

WEEK 1 from Monday 2nd to Sunday 8th of January Macrocycle VI, week 1 (Training week 31)

The training distances covered in High Intensity (on Monday) and Speed Endurance (on Wednesday), will decrease progressively and become more intermittent over the next macro-cycle. Both training volume and intensity have indeed to be cycled throughout the competitive season in an appropriate way to make sure elite referees are fit and fresh after the winter break for both the European and domestic leagues.

Some additional Yo-Yo based exercises have been integrated that combine both internal and external loads. These exercises are not just aerobic but also improve strength and agility.

Mon. 2^{nd} : * Low Int. - 5' jogging slowly building up to 70% HR_{max} (+ 1 km).

Tr. 117

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

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

* High Int. - 2' run at 90% HR_{max}, 1' jogging, 8 x.

- All together, this exercise takes $(2' + 1') \times 8 = + 24'$.

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

Total duration: 79'

Tue. 3rd: REST DAY

Wed. 4th: * Low Int. - 5' jogging slowly building up to 70% HR_{max} (+ 1 km).

Tr. 118

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

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

* Speed End. - Set 1:

- Perform 5 laps (± 2' per lap) of the following field exercise at the

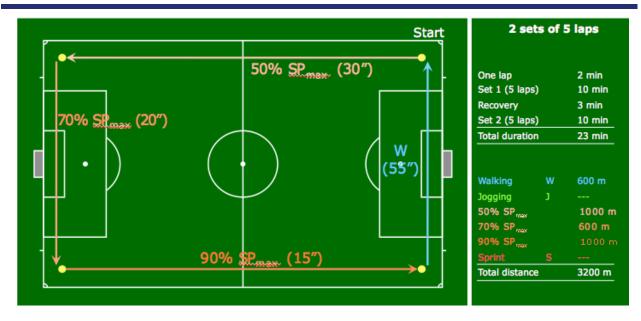
prescribed intensities.

- 4' recovery

- Set 2:

- Perform another 5 laps.





- All together, this exercise takes 10' + 4' recovery + 10' = + 24'.
- * Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 79'

Thu. 5th:

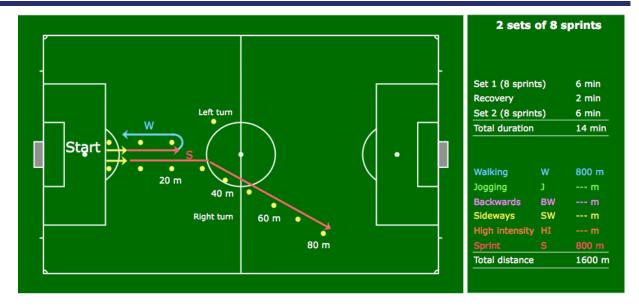
<u>Fri. 6th</u>: * Warm up Tr. 119

* Speed

REST DAY

- 20' jogging, mobilisation and dynamic stretching.
- Variations on the 80 m distance (see below):
- <u>Set</u> 1:
- 20 m sprint up, 20 m walk down, 2 x
- 40 m sprint up, 40 m walk down, 2 x
- 1' recovery and stretching
- 60 m sprint up, 60 m walk down, 2 x (1 x with a change in direction to the left, 1 x to the right)
- 1' recovery and stretching
- 80 m sprint up, 80 m walk down, 2 x (1 x with a change in direction to the left, 1 x to the right)
- 2' recovery
- Set 2: Same exercise but in reversed order (80 > 60 > 40 > 20 m).





- The total exercise time is 14'.
- 3' recovery.
- * High Int. Use the mp3 file to practice the Yo-Yo test from the start till level 15:8. This takes approximately 9'.
- * Cool down 5' jogging and walking, followed by 10' static stretching.

Total duration: 61'

Sat. 7th: REST DAY

Sun. 8th:

If you don't have a match appointment for the domestic league, use your free time for additional recovery, or use your free time to work on any fitness weaknesses you might have, e.g., aerobic endurance, strength, injury prevention,...).



WEEK 2 from Monday 9th to Sunday 15th of January Macrocycle VI, week 2 (Training week 32)

Mon. 9^{th} : * Low Int. - 5' jogging slowly building up to 70% HR_{max} (\pm 1 km).

