

Kompetenzmatrix

Title	General Operator	Supervisor		Process Engineer
		junior	senior	
1. Operating Machinery, Performing Plant Operation Procedures	<p>Can start and stop the process, plant and machinery according to procedure. Can operate the equipment according to the SOP and safety, economic and environmental requirements. (SHEQ)</p> <p>Can work and communicate in teams, with supervisors and maintenance staff</p>	<p>Can instruct and give technical and operational directions to colleagues, according to procedures. Can train and coach colleagues on the job</p>	<p>Can monitor operating staff. Can teach staff about the principles of the process, the plant and machinery operations, and can coach them</p>	<p>Can develop and approve start-up and shutdown procedures on process plant. Can approve regular operating procedures. Is able to advise and approve commissioning procedures.</p>
2. Process Control, Plant Monitoring and Control	<p>Can control processes step by step at the machinery and from the control room. Can document the different steps according to the procedures.</p> <p>Can react correctly in case of alarms according to SOP and SHEQ procedures.</p> <p>Can modify conditions and/or steps of the process according to the results of quality control and according to SOP or act promptly to consult the supervisor in the case of complex situations.</p>	<p>Can lead a team in controlling processes at the machinery and from the control room. Can train and advise members of his team how to react in the event of alarms according to SOP and SHEQ procedures</p> <p>Can check the work of his team.</p>	<p>Can plan and organize the work according to the production plan, including the change of products and monitoring the efficiency and the costs of the production.</p> <p>Can give technical and operational directions to his/her staff, concerning the process control and monitoring functions.</p> <p>Can teach colleagues about the principles of the control process,</p>	<p>Responsible for environmental aspects, calibration approvals, control system procedure approvals. Approve commissioning procedures. Can Customize the Process control System according to the needs of various production processes.</p>
3. Analysis of the Process, Fault Finding and Problem Finding	<p>Can identify faults and problems,</p> <p>Can act according to SHEQ procedures</p> <p>Can make a decision to inform maintenance staff and/or</p>	<p>Can make a decision to modify the process operating settings and can document the modification.</p> <p>Can analyse the causes and consequences of the problem</p>	<p>Can decide on operating changes and adjustments to the production process, while reporting problems and faults according to procedures within the company and</p>	<p>Complex problem support. Organise a structured repair schedule. Responsible for fault diagnostic systems. Plan solutions to problems</p>

	supervisor or to solve the problem by himself	together with experts	communicating with manufacturing companies, maintenance companies etc. Can coordinate the actions decided to fix faults in the area of his/her operational responsibility.	
4. Process Hazards and Emergency Procedures	Can identify hazards in an emergency situation. Can act according to the situation (e.g. follow the alarm plan, inform supervisor etc.)	Can coordinate the staff in hazardous situations concerning the process according the SHEQ procedures.	Can monitor and direct operations in hazardous situations concerning the safety of the plant, personnel and environment, keeping in contact with company organisation and anticipating event evolution and measures to be taken. Can coordinate periodic emergency testing, including testing of emergency equipments and alarms, emergency procedures testing, emergency simulations, personnel training Can contribute to written reports of event analysis and accidents, and eventually can make proposals for changes in safety rules.	Can define safety trip settings. Hazop and similar risk studies, and alarm priority plans. Can approve emergency procedures. Can assess risks within operating procedures and can compose guide lines for hazards and emergency procedures Can analyse and assess actual accident causes together with experts.
5. Logistic Jobs	Can execute logistical activities, ensuring that supplies are available and in agreement with the production schedule and quality standards. Can arrange and manage deliveries and dispatches, maintaining accurate records and documentation and carrying out / ensuring all quality checks	Can supervise the production activity, ensuring that it is in agreement with the production and shipping schedules and quality standards and ensuring that raw materials are available and products are dispatched.	Can agree on the production plan, verifying that it is compatible with plant capacity and resources and trained personnel availability. Can implement a production plan, defining a detailed production schedule including all the production steps and constraints, as sequence of	Can give technical assistance to the definition of the production plan and of the production schedule, to the purchase of items and products used in the process and to give technical assistance concerning details of the products and packaging for output selling and other product or by-product disposals.

	prior to supplies being used or products being dispatched. Can understand / compare the required specification for supplies and products.		grades, specifications and quality requirements, types of packaging, campaign changes, dead times. Can evaluate and requisition necessary equipment retooling and maintenance. Can evaluate the resource consumption and cooperate with the commercial department to provide the timely reception of raw materials and dispatching of products.	
6. Quality Control	Can take samples and perform basic analysis and measurements. Can act according to SOP if results are out of range. Can aim, together with colleagues, for quality improvements and to deal pro-actively with regard to quality improvements.	Can coach colleagues in carrying out quality control. Can interpret causes and consequences of quality deviations and to give directions to achieve quality standards in complex situations. Can promote quality improvements to colleagues using relevant models and methods of process development and process improvement.	Holds responsibility for product quality. Can decide the analytical testing plan - for raw materials, process intermediates and products - necessary to control process performance and product quality. Can decide the internal management of off-spec materials and products, including reworking for quality upgrading.	Can define the requirements for the raw materials and input products. Can define the quality range for the output product and to agree selling specifications with relevant company functions, such as Marketing and R&D. Can define and demonstrate the process actions and process and product controls to maintain and to improve the quality standards. Can interpret causes and consequences of quality deviations and give directions to achieve quality standards in complex situations. Can promote quality improvements to colleagues using relevant models and methods of process development and process improvement.

