

#### WEEK 47 from Monday 18th to Sunday 24th of November Macrocycle V, week 1 (Training week 25)

Mon. 18<sup>th</sup>: \* Act. Rec.

- 30' non-weight-bearing ex. (Cycle / Swim / X-Train) at 65-70% HRmax

Tr. 94

- 20' extensive stretching

- Sauna, jacuzzi, massage

Tue. 19th: Tr. 95

\* Low Int.

- 5' jogging slowly building up to 70% HR<sub>max</sub> (± 1 km).

\* Warm up

- 20' jogging, mobilisation and dynamic stretching.

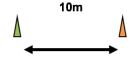
\* Functional Tr.

- 3 sets of 4' each (1' rest between Sets)

https://www.youtube.com/watch?v=ZZBgCkpXGk8

\* Speed End.

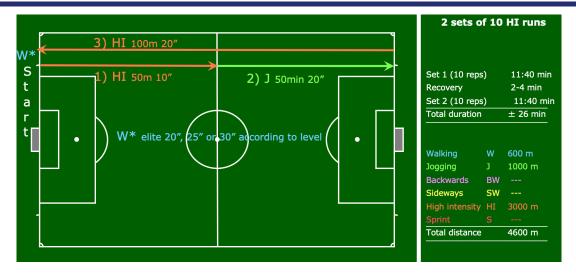
- Run for 10m at 90% max speed, and walk to the end (40m)
- Turn and run 20m at 90% SPmax, and walk to the end (30m)
- Turn and run 30m at 90% SPmax, and walk to the end (20m)
- Turn and run 40m at 90% SPmax, and walk to the end (10m)
- Turn and run 50m at 90% SPmax, turn and run another 50m (100m)
- Your heart rate should peak at >90% HR<sub>max</sub> at the end of each rep
- Rest for 90" then repeat 5 x. Total time is 15'.
- 4' passive recovery (until bpm < 65% HR<sub>max</sub>)



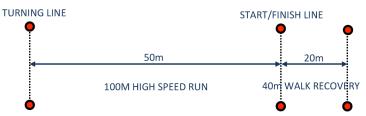
\* High Int.

- Set 1: Run from goal line to midline at high intensity in 10". Then, jog to the opposite goal line in 20". Continue from goal line to the opposite goal line in 20". Recovery time of 20", 25", 30" recovery according to fitness level. 10 reps.
- 2 to 4' recovery according to fitness level.
- Set 2: Again 10 reps.





- \* High Int.
- For Assistant Referees, a Yo-Yo based-exercise is scheduled:
- Set 1: 10 x 100 m shuttles (50 m turn L 50 m) in 20"
- 30" recovery walk (40 m)



- This first set takes 8'20".
- 3' recovery
- Set 2: 10 x 100 m shuttles (50 m turn R 50 m) in 20"
- 30" recovery walk (40 m)
- All together, this exercise takes 20'40 (8'20" + 3' recovery + 8'20")
- The total distance equals 2800 m, of which 2000 m at high speed and 800 m walking.
- \* Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 81'

Wed. 20<sup>th</sup>: \* Strength

- 10' warm up on the bike / x-trainer / rower (70% HR<sub>max</sub>)

- individualised upper and lower body strength exercises

<u>Thu. 21<sup>st</sup>:</u> \* Low Int. Tr. 96

- 5' jogging slowly building up to 70% HR<sub>max</sub> (± 1 km).

\* Warm up

- 20' jogging, mobilisation and dynamic stretching.

\* Strength

- 15' strength, core stability & injury prevention exercises.

Werner Helsen

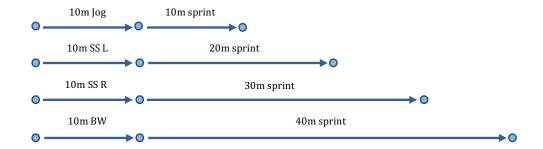
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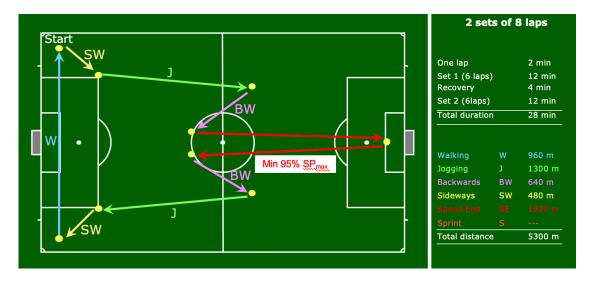
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- \* Speed & Agility Set out cones as shown below and perform the following sprints at maximum speed X 4 rotations:
  - 10m jogging into 10m sprint
  - 10m side-stepping left into 20m sprint
  - 10m side-stepping right into 30m all-out sprint
  - 10m backwards running start into 40m all-out sprint
  - Walk slowly back to the start between each sprint.
  - All together 16 sprints and a total sprint distance of 400m.



