

# Waterski Homologation - 24GER012 U21.hom - Waterski Dossier

25.08.2024 - 19:20:50

International Waterski and Wakeboard Federation  
2024 Edition Homologation Dossier - Waterski

Competition name: 2024 German Nationals U21  
Competition Code: 24GER012  
Date: 2024-08-23 2024-08-25  
Site Name: WSC Hufeisensee Halle e.V.  
Site Code: GERHALLE  
Organising Country: GER - Germany  
Type of competition: International  
Were cash prizes or merchandise awarded (Yes/No): ( No )

Homologator's and Chief Judge recommendation to Waterski Council  
(Fill in R-Record, L-Standing List)

Event	Round 1	Round 2	Round 3	Round 4
Slalom	( L )	( L )	( )	( )
Tricks	( L )	( L )	( )	( )
Jump	( L )	( L )	( )	( )

## HOMOLOGATOR'S CHECKLIST

If checked and all according to rules put OK.

If checked and any variation to the rules put an X and explain in "Remarks" section.

Not applicable is NA or leave blank for events not sanctioned.

## BOAT CHECKLIST

- Boats and equipment (Rule 5) (OK)
- Speed Control (Rule 5) (OK)  
Manufacturer: ( Zero Off)  
Software Version: ( E1886203R)
- JUMP Power Factor Default (Titled Event only): ( )

## SLALOM CHECKLIST

- Slalom Course Type: ( Four lines floating course)  
(single anchor/cross line/four-line floating/centerline frame/other)
- Slalom course Survey attach (8.17, 25.02): Survey date: (2024-08-21)
- Slalom buoy diameter/height checked (8.07, 25.02) (OK)
- All buoys are clearly visible (8.07, 25.02) (OK)
- Boat guides visually checked for straightness (25.02) (OK)  
Average Width - Centerline to B1 - B11: (1,122 )  
Average Width - Centerline to B2 - B12: (1,151 )
- Gate Camera position and height (8.13/8.19) (OK)
- Gate Video Camera View and Recording (8.13, 25.06) (OK)
- Position and height of slalom tower (8.06, 8.13) (OK)
- Slalom Shore Official Configuration (8.13):
  - 4 judges- 2 on each side (44 deg.) (8.19) ( )
  - 2 judges on one side (gate) + 1 judge on the other side ( )
  - 2 judges, 1 on each side with gate video ( )
  - 2 central towers with live boat video (OK)
  - 2 central towers without live boat video ( )
- Measure/Inspect tourn supplied slalom lines/handles (5.09) (OK)
- Arrangement for checking of skier supplied slalom handles (5.11) (NA)
- Speed control mapped (5.03, 5.04, 5.07) (OK)
- Boat Path Monitoring System Used (25.08): ( Sure-Path)  
(Sure-Path/SplashEye/other 25.08)
- RTK-GPS Boat Path Measurement Verified w/Self Check: (OK)  
Record from BPMS (25.02):
  - Width - Centerline Axis to G1/G2: (1,252 )
  - Width - Centerline Axis to G3/G4: (1,255 )
  - Average Width (S1, S3, S5) to Centerline: (11,48 )
  - Average Width (S2, S4, S6) to Centerline: (11,49 )
- If video base BPMS used, system verified (25.06, 25.08) (OK)
- Boat camera and video recording (Class R) minimum (OK)

704x480 pixels @ minimum 25fps (PAL) 30fps (NTSC)

17. If BPMS not used, EC Video Data forwarded to federation or confederation (NA)  
Filename (25.02): ( )

#### TRICKS CHECKLIST

1. Trick course checked (9.01/9.24) (OK)
2. Arrangement for checking rope release (9.13) (OK)
3. Additional weight available (9.14) (OK)
4. Trick Officials  
- 5 Judges (9.12) ( )  
- 3 Judges (9.12) (OK)
5. Video Tricks Timing system manufacturer ( ) SplashEye  
(SplashEye/Video Stop Watch/Loreto/Bottcher/Corson/other)
6. Video Trick Timing System verified (25.03) (OK)
7. Video Trick initial review speed : (100%)
8. Video Trick second review speed : ( )

