

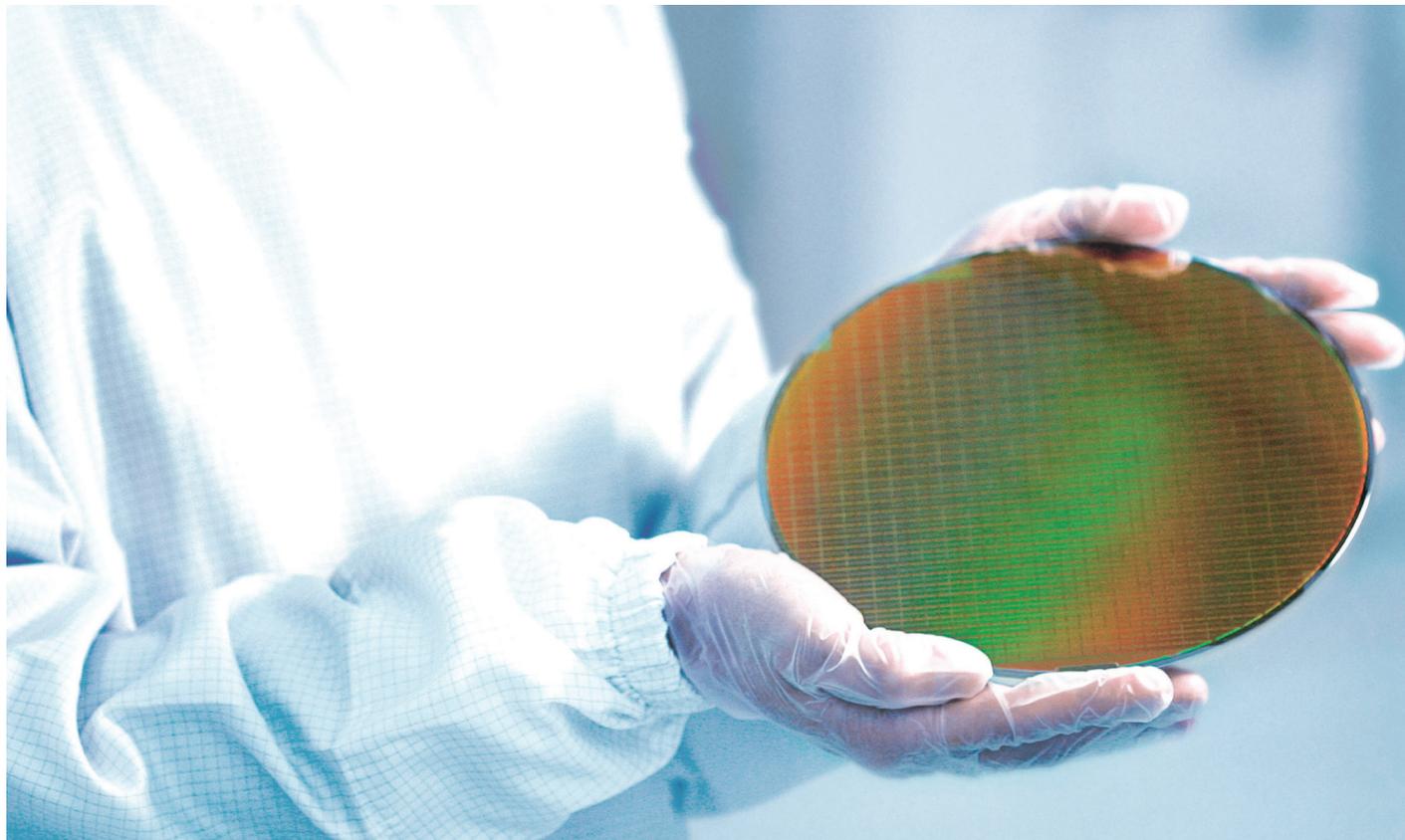


Measurement & Analytics | Measurement made easy

TALYS ASP310

An affordable high precision wet bath monitoring analyzer

Meeting today's manufacturing needs



State of the art analyzer

The TALYS analyzer fulfills the needs of equipment suppliers to semiconductor, solar and LED Fabs. This low cost, high-performance wet bath monitor allows real-time end-of-bath alerts and enables effective bath dosing. Retrievable prediction routines for monitoring multiple bath chemistries are stored within TALYS. The prediction routines will permit a single analyzer to be used when a bath chemistry changes.