Tr. 120

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

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

* High Int. - 1' run at 90% HR_{max}, 30" jogging, 16 x.

- All together, this exercise takes $(1' + 30") \times 16 = + 24'$.

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

Total duration: 79'

Tue. 10th: REST DAY

Wed. 11th: * Low Int. - 5' jogging slowly building up to 70% HR_{max} (\pm 1 km). Tr. 121

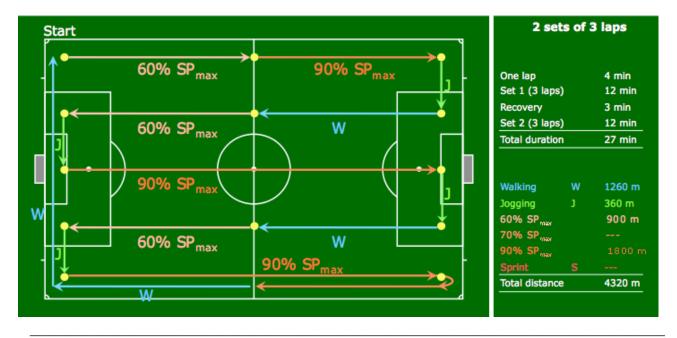
* Warm up - 20' jogging, mobilisation and dynamic stretching.

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

* Speed End. - <u>Set 1:</u> Field exercise, 3 laps.

One full lap takes \pm 4' before re-starting. The intensities or percentages are based on a % of maximal speed (SP_{max}), not % HR_{max}. Therefore, 60% SP_{max} should be a jog and 90% SP_{max} should constitute a fast tempo run.

- 4' recovery.





- Set 2: Field exercise, again 3 full laps.
- All together this exercise takes 28'.
- * Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 83'

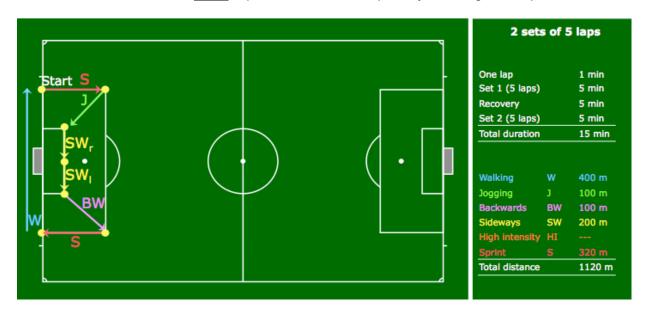
Thu. 12th:

<u>Fri. 13th</u>: * Warm up Tr. 122

- 20' jogging, mobilisation and dynamic stretching.
- * Speed
- Set 1: Sprint exercise in the penalty area, 5 laps in total.
- 5' recovery

REST DAY

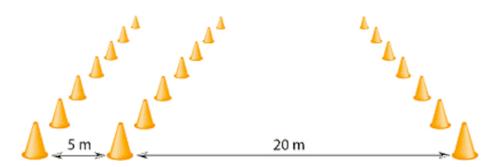
- Set 2: Sprint exercise in the penalty area, again 5 laps in total.

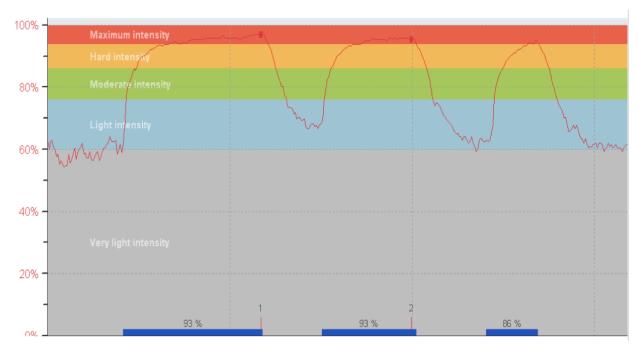


- * High Int.
- In case you don't have a match to referee in the weekend, the next variations on the Yo-Yo test is quite challenging:
- Set 1: start with levels 15, 16 and 17 (takes 7:30), 2 min rest
- Just start the mp3 file of the beep test at 6'45"
- Set 2: repeat levels 16 and 17 (takes 5 minutes), 2 min rest
- Just start the mp3 file of the beep test at 9'22"
- Set 3: repeat level 16 (takes 2:30), 2 min rest
- Just start the mp3 file of the beep test at 9'22"
- Take care to take each turn on a different foot so that you turn alternatively on your left and right shoulder!