- \* Speed End. - Set 1: Run 6 laps as indicated in the picture.
  - 4' recovery
  - Set 2: Run again 6 laps of the same exercise.



- All together, this exercise takes 12' + 4' recovery + 12' = + 28'.
- \* Cool down - 5' jogging and walking, followed by 10' static stretching.

Total duration: 90'

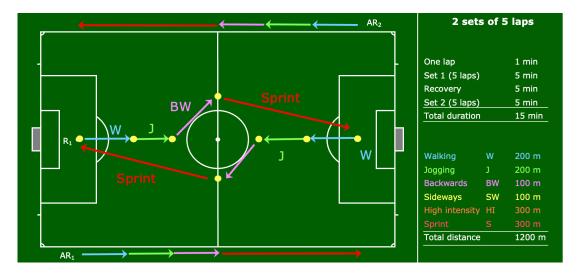
Fri. 22<sup>nd</sup>:

Rest day / Complementary strength and/or injury prevention training



Tr. 97

- \* Warm up
- 20' jogging, mobilisation and dynamic stretching.
- \* Speed
- Set 1: speed exercise in the length of the field, 4 x across the pitch and back to the starting position. ARs stay aligned with the referee.



- 5' recovery
- Set 2: same exercise, again 4 x up and down.
- The total exercise time is 15'. The total sprint distance is 360 m.
- Optionally, 4-6 accelerations can be done along the wide diagonal line. (75 m in 15", 45" recovery)
- \* Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 50'

Sun. 24<sup>th</sup>: If you don't have a match appointment for the domestic league, use your free time for additional recovery, or to work on any fitness weaknesses you might have (e.g., aerobic endurance, strength, injury prevention,...). On UEFA Ref Network, there are also 3 different match simulation exercises in case you are VAR or 4<sup>th</sup> official to compensate for not being physically involved in the game.

> If you are used to these leisure activities, you may also consider alternative intermittent activities such as playing badminton, football, squash, or tennis.



#### WEEK 48 from Monday 25<sup>th</sup> of November to Sunday 1<sup>st</sup> of December Macrocycle V, week 2 (Training week 26)

Mon. 25<sup>th</sup>: \* Act. Rec. - 30' non-weight-bearing ex. (Cycle / Swim / X-Train) at 65-70% HRmax

Tr. 98 - 20' extensive stretching

- Sauna, Jacuzzi, Massage

<u>Tue. 26<sup>th</sup>:</u> \* Low Int. - 5' jogging slowly building up to 70% HR<sub>max</sub> (<u>+</u> 1 km).

Tr. 99

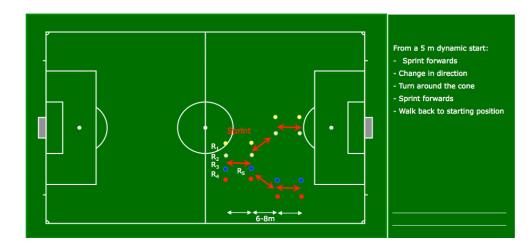
\* Warm up - 20' jogging, mobilisation and dynamic stretching.

\* Functional Tr. - 1 workout of 12'

https://www.youtube.com/watch?v=ttkq49P\_7ds

\* Agility - 15' speed & agility exercises. Referees are organised in groups of 4.

- From a dynamic start, Referee 1 to 4 sprint to the first cone, change direction, turn with fast feet around the next cone and finally sprint the last cone. They return walking.

