

The Commercial, Entertainment Cultural and Tourism Complex

IRAN MALL

Tehran, IRAN

AVA3i Science & Technologies

Contents:

- I. IRAN MALL. Project description
- II. IRAN MALL. Building Management System
- III. AVATRI S&T. About Company



IRAN MALL. Project description

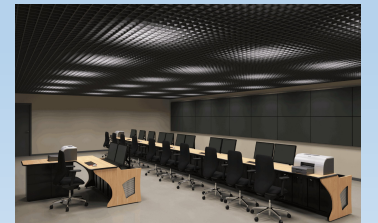
Design: NOOR ARCHITECTS ENGINEERS PLANNERS **NORR**

In 2015 NORR was among the Top 100 of the Top 500 Design Firms.

«At 823 meters, the much-heralded Burj Khalifa is by far the tallest building in the world.

NORR was responsible for the construction administration related to the architectural and design coordination aspects of the project during construction. For this landmark project we supervised the execution of the Burj Khalifa tower in compliance with SOM's design intent and contract documents previously approved by Emaar.

Our responsibilities included the coordination of architecture with engineering design by other consultants and contractors, quality control, reviewing mockups, samples, shop drawings and manufacturers' data. During construction, we advised Emaar and others on issues related to construction methods required to solve complex problems on site»



The Commercial, Entertainment Cultural and Tourism Complex

IRAN MALL

Total Area 1 950 000 sqm



The Commercial, Entertainment Cultural and Tourism Complex

IRAN MOLL Parking



The Commercial, Entertainment Cultural and Tourism Complex

IRAN MALL Transport accessibility



The Commercial, Entertainment Cultural and Tourism Complex

IRAN MALL



The Commercial, Entertainment Cultural and Tourism Complex

IRAN MALL



The Commercial, Entertainment Cultural and Tourism Complex

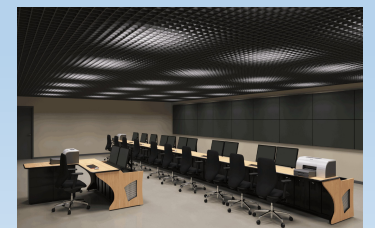
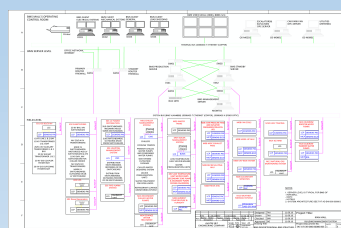
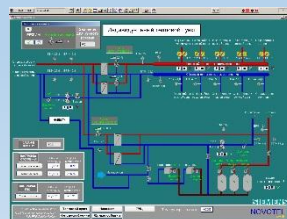
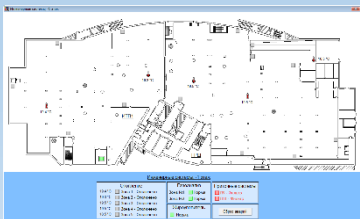
IRAN MALL



The architecture of the project is inspired by the strata and natural beauty of the surrounding mountains. Bands of stone continue through the facades, roof and landscape, punctuated by planting and water. Natural light is brought into the heart of the mall via skylights and atria

The design of the project is inspired by the tradition of geometry in the art and architecture of Iran. An internal garden located centrally .

IRAN MALL. Building Management System





IRAN MALL, Tehran, Iran

Trading area: 650 shops, Infrastructure objects: Ice rink, Lake

Car Parking places: 20 000

2 Hotels 5 stars

Total area - 1 950 000 m²

Efficiency class A according to EN15232

Building Management System

AVA3i has concluded EPC contract for BMS system of the whole complex including:

