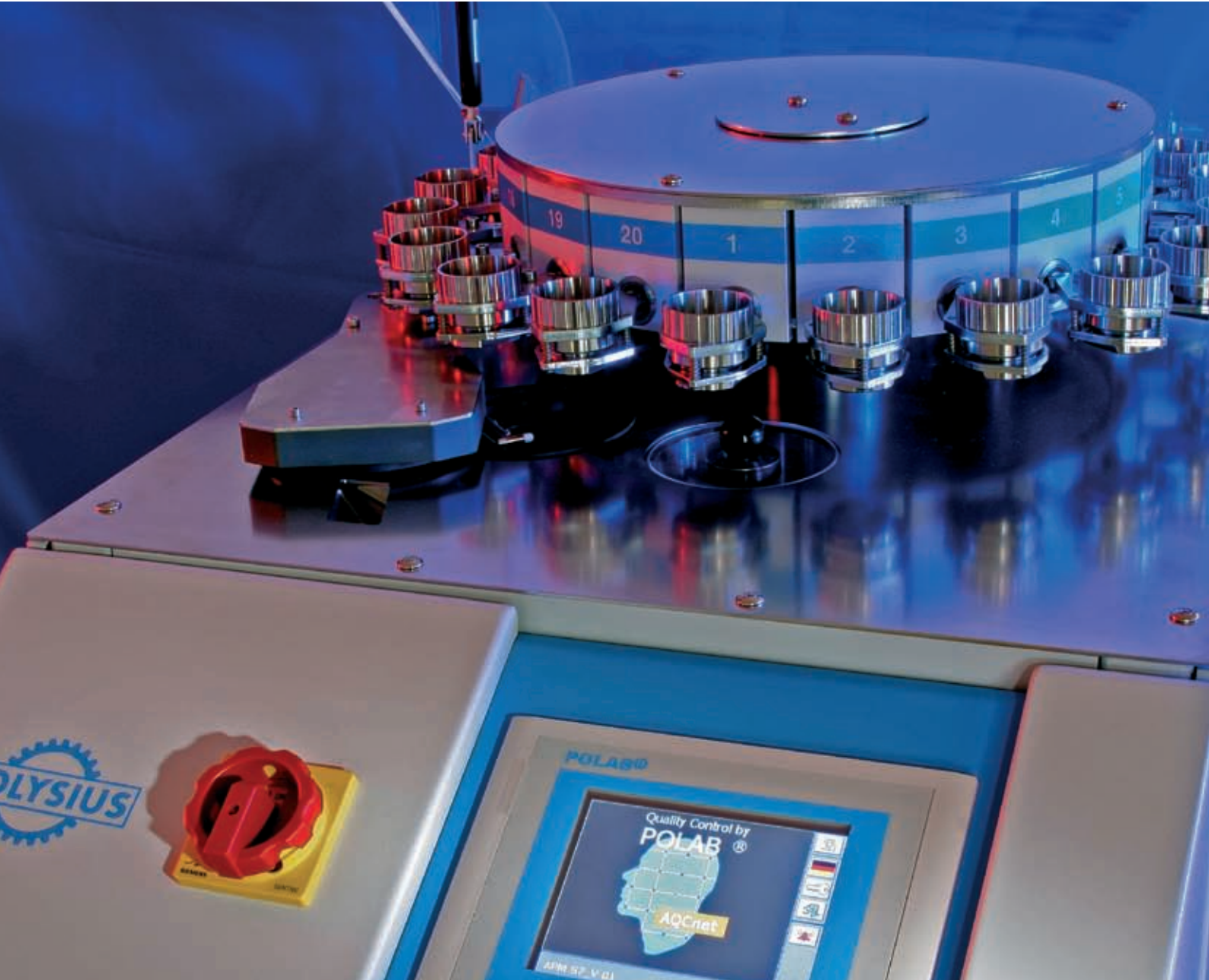


# POLAB® APM Automatic Sample Preparation Module.



Polysius



ThyssenKrupp

# POLAB® APM – Automatic Sample Preparation Module for XRF and XRD.

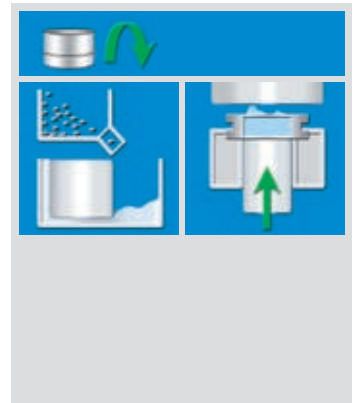


Compact, flexibly configurable and upgrade-capable. POLAB® APM integrates into a single machine all the components needed for preparing samples of mineral materials.

