

Play it safe with your
robot colleague!



EUROPE'S FIRST Automatic Chemical Dispensing Station at Infineon's Dresden Plant



EXTREMELY dangerous chemical in use:
high risk, high cost, high responsibility



i4.0 Now also for Drum Emptying

1



Locate bung

2



Remove transport lock

3



Dock QC-System
(with correct torque!)

4



Check chemical (RFID)

5



Pump off chemical
after safe connection

6



Detect complete emptying,
disconnect drip-free

7



Close bung
(with correct torque!)

MORE PROTECTION: No more chemical contact!



HANDLING of life-threatening chemicals, e.g. hydro-fluoric acid, TMAH, etching mixtures, is substantially defused

NO more people in the direct danger zone when opening and connecting containers

NO more excessive personal protective equipment (PPE) requirements

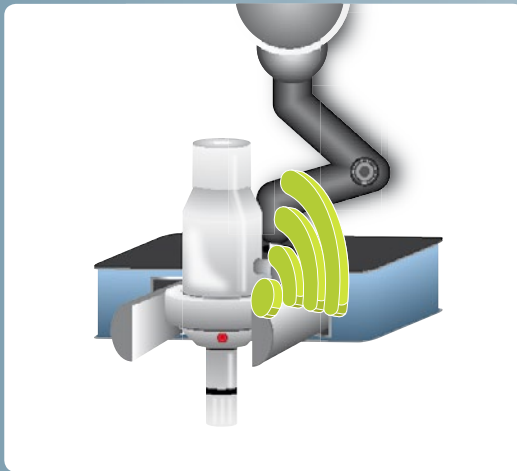
NO physical double checks by different staff members

NO excessive or extra training for operations staff

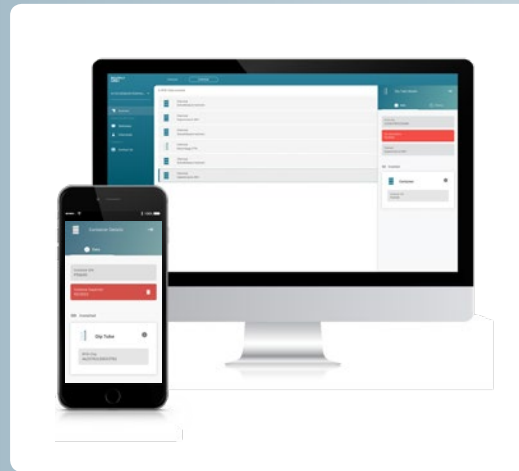
BETTER risk assessment by plant manufacturer (CE directive; STOP principle: plant manufacturer must recommend robot technology!)

MORE SAFETY:

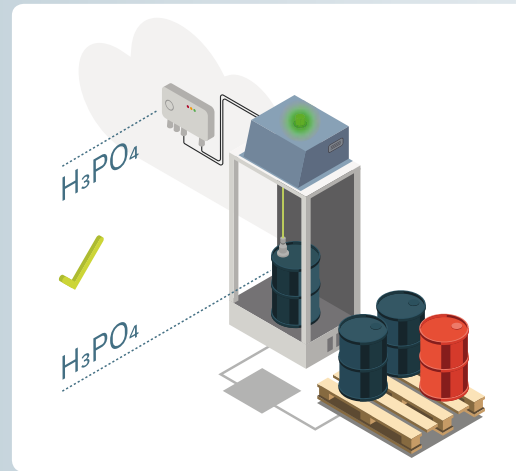
No more chemical mix-ups!



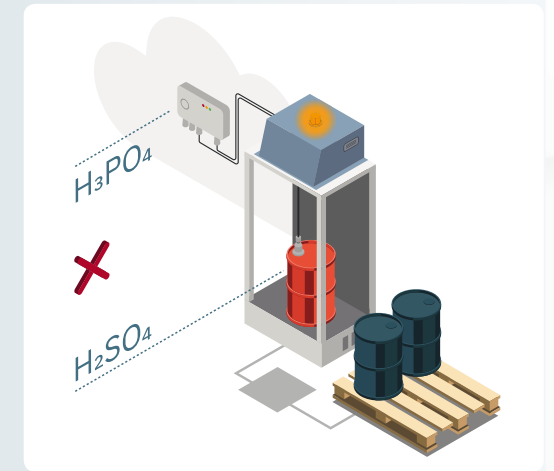
Automatic chemical detection (RFID): chemical, concentration, supplier, container expiration date, etc.



Automatic and complete traceability: reports when each drum with the specific chemical and batch was emptied



Pump release only with matching chemical



No more wrong chemical in the process!