#### JUMP CHECKLIST

1. Jump Course Type: ( Two lines floating course)  
(single anchor/cross line/two-line floating/centreline frame/other)
2. Jump course Survey attached. (10.16, 25.04): Survey date: (2024-08-21)
3. Jump buoy diameter/height per rule (8.07, 25.04) (OK)
4. All buoys are clearly visible (8.07, 25.04) (OK)
5. Boat guides visually checked for straightness (25.04) (OK)
6. Measure/Inspect competition supplied line/handles (5.09) (OK)
7. Arrangement for checking skier's supplied line/handles (5.11, 25.04) (OK)
8. Manufacturer of Video Jump Measurement System (25.07): ( Boettcher)  
(SplashEye/Video Tape Measurement/Loreto/Boettcher/Corson)
9. Video Jump Measurement System - verify setup and homologation level (25.04) (OK)
10. Speed Control mapped (5.03, 5.04, 5.07) (OK)
11. Boat Path Monitoring System Used (25.08): ( Sure-Path)  
(Sure-Path/SplashEye/other)
12. RTK-GPS Boat Path Measurement Verified w/Self Check: (OK)  
Record from BPMS (25.04):  
Width - 15ST to 19ST (4m +/-10cm) ( 4,02 )  
Width - 15MT to 19MT (4m +/-10cm) ( 4,00 )  
Width - 15ET to 19ET (4m +/-10cm) ( 4,04 )  
Width - Ramp Centerline to X Axis (15m+/-15cm) (14,93 )
13. If Video Base BPMS used, system verified (25.06, 25.08) (OK)
14. If BPMS not used, EC Video or BPMS Data forwarded to Confederation ( )  
Filename : ( )

#### JUMP SETUP

##### JUMP RAMP SURFACE MEASUREMENT

1. Ramp width at top and bottom is between 3.7m and 4.3m: (OK)  
Width (10.02): Top (m): ( 4,1 ) Bottom(m): ( 4,1 )
2. Ramp markings are clearly identified (6.50m & 7.00m) (10.02): (OK)  
Top edge to 6.50m line: Left Side(m) ( 6,51 ) Right Side(m) ( 6,50 )  
Top edge to 7.00m line: Left Side(m) ( 7,01 ) Right Side(m) ( 7,00 )
3. Length underwater (minimum 50cm) (10.02c) (m): ( ,65 )
4. Ramp surface deviation verified (10.02) (OK)  
Maximum Deviation from plane (10.02f) (cm) (1,2 )  
Maximum Deviation Point from top edge (10.02f) (m): ( 2,3 )
5. Minimum side curtain depth under water with ramp set at 1.80M is 20cm (10.02): (OK)
6. Apron Angle (Min 28 deg / Max 60 deg): (OK)  
Measured at Ramp Height(m): ( 1,5 )  
Length of apron edge from top corner to water(m): ( 2 )  
Ratio of Length/height (min 0.5, max 0.0883): (0,750 )
7. Ramp surface inspected (25.04) (OK)
8. Ramp secure anchoring (25.04) (OK)
9. Ramp ratio verified and recorded (10.02) (OK)

#### RAMP SETTING

Right Side

Left Side

Setting	Height	Length	Ratio	Height	Length	Ratio
1.80	xxxx		XXX.X	xxxx	XXX.X	XXX.X
1.65	1,67	6,5	0,2569	1,67	6,5	0,2569
1.50	1,57	6,6	0,2379	1,57	6,6	0,2379
1.35	1,47	6,75	0,217	1,47	6,75	0,217

END OF HOMOLOGATION FORM

It is important to leave the above section in the exact format as it will be processed automatically.  
The following section is where free form comments are added, and attachments are made.

HOMOLOGATOR'S REMARKS - Must provide any variations (examples below):

- Rules: no exemptions
- Course alterations: non
- Malfunction of equipment: non
- BPMS: Sure path didnt work because of bad internet connection, Splash drive was used instead
- Boat/Speed Control: ok
- Other: weather conditions difficult during the competition (time schedule changes)

Homologator:

Name:

Ulf LANGROCK

E-mail:

ulf.langrock@gmx.de

Chief Judge:

Name:

Werner SCHICHER

E-mail:

office@aem.co.at

Scorer:

Name:

Iva BINDER

E-mail:

binderi@seznam.cz

This homologation record must be uploaded to IWWF

**CHIEF JUDGE and OFFICIALS REPORT**

Chief Judge and panel Officials to subscribe:

"I certify compliance with all IWWF and E&A Rules governing the competition.  
I am satisfied with the conduct of the event."