- Do this exercise by preference on natural grass rather than indoor.
- This exercise takes 21 min in total.





* Cool down

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

Total duration: 76'

Sat. 14th: REST DAY

Sun. 15th: If you don't have a match appointment for the domestic league, use your free time for additional recovery, or use your free time to work on any fitness weaknesses

you might have, e.g., aerobic endurance, strength, injury prevention,...).



WEEK 3 from Monday 16th to Sunday 22nd of January Macrocycle VI, week 3 (Training week 33)

Mon. 16th: * Low Int. - 5' jogging slowly building up to 70% HR_{max} (\pm 1 km).

Tr. 123 * Warm up

- 20' jogging, mobilisation and dynamic stretching.

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

* High Int. - Set 1:

- 30" run at 90% HR_{max}, 15" jogging, 14 x

- 2' recovery

- Set 2

- 30" run at 90% HR $_{\text{max}}$, 15" jogging, again 14 x

- All together, this exercise takes 10'30" + 4' recovery + 10'30" = 25'

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

Total duration: 80'

Tue. 17th: REST DAY

Wed. 18^{th} : * Low Int. - 5' jogging slowly building up to 70% HR_{max} (\pm 1 km).

Tr. 124

- 20' jogging, mobilisation and dynamic stretching.

* Strength

* Warm up

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

* Extended Sp. - Set 1:

> 8 sprints to the midline (\pm 7") with 50" active recovery jogging in between each sprint

> Jog 1 lap of the pitch (+ 2')

> Duration Set 1: + 10'

- Set 2:

> 4 sprints to the opposite penalty area (<u>+</u> 11") with 70" active recovery jogging in between each sprint

> Jog 1 lap of the pitch (+ 2')

> Duration Set 2: + 7.5'

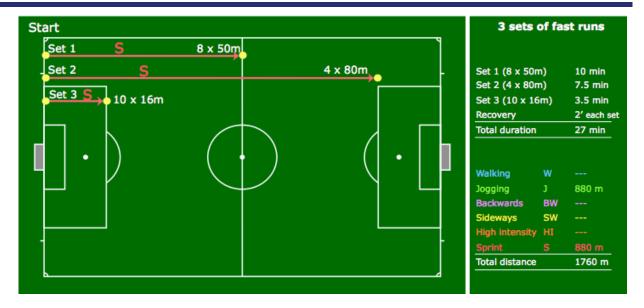
- <u>Set 3:</u>

> 10 sprints to the penalty area (\pm 3") with 20" active recovery jogging in between each sprint

> Jog 1 lap of the pitch (\pm 2')

> Duration Set 3: + 3.5'





- The total duration of this extended speed session is + 27'.
- * Cool down - 5' jogging and walking, followed by 10' static stretching.

Total duration: 82'

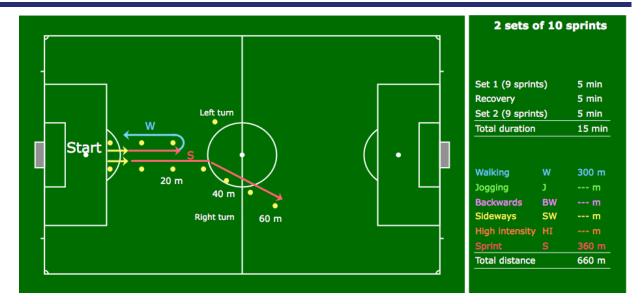
Thu. 19th:

REST DAY

Fri. 20th: * Warm up Tr. 125

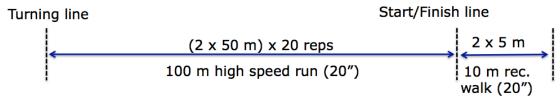
- 20' jogging, mobilisation and dynamic stretching.
- * Speed
- Variations on the 60 m distance (see below):
- 20 m sprint up, 20 m walk down, 6 x or 120 m sprint in total.
- 2' recovery and stretching
- 40 m sprint up, 40 m walk down, 4 x or 160 m sprint in total. (2 x with a change in direction to the left, 2 x to the right)
- 3' recovery and stretching
- 60 m sprint up, 60 m walk down, 2 x or 120 m sprint in total. (1 x with a change in direction to the left, 1 x to the right)
- The total exercise time is 15'.
- * High Int.
- In case you don't have a match to referee in the weekend, the next 2 sets of a Yo-Yo based exercise are quite challenging!





