

CYTO SYSTEM

Cytological preparations –
safe and economic



HETTICH CYTO SYSTEM

— Cytological preparations – safe and economic

Rising demands on security or flexibility as well as time and cost pressures represent a large challenge for today's cytology laboratory. Hettich's three cyto systems are available to tackle these challenges. Reliable, flexible and cost-saving solutions – all IvD-compliant according to EU Directive 98/79/EC.

SYSTEM 1

System 1 is particularly suitable for a high sample throughput thanks to its 12-place rotor. In addition, the autoclavable swing-out rotor with a TÜV certified, bioseal rotor lid provides maximum safety. This system can be used in two proven Hettich benchtop centrifuges, offers comprehensive accessories and is very easy to handle. The end result is an optimal cell presentation.



Benefits:

- Closed, autoclavable rotor with Bio-Seal lid
- 12-place swing-out rotor for maximum sample throughput
- Large selection of cytochambers for single and multiple use. Re-usable cytochambers are autoclavable
- Easy handling
- Good cell representation

SYSTEM 2

This system offers you the highest possible flexibility. On the one hand, volumes between 1 and 8 ml can be prepared while up to 8 cell sediments can fit on a single slide. In addition, this accessory can be used in many Hettich centrifuges, often without rotor replacement. This accessory is inexpensive and is characterized by a high, representative cell yield.



Benefits:

- Large variety of accessories
- Flexible sample volumes
- Can be used with and without filter cards, depending on application and requirements.
- Very high cell yield

SYSTEM 3

System 3 combines the easy handling of System 1 with the flexibility and price advantage of System 2. It can operate in a variety of Hettich centrifuges and, like System 1, requires only a single centrifugation step to arrive at a dry cell pellet. The three different sediment size options give a distinct advantage.



Benefits:

- Easy handling
- Ideal for small sample volumes
- Can be used with and without filter cards, depending on application and requirements. (Dry or moist cell sediment)