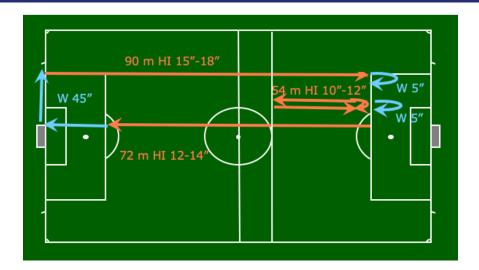


- \* High Int. **REFs:** 3 sets of the following Single-Double-Single exercise
  - Set 1: Repeat 5 x (1075m), followed by 2' recovery
  - Set 2: Repeat 5 x (1075m), followed by 2' recovery
  - Set 3: Repeat 5 x (1075m)

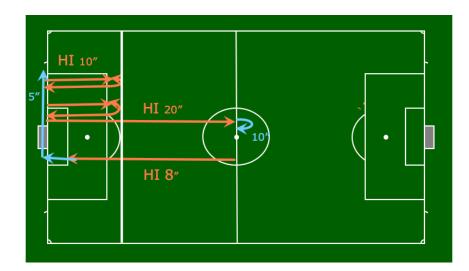
This exercise takes 7'30" + 2' recovery + 7'30" + 2' recovery + 7'30" = 26'30" and covers 3.225m of HI running.

- Alternatively, the regular SDS is also an option: 3 sets of 5 reps.





- \* High Int.
- ARs: 3 sets of the following Double-Triple-Single exercise
- Set 1:
- High Speed from goal line to penalty arc and back in 10" (18 km/h)
- 5" recovery
- High Speed from goal line to penalty arc and back and then to the midline in 20" max
- 10" rec.
- High Speed from midline to small penalty area in 7" max (18 km/h)
- 55" recovery to walk to the starting position
- Repeat X 5 (825m)
- 2' recovery
- Set 2: same sequence
- All together, this exercise takes 9"10" + 2' recovery  $+ 9"10 = \pm 20'$  and covers 1650 m of HI running.



Total duration: 81'



Wed. 27<sup>th</sup>: \* Strength - 10' warm up on the bike / x-trainer / rower (70% HR<sub>max</sub>)

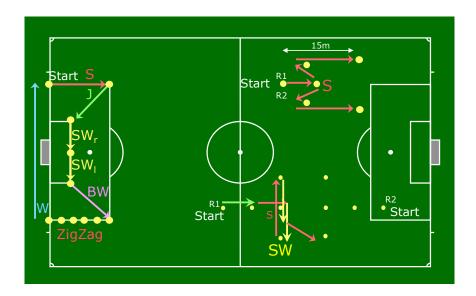
- individualised upper and lower body strength exercises

<u>Thu. 28<sup>th</sup>:</u> \* Low Int. Tr. 100 - 5' jogging slowly building up to 70% HR<sub>max</sub> (± 1 km).

\* Warm up - 20' jogging, mobilisation and dynamic stretching.

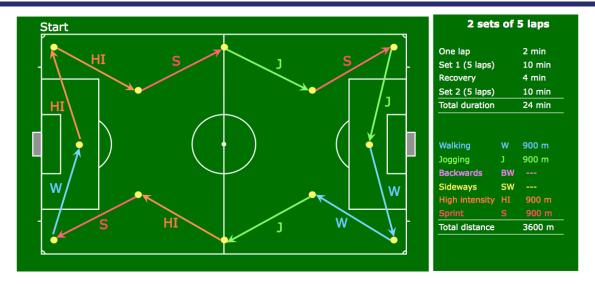
\* Strength - 15' strength, core stability & injury prevention exercises.

\* Agility - 15' of various agility exercises.



- Exercise 1: Sprint forward 5 m, cut back diagonally left/right, then turn and accelerate forwards 12 m.
- <u>Exercise 2</u>: 5 m jogging, 5m forward sprint, sidestep left 5 m, sprint forwards 10 m, sidestep right 5 m, sprint forward 10 m.
- Exercise 3: Sprint and agility exercises in the penalty area.
- \* Speed End. <u>Set 1:</u> Field exercise, 5 laps of 2' each. Ideally, this exercise should be done by trio (1 referee and 2 ARs).
  - During each lap, there are 12 activities. The colour of the next cone determines the intensity of the next activity as follows:
    - walking (blue lines)
    - jogging (green lines)
    - high intensity tempo run (orange lines)
    - sprinting (red lines)





- 4' recovery
- Field exercise Set 2 (again 5 laps of 2' each).
- All together, this exercise takes 10' + 4' recovery +  $10' = \pm 24'$ .
- \* Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 94'

