



**PDD System with Combilight
PDD Light Source 5138**

WOLF PDD-System ... early identification – stops worries!

The photodynamic diagnostic system "PDD" has developed into a genuine alternative for early identification of bladder carcinoma during the past few years. This procedure is based on an interaction between light of suitable wavelength with tumor selectively enriched substances. These substances generate fluorescence contrasts during the PDD. Fluorescence refers to the ability of bodies or substances to convert the light absorbed by them into light of a different wavelength. A photosensitive marker, e.g. "ALA®", "HEXVIX®" is required in order to perform the "PDD" photodynamic diagnostic procedure. This kind of marker is instilled into the bladder at a point in time defined by the manufacturer. The bladder surface then takes up the solution and converts it into a dye specific to the body. This dye is deposited selectively in the tumor and there generates a fluorescence in the red to pink range following excitation with blue-violet light.

Instruments and equipment

A special light source is essential for the PDD which can generate white light or blue-violet light, e.g. our new "Combilight PDD 5138".

The excitation light should have a maximally high intensity in order to generate a clear fluorescence. A dedicated light cable, special telescopes and a special camera head which can also be used in white-light mode are required in addition to the new high-power Combilight PDD 5138.

Technology

After an initial inspection of the bladder using standard white light, the system is switched to blue-violet light. This illumination excites the dye to form a fluorescence in the red-pink range. This makes any potential tumor easily visible to the eye as a red-pink area and the

tumor can also be completely resected immediately without any impairment to visualization.

This was only possible under certain circumstances in the past. New video technology means that this procedure can now be carried out in real time and at the standard cutting speed.

Benefits

The extreme luminous intensity of this system means that an enhanced level of the light power necessary for fluorescence excitation is achieved. This increases the information yielded by the procedure.

Camera head

A highly sensitive camera head delivers reality-based images in white-light and blue-violet mode. This allows resections to be carried out smoothly using blue-violet light. This camera head can also be used for all standard applications.

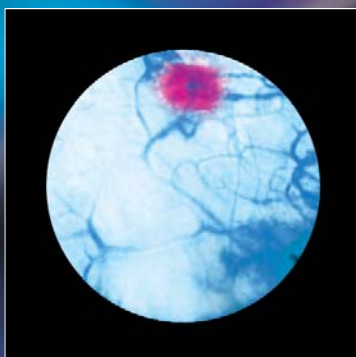
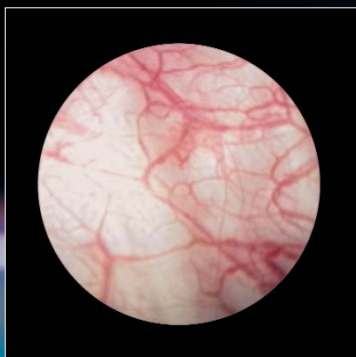
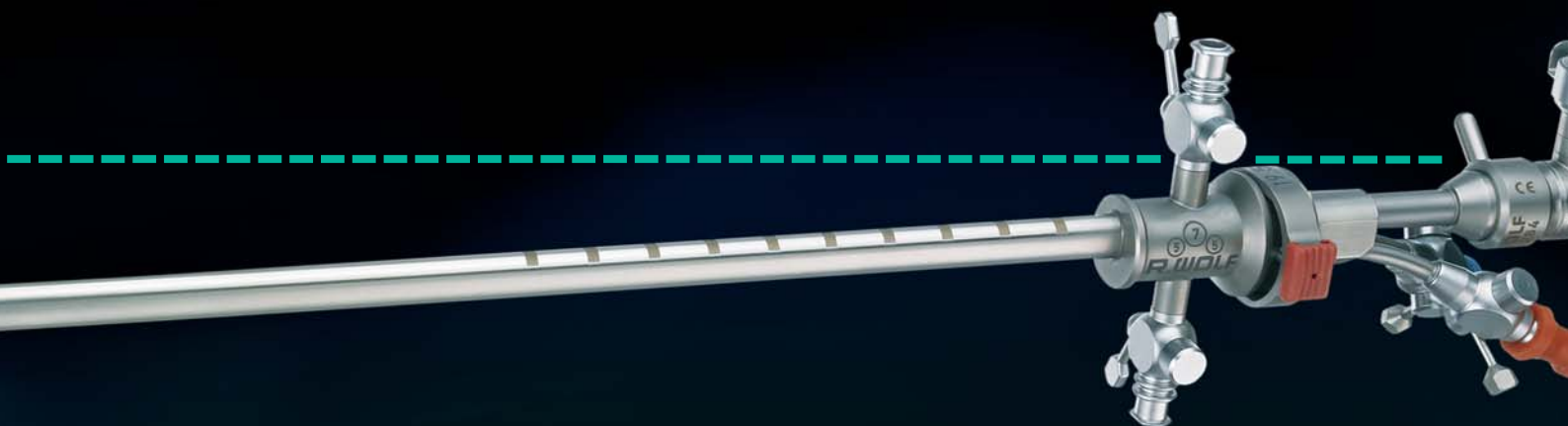
Light cable