— Assembly of a complete cyto insert

System 1

cyto chamber with filter card

Clips

swing-out rotor, 12-place

BESTSELLER

System 2

lid

clamping ring

cyto chamber, 1 ml

Slide carrier with filter card

bucket

System 3

lid

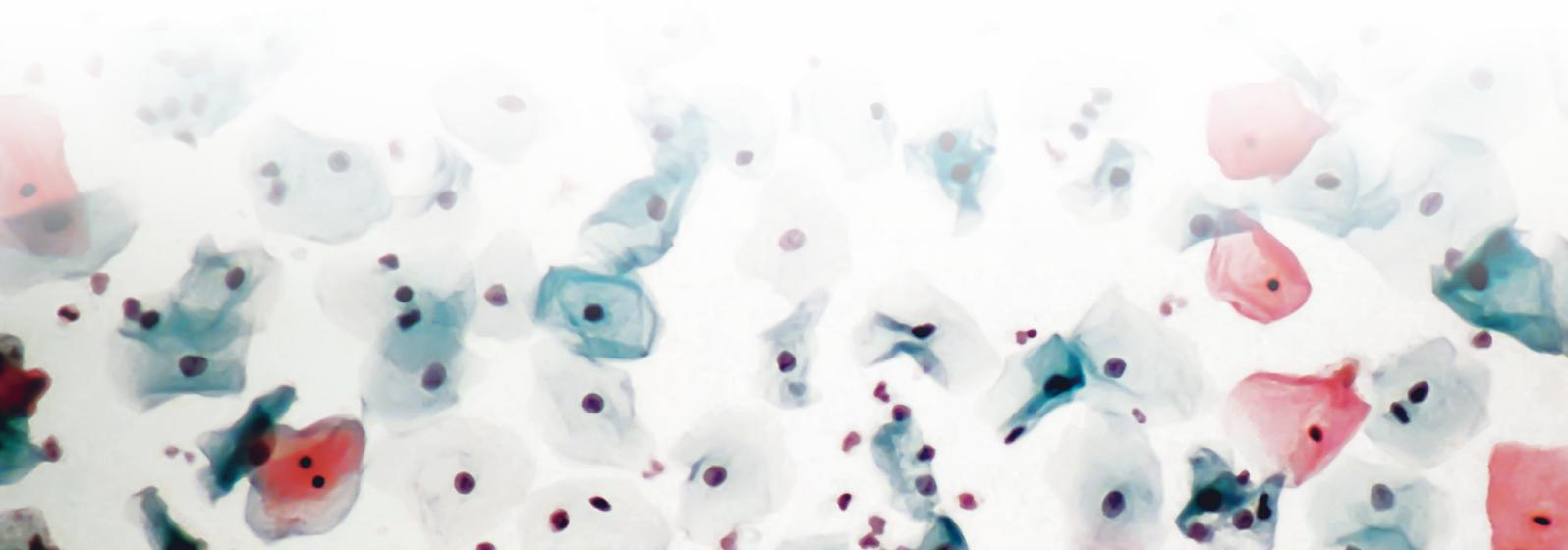
cyto chamber

Slide carrier with filter card and clamping ring

bucket

— Your combination possibilities

| | System 1 | System 2 | System 3 |
|-----------------------|----------|----------|----------|
| ROTOFIX 32 A | • | • | • |
| UNIVERSAL 320 320 R | • | • | • |
| ROTINA 380 380 R | | • | • |
| ROTINA 420 420 R | | • | |
| ROTANTA 460 460 R | | • | |
| ROTIXA 500 RS | | • | |



SYSTEM 1 – ROTOR AND ACCESSORIES

— Swing-out rotor

Swing-out rotor, 12-place
For ROTOFIX 32A | UNIVERSAL 320 / 320 R



| | |
|----------------------------------|-------------------------------|
| max. RPM max. RCF | 2.000 min ⁻¹ 438 |
| max. capacity | 12 cyto chambers |
| run-up run-down, braked in sec | 19 18 |
| Angle | 90° |
| Cat. No. | 1515-A |



Lid bioseal⁵⁾



| | |
|-----------------|------------------|
| Cat. No. | INCLUSIVE |
|-----------------|------------------|

Stand



| | |
|-----------------|-------------|
| Cat. No. | 1528 |
|-----------------|-------------|



— Cyto chambers

Cyto chambers (disposable)




| | | |
|-------------------------|---|-----------------------|
| capacity in ml | 0.5 | 0.2 |
| area in mm ² | 28.3 | 28.3 |
| Ø in mm | 6 | 6 |
| Cat. No. | 1531 (50 pcs.) 1534 (500 pcs.) | 1532 (50 pcs.) |

Clips (autoclavable)




| | | |
|-----------------|----------------------|----------------------|
| Cat. No. | 1524 (4 pcs.) | 1524 (4 pcs.) |
|-----------------|----------------------|----------------------|

Filter cards




| | | |
|-----------------|--------------------------------------|--------------------------------------|
| Cat. No. | filter card white (inclusive) | filter card brown (inclusive) |
|-----------------|--------------------------------------|--------------------------------------|

Cyto chambers (re-usable, autoclavable)




| | | |
|---|-----------------------|-----------------------|
| capacity in ml | 0.5 | 6 ¹⁸⁾ |
| area in mm ² / (L x W) in mm | 28.3 | 13.4 x 22 |
| Ø in mm | 6 | - |
| Cat. No. | 1538 (12 pcs.) | 1536 (12 pcs.) |

Clips (autoclavable)




| | | |
|-----------------|----------------------|----------------------|
| Cat. No. | 1524 (4 pcs.) | 1524 (4 pcs.) |
|-----------------|----------------------|----------------------|

Filter cards / seals




| | | |
|-----------------|------------------------|------------------------|
| Cat. No. | 1539 (200 pcs.) | 1537 (100 pcs.) |
|-----------------|------------------------|------------------------|

5 Tested by the TÜV in conformity with DIN EN 61010, section 2 - 020.

18 This is the maximum capacity. The recommended quantity to be used per chamber is 4 ml.



SYSTEM 2 – ROTOR AND ACCESSORIES

— Swing-out rotors

Swing-out rotor, 4-place For ROTOFIX 32A | UNIVERSAL 320 / 320R



| | |
|----------------------------------|---------------------------------|
| max. RPM max. RCF | 4,000 min ⁻¹ 2,451 |
| max. capacity | 8 cyto chambers |
| run-up run-down, braked in sec | 22 25 |
| angle | 90° |

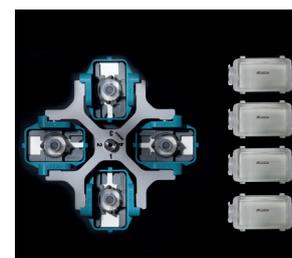
Cat. No. 1624



Bucket



| | |
|-----------------|-------------|
| lid | 1661 |
| Cat. No. | 1660 |



Swing-out rotor, 4-place For UNIVERSAL 320 / 320R



| | |
|---|---------------------------------|
| max. RPM max. RCF | 5,000 min ⁻¹ 2,879 |
| max. capacity | 8 cyto chambers |
| run-up run-down, braked in sec | 30 32 |
| angle temperature in °C ¹⁾ | 90° -10 |