Position	Official name	Country	Qual.	License/ld	Slalom	Tricks	Jump	Signature
Chief Judge	WernerSCHICHER	AUT	J2	E&A	Yes	Yes	Yes	
Homologator	UlfLANGROCK	GER	H2	E&A	Yes	Yes	Yes	
Assistant Homologator	GuenterKUHNT	GER	H1	E&A	Yes	Yes	Yes	
Technical Officer	Andreas Nicke	GER		E&A	Yes	Yes	Yes	
Calculator	IvaBINDER	CZE	S1	E&A	Yes	Yes	Yes	
Judges	Sabine STANGE	GER	J2	E&A	Yes	Yes	Yes	
	Linus PERSSON	SWE	J2	E&A	Yes	Yes	Yes	
	Angelika RUNGE	GER	J2	E&A	Yes	Yes	Yes	
	Ulf LANGROCK	GER	J2*	E&A	Yes	Yes	Yes	
	Werner SCHICHER	AUT	J2	E&A	Yes	Yes	Yes	
	Julia MEIER	GER	J3	E&A	Yes	Yes	Yes	
Chief Driver	Phil INGLE	GBR	D1	E&A	Yes	Yes	Yes	
Drivers	Eric LANGROCK	GER	D3	E&A	Yes	Yes	Yes	

# Waterski Homologation - 24GER012 U21.hom - Waterski Slalom Course

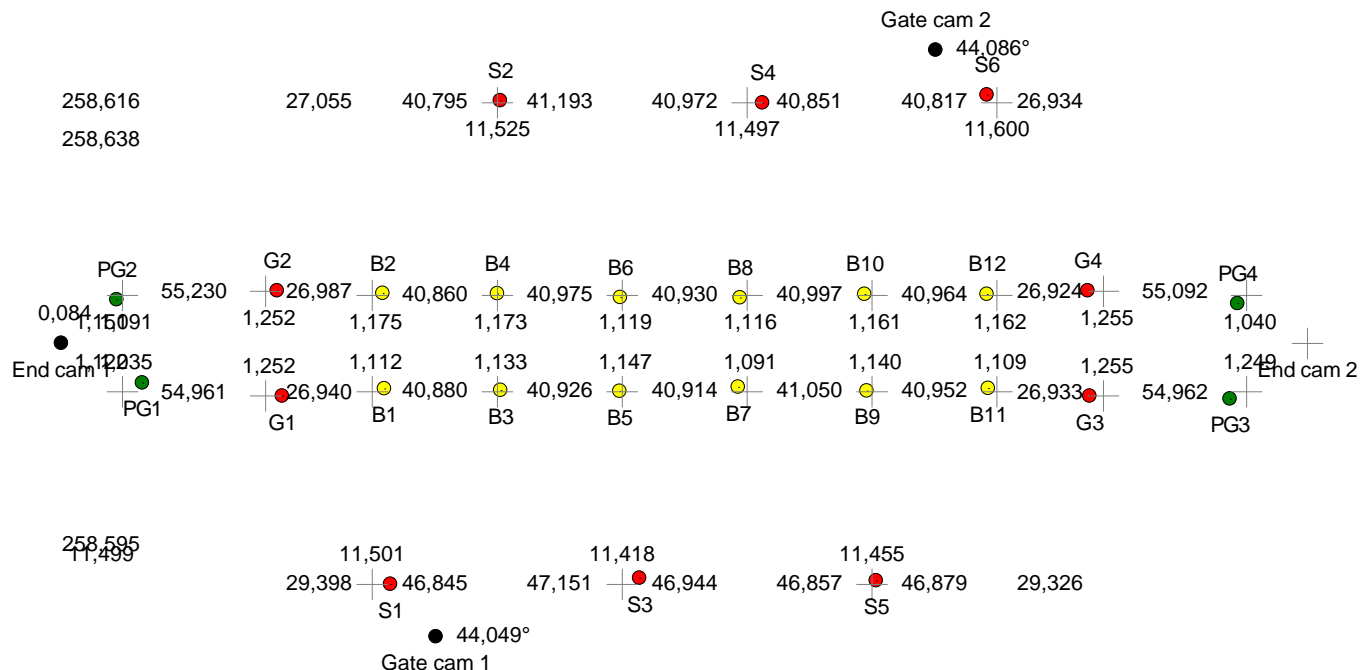
25.08.2024 - 19:20:51

Survey date & time 21.08.2024 13:46:00 Distances  
 Homologation level Ranking List & record St1-St2 47,750  
 Homologation mode Stations 1,2 St2-St3  
 Angle unit Grades St1-St3  
 X-Axis: MG1G2-MG3G4

