

TINT

PERT note #05

5 QUESTIONS - 5 ANSWERS | »A Dispenser That Adjusts To Your Requirements«





Editorial

Markets, customer demands and legal regulations are changing all the time. Dispenser limitations can impair the adaptation of recipes, materials and processes to new conditions. This is why Collomix has designed TINTA for maximum flexibility to adjust to varying dispensing requirements.

At the same time TINTA is made to last – TINTA is fully calibration-free over its entire lifetime and features Collomix's innovative lifetime dosing technology. In addition, it is designed to make the life of your operating personnel and your technicians as easy as possible.

Learn about all the exciting features and technological benefits TINTA offers for all size applications – from DIY to trade shops and professional retail – in this TINTA Expert Newsletter:

- In TINTA Expert note #5 you will find answers to:
- **1.** How can you adapt the capacity and tinting speed of a TINTA dispenser?
- 2. What new ergonomic and handling benefits does TINTA bring for the operator?
- 3. How will TINTA support your technicians?
- 4. How does TINTA ensure a long service life for your dosing system and allow pumping without calibration?
- How does TINTA support easy customisation and optimum user flexibility?

+ Editorial



TINTA for DIY





Example: TINTA 16 with 16 Colorants @ 2.5 l or • 12 Colorants @ 2.5 l

• 4 Colorants @ 5 l



TINTA for trade







- 14 Colorants @ 2.5 l
- 10 Colorants @ 5 I
- Or choose any other configuration



TINTA for larger trade outlets







- 14 Colorants @ 5 l
- 3 Colorants @ 2 x 5 l
- 3 Colorants @ 4 x 4 l

Or choose any other configuration

»How can you adapt the capacity and tinting speed of a TINTA dispenser« There is constant change in the world of colors – colorants are being continually developed to produce greater color diversity and even higher quality. Color fashion tastes come and go with the season, leaving you with unpredictable colorant consumption. Some colorants have fast turnover times, while others sit in your dispenser forever. At the same time environmental regulations increasingly call for paints with minimum solvent content. As a result, more and more colorants have special treatment requirements.

This is why TINTA was designed for optimum operational flexibility.

Our TINTA innovation for you:

Truly modular for optimum adaptability

- On a TINTA, each colorant container is an independent system in itself. This is why you have free choice to use 2.5 I or 5.0 I canister sizes on any position at any time.
- TINTA is available in versions with 16, 24, and 32 canisters for ultimate flexibility: you can easily upgrade or downgrade the capacity of your TINTA at any time to meet your specific requirements.

- Thanks to its innovative Collomix dispensing technology, TINTA will also even let you increase the dispensing speed according to your needs over the complete lifetime of the system. This is achieved by highly precise simultaneous dispensing of the same colorant from multiple canisters.
- Canisters are designed to hold water or solvent-based colorants for ultimate material flexibility. The unique Collomix vibroPAD ensures perfect dispensing conditions even with thixotropic colorants.

Your advantage:

TINTA features a wide range of modular options for ultimate dispensing flexibility. You can not only increase tinting capacity at any time, but also tinting speed.

An example:

A configuration with 1 colorant in 4 canisters simultaneously, each filled with 5 l, will allow 4 x 90 ml, i.e. 360 ml to be dispensed in one single pump stroke. With 2 strokes TINTA will dispense 720 ml in under 1 minute!

How can you adapt the capacity and tinting speed of a TINTA dispenser?



Figure 1.1: fast software



Figure 1.3: fillling terminal



Figure 1.4: disposable funnels





Figure 1.2: constantly clean nozzle head



Figure 1.5: ergonomic tinting with conveyer or slide



Figure 1.6: movable nozzle head move**NOZ**

»What new ergonomic and handling benefits does TINTA bring for the operator?«

Dispensing can be a tough job. Not only do you have to ensure fast and precise identification and execution of the required recipe, but hard physical work may also be necessary – for example, handling the buckets and performing daily nozzle cleaning.

Our TINTA innovation for you:

TINTA will make the execution and handling of tinting orders much easier for the operator.

Your advantage:

Ultrafast software support

TINTA's innovative **colloro.TINT** dispenser software enables totally new levels of dispenser operation and service convenience. Our clever database solution hosts all your dispenser and recipe data with maximum efficiency. The SQlite database format will give you **extremely fast access to all recipes**: it can find the first 10 recipes in a 7-million recipe database in just 500 ms with a 600 MHz processor, and in just 100 ms on a desktop PC (*figure 1.1*).