TALYS is a state of the art analyzer which is ideally suited for real time, in bath, monitoring of a wet etching, cleaning, or PR removal bath. The traditional high precision, low maintenance and hands free ABB approach has been carried forward into the TALYS analytical system to enabling reliable end-of-bath alerts and bath life extension through dosing of individual bath components.

TALYS provides semiconductor, LED and solar cell manufacturing with superior performance offered at a cost suitable for today's tightening budgets.

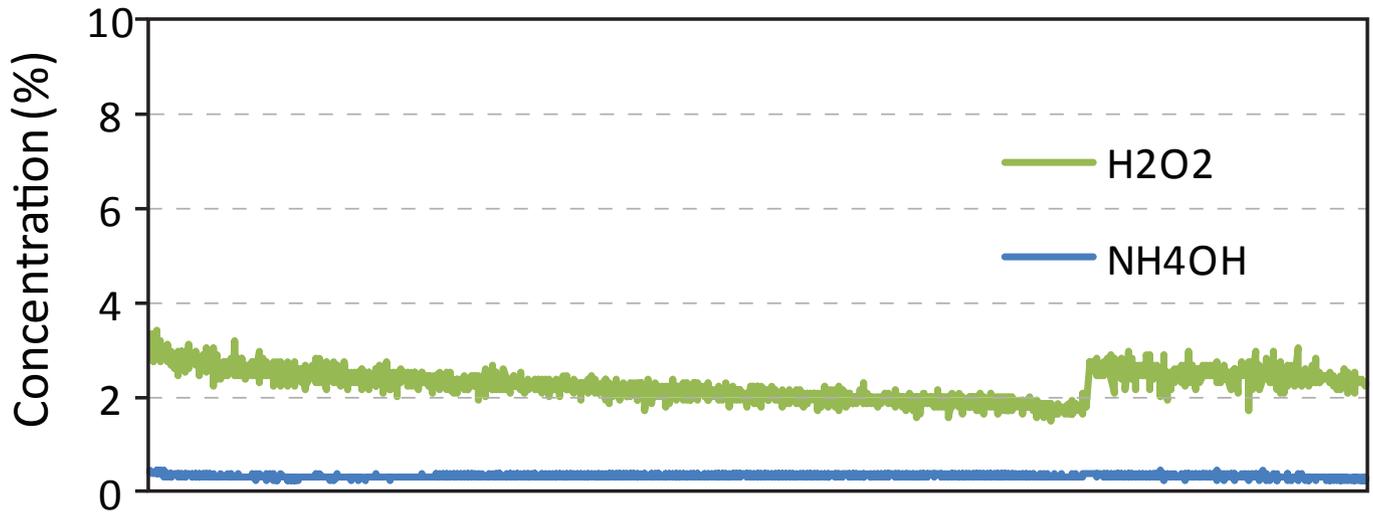
Flexibility and performance

This reliable analyzer offers the standard RCA cleaning suite bath prediction configuration. Its flexibility permits bath configuration changes for monitoring chemistry from solar, FPD, LED and semiconductor manufacturing.

The performance of TALYS permits equipment operators and engineers to reduce chemical usage and minimize excursion events with real time bath component predictions.

Reduce chemical usage and minimize excursion events

SC1 Mixing



Reliable and simple solution

Configured for wet cleaning, etching and PR removal baths. TALYS provides a low cost and simple to use dependable solution.

Excursion Prevention and Trend Analysis

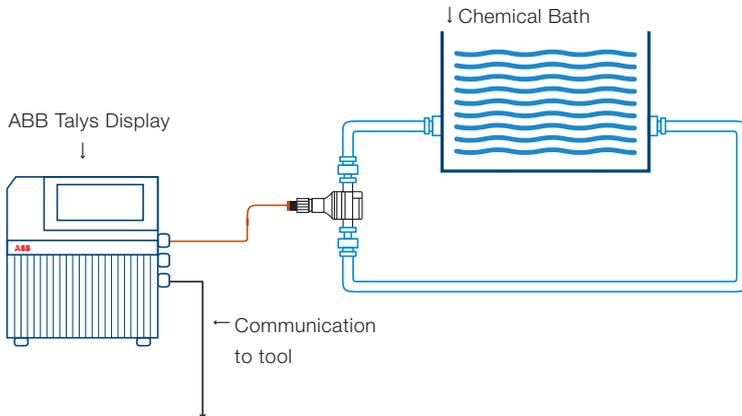
The TALYS system enables real-time trend analysis for bath life extension through dosing. This leads to a reduction in chemical usage. In addition, real time end of bath alerts will minimize the possibility of process excursions.