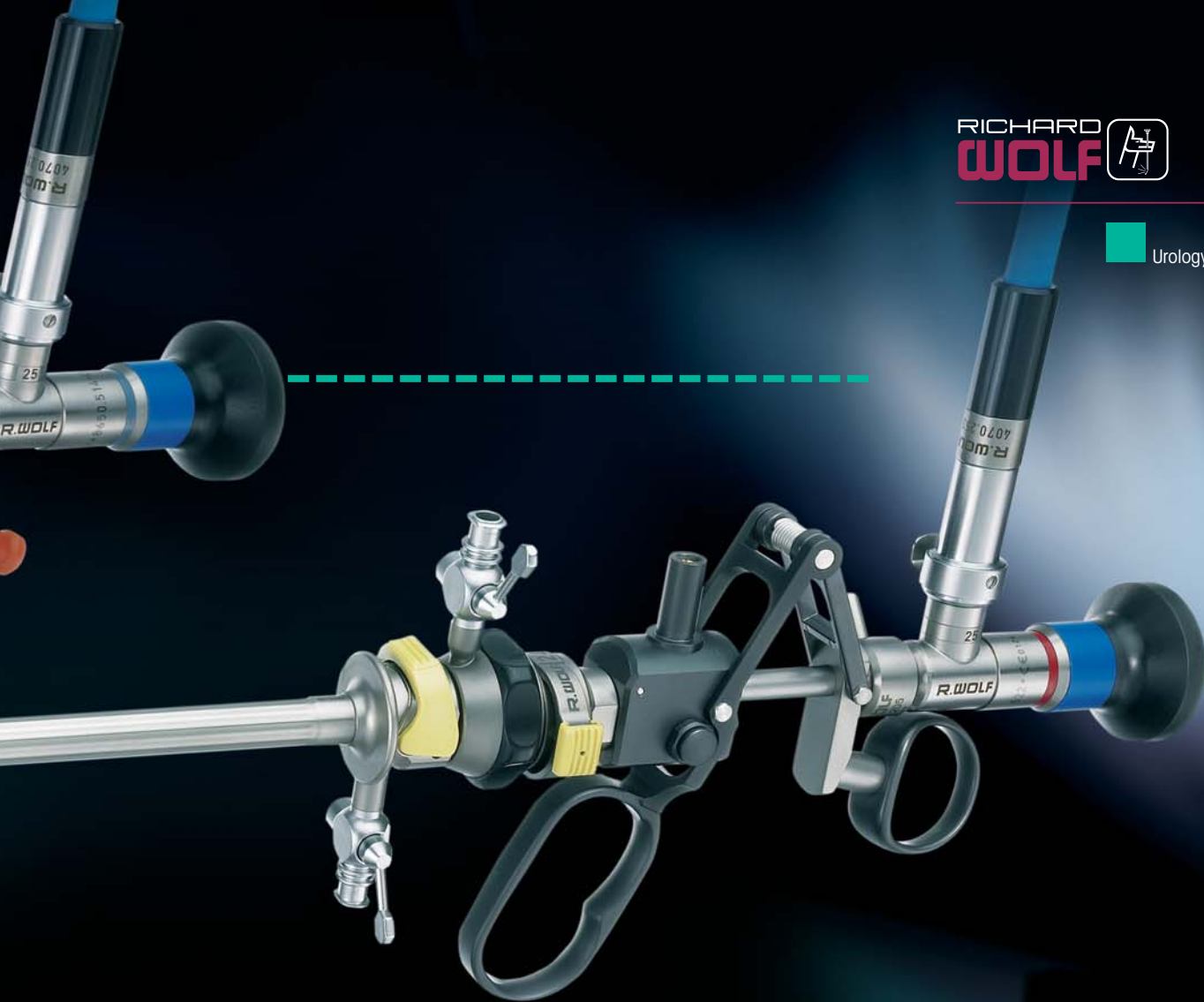
A special light cable permits light transfer without loss between the light source and the PDD telescope.