## POLAB® APM basis module

The fundamental sample preparation device consists of:

- Sample loader for blind sample and main sample
- Grinding aid dosing unit
- Grinding unit (patented)
- Tablet press



- The POLAB® APM basis module can be upgraded into the expanded configuration POLAB® APMplus by simply changing certain components.

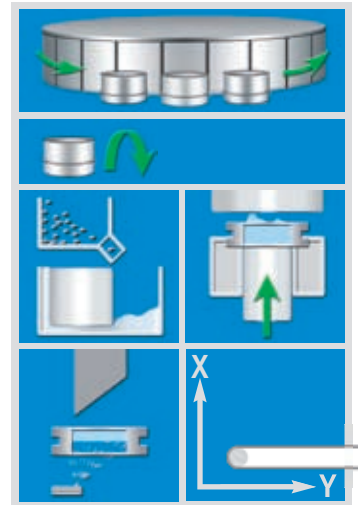
UPGRADE



## POLAB® APMplus

This expanded configuration for the automatic processing of sample series consists of:

- POLAB® APM basis module
- + Input magazine (with up to 20 input positions)
- + Volumetric dosing device
- + Tablet and ring cleaning device
- + Connection for tablet conveyor belt feeding the analysers



- Fully automatic quality assurance with automatic sampling and pneumatic delivery system can be achieved by integrating POLAB® APMplus into POLAB® ACT.

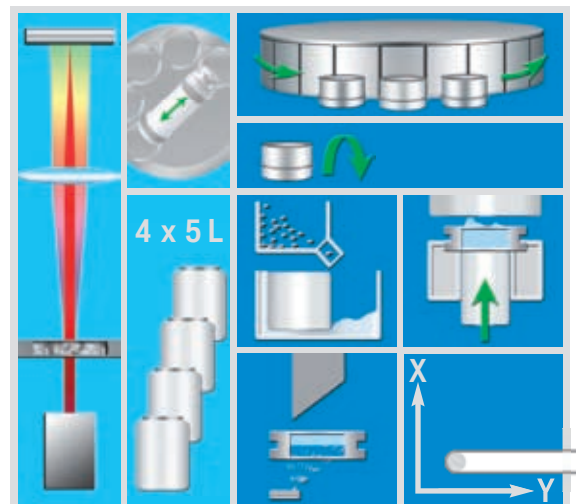
UPGRADE



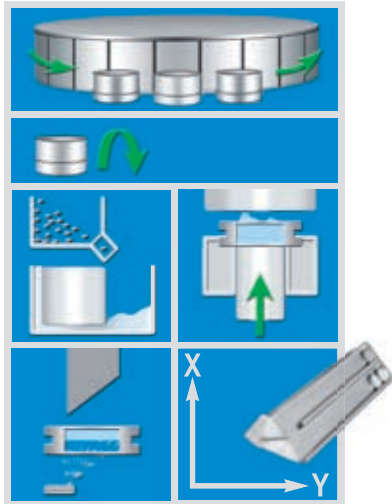
## POLAB® ACT

The expanded configuration for fully automatic quality assurance consists of:

- POLAB® APMplus
- + Pneumatic delivery capsule receiver
- + Sample storage magazine
- + Laser granulometer (optional)



UPGRADE



### POLAB® APMplus

This expanded configuration for the automatic processing of sample series consists of:

- POLAB® APM basis module
- + Input magazine (with up to 20 input positions)
- + Volumetric dosing device
- + Tablet and ring cleaning device
- + Output magazine



### POLAB® APM advantages

- Patented grinding unit for efficient and gentle grinding
- Optimised sample preparation for the different requirements of XRF and XRD
- Excellent reproducibility
- High sample throughput rate
- Laboratory personnel relieved of routine work
- Predefined and user-specific sample preparation routines
- Operator panel for simple and intuitive operation
- Sequential control by PLC



XRD

XRF



XRD

XRF

#### Technical data:

Weight	: 443 kg (APM), 500 kg (APMplus)
Dimensions (W x H x D)	: 600 x 1260 x 645 mm (APM) 600 x 1360 x 990 mm (APMplus)
Power consumption	: 2.0 kVA
Power supply	: 1-phase
Compressed air supply	: 7 – 9 bar
Compressed air consumption	: 160 dm <sup>3</sup> /sample

#### Sample material

Properties	: mineral materials
Grain size	: 0 – 7 mm
Moisture content	: < 1 %

#### Grinding unit: vibratory disc mill

Grinding bowl and grinding elements	: tungsten carbide
Effective volume	: 30 cm <sup>3</sup>

#### Tablet press

Pressing power	: 47 ... 93 kN
Pressure holding time	: selectable

#### Sample holders: steel rings

Outer diameter	: 51.5 mm
Inside diameter	: 35 mm
Height	: 8.6 mm