Fri. 29<sup>th</sup>:

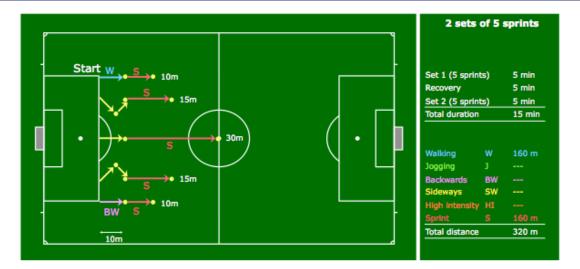
Sat. 30<sup>th</sup>: \* Warm up Tr. 101

\* Speed

Rest day / Complementary strength and/or injury prevention training

- 20' jogging, mobilisation and dynamic stretching.
- Straight line sprints from a dynamic starting position, such as heel lifts, knee lifts, walking, backwards or sideways running:
- Set 1: 5 x 10 m, starting from 10m walking
- Set 2: 4 x 15 m, starting from 10m side-stepping
- Set 3: 3 x 30 m, starting from 10m forwards jogging
- Set 4: 4 x 15 m, starting from 10m side-stepping
- Set 5: 5 x 10 m, starting from 10m backwards jogging
- After every sprint, a very slow walk back to the start position is a good way of determining the recovery time (e.g. 20" for 10 m, 30" for 15 m, 40" for 30 m).





- After every set, there is 1' recovery and stretching break.
- The total exercise time is 15'. The total sprint distance is 310 m.
- Optionally, 4-6 accelerations can be done along the wide diagonal line. (75 m in 15", 45" recovery)
- \* Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 50'

Sun. 1<sup>st</sup>: If you don't have a match appointment for the domestic league, use your free time for additional recovery, or to work on any fitness weaknesses you might have (e.g., aerobic endurance, strength, injury prevention,...). On UEFA Ref Network, there are also 3 different match simulation exercises in case you are VAR or 4<sup>th</sup> official to compensate for not being physically involved in the game.

If you are used to these leisure activities, you may also consider alternative intermittent activities such as playing badminton, football, squash, or tennis.



#### WEEK 49 from Monday 2<sup>nd</sup> to Sunday 8<sup>th</sup> of December Macrocycle V, week 3 (Training week 27)

Mon. 2<sup>nd</sup>: \* Act. Rec. - 30' non-weight-bearing ex. (Cycle / Swim / X-Train) at 65-70% HRmax

Tr. 102 - 20' extensive stretching

\* Functional Tr.

- Sauna, Jacuzzi, Massage

Tue. 3<sup>rd</sup>: - 5' jogging slowly building up to 70%  $HR_{max}$  ( $\pm$  1 km). \* Low Int. Tr. 103

\* Warm up - 20' jogging, mobilisation and dynamic stretching.

- 3 sets of 4'each (1' rest between Sets) https://www.youtube.com/watch?v=ov91YQWISFg

\* Speed End. \* Speed End. - 1 set of the following exercise that takes + 8'.

> - 50 m sprint (± 10"), walking back 30", 5 x, 1' rest - 25 m sprint (± 5"), walking back 15", 5 x, 1' rest

- 16 m sprint (± 3"), walking back 9", 5 x

- 3' recovery

\* High Int. - Each run to be performed at high speed / intensity (>88%HR<sub>max</sub>):

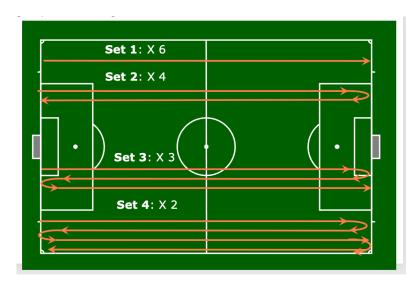
- Set 1: 6 x single runs with 20 seconds rest (4 min), 1' break

- Set 2: 4 x double runs with 40 seconds rest (5,5 min), 1' break

- Set 3: 3 x triple runs with 60 seconds rest (6 min), 1' break

- Set 4: 2 x quadruple runs with 80-85 seconds rest (5,5 min)

- Total distance: 3100 m high-speed running and Total time = 24 min



\* Cool down - 5' jogging and walking, followed by 10' static stretching.