Convenient ergonomics

TINTA's innovative and sensor-controlled moveNOZ technology **adjusts the dosing head to the individual container** and not vice versa. This keeps the container table at a constant height that is **fully compatible with all roller conveyors**. An optional pull-out plate ensures easy **sample pot processing** (*figure 1.5 – 1.6*).

Clean dosing head and zero daily purge

At the end of each dosing process, TINTA's unique **sniff function** retracts the colorant from the nozzle tip back into the nozzle's dew point environment, **keeping the colorant flowable**, efficiently **preventing dripping**, and **enabling high-precision dosing for even the smallest batch and sample volumes**. As colorant cannot stick to the dosing head, **almost zero purge** is required. This **reduces purge waste by up to 80 %** (*figure 1.2*).

Easy refills

TINTA's unique filling terminals and **disposable funnels** enable precise, efficient filling. The filling terminal docks to the canister opening via magnets. The disposable funnel self-locks in the terminal and spreads conically for an easy refill. The funnel can easily hold a colorant container of up to 1 litre to enable complete emptying (*figure* 1.3 - 1.4). Smaller containers can be held in the funnel for complete drainage. An **ergonomic height of approx. 123 cm** enables easy access even for shorter personnel.

All refills are **fully software supported**, blinking LEDs on the container lid indicate canisters that are ready for filling. A lid monitor ensures that the lid is correctly closed. After a refill, the level is automatically adjusted in the database and the canister is released for use.

What new ergonomic and handling benefits does TINTA bring for the operator?



Figure 1.7: tool-free canister change



Figure 1.9: stainless steel cover





Figure 1.8: modular and clean canister setup



Figure 1.10: full access via PC, laptop or mobile device

»How will TINTA support your technicians?«

Service, maintenance, software and database updates require considerable logistics effort, as technicians have to take care of these tasks at the dispenser's location. This can significantly increase the total cost of ownership.

Our TINTA innovation for you:

Collomix has designed TINTA to minimise service and maintenance requirements.

Its major advantage over other systems:

it can be completely remote-controlled and features innovative remote update and remote data processing options.

An additional unique feature of TINTA is the modular set-up with autonomous canisters. In case of damage, all other canisters will continue operating to ensure other recipes can still be processed. Any individual canister can be easily replaced with a new module within minutes. TINTA is fully up and running instantly, significantly reducing the service effort and cost on site.

Your advantages:

Clean operation, easy service

- Tool-free canister changes thanks to TINTA's modular "One Circuit Dispenser" set-up, which enables fast canister exchanges directly on the dispenser in just 5 minutes. Any operator can perform the exchange without special training. A technician may even not be needed (*figure 1.7*).
- A canister change complete with all parts (electronics, pump, canister) is cheaper and faster than having to clean and refurbish comparable dispensers without modular set-up (*figure 1.8*).
- Stainless steel covers around the canisters and colorant enable easy cleaning. All electronic components are installed away from the canisters (*figure 1.9*).
- TINTA's innovative circulation process, the unique approach to filling, and TINTA's special coolNOZ technology keep the canisters and machine clean and efficient at all times.

 A software-based lid monitor control locks TINTA if a lid has been open for longer than 1 hour. This ensures airtight canisters and eliminates problems with dried out colorants and mould formation.

Calibration-free for service effort and cost savings

 TINTA's dispenser and piston pump are completely calibration-free. Forget about annual pump calibration service costs.

Remote control features for extra flexibility

- TINTA is designed to grow with your requirements.
 It comes complete with all those »online features« that color producers usually have to retro-fit (*figure 1.10*).
- **Updates** of database entries, dispenser and dosing circulation electronics are applied automatically or simply via mouse clicks.
- **Browser-based evaluation** of all systems enables real-time tracking (< 60 sec).
- TINTA can be **controlled remotely** via PC or mobile devices (*figure 1.10*).

Figure 1.11: coolNOZ with dew point technology





Figure 1.12: calibration-free piston pump



Figure 1.13: new piston



Figure 1.14: piston after 117,000 strokes with colorant brown oxide without significant wear and tear



Figure 1.15: multi-port valve



Figure 1.16: inner surface of cylinder tube after lifetime endurance test

»How does TINTA ensure a long service life for your dosing system and allow pumping without calibration?«

You want your dispenser fleet to be an attractive investment for the future, and you want an attractive total cost of ownership.

Our TINTA innovation for you:

Everything in TINTA is engineered for durability, long life, efficiency and low service and maintenance requirements.