	Station 1	Station 2	Station 3
Station 1		200,0000	
Station 2	0,0000		
Station 3			
G1	22,8900	229,6900	
G2	23,5650	230,4900	
G3	134,7900	351,2900	
G4	133,9950	350,4700	
S1	24,4800	233,2900	
S2	41,3750	256,7850	
S3	49,2650	275,4150	
S4	75,9300	303,3050	
S5	101,1650	332,0000	
S6	119,9300	339,9550	
B1	27,6500	237,0450	
B2	28,3200	237,8200	
B3	37,5450	253,1000	
B4	38,2650	253,8050	
B5	52,4450	276,8550	
B6	53,1150	277,1750	
B7	73,9850	304,8250	
B8	74,3400	304,5100	
B9	99,9700	328,3300	
B10	99,7350	327,5850	
B11	123,1350	344,0850	
B12	122,5100	343,3050	
PG1	16,0850	219,7950	
PG2	16,5450	220,3355	
PG3	150,7300	361,0600	
PG4	150,0600	360,4450	
Gate cam 1	47,2000	242,5000	
Gate cam 2	94,0250	373,0000	
End cam 1	66,1500	95,3000	
End cam 2			

69 / 69	Mesures
Lengthes	
Axe - Axe	258,616
G1 - G3	258,595
G2 - G4	258,638
Lengthes	
Axe - S1	27,055
S1 - S2	40,795
S2 - S3	41,193
S3 - S4	40,972
S4 - S5	40,851
S5 - S6	40,817
S6 - Axe	26,934
Lengthes	
PG1 - G1	54,961
PG2 - G2	55,230
G1 - B1	26,940
G2 - B2	26,987
B1 - B3	40,880
B2 - B4	40,860
B3 - B5	40,926
B4 - B6	40,975
B5 - B7	40,914
B6 - B8	40,930
B7 - B9	41,050
B8 - B10	40,997
B9 - B11	40,952
B10 - B12	40,964
B11 - G3	26,933
B12 - G4	26,924
G3 - PG3	54,962
G4 - PG4	55,092
Diagonals	
G1 - G4	258,581
G2 - G3	258,676
Axe - S1	29,398
S1 - S2	46,845
S2 - S3	47,151
S3 - S4	46,944
S4 - S5	46,857
S5 - S6	46,879

S6 - Axe	29,326
Widths	
Axe - G1	1,252
Axe - G2	1,252
Axe - G3	1,255
Axe - G4	1,255
Axe - S1	11,501
Axe - S2	11,525
Axe - S3	11,418
Axe - S4	11,497
Axe - S5	11,455
Axe - S6	11,600
Average S1 - S6	11,499
Axe - B1	1,112
Axe - B2	1,175
Axe - B3	1,133
Axe - B4	1,173
Axe - B5	1,147
Axe - B6	1,119
Axe - B7	1,091
Axe - B8	1,116
Axe - B9	1,140
Axe - B10	1,161
Axe - B11	1,109
Axe - B12	1,162
Average B1 - B11	1,122
Average B2 - B12	1,151
Axe - PG1	1,035
Axe - PG2	1,091
Axe - PG3	1,249
Axe - PG4	1,040
Gate camera angles	
Axe - Gate cam 1	44,049°
Axe - Gate cam 2	44,086°
Gate cam. positions	
Axe - Gate cam 1	593,334m
Axe - Gate cam 2	113,933m
End course cameras	
Axe - End cam 1	0,084
Axe - End cam 2	