Total duration: 86'

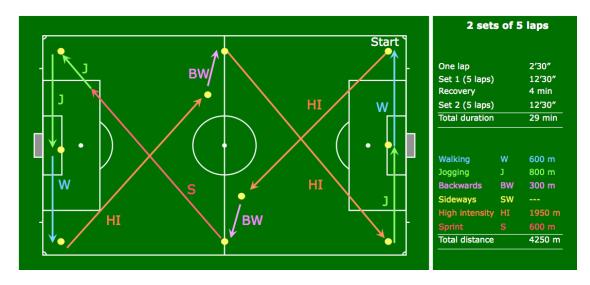


Wed. 4<sup>th</sup>:

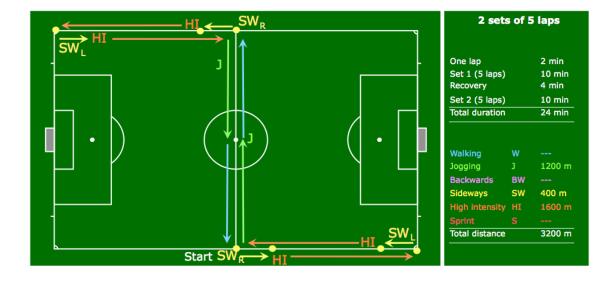
- \* Strength
- 10' warm up on the bike / x-trainer / rower (70% HR<sub>max</sub>)
- individualised upper and lower body strength exercises

Thu. 5<sup>th</sup>:

- \* Low Int.
- 5' jogging slowly building up to 70% HR<sub>max</sub> (+ 1 km).
- \* Warm up
- 20' jogging, mobilisation and dynamic stretching.
- \* Strength
- 15' strength, core stability & injury prevention exercises.
- \* Speed End.
- Set 1: 'Referee Run': 5 laps (± 2'30", + 12'30" in total).
- 4' recovery
- Set 2: 'Referee Run': again 5 laps that will take + 12'30".
- All together, this exercise takes 12'30" + 4' rec + 12'30" = 29'.



\* SE for ARs - While the referees perform their 2 sets of the HI exercise, the next SE exercise can be considered for the assistant referees.





\* Cool down

- 5' jogging and walking, followed by 10' static stretching.

Total duration: 84'

Fri. 6th:

Rest day / Complementary strength and/or injury prevention training

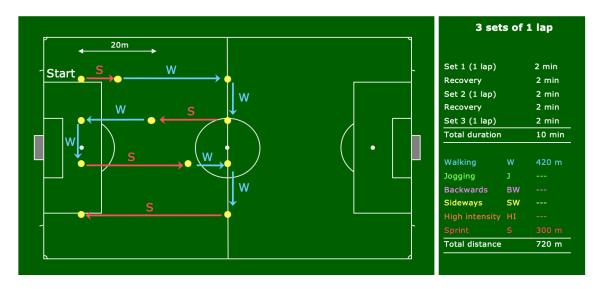
Sat. 7<sup>th</sup>: Tr. 105 \* Warm up

- 20' jogging, mobilisation and dynamic stretching.

\* Speed/Agility

- Set 1: (1) Sprint for 10m, then walk for 30m. (2) Sprint for 20m, then walk for 20m. (3) Sprint for 30m, then walk for 10m. (4) Sprint for 40m.

- 2' recovery
- Set 2: Now start first with 40m and then work down to 10m.
- 2' recovery
- Set 3: Repeat Set 1



- Optionally, 4-6 accelerations can be done along the wide diagonal line. (75 m in 15", 45" recovery)
- \* Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 50'

Sun. 8th:

If you don't have a match appointment for the domestic league, use your free time for additional recovery, or to work on any fitness weaknesses you might have (e.g., aerobic endurance, strength, injury prevention,...). On UEFA Ref Network, there are also 3 different match simulation exercises in case you are VAR or 4<sup>th</sup> official to compensate for not being physically involved in the game.

If you are used to these leisure activities, you may also consider alternative intermittent activities such as playing badminton, football, squash, or tennis.



#### WEEK 50 from Monday 9<sup>th</sup> to Sunday 15<sup>th</sup> of December Macrocycle V, week 4 (Training week 28)

Mon. 9<sup>th</sup>: \* Act. Rec.

