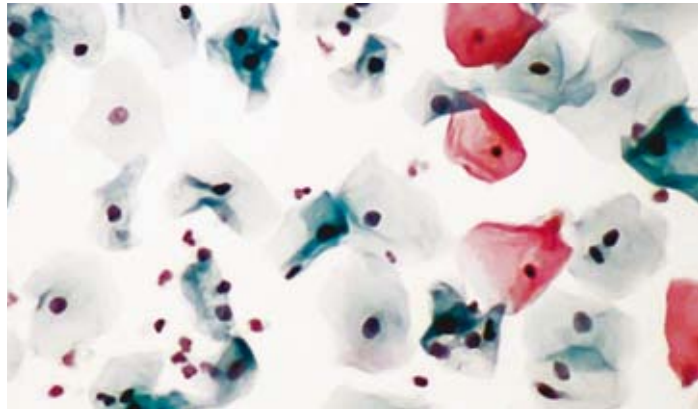


CYTO-SYSTEM

Cytological preparations – fast and economic

Cytologists have to deal with considerable challenges: time and cost pressure, the need for 24 / 7 availability of cytology diagnostics, and in many cases the increased number of diagnostic parameters required for the same quantity of samples. The Hettich cytological system provides reliable, flexible and cost-saving solutions to meet the requirements of cytology laboratories.



APPLICATIONS

Hettich methods for optimum preparations

We have prepared comprehensive descriptions of methods in close co-operation with users for our classical range of accessories. These methods can be obtained without charge.

They provide support for the preparation of different body fluids such as:

- Cerebrospinal fluid
- Bronchial washings (BAL)
- Pleural effusion
- Ascites
- Urine

Hettich specialists would be happy to answer any questions.

Unbeatable flexibility

The exceptional range of accessories makes the Hettich Cyto system unique on the market. This range enables performance of all of the common centrifugation procedures used to yield cytological preparations. In addition to the classical Hettich method alternative methods (such as those using the Shandon^{®39)} cyto centrifuge) can also be carried out in Hettich centrifuges.

Valuable time savings

The new 12-place rotors complete the product range and are particularly suitable for labs that have a large throughput. Up to 12 samples can be centrifuged in a single run. The accessories tailored to the particular application are also offered as a complete package. This saves time in procurement.

Optimal cell yield

The cytologist can select the most appropriate accessories for the body fluid to be analysed. This creates ideal starting conditions to achieve the best results. The comprehensive Hettich methods for the classical cyto accessories provide valuable information on how optimal preparations can be derived from the different samples.

Low purchase costs

The cytological accessories fit in standard Hettich lab centrifuges in which tubes can also be centrifuged. It is therefore not necessary to purchase an expensive cyto centrifuge. This not only saves money, it also saves space on the lab bench.

³⁹⁾ Shandon[®] is a registered trademark of Thermo Fisher Scientific Inc.



CLASSICAL CYTO ACCESSORIES

Proven standard

Cytologists have valued the classical Hettich Cyto System for many years, because of the high cell yield and the high quality of the preparations derived with these accessories. They enable dry or wet preparations as the sedimentation and drying steps are separate. With classical cyto chambers a seal prevents the loss of cells during sedimentation. Drying (which is not necessary if wet fixation is carried out) is performed in a second centrifugation step once the cells already adhere to the slide.

The classical cyto accessories fit in almost all of the Hettich centrifuge models. A conventional centrifuge can be converted into a cyto centrifuge through a simple exchange of the carriers. One-funnel chambers are available in four different sizes, and there are two kinds of multi-funnel chambers. Cytologists thus have a solution for every application. Sample volumes of up to 2 x 8 ml can be handled in the large-capacity chambers together with the double slide carrier. This therefore dispenses with the need for cell enrichment in an extra step.



12-PLACE CYTO ROTORS AND ACCESSORIES

New solutions

In addition to the classical 4-place, 6-place and 8-place rotors, Hettich has now introduced two 12-place cyto rotors – one open and one closed. This completes the range of cyto products.

