

OPTIMIZING SWIM PERFORMANCES

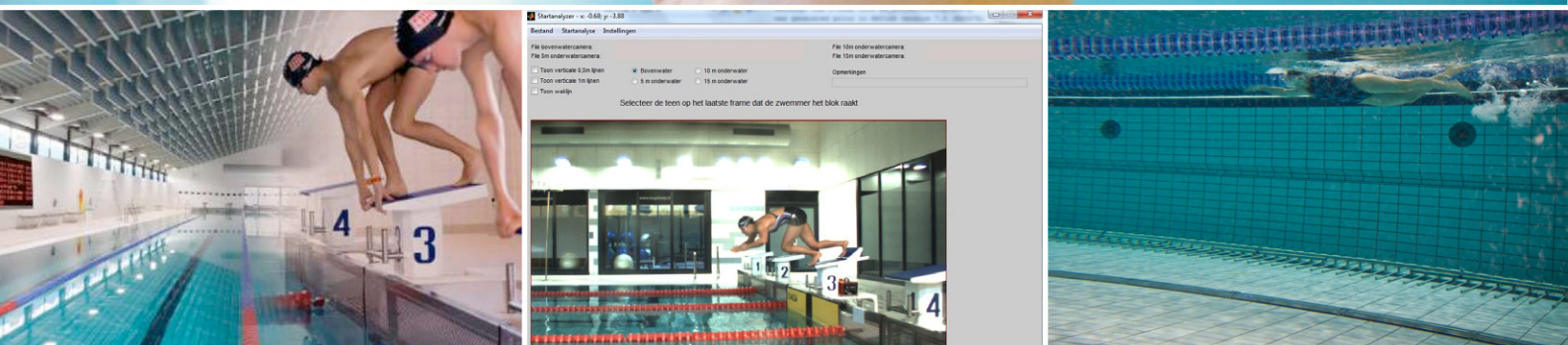


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THE CAMERA SYSTEM

To enable you to do Start, Tumble turn and Stroke Frequency measurements, we have 3 scenarios available depending on your pool and how excellent you want to work.

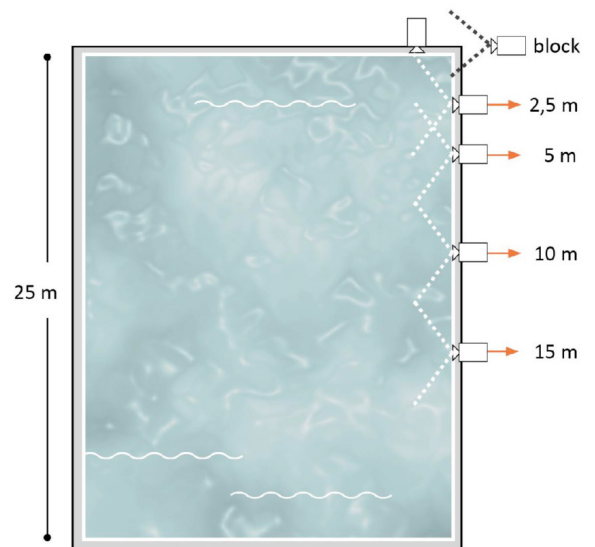
SCENARIO 1

When your pool is 25 meters, you can position a 6 camera setup. This setup consists of 5 below water cameras at 2,5m - 5m - 10m - 15m and 1 frontal camera in lane. The sixth camera is positioned above water on a fixed pole, looking at the block.

This scenario requires only 1 PC.

Summarizing:

- 5 below water cameras
- 1 above water camera
- 1 PC



THE CAMERA SYSTEM

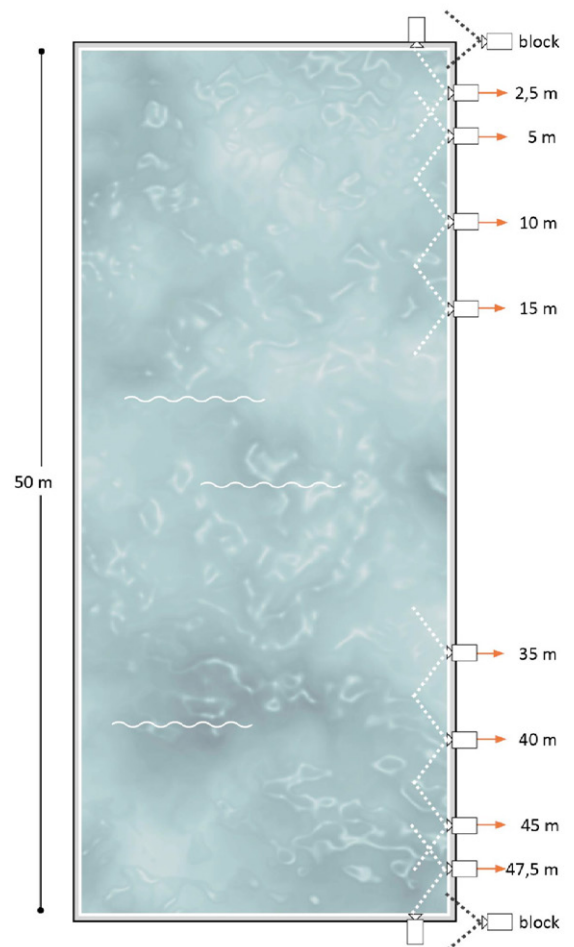
SCENARIO 2

When you have a pool of 50 m, you have the ability to double your setup. The big advantage is that you can use both sides of the pool for analyzing purposes simultaneously.

This scenario is created with a 12 camera setup. The basic set-up of scenario 1 is expanded with a mirrored setup at the opposite side of the pool. This setup is based on 2 PC's. The individual below water cameras are positioned at 2,5m - 5m - 10m - 15m - 35m - 40m - 45m - 47,5 m on one length of the pool and 2 frontals at each end. And also 2 above water cameras positioned looking at the block.

Summarizing:

- 10 below water cameras
- 2 above water cameras
- 2 PC.s



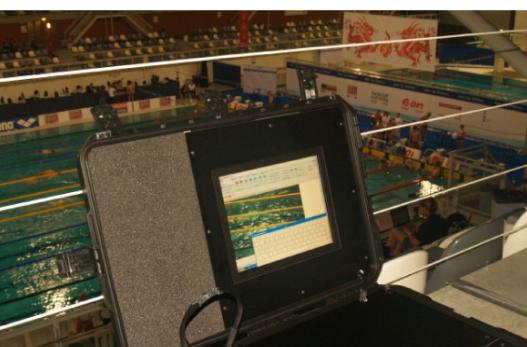
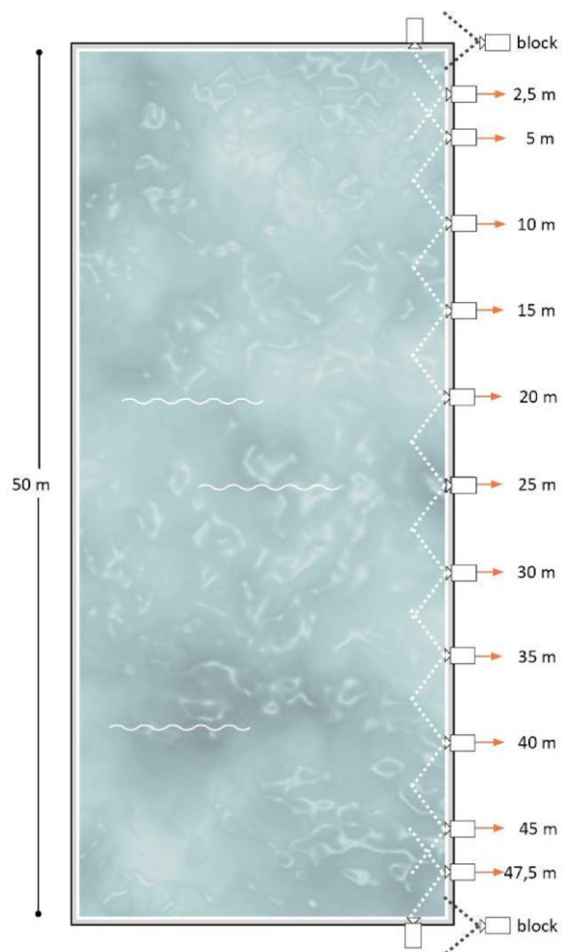
THE CAMERA SYSTEM

SCENARIO 3

Scenario 3 is the most advanced solution and works with a 15 camera setup. It includes all cameras of scenario 2. But it has also 3 extra cameras at 20m - 25m and 30m to cover the entire 50m pool length. This scenario requires a 2 PC setup which includes a 1 click triggering for recordings over the entire length.

Summarizing:

- 13 below water cameras
- 2 above water cameras
- 2 PC's including 1 click triggering



WHAT IS INCLUDED?

Besides the individual cameras you will receive a complete package of products and services to guarantee the best performance possible. The 3 scenario's all include

:

1. Installation
2. Hardware camera-lens combination
3. Portholes, if not already present in your pool
4. Calibration
5. Recording software
6. Training
7. Support
8. Service

The next paragraphs explain in more detail what is meant with this list.