- 30' non-weight-bearing ex. (Cycle / Swim / X-Train) at 65-70% HRmax

Tr. 106

- 20' extensive stretching- Sauna, Jacuzzi, Massage

<u>Tue. 10<sup>th</sup>:</u> \* Low Int. Tr. 107

- 5' jogging slowly building up to 70% HR<sub>max</sub> (± 1 km).

\* Warm up

- 20' jogging, mobilisation and dynamic stretching.

\* Strength

- 15' core stability & injury prevention exercises.

- Alternatively, you can consider a Functional Training Session:

- 1 workout of 12 min

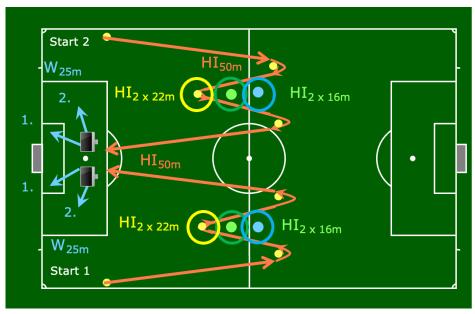
- https://www.youtube.com/watch?v=4CspMFI5vbo

\* High Int.

- Set 1:

From the start, run at high intensity to the other side of the pitch, turn around the cone and return at high intensity (150 m with 3 turns in 35 sec) as indicated in the picture, afterwards walk back to the start (50 m in 35 sec) and repeat 10 times (or more).

- 3' recovery
- Set 2: Same as set 1, however, start on the other side.
- Decision making: At the end of each HI run, referees run 150 m (2 x 75 have to take a technical and disciplinary decision using video clips.



2 sets of 15 HI runs		
One lap		1′30″
Set 1 (10 HI runs)		15′
Recovery		3 min
Set 2 (10 HI runs)		15′
Total duration		33 min
Walking Jogging Backwards Sideways High intensity	J BW SW	
Sprint		
Total distance		3500 m

- All together, this exercise takes 33'.
- \* Cool down 5' jogging and walking, followed by 10' static stretching.

Total duration: 85'

**Werner Helsen** 



Wed. 11th: \* Strength

- 10' warm up on the bike / x-trainer / rower (70% HR<sub>max</sub>)

individualised upper and lower body strength exercises
5' jogging slowly building up to 70% HR<sub>max</sub> (+ 1 km).

Thu. 12<sup>th</sup>: Tr. 108

\* Low Int.

- 20' jogging, mobilisation and dynamic stretching.

\* Strength

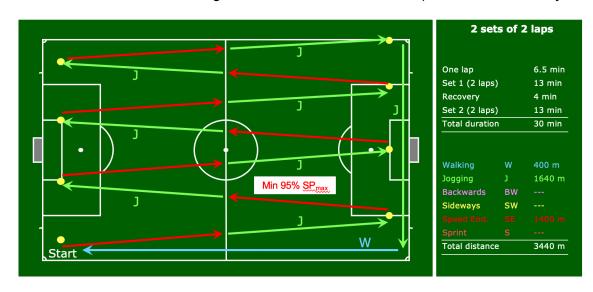
\* Warm up

- 15' core stability & injury prevention exercises.

\* Speed End.

- <u>Set 1:</u> One lap consists of 7 sub-maximal sprints followed by 7 recovery jogs. The tempo running should consist of 90% of maximal speed. The jogging should take 3x longer than the duration of the tempo run. After reaching the finish, referees jog along the goal line until the next corner and then walk back to the starting position.

- 3' recovery
- Set 2: Again 2 laps of the same exercise.
- All together these exercises take 30' (13' Set 1, 4' recovery, 13' Set 2).



\* Cool down

- 5' jogging and walking, followed by 10' static stretching.

Total duration: 85'

Fri. 13<sup>th</sup>:

Rest day / Complementary strength and/or injury prevention training

<u>Sat. 14<sup>th</sup>:</u> \* Warm up Tr. 109

- 20' jogging, mobilisation and dynamic stretching.

\* Speed

- short sprints from a dynamic position (heel lifts, knee lifts,...)