- Engineering
- Procurement and manufacturing
- Construction
- Commissioning

MALL BMS STRUCTURE

Solution
Partner

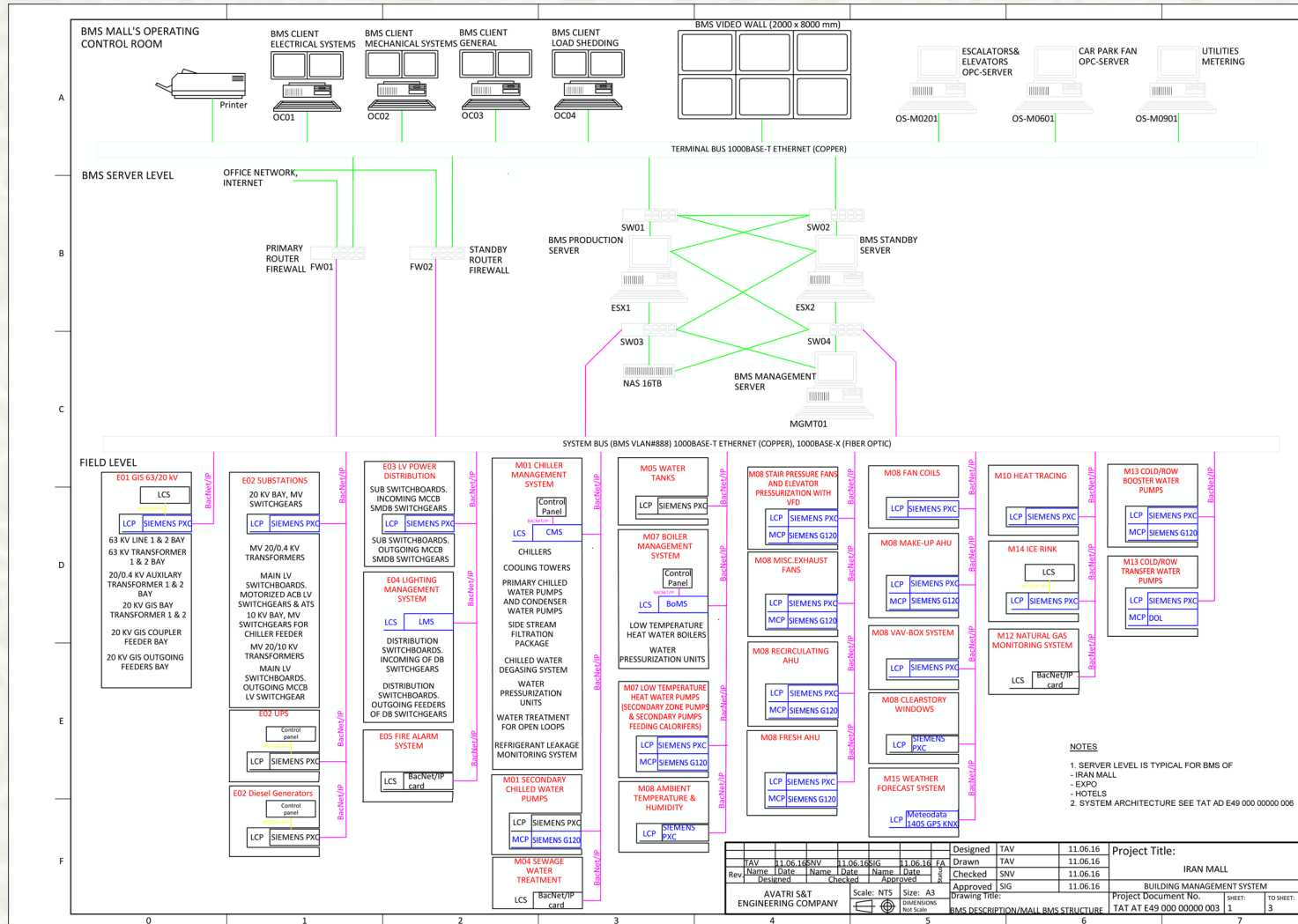
SIEMENS

Automation

Solution
Partner

SIEMENS

Building
Technologies



BMS - Building management system is based on:

- Siemens Design Insight software
- High-availability configurations
- Systems, components, instrumentation from Siemens AG

The system covers control and management of VAVs, Fancoils, AHUs, Lighting Control and other functions for 60 sub-systems