Key features

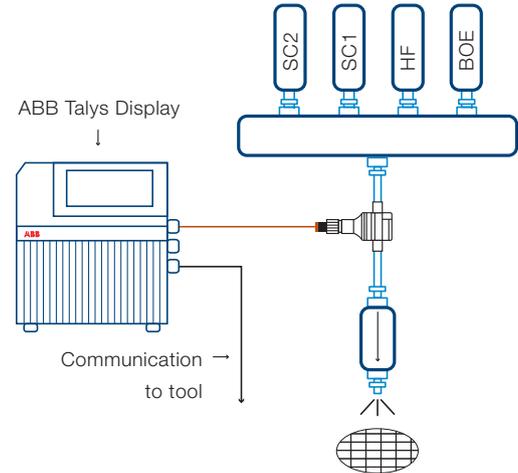
- Simplicity of operation eliminates the need for analyzer experts, runs 24/7 with data displayed on tool monitor.
- Reagent free operation reduces cost of ownership
- Low cost solution meets available budgets.
- No wetted parts sampling eliminates the need for tubing modifications and ensures contamination control.
- Flexibility allows the analyzer's electronic configuration file to be uploaded from email for additional bath monitoring routines.
- Multiple bath chemistries can be monitored at one sample point, reducing the number of analyzers required.

Multiple chemistries at one sample point

Monitoring a re-circulation bath



Monitoring on-the-fly chemical usage



Monitoring a recirculation bath

As the industry moves to on-the-fly chemical delivery, TALYS meets the need for a single analyzer to measure multiple chemistries flowing through a common tube.

TALYS can quickly measure multiple chemistries at the same same sample point. Automatic bath selection via Modbus TCP outputs from the tool permits real time selection of the desired bath prediction routine.

When monitoring more than one bath chemistry on a tool, there is no need for a hardware change, no need for multiple analyzers and there is no need for manual intervention resulting in a sizable cost savings at the FAB. Imagine one analyzer measuring a delivery tube for SC1, SC2, BOE, BHF, DHF and ST-250 without manual intervention, all controlled by the tool PC.

Recirculation Bath

TALYS brings the same robust reliable and precise measurement that the WPA brings into the FAB. Designed for use when only one sample point needs monitoring. The TALYS analyzer reduces the cost of analyzer purchases.

If a technology update requires a new chemistry on the same production tool, TALYS can be up-upgraded in the FAB via a file received in your e-mail.

Unique sample cell that has no wetted parts



The Patented Clipp/R

The ABB sample interface is a unique cell that has no wetted parts. It is easy to install. Just clip it on to an existing 1", 3/4", 1/2" or 3/8" PFA tube.