# Waterski Homologation - 24GER012 U21.hom - Waterski Jump Course

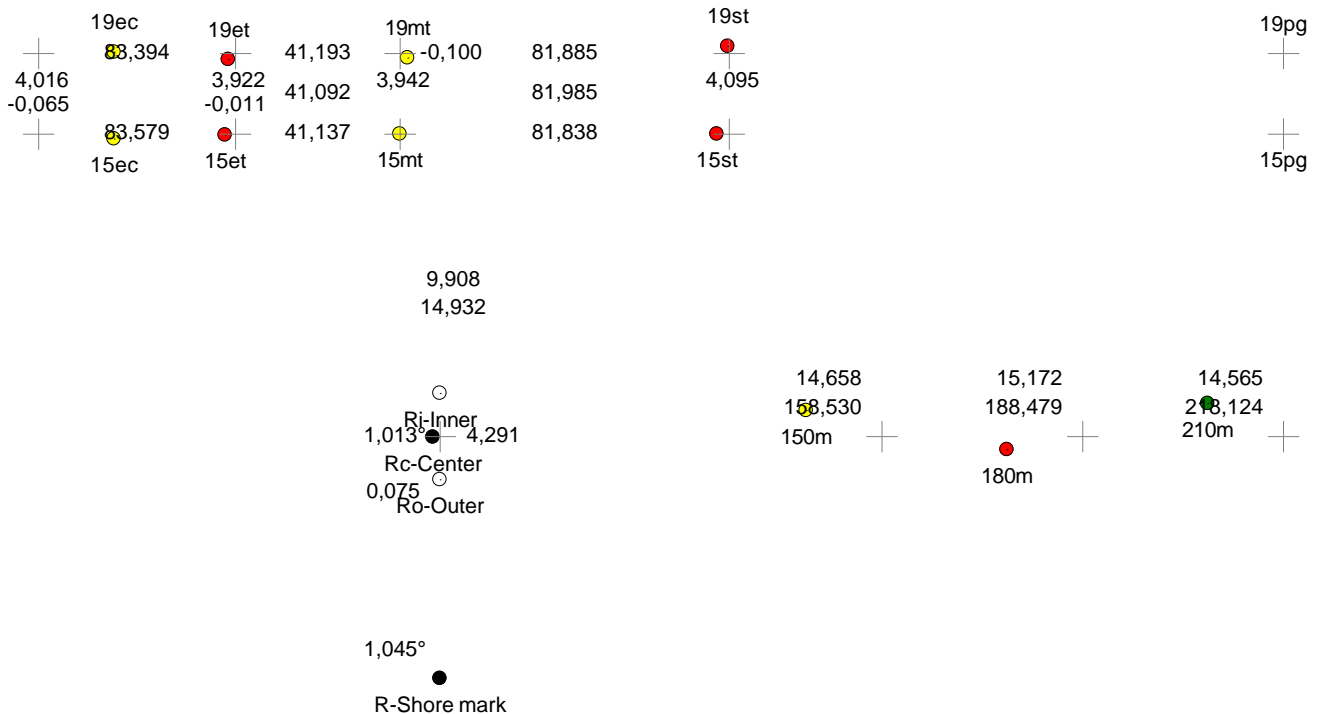
25.08.2024 - 19:20:51

Survey date & time 21.08.2024 17:02:00 Distances  
 Homologation level Ranking List & record St1-St2 47,750  
 Homologation mode Stations 1,2 St2-St3  
 Angle unit Grades St1-St3  
 X-Axis: 15st-15mt

	Station 1	Station 2	Station 3
Station 1		200,0000	
Station 2	0,0000		
Station 3			
15pg			
19pg			
210m	177,8000	382,2250	
180m	174,9300	380,6050	
150m	170,2800	378,0350	
15st	134,4950	358,3050	
19st	132,7550	356,4350	
15mt	62,9500	307,4500	
19mt	64,5850	306,7950	
15et	39,4850	266,5450	
19et	41,3650	268,1000	
15ec	26,4950	239,7050	
19ec	28,2000	241,8400	
Ro-Outer	63,5700	324,7000	
Ri-Inner	65,7250	322,2800	
Rc-Center	64,6450	323,4850	
R-Shore mark	18,8500	178,6500	

28 / 28	Mesures
Lengthes	
210m - Y-Axis	218,124
180m - Y-Axis	188,479
150m - Y-Axis	158,530
15pg - Y-Axis	
19pg - Y-Axis	
15st - Y-Axis	81,838
19st - Y-Axis	81,985
15et - Y-Axis	41,137
19et - Y-Axis	41,092
15ec - Y-Axis	83,579
19ec - Y-Axis	83,394
19st - 19mt	81,885
19mt - 19et	41,193
19mt - Y-Axis	-0,100
Ramp - Y-Axis	9,908
Widths	
210m - X-Axis	14,565