Set 1:

- 2 shuttles x 50 m @ high speed (50 m turn L 50 m) in 20"
- 20" recovery walk (10 m)
- 10 reps in total
- 2' recovery



Set 2:

- 2 shuttles x 50 m @ high speed (50 m turn L 50 m) in 20"
- 20" recovery walk (10 m)
- 10 reps in total
- All together, this exercise takes 15'20".
- 2000 m of high-intensity running, 200 m walking, 20 turns in total.
- * Cool down 5' jogging and walking, followed by 10' static stretching.

Total duration: 65'

Sat. 21st: REST DAY

Sun. 22nd: If you don't have a match appointment for the domestic league, use your free time for additional recovery, or use your free time to work on any fitness weaknesses you might have, e.g., aerobic endurance, strength, injury prevention,...).



WEEK 4 from Monday 23rd to Sunday 29th of January Macrocycle VI, week 4 (Training week 34)

Mon. 23rd: * Act. Rec. Tr. 126

- 50' recovery session in a fitness centre.

Tue. 24th: * Low Int. Tr. 127

- 5' jogging slowly building up to 70% HR_{max} (+ 1 km).

* Warm up

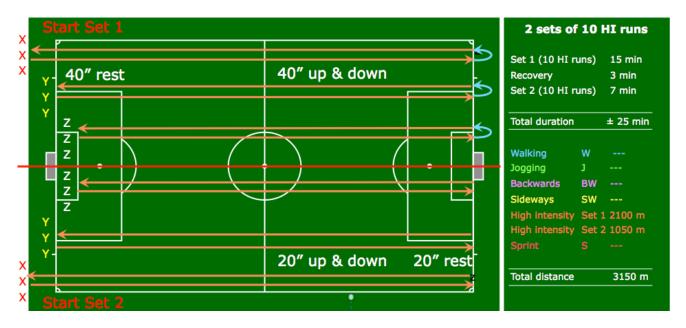
- 20' jogging, mobilisation and dynamic stretching.

* Strength

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

* High Int.

- <u>Set 1:</u> Two lines are marked approx. 5 meters away from each side of one of the goal lines. The referees are divided into 3 groups based on their fitness level. The referees in the group with the best fitness (x) have to run the longest distance (<u>+</u> 210 m), while the group with the weakest runners (z) covers a shorter distance (about 190 m), and the intermediate referees (y) start on the goal line and cover an intermediate distance (about 200 m).
- All referees start at the end with the 3 lines and run together at a given speed to the opposite goal line, and immediately back to the starting position (40" max). After a given rest that equals the running time (40" max), they start the second run. A signal may be used to indicate when the referees have to reach the opposite line and the home position.
- Referees do this first exercise 10 x (15' max).
- 2' recovery.





- <u>Set 2:</u> All referees start again at the end with the 3 lines and run at a given speed to the opposite goal-line (20"). After a given rest that equals the running time (20"), they run back to the starting position (repetition 2).

Referees do this second exercise 10 x (7').

- All together, this high intensity exercise takes <u>+</u> 24'. (15' Set 1 + 2' recovery + 7' Set 2).

* Tip - Differentiating the whole group into 3 teams should guarantee that

the relative exercise intensity for each referee does not vary too much. If there is an extreme difference in fitness level between referees, the distances between the goal line and the 2 other lines can even be further extended (e.g. 10 meters). Another possibility is to divide the referees in even more groups (and use even more than

just 3 starting positions).

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

Total duration: 79'

Wed. 25th: REST DAY

Thu. 26^{th} : * Low Int. - 5' jogging slowly building up to 70% HR_{max} (\pm 1 km). Tr. 128

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

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

* Speed End. - 1 Set of the below exercise takes ± 8'.