- <u>Set 1 (right turn):</u> (2 x 5 m) - (2 x 10 m) - (2 x 15 m) -

(2 x 5 m) - (2 x 10 m) - (2 x 15 m) - (2 x 20 m) - (2 x 25 m)

- 5' recovery

- Set 2 (left turn):

 $(2 \times 5 \text{ m}) - (2 \times 10 \text{ m}) - (2 \times 15 \text{ m}) - (2 \times 20 \text{ m}) - (2 \times 25 \text{ m})$ 

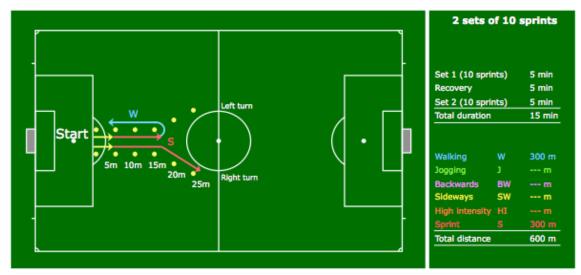
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- In total, this exercise takes 15'. The total sprint distance is 300 m.
- Optionally, 4-6 accelerations can be done along the wide diagonal line. (75 m in 15", 45" recovery)
- \* Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 50'

Sun. 15<sup>th</sup>: If you don't have a match appointment for the domestic league, use your free time for additional recovery, or to work on any fitness weaknesses you might have (e.g., aerobic endurance, strength, injury prevention,...). On UEFA Ref Network, there are also 3 different match simulation exercises in case you are VAR or 4<sup>th</sup> official to compensate for not being physically involved in the game.

If you are used to these leisure activities, you may also consider alternative intermittent activities such as playing badminton, football, squash, or tennis.



#### WEEK 51 from Monday 16<sup>th</sup> to Sunday 22<sup>nd</sup> of December Macrocycle V, week 5 (Training week 29)

Mon. 16<sup>th</sup>: \* Act. Rec.

- 30' non-weight-bearing ex. (Cycle / Swim / X-Train) at 65-70% HRmax

Tr. 110

- 20' extensive stretching- Sauna, Jacuzzi, Massage

Tue. 17<sup>th</sup>: Tr. 111

- 5' jogging slowly building up to 70% HR<sub>max</sub> (+ 1 km).
- \* Warm up

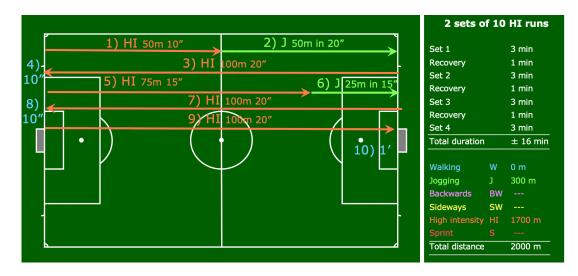
\* Low Int.

- 20' jogging, mobilisation and dynamic stretching.
- \* Strength
- 15' core stability & injury prevention exercises.- Alternatively, you can consider a Functional Training Session:
- 3 sets of 4'each (1' rest between Sets)

https://www.youtube.com/watch?v=irvP0vuEMk4

\* High Int.

- <u>Set 1:</u> 1) Run from goal line to midline at high speed in 10". 2) jog to the opposite goal line in 20". 3) Run from goal line to goal line at high speed in 20". 4) 10" recovery. 5) Run from goal line to the opposite penalty arc in 15". 6) jog to the goal line in 25". 7) Run from goal line to goal line at high speed in 20". 8) 10" recovery. 9) Run from goal line to goal line at high speed in 20". 10) 1' recovery.
- 1' recovery
- Set 2-3-4: same procedure, 4 sets in total, approximately 16 min



\* Cool down

- 5' jogging and walking, followed by 10' static stretching.

Total duration: 75'

Wed. 18<sup>th</sup>: \* Strength

- 10' warm up on the bike / x-trainer / rower (70%  $HR_{max}$ )

- individualised upper and lower body strength exercises

<u>Thu. 19<sup>th</sup>:</u> \* Low Int.

- 5' jogging slowly building up to 70% HR<sub>max</sub> (+ 1 km).

\* Warm up

- 20' jogging, mobilisation and dynamic stretching.