Number of BMS connection points (Design) =
336 000

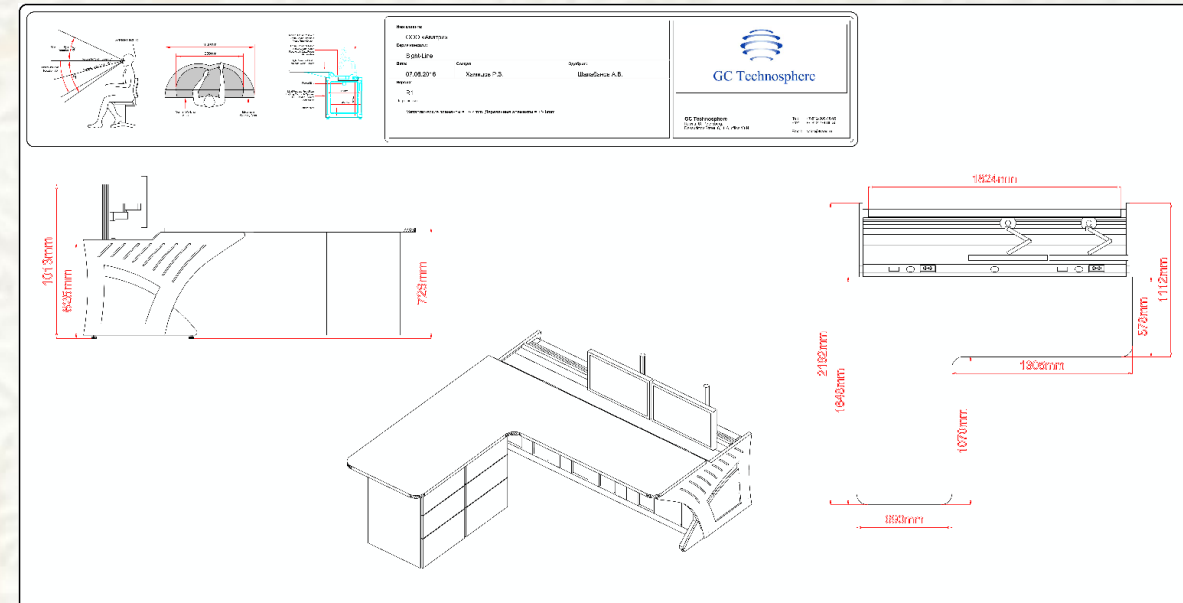
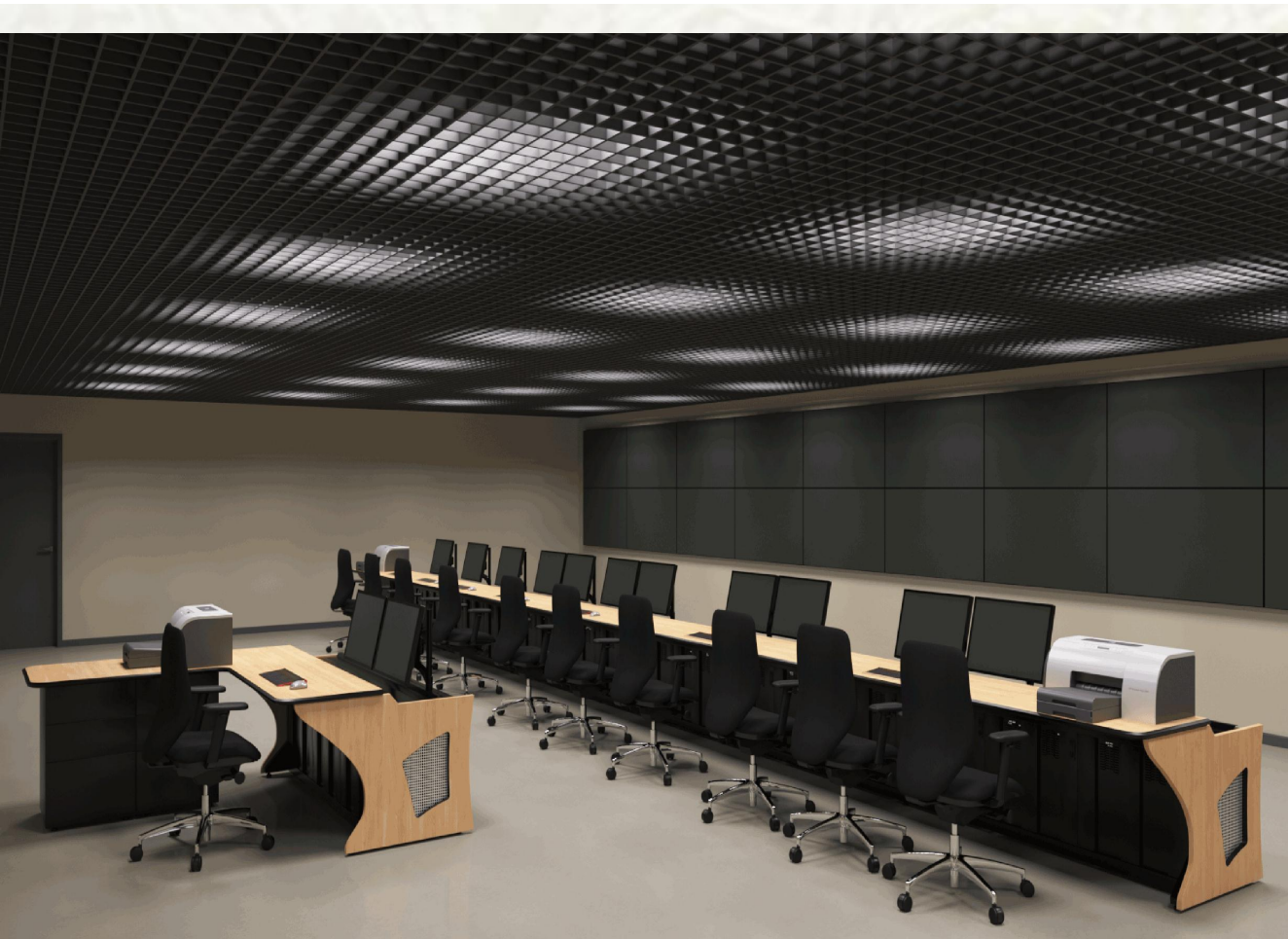
BMS VIDEO WALL