<p>7. Maintenance Work and Safety Working Conditions</p>	<p>Can execute basic maintenance work according to SOP. Can follow the safety working procedures in maintenance. Can prepare process units for maintenance. Can check the equipment and prepare it for start up after maintenance. Can communicate with maintenance staff. Can verify that SOP and SHEQ requirements are fulfilled in his/her work environment, find faults and perform or requisition appropriate maintenance work.</p>	<p>Can discuss maintenance problems with technical experts. Can requisition, schedule and approve the maintenance works, giving due information about hazard conditions and dangerous substances, requiring that workers are trained and that the work is performed in agreement with SOP, SHEQ standards, labour agreements and laws and managing the work permits. Can check the maintenance work performed by specialists, verifying that the results are satisfactory and that the equipment can be started up. Can coach colleagues in basic maintenance work. Can control the SHEQ conditions in the plant, planning and requiring analyses and maintenance as necessary.</p>	<p>Can plan, organize and coordinate maintenance work according to the production plan. Can define spare parts minimum stock requirements and purchasing policies. Can agree major maintenance events, including plant stoppages. Responsible for the SHEQ conditions in the plant and their continuous improvement.</p>	<p>Can recognise faults and organise repairing. Can design and plan plant modifications, in agreement with plant manager. Can give technical advice and approvals to maintenance events, including periodical plant stoppages with several parallel actions, involving resource deployment, related actions and finding critical paths. Can agree with maintenance specialists on testing and maintenance plans and policies. Can advise on the SHEQ conditions in the plant and their continuous improvement.</p>
<p>8. Leadership</p>	<p>Can follow the philosophy of the leadership principles of the company</p>	<p>Can use proper techniques in leading other operators, can lead a shift</p>	<p>Can lead teams of operators according to leadership principles, can assess the behaviour of operators and can develop training needs from their behaviour</p>	<p>Can converse freely with his staff and colleagues, and gain the trust of his staff, colleagues and peers.</p>
<p>9. Organisational behaviour and Personnel Management</p>	<p>Can organize his/her work and operate in agreement with SOP, SHEQ standards and labour agreements and laws. Knows his/her responsibilities for the process and the need for reasonable care.</p>	<p>Can coordinate other personnel, verifying that they are trained and ready and that work is performed in agreement with SOP, EH&S standards and labour agreements and laws. Can compare KSC profiles of operators with their job profiles</p>	<p>Can communicate with the personnel department and the plant manager to optimise the personnel needs with the production budget. Can control and organize employment of staff according to the production plan</p>	<p>Can provide engineering specific training to operations, commissioning and maintenance staff. Can advise on personnel requirements for process and plant actions, including commissioning and upgrades.</p>

		and propose the training requirements.		Responsibility for the disposal of staff according to the needs of the production plan. Can define work conditions together with the HR-department according to the needs of production and according to the rules and legal requirements. Can maintain a fair and problem solving oriented dialogue with other company departments, to achieve smooth and efficient running of the plant.
10. Budgeting and reporting	Can keep records on material and utilities consumption to detect waste and report as early as possible during the production process.	Can analyse the production, together with maintenance staff, plant engineers and other relevant staff to propose cost reduction actions.	Can analyse quality and cost reports and take appropriate measures to adjust the causes of inconsistencies.	Can provide basic calculations and costing for process and plant design and its development and can monitor and analyse the cost plans under their control
11. Process and plant continuous improvement	Can find ideas for improvements on an operational level	Can motivate staff for their continuous improvement	Can assess ideas for improvements on an operational level Can communicate with experts for implementing ideas	Control system updates. Process action updates. Design and plan plant upgrades, e.g. for environmental, energy usage, de-bottlenecking, product quality, and reliability/safety reasons.
12. Process development	Can run tests with the regular plant following a given testing plan without being monitored	Can coordinate test runs after being given the requirements and plans. Can organize monitoring		To be able to recognise and define the reasons for improvement to the plant or process. To be able to source new ideas and manage knowledge. To be able to design and develop a solution to the improvement specification. To be able to define the testing plans and operability, and the safety and quality checks, associated with the development.

13. Plant design		Can assist in defining a Functional Design Specification with operational experience		To be able to define a Functional Design Specification for a new process or process plant or control system. To be able to design a new process or process plant or control system to meet a Functional Design Specification. To be able to implement the requirements of approval authorities for new designs.
14. Information management	Can use at a low level a PC to recall data and for data entry Can read a flow diagram representing a control-program on a PC screen	Can work with e-mail, Intranet, Internet and standard office programs Can coach colleagues in using the user interface of a control program	Is familiar in working with a computer, to create plans, reports, analyses, to search information and documentation, to organize files Responsibility for work flow to the operating staff	Can communicate problem solution planning to management. Can create plant safety reports for management and authorities. Can carry out process and plant accident analysis and reporting

Notes

SOP = Standard Operating Procedures

SHEQ = Safety, Health, Environment and Quality