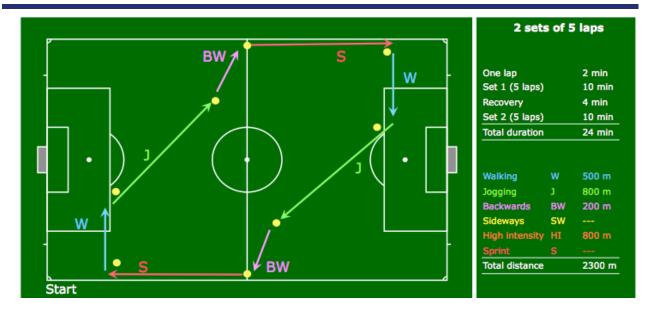
- 50 m sprint (± 10"), walking back 30", 5 x, 1' rest
- 25 m sprint (± 5"), walking back 15", 5 x, 1' rest

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

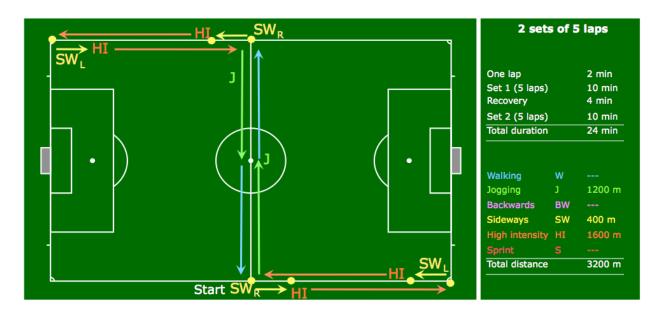
- 4' recovery

* Speed End. - 1 set of the following Field exercise for a total of 10'.





- All together, this exercise takes 8' + 4' recovery + $10' = \pm 22'$.
- * 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



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

Total duration: 87'

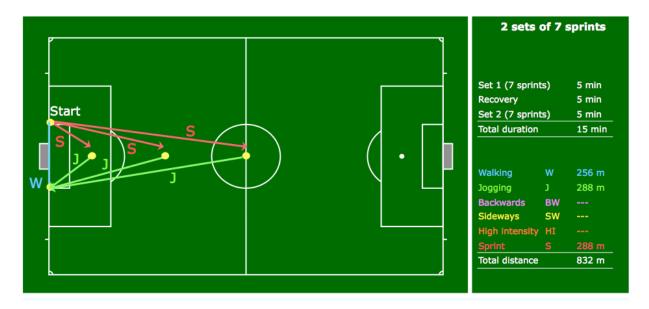
Fri. 27th: REST DAY

Sat. 28th: * Warm up - 20' jogging, mobilisation and dynamic stretching. Tr. 129

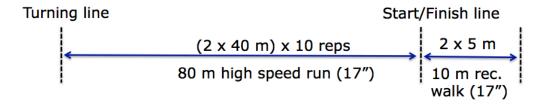


* Speed

- <u>Set</u> 1:
- 1) 11 m sprint, 11 m jogging, walking to the start, 4 reps
- 2) 25 m sprint, 25 m jogging, walking to the start, 2 reps
- 3) 50 m sprint, 50 m jogging, walking to the start, 1 rep
- 5' recovery and stretching.
- Followed by a 2nd Set_of 7 sprints.

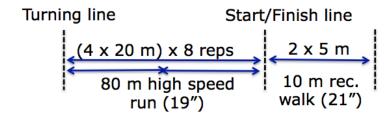


- The total exercise time is 15'. The total sprint distance is 288 m.
- * High Int.
- In case you don't have a match to referee in the weekend, the next 3 sets of the next Yo-Yo based exercise are challenging!
- <u>Set 1:</u>
- 2 x 40 m (40 m turn 40 m) in 17"
- 17" recovery walk (10 m)
- 10 reps in total
- 2' recovery between sets



- Set 2:

- 4 x 20 m (20 m turn 20 m turn 20 m turn 20 m) in 19"
- 19" recovery walk (10 m)
- 8 reps in total
- 2' recovery between sets



- Set 3:
- 8 x 10 m (10 m turn 10 m turn 10 m ...) in 21"
- 21" recovery walk (40 m)
- 6 reps in total
- 2' recovery

Turning line Start/Finish line (8 x 10 m) x 6 reps 80 m high sp run (19") 2 x 5 m 10 m rec. walk (21")

- All together, this exercise takes 21'
 (6' Set 1 + 2' rec. + 5' Set 2 + 2' rec. + 4' Set 3 + 2' rec.).
- 1920 m of high-intensity running, 240 m walking, 72 turns in total.