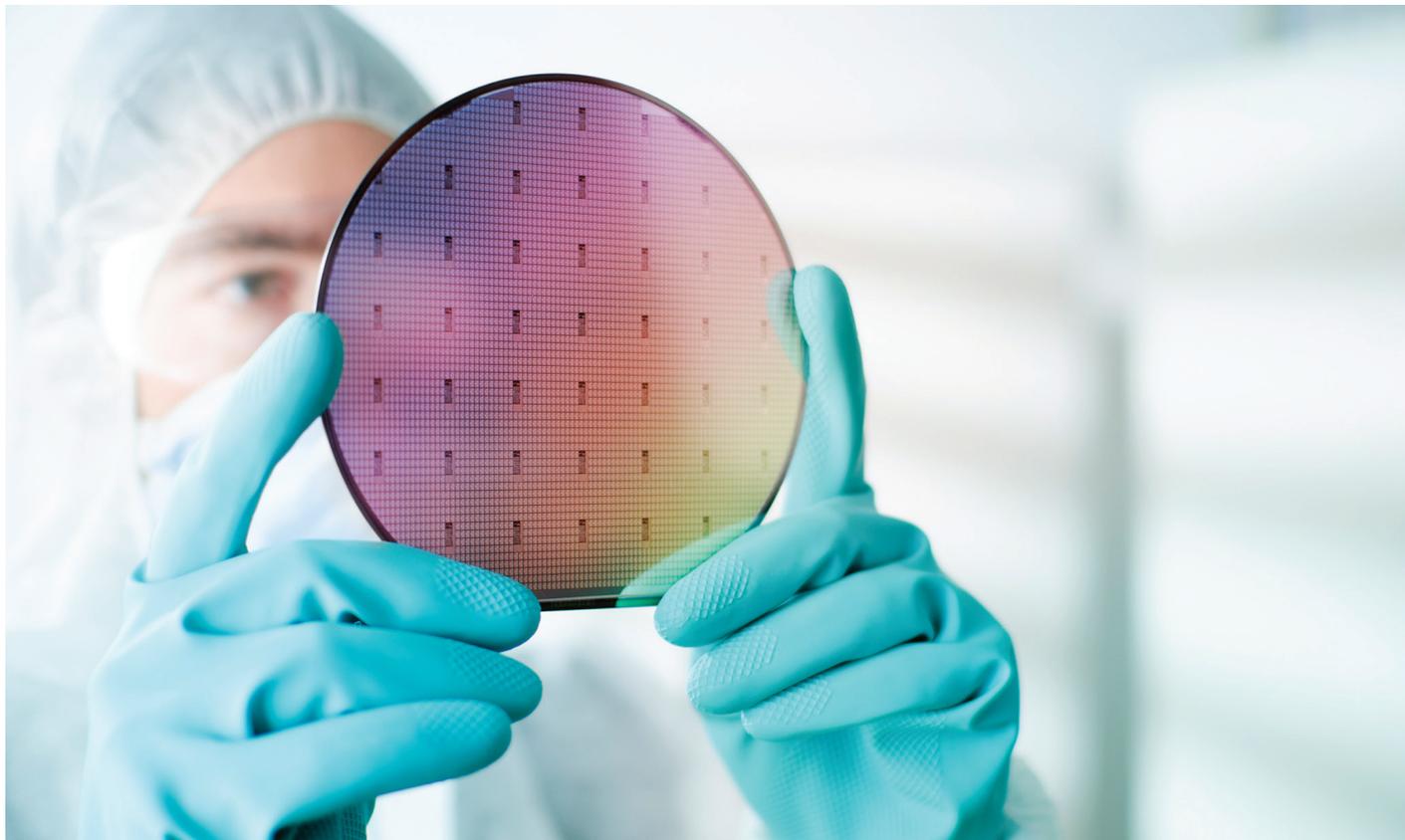
The Clipp/R is constructed of Teflon™ and connected to the TALYS via Teflon™ protected fiber optic cables. The bath cannot be contaminated!

The Clipp/R can be installed on an operating tool. There is no need to shut down production for installation.

Simply un-screw the cap, place tubing in the groove, screw cap in place and it is installed.



Ease of use



The TALYS analyzer is a complex system that is simple to use. With a minimal footprint, wall or shelf mounting capability and fiber optic interface to the sample point this computer-less analyzer is easy to mount in space limited areas.

ABB's Clipp/R probe aids in simplifying the installation as it is not necessary to shut down the tool, existing tubing does not require any modifications and the no-wetted parts sampling eliminates the risk of contamination. Unlike titrators, there are no reagent vessels to fill or routine analyzer "zeroing" procedures.

When updating a process to a new chemistry, the TALYS prediction configuration can be uploaded electronically. There is no need to send the analyzer back to the factory for refurbishing; there is no need to purchase a new analyzer.

A simple electronic file received via email is uploaded and the analyzer will be reconfigured for new chemistries. When a set of chemistries are rotated on a regular basis, as in foundries, the multiple configurations can be saved and used on demand.

The analyzer lifetime is extended well beyond industry standards. TALYS is designed for field serviceability of all components eliminating the need of a spare analyzer in the FAB.



Standard Package Includes

- One (1) TALYS
- Five (5) meter fiber
- Configuration for SC1, SC2, BOE, BHF, DHF and ST-250
- One (1) Clipp*IR* sample probe
- ModBus TCP (Ethernet) communications to PC tool

Options include

- Touch screen display
- Additional lengths of fiber
- Additional bath monitoring configurations

Specifications

- Dimensions: 369mm (H) × 350mm (W) × 255.5mm (D)
- Weight: 20 kg (primary analyzer enclosure)
1 kg (Clipp*IR* and fiber combined)
- Communications: ModBus TCP
- Mounting: Wall or shelf mounting
- Electrical: <100 Watts consumption
in routine operation
- Environmental: 15 to 35° C
<95% RH non-condensing
General purpose area classification

Approvals

- cTÜVus, CE, FCC, laser safety FDA/IEC/EN 60825-1, RoHS, WEEE

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