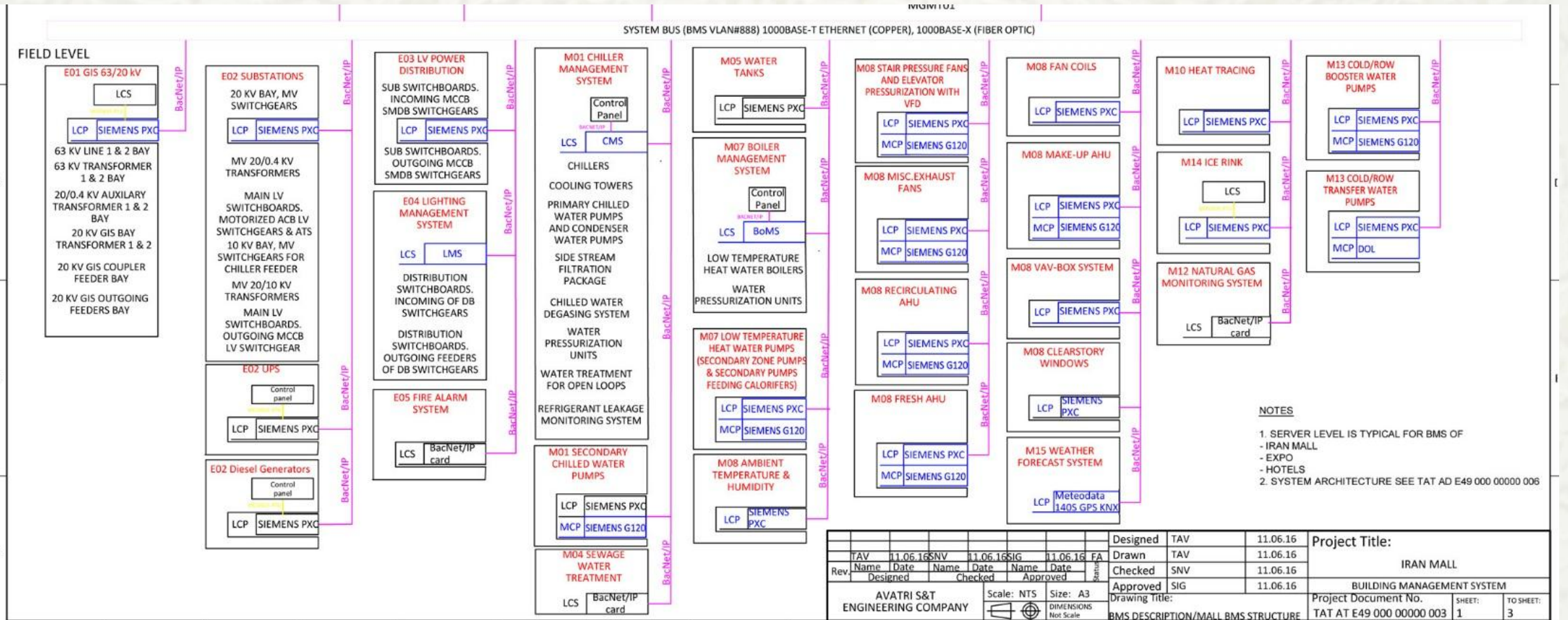
Solution
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Automation