YOYO Exercise 1 10 X (2X40m), 8 X (4X20m), 6 X (8X10m)



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

Total duration: 71'



Sun. 29th:

If you don't have a match appointment for the domestic league, use your free time for additional recovery, or use your free time to work on any fitness weaknesses you might have, e.g., aerobic endurance, strength, injury prevention,...).



WEEK 5 from Monday 30th of January to Sunday 5th of February Macrocycle VI, week 5 (Training week 35)

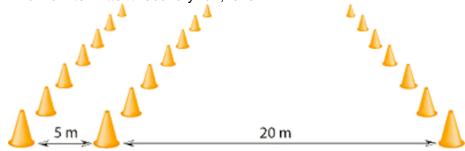
Mon. 30th: * Act. Rec. - 50' recovery session in a fitness centre. Tr. 130

<u>Tue. 31^{st} .</u> * Low Int. - 5' jogging slowly building up to 70% HR_{max} (\pm 1 km).

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

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

* High Int. - Yo-Yo intermittent recovery run, level 1



SPEED LEVEL

INTERVALS

)I LLL	LL , LL				II (I LIC)	TILO		
5	1							
	(40)							
9	1							
	(80)							
11	1	2						
	(120)	(160)						
12	1	2	3					
	(200)	(240)	(280)					
13	1	2	3	4				
	(320)	(360)	(400)	(440)				
14	1	2	3	4	5	6	7	8
	(480)	(520)	(560)	(600)	(640)	(680)	(720)	(760)
15	1	2	3	4	5	6	7	8
	(800)	(840)	(880)	(920)	(960)	(1000)	(1040)	(1080)
16	1	2	3	4	5	6	7	8
	(1120)	(1160)	(1200)	(1240)	(1280)	(1320)	(1360)	(1400)
17	1	2	3	4	5	6	7	8
	(1440)	(1480)	(1520)	(1560)	(1600)	(1640)	(1680)	(1720)
18	1	2	3	4	5	6	7	8
	(1760)	(1800)	(1840)	(1880)	(1920)	(1960)	(2000)	(2040)
19	1	2	3	4	5	6	7	8
	(2080)	(2120)	(2160)	(2200)	(2240)	(2280)	(2320)	(2360)
20	1	2	3	4	5	6	7	8
	(2400)	(2440)	(2480)	(2520)	(2560)	(2600)	(2640)	(2680)
21	1	2	3	4	5	6	7	8
	(2720)	(2760)	(2800)	(2840)	(2880)	(2920)	(2960)	(3000)
22	1	2	3	4	5	6	7	8
	(3040)	(3080)	(3120)	(3160)	(3200)	(3240)	(3280)	(3320)
23	1	2	3	4	5	6	7	8
	(3360)	(3400)	(3440)	(3480)	(3520)	(3560)	(3600)	(3640)

- International referees should aim for 18:2 or more. This corresponds to 1.800 m and takes 14'42".
- National elite referees should aim for 17:6 or more. This corresponds to 1.640 m and takes 13'26".



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

Total duration: 70'

Wed. 1st: REST DAY

<u>Thu. 2nd</u>: * Low Int. Tr. 132

- 5' jogging slowly building up to 70% HR_{max} (\pm 1 km).

* Warm up

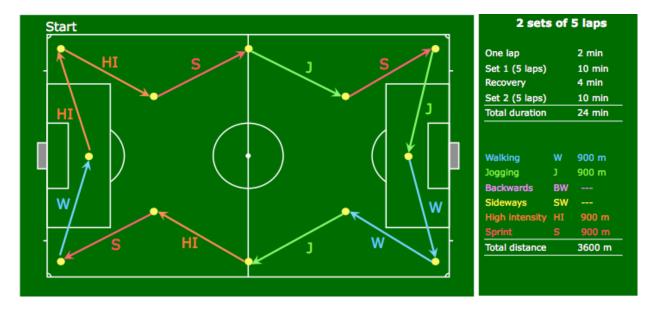
- 20' jogging, mobilisation and dynamic stretching.