Cytological labs that wish to use methods other than the proven Hettich ones can now also use Hettich lab centrifuges. There is no need to acquire a special cyto centrifuge. The new 12-place cyto rotors fit in the benchtop centrifuge models ROTOFIX 32 A and UNIVERSAL 320. They can be fitted and removed very easily without the need for tools.

Assembly of a complete cyto insert with carrier 1660 for cyto chambers:



Cyto chambers



One-funnel chambers

We recommend:
1 ml chambers for small quantities of samples which are low in cells, such as cerebrospinal fluid; 2 / 4 ml chambers for samples rich in cells such as pleural effusions, ascites and BAL; 8 ml chambers for high-volume samples such as urine.

Multi-funnel chambers

If a number of sediments are required from a single sample (for example for tests with different antibodies) then the multi-funnel chambers may be used. If the 4-place chambers are used in combination with the double slide carrier then up to 8 individual sediments can be prepared per microscope slide.

Slide carriers



Slide carriers for one and two chambers

The surface area of two 8 ml chambers is especially suited for the evaluation of a large number of cells, e.g. when searching for tumour cells.

Two-tier frame



Two-tier frame 5280

for the use of cytology accessories in large benchtop centrifuges or floor-standing centrifuges: Up to 16 cytological preparations can be obtained in one run.

Cyto chambers

for slide carrier 1662 and slide carrier for two chambers 1670
to fit carriers 1660 and 1452 and two-tier frame 5280

The following products have been removed from our range, but may still be ordered from us:

Cyto chambers						
Capacity in ml	1	2	4	8	3x2	4x1
Area in mm ²	30	60	120	240	3x60	4x30
Ø in mm	6.2	8.7	12.4	17.5	3x8.7	4x6.2
Cat. No.	1663	1664	1665	1666	1667	1668
Filter cards for 1662						
Cat. No.		1675		1676	1677	1678
Filter cards for 1670						
Cat. No.		1692		1691	1694	1693

Product	Cat. No.
Carrier	1680
Angle chambers	1671
	1672
	1673
Filter cards	1696
	1697
	1698
Slide carrier	1470
Cyto chambers	1471
	1475

Slide carriers

Slide carrier (autoclavable)	Slide carrier with ring	Slide carrier for two chambers
Cat. No.	1662	1670

Carriers

Carriers (autoclavable)	Carrier	Lid for 1660	Carrier
Cat. No.	1660	1661	1452

Two-tier frame

Two-tier frame (autoclavable)	
Cat. No.	5280

Possible Combinations

Centrifuge	4-place rotor	6-place rotor	8-place rotor
ROTOFIX 32A	1624 + 1660	1626 + 1660	
UNIVERSAL 320 / 320 R	1624 + 1660 1494 + 1452	1626 + 1660	
ROTINA 380 / 380 R	1798 + 5051 + 5280	1726 + 1660	1748 + 1660
ROTINA 420 / 420 R	4753 + 5051 + 5280		4758 + 1660
ROTANTA 460 / 460 R / 460 RC / 460 RF	5699-R + 5628 + 5220-A + 2x5280 5694 + 5051 + 5280	4446 + 5051 + 5280	
ROTIXA 500 RS		4296 + 5051 + 5280	

Special rotors for cytology:

12 cytological preparations in a single step – rotor 1515-A with lid (above) and disk rotor 1520 enable this:



Disposable cyto chambers



The practical disposable cyto chambers eliminate the problem of cross-contamination with cells and save time as there is no need for cleaning and disinfection. The filter card / seal fixed to the chamber guarantees that handling is very simple.

Re-usable cyto chambers



These cyto chambers can be re-used many times and are supplied without filter cards / seals. They must be cleaned and disinfected after use before they are used again.

Clip



for cyto chambers

Stand



for disk rotor 1520