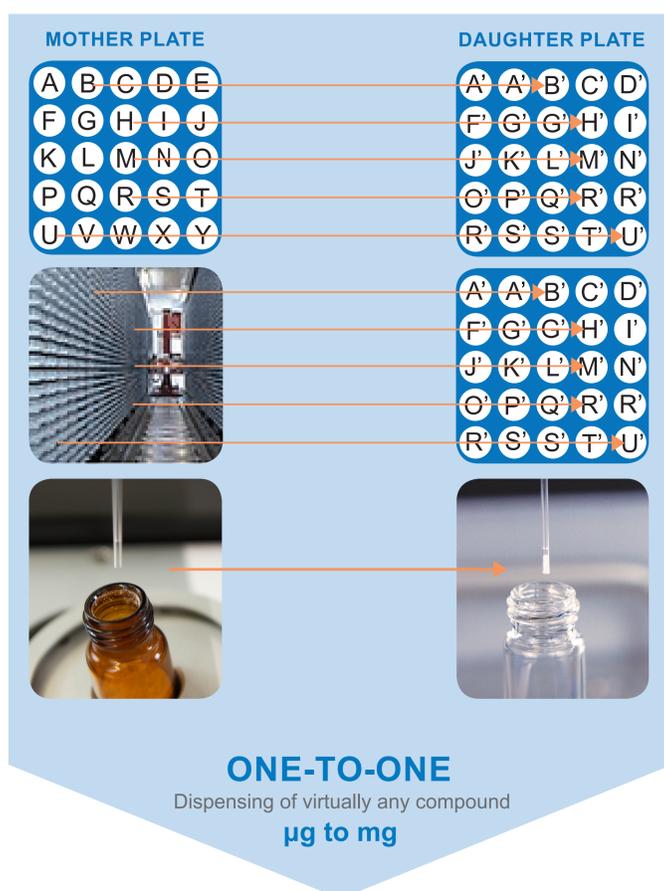


UNLOCK YOUR COMPOUND MANAGEMENT

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INTRODUCTION AND PURPOSE

Pharmaceutical industry faces the increasing demand for innovative medicines against various diseases. In this regard, the compound library in pharmaceutical industry is the most valuable asset. However, the compound distribution from the library into the screening plates is often still done manually and binds highly qualified resources to very time-consuming, tedious and error-prone tasks.

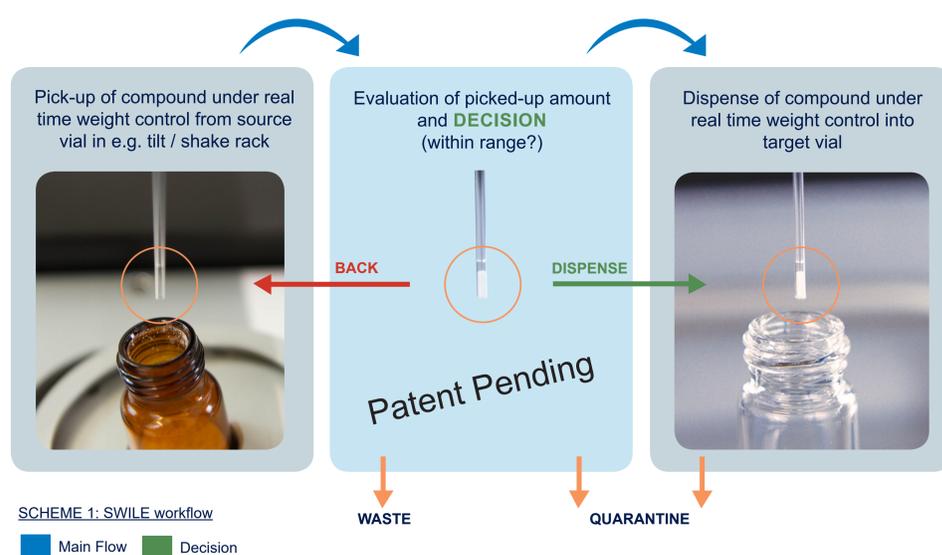
METHODS

To overcome these challenges, Chemspeed launched the **first fully automated true one-to-one gravimetric "pick and decision dispense"** of virtually whatever compound (SWILE and SWIP) – unlocking your compound management.

The key features are:

- Fully automated "pick & decision dispense" from almost any source into any destination
- Dispensing range from < 100 µg to 100 mg with +/- 10 µg resolution
- Revolutionary accuracy & precision due to "decision dispensing"
- Disposable positive displacement tips
- No cross-contamination
- A recovery rate equal or higher than in manual procedures
- Unattended operation (with optional inert atmosphere)
- Boost in your discovery process and time to market

CONCEPT SWILE: PARADIGM SHIFT IN SUBSTANCE HANDLING



SCHEME 1: SWILE workflow

RESULTS

TABLE 1:	TYPICAL DISPENSE RESULTS FOR DIFFERENT TARGET AMOUNTS AND DIFFERENT MORPHOLOGIES				
Target (mg)	0.50	1.00	2.00	5.00	10.00
Average (mg)	0.56	1.04	2.04	5.05	10.08
StdDev (mg)	0.11	0.14	0.13	0.12	0.20
Accuracy (%)	12.76	3.84	2.16	0.96	0.81
Precision (%)	20.23	13.44	6.44	2.48	1.94

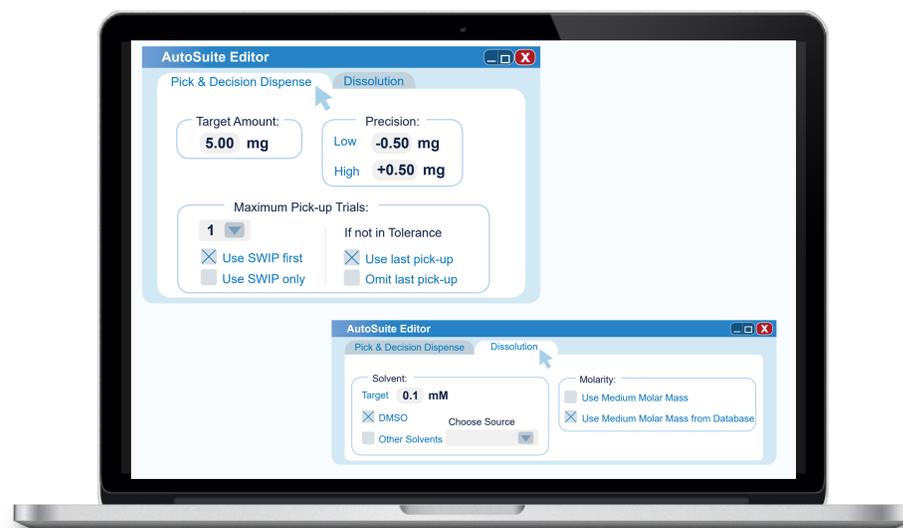
CONCLUSION

Accuracies and precisions are tremendously increased by this unique "pick & decision dispense" solution (Scheme 1 & 2).

The integrated balance of the SWILE tool has a resolution of 0.1 mg which actively measures during the pick-up process.

This enables a controlled (decision driven) pick-up of the target amount prior to the actual dispense on an on-deck balance with a resolution of +/- 10 µg for measurement.

By the modular combination with additional tools like liquid handling, shaking and heating, the entire screening plate preparation workflow can be automated.



SCHEME 2: Compound Management Task - Generic Example of AutoSuite Software