* Strength

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

* Speed End.

- Set 1: Field exercise, 5 laps of 2' each.
- During each lap, there are 12 different activities: walking (W), jogging (J), high intensity running (HI), sprinting (S).
- 4' recovery.
- <u>Set 2:</u> Field exercise, another 5 laps of 2' each.



- All together, this exercise takes 10' + 4' recovery + $10' = \pm 24'$.
- * Match 10' match play.
- * Cool down 5' jogging and walking, followed by 10' static stretching.

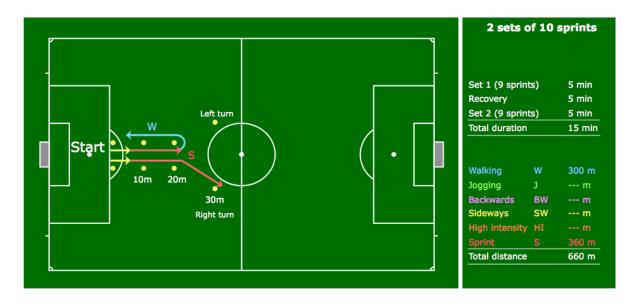
Total duration: 89'

Fri. 3rd: REST DAY



Sat. 4th: Tr. 133

- * Warm up
- * Speed
- 20' jogging, mobilisation and dynamic stretching.
- 10 m sprint up, 10 m walk down, 3 x
- 20 m sprint up, 20 m walk down, 3 x
- 30 m sprint up, 30 m walk down, 3 x (with a change in direction to the left or to the right)
- Once the 9 sprints (180 m total sprinting distance) have been completed take a 5' stretching and drinking break.
- Set 2:
- In reversed order, i.e. from 30 m to 10 m, each distance 3 x for a further 9 sprints.



- The total sprint distance is 360 m. The total exercise time is 15'.
- * Cool down
- 5' jogging and walking, followed by 10' static stretching.

Total duration: 50'

Sun. 5th:

If you don't have a match appointment for the domestic league, use your free time for additional recovery, or use your free time to work on any fitness weaknesses you might have, e.g., aerobic endurance, strength, injury prevention,...).



WEEK 6 from Monday 6th to Sunday 12th of February Macrocycle VI, week 6 (Training week 36)

Mon. 6th: * Act. Rec. - 50' recovery session in a fitness centre. Tr. 134

<u>Tue.</u> 7th: * Low Int. - 5' jogging slowly building up to 70% HR_{max} (<u>+</u> 1 km). Tr. 135

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

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

(abdominals, back muscles, sideways, arms, legs, see Library TSL

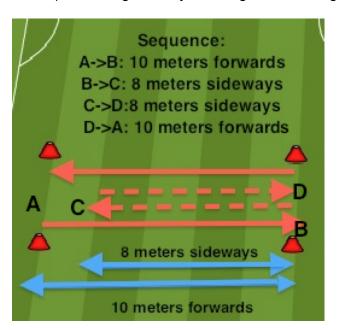
for 2 sets of 30"-30" exercises).

* Sp. & Ag. - Referees: 5 x 30 m, 30" recovery.

- Assistant Referees: 4 reps of the CODA agility drill:

- 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.

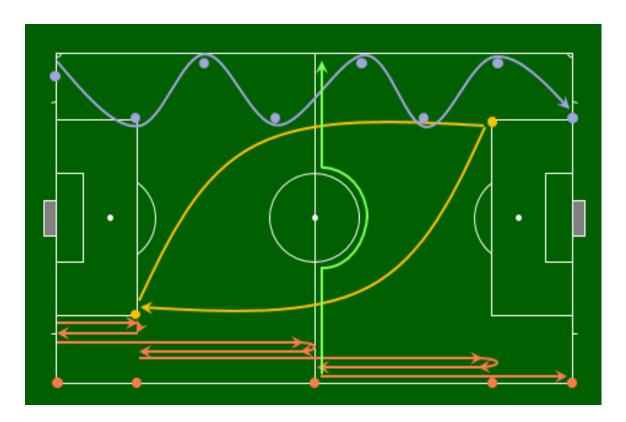
- The reference time is 9.8": 4 reps in total (2 x starting sideways running with the L leg & 2 x starting R leg)



- 3' recovery



- * High Int.
- Referee circuit training: 4 HI exercises of 6 min each 1:1 recovery
- 2 min recovery between each of the 4 sets
- The swerv (6x 30"-30")
- The centre circle (12x 12"-12")
- The diagonal (4x 45"-45")
- The suicide (3x 60"-60")



- All together this exercise takes 4 times 6 min with 2 min rec ± 30'.
- * Cool down 5' jogging and walking, followed by 10' static stretching.