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Partner

Building Technologies

SIEMENS



PROJECT DOCUMENTS

Solution
Partner



Automation

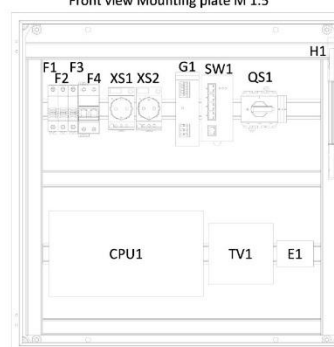
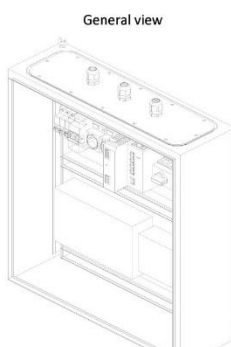
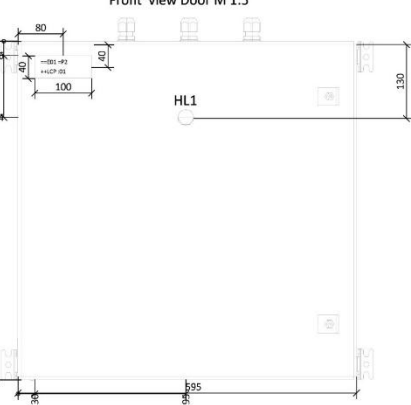
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		AVATRI S&T TANDIS ARMAN TAM ENGINEERING COMPANY Address: 620146, Russia, Ekaterinburg Str. Academician Bardin, 28 Office: +7 (343) 240-34-35, 240-34-33 Fax: +7 (343) 240-34-03, 240-70-05																											
CLIENT: ATC Company PROJECT: BUILDING MANAGEMENT SYSTEM DOC.No TAT AA E01 P2 00001 001 STAGE: Detail Design																													
COMPANY: AVATRI S&T TANDIS ARMAN TAM ENGINEERING COMPANY																													
LOCATION: IRAN MALL																													
DESCRIPTION: GIS 63/20 kV																													
MAIN DESIGNER: IVAN SERGEEV																													
Created: 12.04.16 Changed: 12.06.16		Last change by: TAV		Status: FA																									
		Total pages: 82																											
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Front view Mounting plate M 1:5 		General view 																																																													
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NUMBER OF SYSTEM AND FIELD COMPONENTS

