

Process engineering

1. Production line gypsum factory with bulk packing

execution 2005

1600 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S7/400**

5 frequency converters, activation via Profibus DP
HMI, visualisation industrial PCs (**ProconWin**, GTI)
networking via **Ethernet** TCP/IP, **Profibus DP**

- engineering and manufacturing of electrical switchboards
- creation of control software, software regulation and visualisation
- installing of remote diagnostics line
- commissioning in **Tunisia**

2. 2nd Production line gypsum factory with packing

execution 2005

640 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S7/400**

7 frequency converters
HMI, visualisation industrial PCs (**ProconWin**, GTI)
networking via **Ethernet** TCP/IP, **Profibus DP**

- engineering and manufacturing of electrical switchboards
- creation of control software, software regulation and visualisation
- installation of remote diagnostics line
- commissioning in **Morocco**

3. Production line gypsum factory

execution 2004

240 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S7/400 + ET200M** system

HMI, visualisation industrial PCs (**ProconWin**, GTI)
networking via **Ethernet** TCP/IP, **Profibus DP**

- engineering and manufacturing of electrical switchboards
- creation of control software, software regulation and visualisation
- commissioning in **Morocco**

4. Production line gypsum factory with combustion gas desulphurisation plant

execution 2004

2100 digital / analogue **in-/outputs** (decentralised configuration)

2 programmable controller SIMATIC **S7/400 + ET200M** system

35 frequency converters
HMI, visualisation industrial PCs (**ProconWin**, GTI)
networking via **Ethernet** TCP/IP, **Profibus DP**

- manufacturing of electrical switchboards for **Germany**

Process engineering

5. Production line gypsum boards

[execution 2004](#)

800 digital / analogue **in-/outputs** (centralised configuration)

1 programmable controller SIMATIC **S5/135U**

12 frequency converters

HMI, visualisation industrial PCs (**ProconWin**, GTI)

networking via **Ethernet** TCP/IP, **Profibus DP**

- manufacturing of electrical switchboards for **Bulgaria**

6. Extension handling system gypsum fibre boards

[execution 2004](#)

250 digital / analogue **in-/outputs** (centralised configuration)

1 programmable controller SIMATIC **S5/135U**

9 frequency converters

HMI, visualisation touch screen **TP270**

networking via **Profibus DP** (frequency converter and absolute encoder)

- engineering and manufacturing of electrical switchboards

- creation of control software, software regulation and visualisation

- commissioning in **Russia**

7. Production line spelt peeling, cleaning and sorting

[execution 2004](#)

1200 digital / analogue **in-/outputs** (centralised configuration)

1 programmable controller SIMATIC **S7/400**

2 frequency converters

HMI, visualisation industrial PCs (**ProconWin**, GTI)

networking via **Ethernet** TCP/IP, **CP441**

connection of tank scales by RS 485

- engineering and manufacturing of electrical switchboards

- creation of control software, software regulation and visualisation

- commissioning in **Germany**

8. Production line building material with crusher and washing

[execution 2003](#)

540 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S7/300 + ET200M** system

2 frequency converters

HMI, visualisation **OP7**

networking via **Profibus DP**

- engineering and manufacturing of electrical switchboards

- creation of control software, software regulation and visualisation

- commissioning in **Germany**

Process engineering

9. 1st Production line gypsum factory with bulk packing

execution 2002 - 2003

550 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S7/400**

4 frequency converters

HMI, visualisation industrial PCs (**ProconWin**, GTI)

networking via **Ethernet** TCP/IP, **Profibus DP**

- engineering and manufacturing of electrical switchboards
- creation of control software, software regulation and visualisation
- installing of remote diagnostics line
- commissioning in **Morocco**

10. Production line building material

execution 2002

800 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S7/400**

8 frequency converters

HMI, visualisation industrial PCs (**ProconWin**, GTI)

networking via **Ethernet** TCP/IP, **Profibus DP**

- manufacturing of electrical switchboards

11. Production line plaster mixing plant

execution 2000

450 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S5/135U**

4 frequency converters

HMI, visualisation industrial PCs

networking via **Profibus DP**

- engineering and manufacturing of electrical switchboards
- commissioning in **Poland**