Total duration: 95'

Wed. 8th: REST DAY

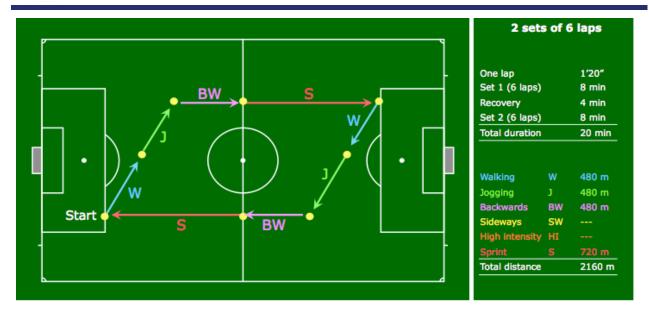
<u>Thu. 9th</u>: * Low Int. Tr. 136 - 5' jogging slowly building up to 70% HR $_{\text{max}}$ (+ 1 km).

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

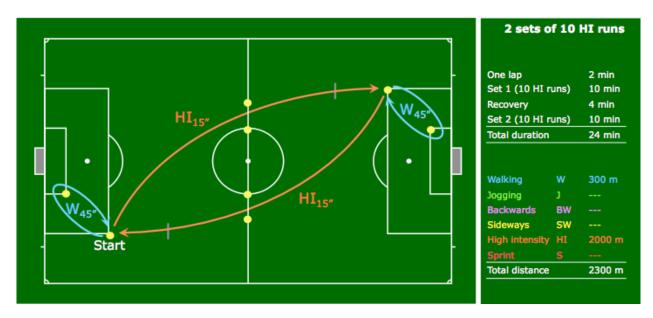
* Strength - 15' strength, core stability and injury prevention exercises.

* Speed End. - Field exercise (below) for a total of 8' or 6 laps.





- 4' recovery.
- Field exercise (below) along the wide diagonal line, run for 10' or 10 tempo runs in total.



- All together, these exercises take 8' + 4' recovery + 10' = 22'.
- * Match 10' match play.
- * Cool down 5' jogging and walking, followed by 10' static stretching.

Total duration: 87'

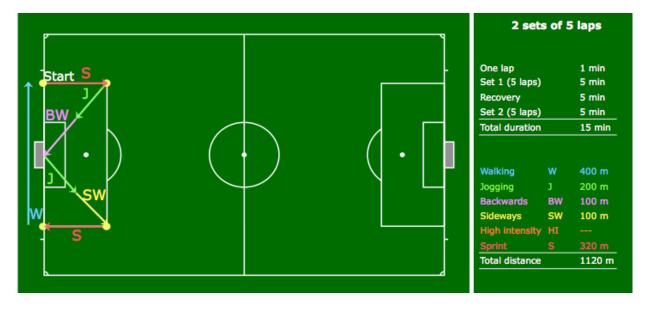
Fri. 10th: REST DAY

Sat. 11th: * Warm up - 20' jogging, mobilisation and dynamic stretching. Tr. 137

W. Helsen T +32 16 32 90 68 F +32 16 32 91 97 M +32 477 425 534 E werner.helsen@kuleuven.be p. 21



- * Speed
- Set 1: Sprint exercise in the penalty area, 5 laps in total.
- 5' recovery
- Set 2: Sprint exercise in the penalty area, again 5 laps in total.



- The total exercise time is 15'.
- * Cool down 5' jogging and walking, followed by 10' static stretching.

Total duration: 50'

Sun. 12th:

If you don't have a match appointment for the domestic league, use your free time for additional recovery, or use your free time to work on any fitness weaknesses you might have, e.g., aerobic endurance, strength, injury prevention,...).