

# Metso:Outotec

Training Academy

## Analyzer product training

Application

Theoretical and practical knowledge on our analyzers to maximize their accuracy and minimize downtime.



Metso Outotec on-stream analyzers give vital feedback about the grinding, flotation and hydrometallurgical processes. The control of these processes is based on particle size and elemental analysis. Thus, for reliable results from these instruments, it is important that the operators are able to use the equipment correctly, maintain it properly, and accurately calibrate the equipment. Correct operation gives you the best return on your investment by maximizing the analyzer's accuracy and minimizing service downtime.

### Training overview

- The training provides basic theoretical and practical knowledge of analyzer principles and safe operation for both beginners and personnel requiring refresher training.
- Suitable for operators, metallurgists, supervisors, maintenance and technical personnel.
- Pre-defined modules allow for the tailoring of training content.
- Customized training for experienced personnel for more in-depth knowledge.
- Training delivered at Metso Outotec facility or on-site.

Through carefully designed course modules, this training covers the following elements:

1. Safety – guidelines on the safe use of analyzers and the relevant safety regulations.
2. Technical overview – mechanical, instrumentation, electrical and automation, as well as pneumatic overview.
3. Operational overview – equipment operation, parameter adjustment, and use of the operator interface unit.
4. Maintenance and after-sales support – guidelines on service and covering the performance of maintenance activities in a safe and correct manner.

Read more at [mogroup.com/trainingacademy](http://mogroup.com/trainingacademy)



### Benefits

- Increased productivity and efficiency
- Improved safety
- Higher equipment availability
- Optimized processes

## Training course details

Analyzer product training course is composed of five different modules.

Module	Typical content
Analyzer system	Introduction, safety, why analyzers are used, process benefits, system components, operation and system functionalities, basic maintenance requirements, roles and responsibilities.
Analyzer system for operators	Compact version of the Analyzer system module, covering only the necessary information for safe daily operation and operative maintenance of the analyzer.
Maintenance	Analyzer maintenance and safety (including multiplexer and samplers), maintenance activities, scheduled maintenance tasks, diagnostics and troubleshooting, recommended spare parts (Prerequisite – Analyzer system course).
Calibration	Calibration theory, calibration process, calibration in practice (Prerequisite – Analyzer system course).
Safety refresher	Online safety refresher training.

### Recommended training time per equipment type

Module	Courier 5X/6X SL	Courier 6G SL	Courier 8X SL	Courier 5X/6X HX	PSI 300i	PSI 500i
Analyzer system	1,5 days	1,5 days	1,5 days	1,5 days	1 day	1 day
Analyzer system for operators	0,5 days	0,5 days	0,5 days	0,5 days	0,5 days	0,5 days
Maintenance	2 days	2 days	2 days	2 days	1 day	1 day
Calibration	1 day	1 day	1 day	1 day	0,5 days	-
Safety Refresher	1 hour	1 hour	1 hour	1 hour	1 hour	1 hour

Above modules are a combination of theory and practical training. Module content can be customized to your specific needs.

#### Theory training

Classroom-based course which covers basic operation principles, operator interface, safe use of Metso Outotec analyzers as well as after-sales support. This course is intended for operators, supervisors, maintenance personnel, and technical specialists, and can also be used as a refresher course for personnel who already possess a basic knowledge of analyzers.

#### Practical training

In addition to the theory training, the practical course connects the classroom-based information to practical experience. The course provides operators and technical specialists with practical knowledge on running, maintaining, and troubleshooting Metso Outotec analyzers. Practical training can include demonstrations, simulations and machine-side training.

#### Customized training courses

These courses are custom made to meet our customer's specific needs. They are designed to build up competence in Metso Outotec products and provide more in-depth information for designated equipment. Customized training courses provide thorough information on our equipment and technologies, process optimization insights as well as service procedures and tips to help customers move from reactive to proactive maintenance. These custom courses are normally a combination of classroom and practical training.