



TENNIS PERFORMANCE: MEASURE, DECIDE, MOVE

OPTOELECTRONIC SYSTEM
+ REACTIVE LIGHT SYSTEM



AN INTEGRATED APPROACH TO ASSESS AND TRAIN
THE QUALITIES THAT MAKE THE DIFFERENCE ON COURT

MICRO PILLS



TENNIS IS NOT JUST ABOUT SPEED

300 ms

That's all a tennis player has to react.
The ball leaves the opponent's racket.
A decision must already be made.

Movement speed and decision-making are inseparable.
Yet they are often assessed separately.

How fast can an athlete move when they also have to decide?





ONE QUESTION

HOW FAST CAN AN ATHLETE MOVE AND DECIDE?

To answer it, we assess three areas:

1. **READINESS**

2. **AGILITY**

3. **COGNITIVE-MOTOR
PERFORMANCE**



READINESS ARE THEY READY TODAY?

Performance changes every day.

Before training, it's important to understand whether the athlete is moving efficiently and symmetrically. A short lateral hop assessment provides objective information on:

- Lateral stability
- Movement consistency
- Neuromuscular readiness





505 TEST: THE ASYMMETRY YOU CAN'T SEE

The 505 test is the gold standard for change-of-direction agility assessment.

EXECUTION

The athlete covers 10 meters, performs a 180° change of direction on the line, and returns. The test is repeated starting from both sides:





WHAT IT REVEALS

- Compare left vs right change-of-direction performance
- Detect hidden deficits
- Support injury prevention and performance optimization

An athlete who is faster starting from the right than the left has a measurable lateral deficit. Ignoring it means training only half the problem.



WITTY SEM: TRAINING THE DECISION

On court, movement never happens in response to a predictable stimulus. Training must replicate the unpredictability of competition.

5-DIRECTION TEST

5 lights in a forward arc, 5 meter radius. One activates randomly every 6 seconds: reach it as fast as possible. Measures reaction speed, multidirectional agility, and fatigue response.

DOUBLE DECISION DRILL

While executing a stroke, the athlete processes two simultaneous stimuli: one central, one peripheral, and reports both after the shot. Trains useful visual field and visual processing speed under motor load.





FROM TEST DATA TO ACTION

505 TEST

Left-side deficit detected



Witty SEM

Multi stimuli on the left side



TARGETED TRAINING

Train what really needs improvement

**Data is not just for measuring.
It is for deciding how to train.**



WHAT CHANGES ON COURT

An integrated protocol does not just produce better test numbers. It produces adaptations that transfer to performance:

- 1. REDUCED LATERAL ASYMMETRY**
- 2. FASTER REACTION TIME UNDER COGNITIVE LOAD**
- 3. BETTER CHANGE-OF-DIRECTION CONTROL**
- 4. CONTINUOUS READINESS MONITORING**



SUMMARY

MEASURE WHAT MATTERS IN TENNIS

- + **ASSYMETRY DETECTION:**
measure what the eye can't see
- + **READINESS MONITORING:**
know the athlete's condition before every session
- + **COGNITIVE-MOTOR TRAINING:**
decision-making and movement trained together
- + **COURT-READY PROTOCOLS:**
assessment and training in the same environment

**MEASURE THE ASYMMETRY.
TRAIN THE DECISION.
MONITOR EVERY DAY.**