HF Specialist
Devoted to human centered design



CONTROL ROOM DESIGN · ISO 11064

Control rooms that work for the people who run them

Human-centred design of control rooms and control centres, from pre-study to operation. Safer operations, fewer costly redesigns, and operators who can act with confidence when it matters most.

ISO 11064
The full design process, all seven parts

Operators involved
End users take part in every phase

From ~70 hours
Pre-studies scaled to your project

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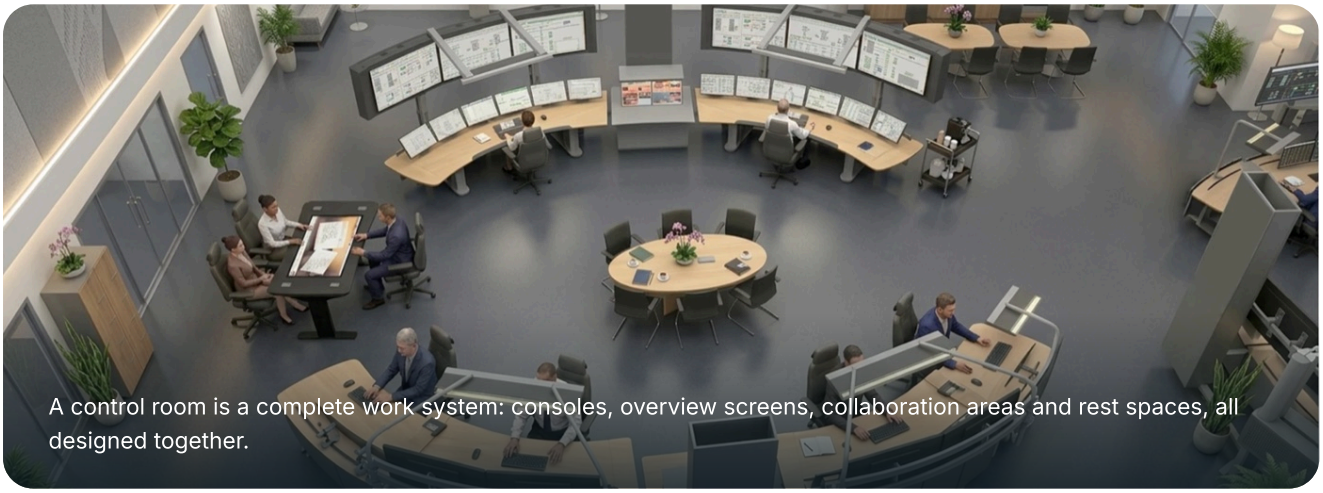
WHY HUMAN FACTORS

A visually impressive control room is not necessarily an effective one

Automation is more advanced than ever, and the consequences of equipment and human failure grow with it. The control room is where it all comes together.

We design control rooms and control centres around the operators: what they need to see, hear, do and decide, in normal operation and when things go wrong. The result is a working environment that supports safety, health and performance, not just one that looks good on the day it opens.



A control room is a complete work system: consoles, overview screens, collaboration areas and rest spaces, all designed together.

WHAT YOU GAIN

Design decisions you will not have to undo

Safer operations

Layouts, workstations and displays that reduce human error and support operators in abnormal situations.

Faster, better decisions

The right information in the right place, so operators see the whole picture and act in time.

Lower lifetime cost

Problems found on paper cost a fraction of those found after commissioning. We help you get it right the first time.

Documented and compliant

A traceable design based on ISO 11064 and recognised guidance, ready for authorities and stakeholders.

HOW WE WORK

From first sketch to a control room that works

ISO 11064 is the leading international standard for control room design. We follow its human-centred, five-step process, with your operators involved in every phase.



1 **Clarification**
Goals, scope, constraints and stakeholders are defined before design begins.

YOU GET
Project brief and data collection report

2 **Analysis & definition**
We analyse functions, tasks and operator needs, and turn them into requirements.

YOU GET
Functional analysis and HF design requirements

3 **Conceptual design**
Layout alternatives are developed and evaluated together with the end users.

YOU GET
Conceptual design and layout alternatives

4 **Detailed design**
Workstations, displays, lighting, acoustics and the work environment in detail.

YOU GET
Detailed Human Factors design documentation

5 **Operational feedback**
We evaluate the control room in use and feed the lessons back into improvements.

YOU GET
Evaluation report and recommendations

Standards and guidance we work with

- **ISO 11064 (seven parts)**
- NORSOK S-002
- CRIOP (methodology)
- EEMUA 201
- ANSI/HFES 100-2007
- ISO 8995-1

The operators are in the room

Operators, shift leaders, maintenance staff and engineers take part through interviews, workshops and design reviews. They know the work best.

BEYOND THE ROOM

Everything your control room needs, from one team

HMI design
Displays and controls that help operators make the right decisions.

Alarm management
Alarm systems built around human limits, per ISA-18.2 and EEMUA 191.

Function & task analysis
The right split of work between people and automation.

Workload & workflow
Jobs, shifts and staffing that fit human capabilities.

CR / CCR risk assessment
Risks identified, evaluated and turned into an action plan.

Verification & validation
Proof that the design works, tested with real operators.

Safety-critical communication
Clear communication between operators, teams and the field.

Organisational culture
Ways of working that support safe operation over time.

PRE-STUDY PLANS

Start with the plan that fits your project

Every plan can be adjusted as the project develops.

Small
~70 hours

For small upgrades or a simple control room design.

- ✓ Design support
- ✓ Review of your data
- ✓ 3 design iterations
- ✓ Design evaluation

FULL ISO 11064

Medium
~175 hours

The complete ISO 11064 process, with HF support all the way.

- ✓ Five-step design process
- ✓ CCR design & control suite
- ✓ Workstations & displays
- ✓ Work environment

Large
~260 hours

Everything in Medium, plus a full documented HF report.

- ✓ Human Factors report
- ✓ On-site data collection
- ✓ Interviews, workshops, observation
- ✓ Recommendations

SELECTED CLIENTS Vale · BP · ExxonMobil · Dow · Volvo · Perstorp

Planning a new control room or transforming an existing one?

Tell us about your project. We'll help you find the right scope and show how Human Factors can make your operations safer and more efficient.

Book a meeting

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