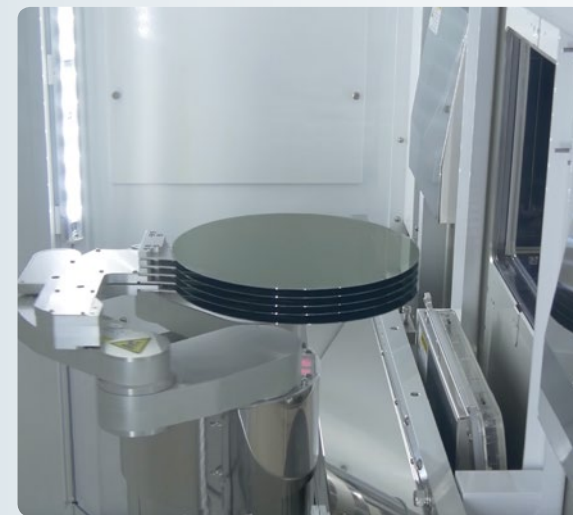
MORE CLEANLINESS: No contamination!



Humans no longer the
No. 1 source of contamination



More cleanliness means
more safety



Improved product quality!

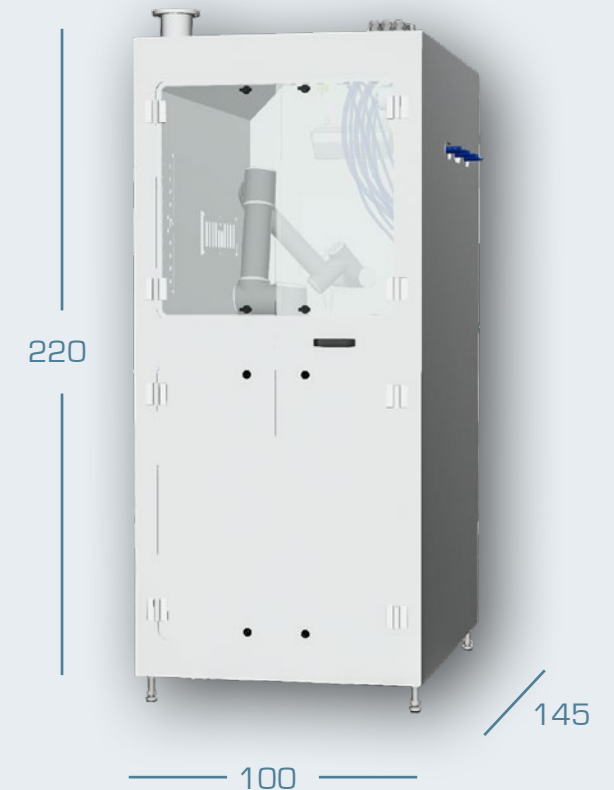
SMALL DIMENSIONS: No extra space required!

Footprint of robot box practically identical
to conventional TGM station (approx. 100 x 145 x 220 cm)

Easy integration into existing environments

Easy loading with standard pallet trucks/forklifts/barrel lifters

No special connections necessary



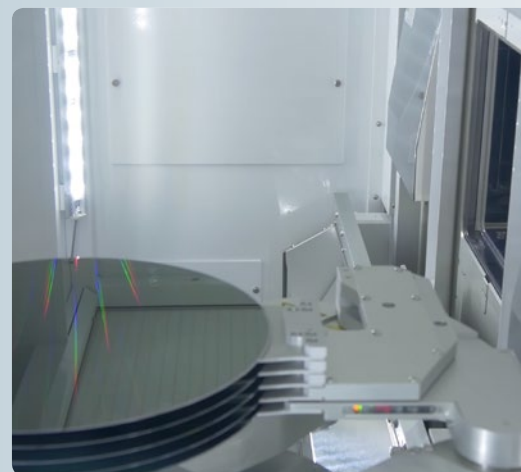
LOW EXPENSES: Fast amortization!



No constant change of single-use PPE (full protection, filter masks, gloves)



No double check principle, One-man operation



Less incidents

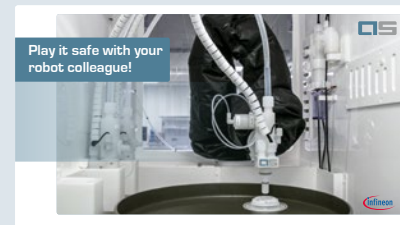


First pilot calculation: amortized after approx. 1 year!

AN ALL-AROUND SUCCESSFUL PILOT PROJECT: better occupational safety, better quality!

“What surprised me about this project was how efficiently we were able to improve occupational safety and process quality. It took us only a few days from delivery to commission the robot. And it worked flawlessly right away. That’s something you don’t get every day with innovation projects.”

Petra Handrick-Morgenstern
Infineon Facility Management Dresden



SAFETY-FIRST PARTNER OF INFINEON

“Improved risk assessment was a key concern for us as a plant manufacturer - and this was achieved without reservation.”

Frank Petzold

Managing Director eMAXX



“For chemical handling, this was truly pioneering work by Infineon, and the entire industry will benefit from the added protection and safety.”

Nico Fischer

Business Development AS Strömungstechnik



More information about the QC robot?

www.asstroemungstechnik.de

Thank you for your interest!



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