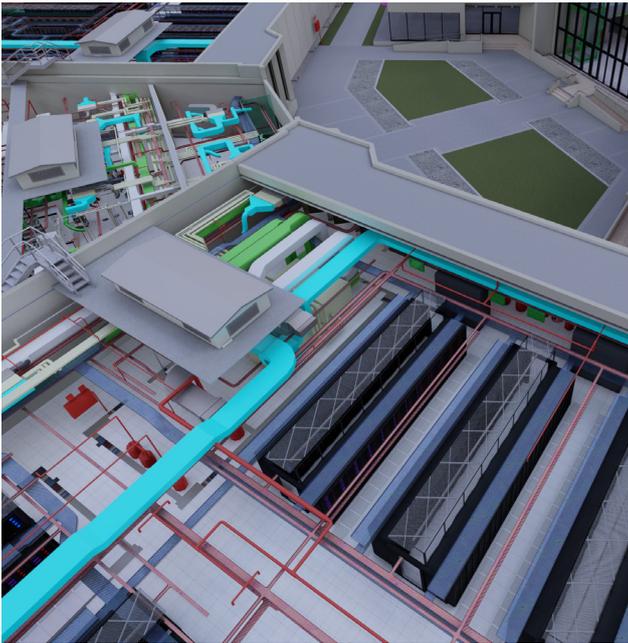


MEP ENGINEERING



Enhancing long-term value and efficiency of buildings through value-added engineering. We approach each project independently, and implement industry highest standards to create functional, resource-effective and easy to maintain buildings.

ICS Arabia MEP engineers solve the most complex challenges our customers encounter by combining innovative thinking, BIM technology and years of experience. Our work results in resource-efficient buildings, and comfortable and healthy environment to live and work. We integrate mechanical, electrical, HVAC and public health engineering to deliver complete building services for projects of all types.

We offer our clients years of experience in diverse markets such as smart cities and buildings, government mission critical facilities, healthcare and commercial buildings, providing complete MEP services for greenfield and renovation projects. We work with clients to design buildings optimized in their economical performance, functionality, user's comfort and health, sustainability and maintainability.

Our Services:

- ◆ Mechanical Engineering
- ◆ Electrical Engineering
- ◆ Lighting Design
- ◆ Plumbing Engineering
- ◆ BIM Modeling
- ◆ Automation and Controls Systems
- ◆ Energy Management Systems
- ◆ Lifecycle Cost and ROI Analysis
- ◆ SBC/IBC Compliant Design Commissioning
- ◆ Planned, Preventative and Predictive Maintenance

Featured Partners:



Integrated Approach to MEP Engineering

MECHANICAL ENGINEERING

ICS Arabia's mechanical engineers combine knowledge, analytical tools and innovative thinking to provide high-quality, fit-for-purpose mechanical designs that keep clients project on budget. Our mechanical engineers participate in all project stages, from studies to detailed engineering, 2D/3D CAD drawings production and documentation for construction. Our experience includes large-scale greenfield and brownfield projects for industrial, commercial and residential facilities.



ELECTRICAL ENGINEERING

Our experienced electrical engineers plan and ensure that buildings are always at their highest operational capabilities, energy-efficient, provide comfortable environment for living and working, and utmost are reliable and safe. We conduct comprehensive studies, develop risk mitigation strategies and design remediation programs. Our testing division delivers load analysis reports and equipment acceptance testing.



PLUMBING ENGINEERING

Intelligently designed, a plumbing system plays a critical role in buildings' convenience and operational efficiency. We offer full range of plumbing engineering and maintenance services and ensure compliance with industry standards and foresee flexible solutions that can be easily upgraded to the future requirements.



