1. Colored liquid control

During a water cycle process the quality of the water must be controlled. It can happen that the water becomes slightly blue (pollution) or beige (oily) in color. Both case must be detected, the water must be clean. Different water samples were investigated with a color sensor type **SPECTRO-3-FIO-CL,** additionally to the sensor an optical fiber type **D-S-A2.0-(2.5)-1200-67°** (through beam model) in combination with two optical frontends type **KL-M18-A2.0** and optionally a **R-S-A2.0-(2.5)-1200-67°** (reflective beam version) were used. In the through beam application the optical fiber was not placed in the liquid, whereas the reflective optical fiber was arranged in the liquid without any additional reflector. Both test arrangements delivered proper results. The reflective arrangements demands a higher amplification compared to the through beam solution, but if there is no chance in practice to place a through beam solution a reflective type is available.

through beam type

SPECTRO3-Scope V3.2

	X	Y	INT	TOL	
0	1451	1347	3498	300	1
1	1386	1290	3210	300	1
2	1325	1214	2653	300	1
3	1114	957	1945	300	1
4	1578	1532	3526	300	1
5	1	1	1	1	1
6	1	1	1	1	1
7	1	1	1	1	1
8	1	1	1	1	1
9	1	1	1	1	1
10	1	1	1	1	1
11	1	1	1	1	1
12	1	1	1	1	1

CONNECT | PARA1 | PARA2 | TEACH TABLE
RECORDER | CALIBRATE | TABLE ATTRIBUTES

TEACH DATA TO   No.: 5   Inc
TEACH MEAN VAL   TEACH REC VAL
APPLY FROM ALL   RESET TABLE

RAM / EEPROM / FILE
SEND | GET | GO | STOP

SOURCE
X 1572
Y 1526
INT 3556
delta C 31
C-No: 4

COMMUNICATION PORT 7   SPECTRO3 V3.2   RT:KW32/09

SPECTRO3-Scope V3.2

POWER MODE — STATIC
POWER (pm) — 474   (0 250 500 750 1000)
LED MODE — AC   DYNWIN HI 3300
GAIN — AMP3   DYNWIN LO 3200
AVERAGE — 8
INTEGRAL — 1
MAXCOL-No. — 5
OUTMODE — DIRECT HI
INTLIM — 0
EVALUATION MODE — BEST HIT
CALCULATION MODE — X/Y/INT
EXTEACH — OFF   TRIGGER — CONT

X 1572
Y 1526
INT 3556
delta C 31
C-No: 4

COMMUNICATION PORT 7   SPECTRO3 V3.2   RT:KW32/09

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reflective beam type

SPECTRO3-Scope V3.2

	s	i	M	TOL	
0	5182	1817	1028	200	1
1	5162	1832	826	200	1
2	5156	1863	727	200	1
3	5109	1733	534	200	1
4	5002	2153	616	200	1
5	1	1	1	1	1
6	1	1	1	1	1
7	1	1	1	1	1
8	1	1	1	1	1
9	1	1	1	1	1
10	1	1	1	1	1
11	1	1	1	1	1
12	1	1	1	1	1

CONNECT | PARA1 | PARA2 | TEACH TABLE
RECORDER | CALIBRATE | TABLE ATTRIBUTES

TEACH DATA TO   No.: 5   Inc
TEACH MEAN VAL   TEACH REC VAL
APPLY FROM ALL   RESET TABLE

RAM / EEPROM / FILE
SEND | GET | GO | STOP

SOURCE
s 5002
i 2157
M 616
delta C 4
C-No: 4

COMMUNICATION PORT 7   SPECTRO3 V3.2   RT:KW32/09

SPECTRO3-Scope V3.2

POWER MODE — STATIC
POWER (pm) — 1000   (0 250 500 750 1000)
LED MODE — AC   DYNWIN HI 3300
GAIN — AMP8   DYNWIN LO 3200
AVERAGE — 512
INTEGRAL — 11
MAXCOL-No. — 5
OUTMODE — DIRECT HI
INTLIM — 0
EVALUATION MODE — BEST HIT
CALCULATION MODE — s/i/M
EXTEACH — OFF   TRIGGER — CONT

s 5002
i 2157
M 616
delta C 4
C-No: 4

COMMUNICATION PORT 7   SPECTRO3 V3.2   RT:KW32/09