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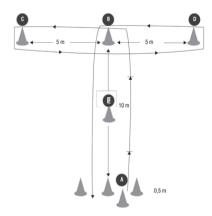
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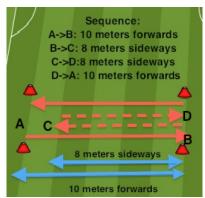
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- \* Strength
- 15' strength, core stability & injury prevention exercises.
- \* Agility
- 'T'- drill for Referees:
- <u>Set 1</u>: Referees sprint forwards as indicated in the figure: 10 m straight forwards from cone A to cone B, turn around cone B, continue sprinting forwards to cone C, turn around cone C, continue sprinting forwards to cone D, turn around cone D, continue sprinting forwards to cone B, turn around cone B and continue sprinting through the finish. Reference time is 9.8".
- 1' recovery, 3 reps.
- <u>Set 2</u>: Again 3 reps with 1' recovery in between, but Referees now start on the left side instead of the right side.



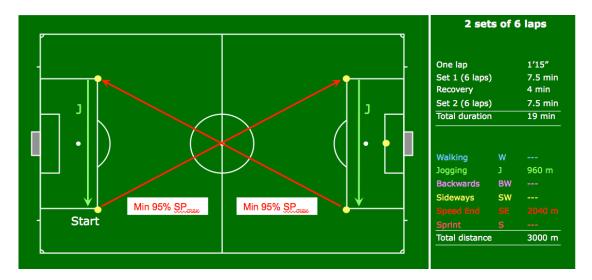
- ARs do 4 reps of the CODA exercise (with flag):
- Sprint 10 m (one foot lined up 0.5 m in front of cone A) from cone A to B, then sideways left 8 m from cone B to C, the sideways right 8 m from cone C to D, sprint back to the finish line.
- The reference time is 9.8": 4 reps in total (2 x starting sideways running L leg & 2 x starting R leg)



- 3' recovery
- \* Speed End. '
- 'Diagonal Run' exercise, 6 laps of 1'15" or 12 accelerations each:



- 90% SP $_{max}$  along the diagonal line, jogging along the penalty area, 90% SP $_{max}$  along the diagonal line, jogging along the penalty area.



- 4' recovery
- All together these exercises take 22' (6' exercise 1, 3' recovery, 7'5 exercise 2, 4' recovery).
- \* Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 92'

Fri. 20<sup>th</sup>:

<u>Sat. 21<sup>st</sup>:</u> \* Warm up Tr. 113

\* Speed

Rest day / Complementary strength and/or injury prevention screening

- 20' jogging, mobilisation and dynamic stretching.

- Set 1: Perform 5 laps of the next exercise in the penalty area.



- Once the 5 laps (or 10 sprints of 16m) have been completed, take a 5' recovery, stretching and drinking break.



- Then perform another 5 laps.
- The total exercise time is 15'. The total sprint distance is 320m.
- Optionally, 4-6 accelerations can be done along the wide diagonal line. (75 m in 15", 45" recovery)

\* Cool down

- 5' jogging and walking, followed by 10' static stretching.

Total duration: 50'

Sun. 22<sup>nd</sup>: REST DAY I WISH YOU AND YOUR FAMILY A MERRY CHRISTMAS!



#### <u>WEEK 52 from Monday 23<sup>rd</sup> of December to Sunday 29<sup>th</sup> of December Macrocycle V, week 6 (Training week 30)</u>

For the week between Christmas and New Year, there will be a winter break in many European countries. Therefore, a training programme will not be provided. Just listen to your own body. If you require a few days of rest, take a break and enjoy your days with your family and friends. If you are willing to practice, then the goal is to practice this last week of the year at 80% HR<sub>max</sub>, i.e. on Monday (Tr. 114), and Saturday + 40 min (Tr. 116).

The medium-intensity training session on Wednesday is more intermittent. For every 5' of running, two tempo runs must be done: in the middle, a 50 m tempo run, and towards the end of the 5' period, a 100 m tempo run has to be covered. Over the 50' run, 20 accelerations have to be done, i.e. 10 of 50 m and 10 of 100 m. If you like to continue doing a functional workout of 12 minutes, then you will find some inspiration here: https://www.youtube.com/watch?v=w6NuscjVacQ

From the first week of January on, the training sessions will be designed over the next 6 weeks in a progressive way in such a way that the referees will be top-fit for the second half of the competitive season in the domestic leagues and the European competitions in February.

I WISH YOU AND YOUR FAMILY A HEALTHY, HAPPY AND PROSPEROUS NEW YEAR!

TAKE CARE OF YOURSELF AND THOSE YOU HOLD DEAR!