12. 2nd production line gypsum factory

execution 1999

1100 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S5/135U**

8 frequency converters (up to 350kW)

HMI, visualisation industrial PCs (**ProconWin**, GTI)

networking via **Profibus FMS**, **Profibus DP**

- engineering and manufacturing of electrical switchboards
- creation of control software, software regulation and visualisation
- commissioning in **Russia**

Process engineering

13. Production line plaster mixing plant

execution 1999

- 450** digital / analogue **in-/outputs** (decentralised configuration)
 - 1** programmable controller SIMATIC **S5/135U**
 - 4** frequency converters
 - HMI, visualisation industrial PCs
 - networking via **Profibus DP**

- engineering and manufacturing of electrical switchboards
- commissioning in **Russia**

14. Production line gypsum factory

execution 1998 - 1999

- 1300** digital / analogue **in-/outputs** (decentralised configuration)
 - 2** programmable controllers SIMATIC **S5/155U**
 - 12** frequency converters (up to 200kW)
 - HMI, visualisation industrial PCs (**ProconWin**, GTI)
 - networking via **Ethernet** TCP/IP, **Profibus DP**

- engineering and manufacturing of electrical switchboards
- creation of control software, software regulation and visualisation
- commissioning in **Poland**

15. Production line building material with crusher and conveyor system

execution 1998

- 300** digital / analogue **in-/outputs** (decentralised configuration)
 - 1** programmable controller KlöcknerMoeller **SUCOS PS4**
 - 2** frequency converters
 - HMI, visualisation plain-text display (SUCOS)
 - networking via **Suconet K1**

- engineering and manufacturing of electrical switchboards
- creation of control software and visualisation
- installing und commissioning in **Germany**

16. Production line gypsum factory

execution 1998

- 110** digital / analogue **in-/outputs** (decentralised configuration)
 - 1** programmable controller SIMATIC **S5/115U**
 - 2** frequency converters
 - HMI, visualisation industrial PCs (**ProconWin**, GTI, Cemat)
 - networking via **Sinec H1**, **Profibus DP**

- engineering and manufacturing of electrical switchboards
- creation of control software, software regulation and visualisation
- commissioning in **Germany**

Process engineering

17. Production line plaster mixing plant

execution 1998

450 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S5/135U**

4 frequency converters

HMI, visualisation industrial PCs

networking via **Profibus DP**

- engineering and manufacturing of electrical switchboards

- commissioning in **Latvia**

18. Charging unit putrescence tower

execution 1997

140 digital / analogue **in-/outputs**

1 programmable controller B&R2000 **S200**

1 frequency converter

HMI, visualisation PC

- engineering and manufacturing of electrical switchboards

- creation of control software and visualisation

- mounting und commissioning in **Germany**

19. 1st Production line gypsum factory

execution 1996 - 1997

1100 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller SIMATIC **S5/135U**

8 frequency converters (up to 350kW)

HMI, visualisation industrial PCs (**ProconWin**, GTI)

networking via **Profibus FMS**, **Profibus DP**

- engineering and manufacturing of electrical switchboards

- creation of control software, software regulation and visualisation

- commissioning in **Russia**

20. Production line gypsum factory

execution 1995

950 digital / analogue **in-/outputs** (decentralised configuration)

2 programmable controllers SIMATIC **S5/155U**

8 frequency converters (up to 200kW)

HMI, visualisation industrial PCs (GTI)

networking via **Profibus FMS**, **Profibus DP**

- engineering and manufacturing of electrical switchboards

- commissioning in **Germany**

Process engineering

21. Renovation of waste dump

[execution 1993](#)

140 digital / analogue **in-/outputs** (decentralised configuration)

1 programmable controller Mitsubishi **A1S**

HMI operating terminal with printer

remote enquiry of measured data via PC / telephone line

- engineering and manufacturing of electrical switchboards
 - creation of control software
 - implementation of fault report system by phone with remote enquiry of measured data via PC / telephone line
 - installation und commissioning in **Germany**
-