Cat. No. 1494



Bucket



| | |
|-----------------|-------------|
| lid | 1452 |
| Cat. No. | 1452 |



Swing-out rotor, 4-place For ROTINA 380 / 380R

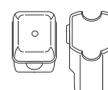


| | |
|---|---------------------------------|
| max. RPM max. RCF | 4,000 min ⁻¹ 2,898 |
| max. capacity | 16 cyto chambers |
| run-up run-down, braked in sec | 24 17 |
| angle temperature in °C ¹⁾ | 90° -8 |

Cat. No. 1798



Bucket



| | |
|-----------------|-------------|
| lid | 5053 |
| Cat. No. | 5051 |

Adapter



| | |
|-----------------|-------------|
| Cat. No. | 5280 |
|-----------------|-------------|



Swing-out rotor, 4-place For ROTINA 420 / 420R

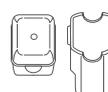


| | |
|---|---------------------------------|
| max. RPM max. RCF | 4,000 min ⁻¹ 2,898 |
| max. capacity | 16 cyto chambers |
| run-up run-down, braked in sec | 18 16 |
| angle temperature in °C ¹⁾ | 90° -1 |

Cat. No. 4753



Bucket



| | |
|-----------------|-------------|
| lid | 5053 |
| Cat. No. | 5051 |

Adapter



| | |
|-----------------|-------------|
| Cat. No. | 5280 |
|-----------------|-------------|



Swing-out rotor, 4-place For ROTANTA 460 / 460R / 460 RC / 460 RF

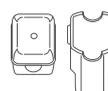


| | |
|----------------------------------|---------------------------------|
| max. RPM max. RCF | 4,000 min ⁻¹ 3,095 |
| max. capacity | 16 cyto chambers |
| run-up run-down, braked in sec | 40 45 |
| angle | 90° |

Cat. No. 5694



Bucket



| | |
|-----------------|-------------|
| lid | 5053 |
| Cat. No. | 5051 |

Adapter



| | |
|-----------------|-------------|
| Cat. No. | 5280 |
|-----------------|-------------|



1 For cooled versions: Lowest temperature achievable with precooling and max. speed.

Swing-out rotors

Swing-out rotor, 4-place

For ROTANTA 460 / 460 R / 460 RC / 460 RF



| | |
|---|---------------------------------|
| max. RPM max. RCF | 4,600 min ⁻¹ 4,069 |
| max. capacity | 16 cyto chambers |
| run-up run-down, braked in sec | 75 88 |
| angle temperature in °C ¹⁾ | 90° +10 |

Cat. No. 5699-R



Bucket

Cat. No.



5628

Bucket

Cat. No.



5220-A

Adapter

Cat. No.



5280



Swing-out rotor, 6-place

For ROTOFIX 32A | UNIVERSAL 320 / 320R



| | |
|----------------------------------|---------------------------------|
| max. RPM max. RCF | 4,000 min ⁻¹ 2,039 |
| max. capacity | 12 cyto chambers |
| run-up run-down, braked in sec | 22 25 |
| angle | 90° |

Cat. No. 1626



Bucket

lid

Cat. No.



1661

1660



Swing-out rotor, 6-place

Passend für ROTINA 380 / 380R



| | |
|---|---------------------------------|
| max. RPM max. RCF | 4,000 min ⁻¹ 2,003 |
| max. capacity | 12 cyto chambers |
| run-up run-down, braked in sec | 19 18 |
| angle temperature in °C ¹⁾ | 90° -6 |

Cat. No. 1726



Bucket

lid

Cat. No.



1661

1660



Swing-out rotor, 6-place

For ROTANTA 460 | 460 R | 460 RC | 460 RF



| | |
|---|---------------------------------|
| max. RPM max. RCF | 4,000 min ⁻¹ 3,291 |
| max. capacity | 24 cyto chambers |
| run-up run-down, braked in sec | 38 46 |
| angle temperature in °C ¹⁾ | 90° 0 |

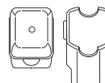
Cat. No. 4446



Bucket

lid

Cat. No.



5053

5051

Adapter

Cat. No.