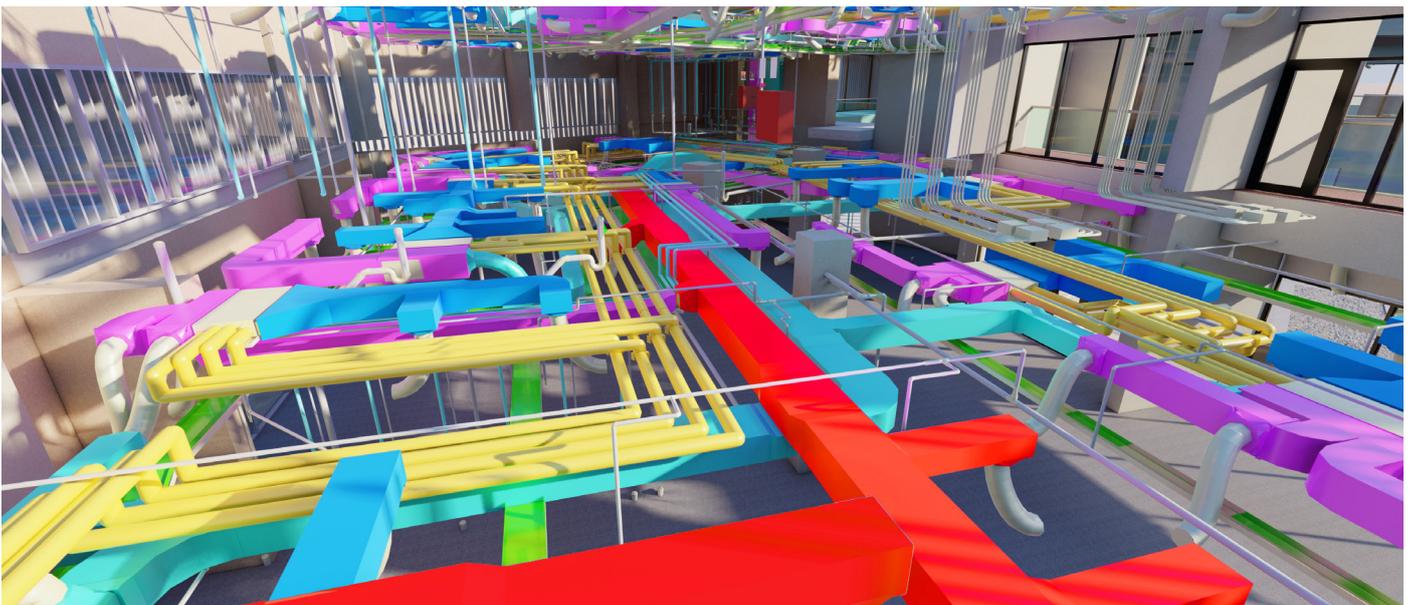
MEP SYSTEMS MAINTENANCE

Complex building systems require regular monitoring, periodical inspections, a well-planned and predictive maintenance to avoid faults, prevent major repair costs and pricy disruptive faults. We base our maintenance programs on adopting proactive approaches to minimize emergencies, optimize performance, enhance safety, and increase assets' longevity and owner's return on investments.



BIM MEP ENGINEERING

ICS Arabia integrated approach to MEP system coordination gives early insight into critical design data in real-time scenarios that helps to improve project performance. BIM technology allows locating critical system components in congested spaces not just to avoid obstructions but also to meet design, construction, and operational requirements.



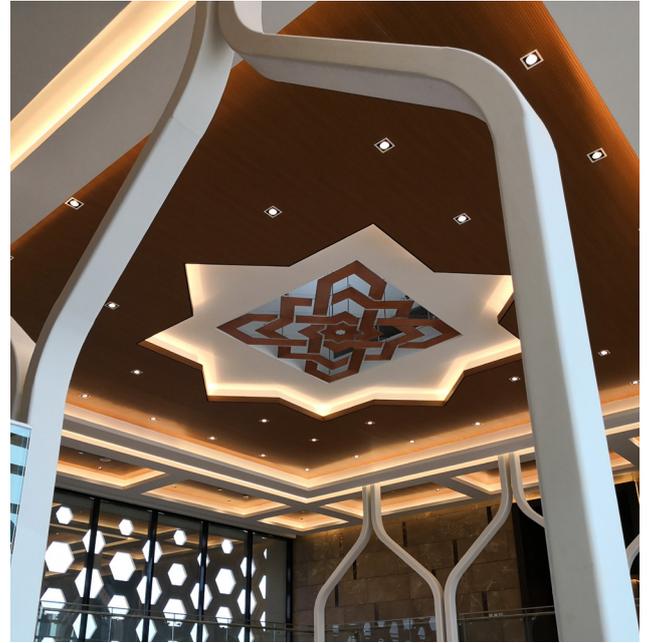
Benefits:

- ◆ Construction timetable optimization
- ◆ A great degree of adaptability
- ◆ Conflict detection in the early stages of a project
- ◆ Risk minimization
- ◆ Cost reduction – precise cost estimation and bill of materials
- ◆ Customization to a high degree
- ◆ Workflow integration
- ◆ Effective building performance analysis
- ◆ Efficient maintenance and improved lifecycle management

BIM allows for up to 52% cost savings from the contract value and twice faster construction

LIGHTING DESIGN

Combining science, technology and creativity, we design functional, safe and visually appealing environment. With light, we enhance buildings' architecture and create efficient workplaces.



Light design is of extreme importance when creating healthy, safe and functional buildings. While providing solutions based on building usage, operational requirements and international standards, ICS Arabia engineers seamlessly integrate lighting design in the architecture of buildings, providing visual comfort and enhancing aesthetics.

Our Services:

- ◆ Architectural Lighting Plan Design
- ◆ Dark Sky Compliance and Ordinance Coordination
- ◆ Illuminance Calculations
- ◆ Color Temperature Analysis
- ◆ Automated Lighting Control Systems
- ◆ Natural Lighting Design
- ◆ Custom Lighting Design
- ◆ Rendering and Visualization

SUSTAINABLE LIGHTING DESIGN

Our expertise in design and construction of intelligent buildings, allows us to offer integration of advanced smart control and automation systems. Multiple levels of automation are engineered into the lighting control systems. Our engineers integrate and upgrade the automation solution, converting buildings to smart places for working and living, while ensuring the highest safety, convenience, comfort, savings and control.