Solution
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Automation

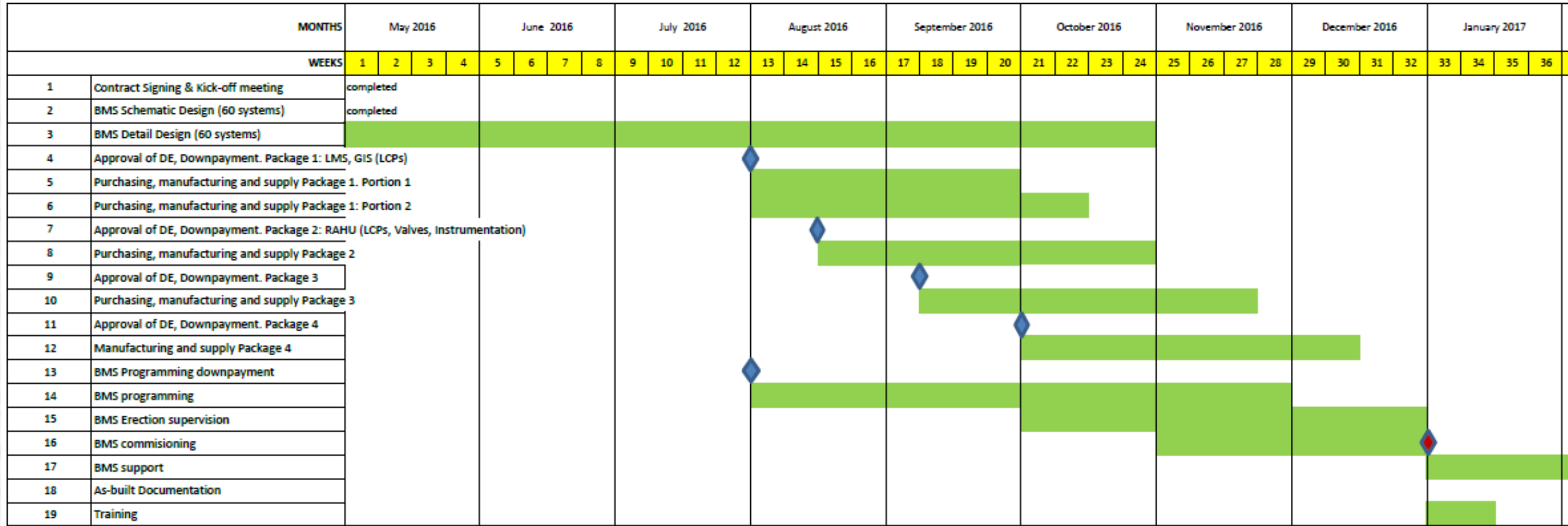
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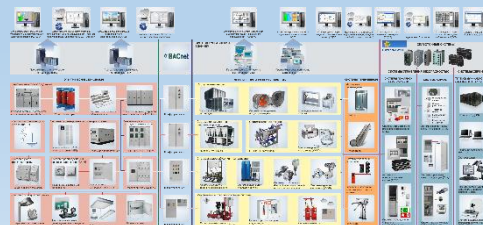
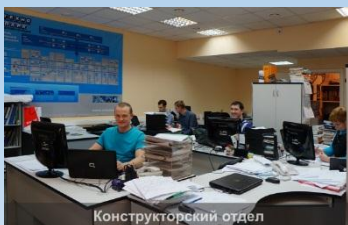
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Part number	Description	Quant.
PXC200-E.D	Automation station BACnet/IP, with more than 200 data points	1395
PXC3.E75-100A	Room automation station BACnet / IP, for up to 8 rooms / 16 room segments	296
S55376-C110	Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 3 relay, 3 AO	1695
VPF...VPI	Combi valves	4080
AQR2576NF	Base module for CO ₂ measurement, with KNX / PL-Link, 70.8 x 70.8 mm	600
ASV181.1E/3	VAV modular controller	220
GCA...GLB	Rotary air damper actuators	575
GLB181.1E/3	VAV compact controller, AC 24 V, DC 0...10 V, 10 Nm, 150 s, 300 Pa	400
QAA, QAC, QAD, QAE, QAM	Temperature sensors	4822
QBE2003-P16	Pressure sensor for neutral and slightly aggressive liquids and gases (0...10 V) 0...16 bar	212
QBE...QBM	Differential pressure sensors for liquids and gas	1212
QFM2100	Duct sensor for humidity (DC 0...10 V)	440
QMX3.P36F	Room unit for KNX PL-Link, freely configurable, flush-mounted with square bezel	2595
QPA...QPM	Air quality sensors CO ₂	670
QVM62.1	Duct sensor for air velocity	100
SKC60	Electrohydraulic actuator, 2800 N, 40 mm, AC 24 V, DC 0...10 V/4...20 mA	169
SQV, SSA	Electromotoric actuators	4050
TXA1.IBE	Island bus expansion module for decentralized sub-islands with TX-I/O-modules	1085
TXM1.16D	16 Digital Input Module	5940
TXM1.6R	6 Relay output module	683
TXM1.6RL	6 Relay output module, bistable	1914
TXM1.8U	8 Universal I/O Module	483
TXM1.8X	8 Universal I/O Module, 4-20mA,	660
TXS1.12F10	TX-I/O Power Supply Modules 24 VDC Supply 1200 mA, 10 A Fuse	1131
UP258D11	Motion detector, assembly height 1.10 m, titanium white	900



AVATRI Science & Technologies

About Company



“AVA3i S&T” provides successful engineering
for projects of industrial facilities and civil
installations, full cycle provided

Solution
Partner

Automation

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Partner

Building
Technologies

SIEMENS



OUR ACTIVITIES:

- Study
- Basic & detail design
- Procurement
- Construction, supervision
- Commissioning & Testing
- Personnel training

ADVANTAGES:

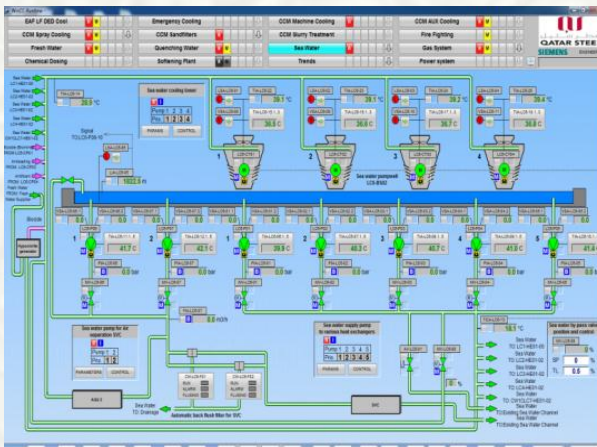
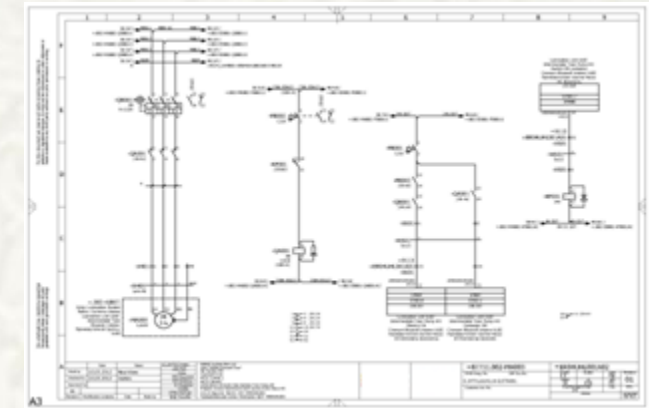
- Top qualified engineers – 70 professionals.
- 120 employees of the company.
- Extensive, stable international relations with foreign and Russian suppliers and partners.
- All necessary certificates, licenses and permissions are available
- Long-term fruitful relationships with major customers and partners.
- Own shop for assembling and installation works of about 1000 m².
- Own stock house for components of about 1000 m², and the total cost of stored goods is 2 000 000 Euros





Basic engineering:

- Collecting initial data and creating project specifications;
- Forming general principles and requirements for project design.



Detail engineering:

- Detailed engineering and planning of electrical & automation equipment and circuits
- PLC Software development
- Human-machine interface (HMI) development
- Process and drive control systems development;
- Detailed cable-route erection engineering;

As built:

- Development of as built docs after start-up;
- Feedback on experience and project analysis;
- Transfer of as built documents to a customer.

High quality standards, compliance with regulatory legal norms of the Russian Federation, usage of the world's latest construction materials and technological design know-how, supplemented by close cooperation with foreign design companies, enables us to satisfy any customer wish.

Solution
Partner

Automation

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Technologies

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Certificates SIEMENS

Solution Partner

Certificate

AVATRI
Certified

The company is a certified Partner in Russia and is authorized to use the name **Siemens Solution Partner Automation Drives**. The certification has been proved in the following program modules:

Automation System SIMATIC
Human Machine Interface SIMATIC HMI
Process Control System SIMATIC PCS 7

This certificate is valid until September 2016

Ralf Deneke
Siemens Partner Program

Сертификат

Настоящий сертификат подтверждает, что
ООО «Аватри»
является официальным партнером
Департамента
«Автоматизация и безопасность зданий» (BT)
компании «Сименс»

по продаже и установке следующего оборудования:

- система автоматизации зданий Desigo;
- продукты и решения по направлению HVAC;
- периферийное оборудование для автоматизации зданий;
- приборы стандартного управления для автоматизации зданий;
- автоматика для котлов и горелок;
- система пожарной сигнализации Cerberus PRO;
- система диспетчеризации оборудования систем безопасности MM8000.

Руководство Департамента «Автоматизация и безопасность зданий»
Москва, 24.11.2015
Номер сертификата: BT - 15 - 11-56
Сертификат действителен до 30.09.2016

www.siemens.ru/bt

Сектор Инфраструктура и города

ООО «Сименс»,
115184, Москва,
ул. Б.Татарская, 9

Name: Sergey Sinitsyn
Department: Building Technologies

Telephone: + 7 495 737 18 38
E-mail: Sergey.Sinitsyn@siemens.com

Your letter of Our reference Date: March 06, 2014

To whom it may concern

Тема: Recommendation letter

Dear Sirs,

Herewith ООО "Siemens", Building Technologies Division highly expresses our respect and recommends you the cooperation with our official partner "AVA 3" in your projects. We guarantee you full-pack technical assistance and support to our official partner.

We confirm that "AVA 3" is one of our key-partners, working in close productive collaboration with us.

"AVA 3" performs a full spectrum of installation and commissioning works on Building Management Systems for HVAC, fire safety and security systems, furthermore performs warranty and maintenance services.