180m - X-Axis	15,172
150m - X-Axis	14,658
15pg - X-Axis	
15et - X-Axis	-0,011
15ec - X-Axis	-0,065
19pg - X-Axis	
19st - X-Axis	4,095
19mt - X-Axis	3,942
19et - X-Axis	3,922
19ec - X-Axis	4,016
Average 19st - 19et	3,986
Ramp - X-Axis	14,932
Distances	
Ro-Outer - Ri-Inner	4,291
Ramp - Rc-Center	0,075
Ramp angle	
Ro-Outer - Ri-Inner	1,013°
Ramp - R-Shore mark	1,045°

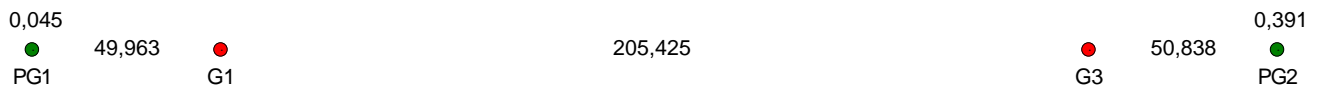


# Waterski Homologation - 24GER012 U21.hom - Waterski Trick Course 25.08.2024 - 19:20:51

Survey date & time 21.08.2024 16:25:00 Distances  
 Homologation level Ranking List & record St1-St2 69,200  
 Homologation mode Stations 1,2 St2-St3  
 Angle unit Grades St1-St3  
 X-Axis: G1-G3

5 / 5	Mesures	Exact	Tol Min	Tol Max
Lengthes				
G1 - G3	205,425	230,000	180,000	280,000
G1 - PG1	49,963	50,000	40,000	60,000
G3 - PG2	50,838	50,000	40,000	60,000
Widths				
G1 - PG1	0,045	2,000	-4,000	4,000
G3 - PG2	0,391	2,000	-4,000	4,000

	Station 1	Station 2	Station 3
Station 1	0,0000	200,0000	
Station 2	200,0000		
Station 3			
G1	295,1600	266,3900	
G3	362,4750	348,8500	
PG1	273,7650	252,0200	
PG2	369,1800	359,7750	



# Waterski Homologation - 24GER012 U21.hom - Video Jump Buys

25.08.2024 - 19:20:52

Survey date & time 21.08.2024 09:15:00 Distances  
 St1-St2 23,500  
 Homologation mode Stations 1,2 St2-St3  
 Angle unit Grades St1-St3  
 X-Axis: Cam1-Cam2

	Station 1	Station 2	Station 3
Station 1	0,0000	200,0000	
Station 2	200,0000		
Station 3			
Vi1			
Vi2			
Vi3			
Vi4			
Vi5			
Vi6			
Vi7			
Vi8			
Vo1			
Vo2			
Vo3			
Vo4			
Vo5			
Vo6			
Vo7			
Vo8			
Cam1	23,3000	72,3750	
Cam2	89,7900	170,5400	
Cam3			
Ro-Outer	336,0500	314,8000	
Ri-Inner	334,3700	314,1550	
Rc-Center	335,1750	314,4400	
15st	361,9600	354,5750	
15mt	322,3550	303,6350	
15et	289,7000	272,0150	
20m	330,8750	305,9850	
30m	319,9850	292,4550	
40m	308,3950	280,0150	
50m	297,1300	269,7800	
60m	284,7950	260,0700	
70m			
80m			

2 / 2	Dist ramp	Ramp - Vo6	
Coordinates		Ramp - Vo7	
Ramp	0,000	Ramp - Vo8	
Ramp - Ro-Outer	2,039	Ramp - 20m	11,150
Ramp - Ri-Inner	2,039	Ramp - 30m	21,902
Ramp - Vi1		Ramp - 40m	32,222
Ramp - Vi2		Ramp - 50m	41,292
Ramp - Vi3		Ramp - 60m	50,940
Ramp - Vi4		Ramp - 70m	
Ramp - Vi5		Ramp - 80m	
Ramp - Vi6		Ramp - Cam1	72,452
Ramp - Vi7		Ramp - Cam2	80,233
Ramp - Vi8		Ramp - Cam3	
Ramp - Vo1		Distances	
Ramp - Vo2		Ramp - Rc-Center	0,040
Ramp - Vo3		Ro-Outer - Ri-Inner	4,079
Ramp - Vo4		Ramp - 15mt	17,949
Ramp - Vo5		Ramp - 15et	52,455