Telescopes

New special PDD telescopes can be used as standard telescopes and as PDD telescopes with white light. The view through the telescope shows a continuously clear unrestricted image without yellow cast or other discoloration.







New

Flexible PDD video cystoscope

Specially designed for extremely gentle and atraumatic follow-up (checking for recurrences) after resection of bladder tumours.

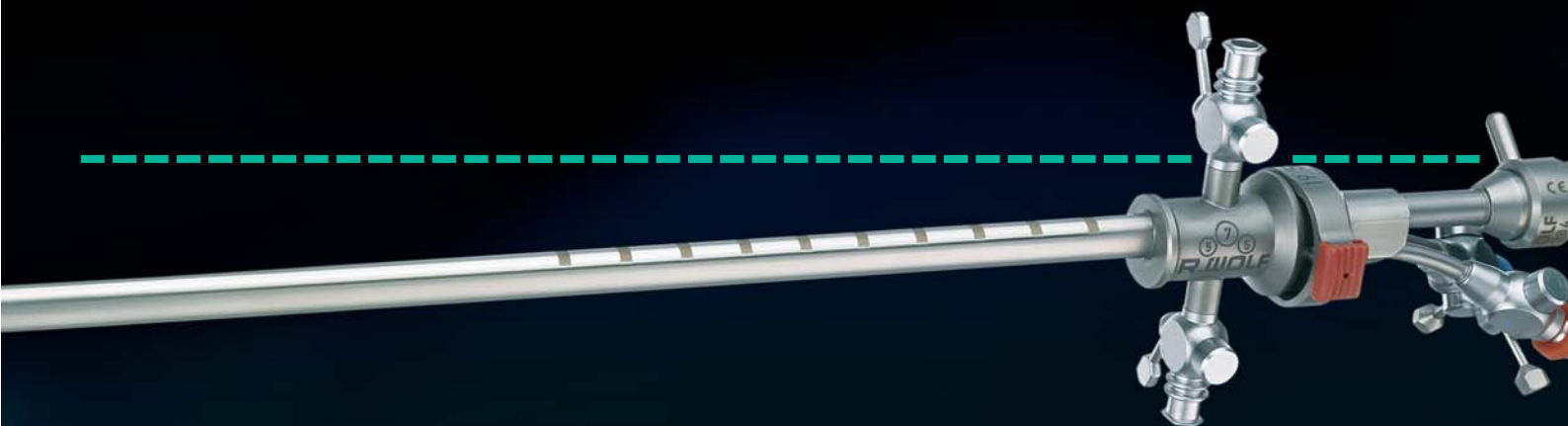
Due to its flexibility, the instrument allows the user an excellent overview of the entire bladder structure. The special shape of the distal tip and small sheath diameter ensure an absolutely atraumatic intervention.

The flexible PDD video cystoscope can be connected easily to the previous Richard Wolf PDD system and can also be used with standard cystoscopes with white light.



Combilight PDD light source

New xenon high-power light source with 300 watt for use in the PDD. Delivers enhanced image visualization and tissue differentiation combined with improved user-friendliness. This light source can also be used as a white-light source for standard interventions.