All works provided by "AVA 3" are realized on the highest level with implementation of up-to-date technology. The experience of all "AVA 3" employees, passed training preparation and certification in Siemens BT educational centers, allows to run all operations concerning time-safety and precise, regarding possible customer's wishes.

The right for "AVA 3" to carry out various works is confirmed by all necessary licenses according to the legislation of the Russian Federation.

ООО "Siemens", Building Technologies Division recommends to use a wide experience of employees of "AVA 3" and guarantees high quality of the supplied equipment and works carried out by the company.

With hope for the further cooperation,

Yours faithfully

Sergey Sinitsyn
I BT CPS Division Regional Head

ООО «Сименс»
Юридический адрес: Российская Федерация, 115184, Москва, ул. Б. Татарская, 9.
Центральный телефон: +7 495 737-10-00, центральный факс: +7 495 737-10-01, www.siemens.ru

OUR PROJECTS IN BUILDING TECHNOLOGIES

Solution
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Automation

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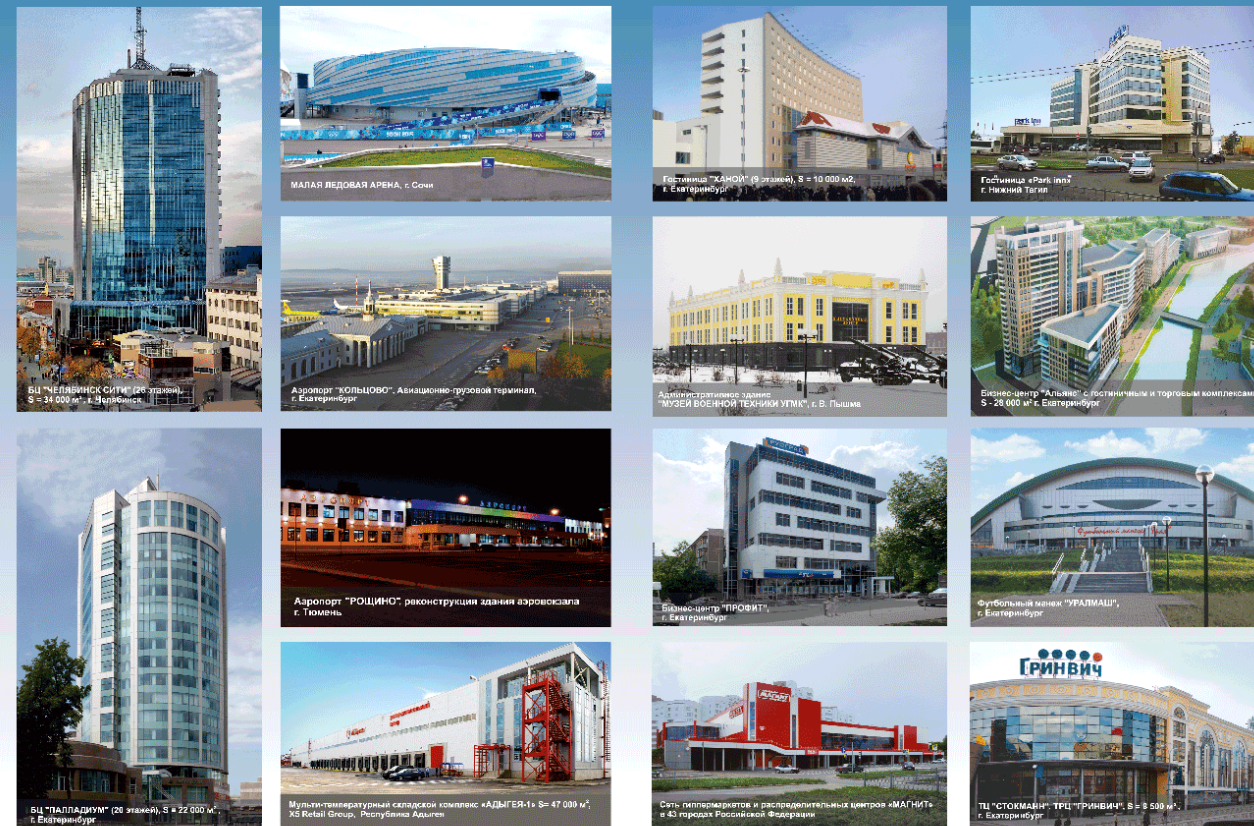
Building
Technologies

SIEMENS

Интеллектуальная инфраструктура



Intellectual infrastructure



Our offices

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Partner

Automation

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