Your advantage:

TINTA's long-life dosing technology

- Inside the TINTA canister the **number of moving parts has been reduced to an absolute minimum**. No stirrers, no screws, no rods. Recirculation is controlled via pump motion.
- Ceramic discs in the valves ensure an almost unlimited service life.
- TINTA's piston pumps underwent rigorous testing and successfully demonstrated maintenance-free operation over their complete lifetime. We ran them with a wide range of colorants including highly abrasive ones like white oxide. In our tests they successfully completed 350,000 cycles without piston wear. At a cylinder volume of 90 ml, this is a total dispensed volume of 31,500 l. With dosing and recirculation this amounts to a lifetime of 21 years. For some colorants we even achieved 580,000 cycles (*figure 1.13 1.16*).

TINTA's piston pumps are calibration-free over their complete lifetime!

- Calibration-free piston pumps eliminate annual calibration service costs and ensure constantly high dosing precision throughout their service life (*figure 1.12*).
- Upon installation we recommend one time parametrisation of the colorant system to realise maximum sample pot accuracy.

No purge for ultimate precision and significantly reduced colorant waste

• TINTA's innovative cool**NOZ technology prevents the colorant from drying out** and keeps it in prime condition, i.e. moist and flowable. This eliminates the need for frequent purging and reduces purging waste by up to 80 per cent (*figure 1.11*).

How does TINTA ensure a long service life for your dosing system and allow pumping without calibration?



Figure 1.25: paper refill funnels directly at the TINTA



Figure 1.24: small container unloading mechansim



Figure 1.26: label printer holder

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for metal tins

Figure 1.23: punch knife



Figure 1.18: touch display



Figure 1.17: customised brand communication



Figure 1.19: keyboard and mouse



Figure 1.20: PC holder



Figure 1.21: punch dosing head for metal tins



Figure 1.22: nozzle including laser indicators

»How does TINTA support easy customisation and optimum user flexibility?«

Modern dispenser systems must be easily adaptable to new color technology, regulations and customer requirements. They also must integrate easily into the customer's existing system environment and be able to handle differing pot sizes and materials in different regions.

Our TINTA innovation for you:

TINTA features a fully modular set-up with 16, 24 or 32 canisters and capacities of 2.5 or 5.0 litres for each canister. It was designed for simple, intuitive operation by the user in the store. A wide range of equipment and software options are available to customise your TINTA according to your individual requirements.

Your advantage:

Hardware & User Interface

- TINTA works with your existing hardware. **colloro.TINT runs on any** conventional Windows PC, All-in-one PC, PC-on-a-stick or any Windows tablet or iPad. This ensures optimum flexibility at retail.
- Collomix offers a wide range of hardware adapters to integrate TINTA into any environment.

Small container extras & label printers

- An optional **pull-out-tray** is available for small containers starting at 100 ml.
- Label printers for the production of paint container labels can be integrated on an adjustable printer mount.

Extra features

- Mechanical punch for metal containers
- Laser indicator for easy positioning of smaller and larger cans
- Barcode scanner mount

Branding communication

• TINTA can be branded with your store or paint brand.



The major benefit for our customers: Why is Collomix the perfect partner in all matters relating to tinting solutions?

Collomix has been at the forefront of mixing for more than 40 years. Through its long-standing practical experience and close involvement with an extremely wide range of tasks and requirements, Collomix has built up profound knowledge, which its customers benefit from too. Our mission as an innovation leader is to create added value for our customers in the industrial environment by coming up with new ideas. How do we achieve this? By developing proven functions, optimising profitability aspects and gaining a technological edge through interdisciplinary experience transfer – which is a real plus for our customers.

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As a system provider for tinting solutions, we give you advice that spans entire product fields and is tailored to your own, very special situation. During this process, you as a customer benefit from our intelligent, compact corporate structure. Short distances mean that we can respond to your requirements in a flexible and agile way. In so doing, Collomix uses highly qualified specialists and long-term employees. After all, they are the key to our outstanding products and, therefore, to our joint success as partners.



Find out more about TINTA benefits and TINTA technology in the TINTA Expert Newsletter series:

TINTA Xpert note #1: **»TINTA – A Dispenser Without Stirring«**

TINTA Xpert note #2: **»Piston Pump & coolNOZ – A Dispenser With Sample Pot Accuracy**«

TINTA Xpert note #3: »coolNOZ - A Dispenser Without Purging«

TINTA Xpert note #4: **»colloro.TINT - Next Generation Dispenser Control**«

Please contact us for a TINTA test and for further information. Our sales & technical service team is happy to answer your questions.

More information on http://collomix-tinta.de/en





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