PDD System with Combilight PDD Light Source 5138

Combilight PDD 5138 Set

High-power light source for photodynamic diagnostic system "PDD", early identification of bladder carcinomas, switchable between white and blue-violet light incl. anti-bleaching filter comprising:

Light source Combilight PDD 5138 (5138.101),
lamp module with 300 watt (2431.111),
system cable (103.03), power cable 3 m
(2440.03), CAN-BUS connecting cable
0.5 m (103.701),
pedal switch (2030.105) **5138.1011**

Panoview telescope "PDD"

Ø 4 mm, free of distortion
0°, with universal eyepiece **8650.514**

Panoview telescope "PDD"

Ø 4 mm, free of distortion
12°, with universal eyepiece **8654.531**

Panoview telescope "PDD"

Ø 4 mm, free of distortion,
30°, with universal eyepiece **8654.522**

Panoview telescope "PDD"

Ø 4 mm, free of distortion
70°, with universal eyepiece **8650.515**

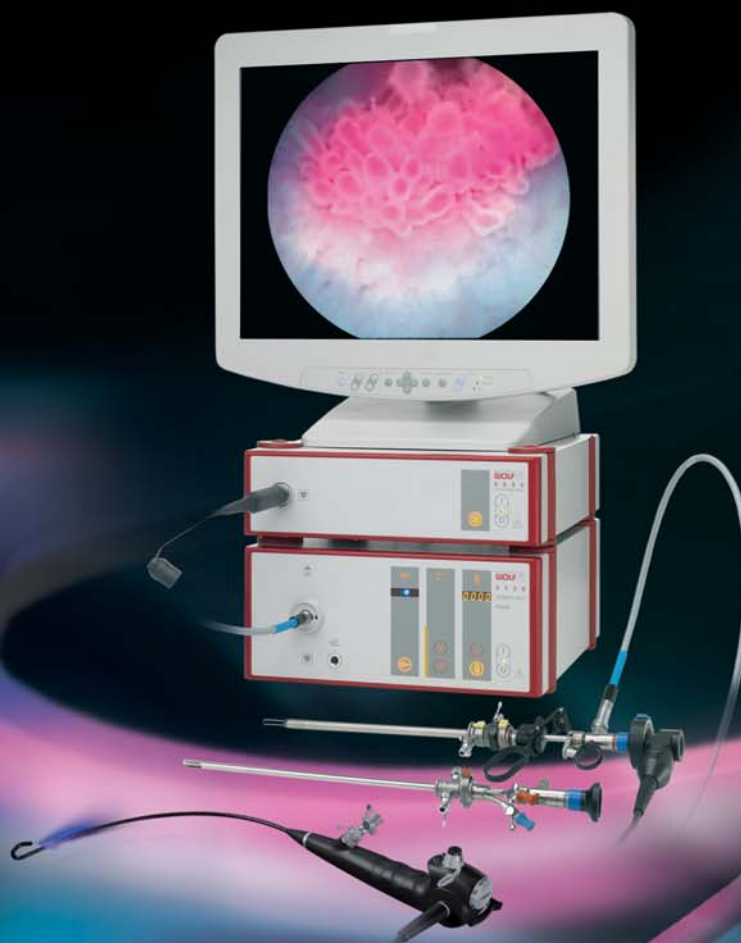
Flexible PDD video cystoscope

oblique distal tip 9.8 Fr., sheath 15.9 Fr.,
working and irrigation channel 6 Fr., deflection
210° up, 150° down (in total 360°),
WL 400 mm, with integrated suction valve
and fixed light cable
including:

Leak tester with bayonet connector (163.903),
steri-gas valve (163.904), cleaning brush
(7264.691) and case, control lever action
towards distal; deflection down,
PAL version **730900142**

As above however with control lever action
towards distal; deflection up,
PAL version **730900642**

Types in NTSC version on request



Urological camera head

for photodynamic diagnostic system "PDD"
with 1CCD ENDOCAM 5520, PAL color
system, integrated wide-angle lens,
rotatable endoscope standard locking
mechanism, cable length 3 m
focal length f = 22 mm **5520.833**

Fluid light cable

Ø 3 mm, 2.3 m long **4070.253**

Endocam controller 5520

can also be used with standard
camera heads **5520.201**

Recommended accessories:

Flat-screen monitor 19"

for pin-sharp endo images **5370.019**

Base leg **5370.0190**

Remote control **5520.401**

Usable with all standard cystoscopes and standard resectoscopes.