconstruction project.
- 1997. - Infusion liquid production automation; 2xS7-300; 2xOP35; PC supervision station with WinCC.
- 1997. - Automation in food factory VIVERA in Glina; S7-400 with 1000 I/O, charge weighing with Siwarex weighing units, 2 x controlling and supervision PC with FIX dMACS.
- 1997. - Reconstruction of laboratory reactor control "CHEMAP"
- M7-400, Win CC
- 1997. - Supervision of main transformer station parameters TS1 Pliva - Baruna Filipovica
- S7-300, FIX DMACS



- 1997. - Supervision of Acetazolamid plant
- S7-300, FIX DMACS

- 1997. - Reconstruction of four centrifuges in the plant
Acetazolamid
- 4 x S7-300, Elkon Ex isolation, ABB ACS 500 frequency
controller

- 1997. - CIP station for baking yeast separators
- S5-95U, OP35

- 1997. - Laminar Flow
- 3 x electric part of the clean air units

- 1998. - Reconstruction of control and energetic part on the
palletizer in cattle food plant
- Simatic S7-314, OP-37, Siemens Midi Master frequency
controller

- 1998. - Remote control of water pump station
- 10 unregulated and 2 regulated pumps
- S7-314, OP-7, Fix Dmacs, modem communication
- frequency controller ABB ACS 600, 140kVA

- 1999. - Reconstruction and automation of two weighing units 25 kg
for cattle food packing,
- Simatic S7-300, OP27, Siwarex U

- 1999. - Reconstruction and automation of centrifuge in Ex area,
- Simatic S7-300, U/f ABB ACS 600 converter, 30 kVA
- Project, erection, program making and start up.

- 1999. - Electro erection works of equipment for micro components
dosing plant (ANAG-CH) and plant of 2 granulators (GEA
AEROMATIC – CH) in Cedevita plant.

- 1999. - Design, delivery of cabinets, erection, program and
start up of system for dosing of DEMI water in Cedevita
plant,
- Simatic S7-300, Simatic OP7 and OP37

- 1999. - Reconstruction and automation of water wells on
location Kalinovica,
- Simatic S7-300, Simatic OP7,
- project, delivery of cabinet, erection, program and start up.

- 2000. - OTC plant control reconstruction – supervision of liquid
row material storage and control of 3 centrifuges,
- Simatic S7-300 and WinCC.

- 2000. - Participation in building and erection of highly
automated tablet plant, electro erection, and start up of few
dozens of SIMATIC devices.



	2001.	- Energetic supply separation of "Kvasac" (yeast) factory, water and steam measuring .
	2001.	- Water recuperation plant of "Kvasac" factory.
"JEDINSTVO" ZAGREB, Croatia	1994.	- Chemical storage of medicine factory "KRKA", Novo Mesto - program, start up: - SIMATIC S5 115U; OP15B; 64DI; 32DO; 8AI
SUGAR REFINERY "VIROVITICA" VIROVITICA, Croatia	1994.	- Sugar beet quality analysis - project, program, erection, start up: - SIMATIC S5 115U; 128DI; 96DO; 8AI; COROS OP15; CP524; SIMATIC S5 100U; 32DI; 56DO; PC supervision station.
	1995.	- Automation of lime furnace: - SIMATIC S5 115U; 160DI; 64DO; 32AI; 8AO; PC supervision station with FIX.
	1997.	- Communication between PC and Simatic on lime furnace with optical connection.
	1999.	- Program changes in PLC for lime furnace.
	2000.	- Electro equipment for beet washing machine; automation.
	2003.	- Extraction station automation - SIMATIC S7-400 with PC station iFIX
	2005.	- "A" Vacuum pans automation - SIMATIC S7-400 with PC station iFIX
SUGAR REFINERY "ŽUPANJA" ŽUPANJA, Croatia	1996.	- Sugar beet quality analysis - project, program, erection, start up: - SIMATIC S7-300 with 4 PC stations.
	1997.	- SIMATIC S7-300; weighing units of dirty and clean beet; PC supervision.
	2001.	- Sugar beet quality analysis - project, program, erection, start up: - SIMATIC S7 300; 128DI; 96DO; 8AI; COROS OP7; 2xCP340; weighing system with Mettler Toledo 2x weighing units
SUGAR REFINERY "ORMOŽ" ORMOŽ, Slovenia	1997.-1998.	- Automation of lime furnace:



- SIMATIC S7-400 (400 I/O) with PC station FIX dMACS,
- Supervision system for centrifuges (OP27 and connection with Teleperm system).

**MEAT FACTORY
"PIK VRBOVEC"
VRBOVEC, Croatia**

- 1994.-1995. - Air conditioning and refrigeration automation and supervision with SIEMENS COROS LS-B.
1996. - Electric power supervision and control system.

**"KRKA"
NOVO MESTO, Slovenia**

1997. - System for control and monitoring of CIP station and chemical storage; FIX dMACS.

**"AGROPRERADA"
IVANIC-GRAD, Croatia**

2000. - Reconstruction and automation of batch weighing plant for cattle food mixture,
- Simatic S7-300, OP27, Siemens Micromaster, Siwarex U.

**"SLAVONIJA SLAD"
NOVA GRADIŠKA, Croatia**

- 2000.-2001. - Electro erection, delivery of materials, commissioning of malt factory (for main contractor SEEGER, Germany).
- Installation of illumination – design, delivery, commissioning.