5280



Swing-out rotor, 6-place

For ROTIXA 500 RS



| | |
|---|---------------------------------|
| max. RPM max. RCF | 4,000 min ⁻¹ 3,274 |
| max. capacity | 24 cyto chambers |
| run-up run-down, braked in sec | 33 50 |
| angle temperature in °C ¹⁾ | 90° 0 |

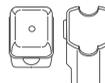
Cat. No. 4296



Bucket

lid

Cat. No.



5053

5051

Adapter

Cat. No.



5280



¹ For cooled versions: Lowest temperature achievable with precooling and max. speed.

— Cyto chambers

| Cyto chambers | | | | | | |
|-------------------------------------|-------------------------|--------------------------------|-------------------------|--------------------------------|-------------------------|--------------------------------|
| capacity in ml | 1 | 2 | 4 | 8 | 3 x 2 | 4 x 1 |
| area in mm ² | 30 | 60 | 120 | 240 | 3 x 60 | 4 x 30 |
| ∅ in mm | 6.2 | 8.7 | 12.4 | 17.5 | 3x8.7 | 4x6.2 |
| Cat. No. | 1663-100 | 1664-100 | 1665-100 | 1666-100 | 1667-100 | 1668-100 |
| + | Slide carrier with ring | Slide carrier for two chambers | Slide carrier with ring | Slide carrier for two chambers | Slide carrier with ring | Slide carrier for two chambers |
| Slide carrier (autoclavable) | | | | | | |
| Cat. No. | 1662 | 1670 | 1662 | 1670 | 1662 | 1670 |
| + | | | | | | |
| Filter cards for 1662 | | | | | | |
| Cat. No. | 1675 (200 pcs.) | 1675 (200 pcs.) | 1675 (200 pcs.) | 1676 (100 pcs.) | 1677 (100 pcs.) | 1678 (100 pcs.) |
| + | | | | | | |
| Filter cards for 1670 | | | | | | |
| Cat. No. | 1692 (200 pcs.) | 1692 (200 pcs.) | 1692 (200 pcs.) | 1691 (100 pcs.) | 1694 (100 pcs.) | 1693 (100 pcs.) |

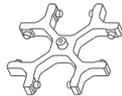


SYSTEM 3 – ROTOR AND ACCESSORIES

— Swing-out rotors

Swing-out rotor, 4-place

For ROTOFIX 32 A | UNIVERSAL 320 / 320R



| | |
|----------------------------------|---------------------------------|
| max. RPM max. RCF | 4,000 min ⁻¹ 1,467 |
| max. capacity | 4 cyto chambers |
| run-up run-down, braked in sec | 20 25 |
| angle | 90° |
| Cat. No. | 1624 |



Bucket



| | |
|-----------------|-------------|
| lid | inclusive |
| Cat. No. | 1680 |



Swing-out rotor, 6-place

For ROTOFIX 32 A | UNIVERSAL 320 / 320R



| | |
|----------------------------------|---------------------------------|
| max. RPM max. RCF | 5,000 min ⁻¹ 1,842 |
| max. capacity | 6 cyto chambers |
| run-up run-down, braked in sec | 20 22 |
| angle | 90° |
| Cat. No. | 1626 |



Bucket



| | |
|-----------------|-------------|
| lid | inclusive |
| Cat. No. | 1680 |



— Cyto chambers

Cyto chambers

| | | | |
|-------------------------|-----------------|-----------------|-----------------|
| area in mm ² | 30 | 60 | 120 |
| Ø in mm | 6.2 | 8.7 | 12.4 |
| Cat. No. | 1671-100 | 1672-100 | 1673-100 |



| | | | |
|--|-------------------------|-------------------------|-------------------------|
| | Slide carrier with ring | Slide carrier with ring | Slide carrier with ring |
|--|-------------------------|-------------------------|-------------------------|



Slide carrier (autoclavable)



| | | | |
|-----------------|-------------|-------------|-------------|
| Cat. No. | 1662 | 1662 | 1662 |
|-----------------|-------------|-------------|-------------|



Filter cards



| | | | |
|-----------------|------------------------|------------------------|------------------------|
| Cat. No. | 1696 (100 pcs.) | 1697 (100 pcs.) | 1698 (100 pcs.) |
|-----------------|------------------------|------------------------|------------------------|



Hettich centrifuges, incubators and accessories fulfill all applicable EC directives that apply to you. Every work step is subject to strict controls and documentation. The company is ISO 9001, ISO 13485 and ISO 14001 certified. Hettich products are manufactured with care and responsibility, giving them a worldwide reputation for safety and reliability.