INSTALLATION

A complete installation at your site will take 1 weeks time. This includes drawings of the system, all cabling, connection to a central PC-server room (preferably at the viewing and analyzing room), mounting the hardware combination, utilizing trigger boxes and installation of the user PC(s) in the cabinet.

HARDWARE: CAMERA-LENS COMBINATION

As capture device we use 50 frames per second cameras with wide angle lenses. Wide angle lenses ensure the capturing of swimmers from porthole to porthole. With this system you are able to follow the swimmers from e.g. cam 1 to 2.

The mentioned above water cameras are 200 frames per second cameras. This enables you to analyze minimal movements, for instance the muscles of the swimmer on the starting block. The operator view consists of max 6 cameras at a time. Please have a look at the attached videos to see the actual HD quality.



MEASUREMENTS

SwimExpertise provides total analysis solutions for swimming clubs, federation teams and swimming pools. We use specialized software to analyze starts, turns and swimming. These include measurements of technique and performance.

FOR THE START

the parameters measured include:

- block time
- take off angle
- flight velocity
- distance at entry
- distance of the first leg kick
- distance of head resurface
- time at 5 m, 10 and 15 m
- velocity at 5 m, 10 and 15 m
- depth at 5 m, 10 and 15 m

IN THE TURN

the parameters measured include:

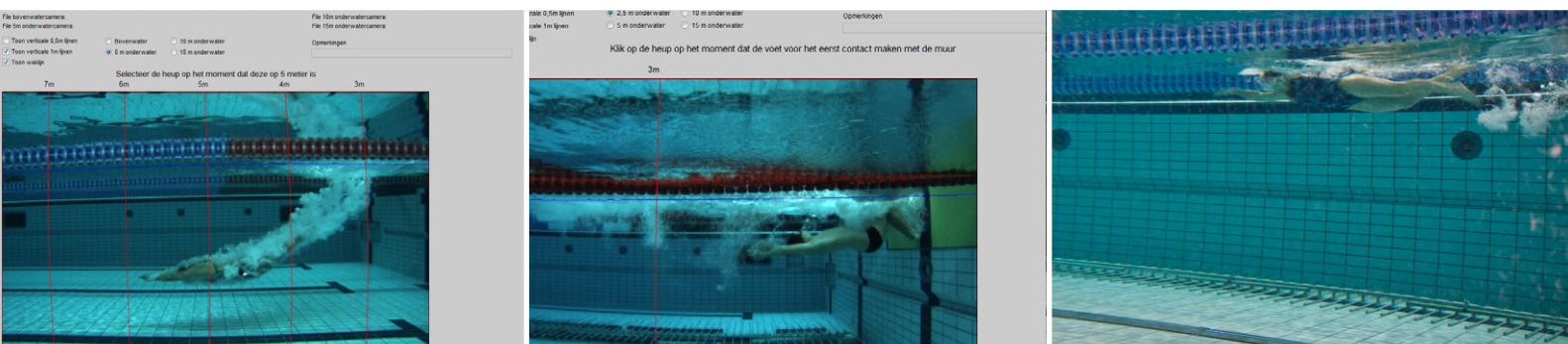
- swim velocity
- distance to wall at start of turn
- rotation time
- foot contact time
- push-off angle
- distance of the first leg kick
- distance of head resurface
- time at 5 m, 10 and 15 m
- velocity at 5 m, 10 and 15 m
- depth at 5 m, 10 and 15 m

IN THE SWIMMING STROKE,

the parameters which are determined per 25 m are:

- swimming velocity
- stroke frequency
- stroke length
- index of coordination

Measurements will be saved in a database and we will provide a detailed report that shows the progress of the swimmer combined with points of improvement, based upon statistical analysis of the results.



MEASUREMENTS

WE DO THE WORK FOR YOU

We provide a total analysis system, where all the work is done by SwimExpertise. After capturing the video, the only thing that you need to do is push on the send button. The video will be transferred to our data centre, where trained workers will perform the measurements. Within 4 business days after the videos are sent, you will receive our detailed report per individual swimmer.

COSTS

A yearly license fee of 1500 euro (excl. VAT) will be charged for development and maintenance costs and subscription for our start, turn and swimming analysis system. After subscription in our system, the total cost per analysis are only 3 euro (excl. VAT), which includes:

- measurement of technique and performance of the start, turn or swimming
- detailed report containing progress and individual points of improvement based upon statistical analysis of the data
- easy to use; all the analysis work is done by trained workers from SwimExpertise
- results available within 4 business days after sending the videos

CONTACT

If you have any further questions, please contact us at totalanalysis@swimexpertise.com

