

AUTO žurnál



Summary

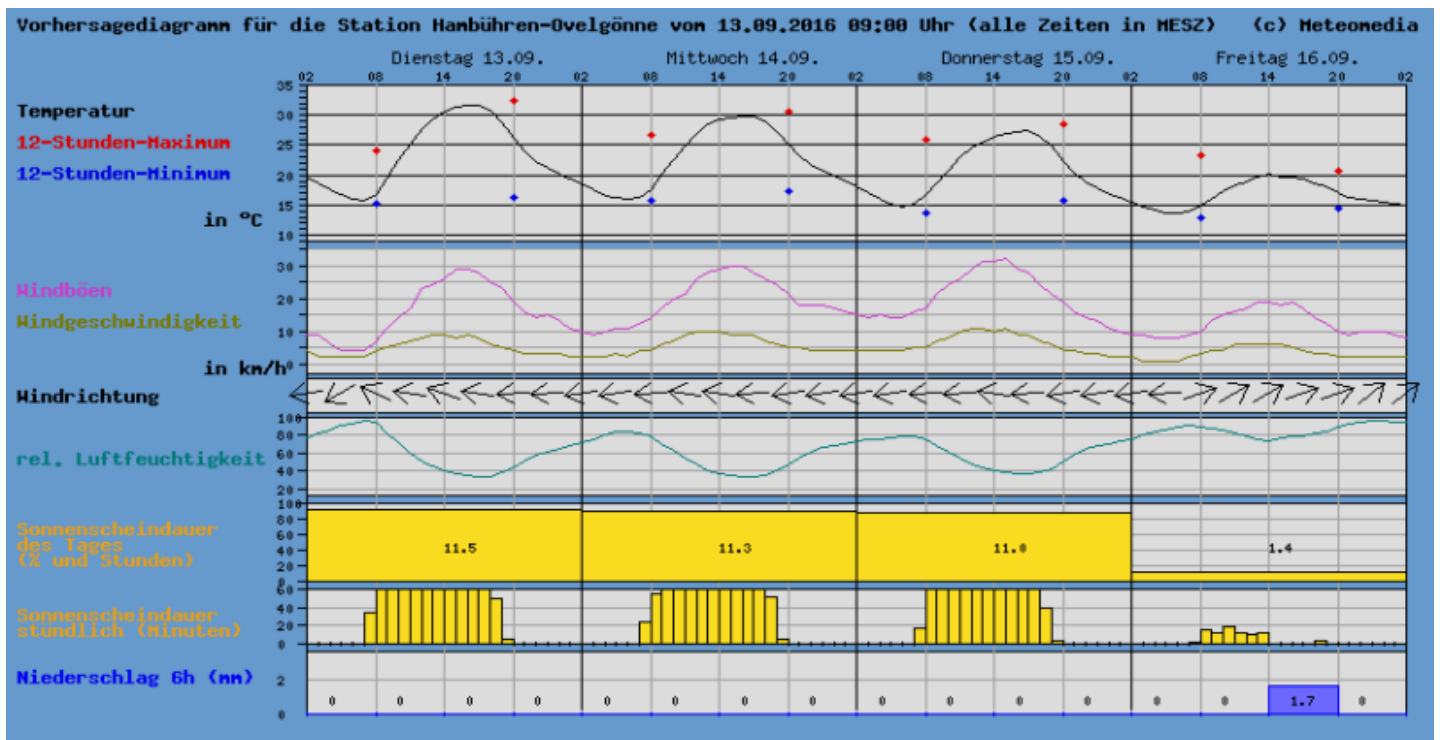
Summer Tire Test

215/65 R 16

12th-15th September 2016

Contidrom, Germany

Weather forecast




Schedule for Autozurnal Tire Test 2016



	tire set a	obj.	tire set b	subj.	add. tires (2)
	pass by noise				Rowi
mon 12.09.2016	wet braking				
tue 13.09.2016	aquapl.-longitudinal		wet handling		
wed 14.09.2016	dry braking		comfort dry handling		
thu 15.09.2016	wet circle				
fri 16.09.2016	aquapl.-lateral				

Current No.		1	2	3	4
Sidewall Data					
Brand	Continental	Bridgestone	Dunlop	Goodyear	
Trade Designation	ContiPremiumContact 5	DUELER H/P Sport	SP SPORT FASTRESPONSE	EFFICIENTGRIP Performance	
Summer/ Winter/ All Season [S/W/A]	S	S	S	S	
Tire Size	215/65 R 16	215/65 R 16	215/65 R 16	215/65 R 16	
Load-Index (Single Point)	98	98	98	98	
Speed Symbol (Single Point)	H	H	H	H	
Plant-/ Size-/ Type-Code	CN6V D5X8	6CHB M8T	N56V JAFR	N56V JB7R	
Date Code (DOT)	2716	4815 4815 4815 4815 4815 4715	2716 1716 2716 2716 2716 2716	1916 1816 1816 1916	
RR EU Label	C	E	B	-	
Wet EU Label	A	B	B	-	
Noise EU Label [x/db]	-	2 71	1 68	-	
Production Country	France	Spain	Germany	Germany	
Treadwear	280	300	280	340	
Traction	AA	A	A	A	
Temperature	A	A	A	A	
Tread Plies	1 Polyester + 2 Steel + 1 Polyamide	1 Rayon + 2 Steel + 1 Nylon	1 polyester + 1 Steel + 1 Polyamide	1 Polyester + 2 Steel + 1 Polyamide	
Sidewall Plies	1 Polyester	2 Rayon	2 Polyester	1 Polyester	
DOT Sign [Y/N]	Y	Y	Y	Y	
Rotational Tread [Y/N]	N	N	N	N	
Asymmetric Tread [Y/N]	Y	N	Y	Y	
Snowflake Symbol [Y/N]	N	N	N	N	
M+S Symbol [Y/N]	N	N	N	N	
Other Sidewall Lettering (e-No. for ZR)					
Remarks (intern Set No.,...)	4 Stk.	8 Stk.	8 Stk.	4 Stk.	
Measurements					
Hardness new @ °C 18 [ShA]	72	68	68	71	
Hardness used @ °C 18 [ShA]	68	64	65	67	
Pattern depth center/shoulder [mm]	7,3 7,2	8,0 7,6	7,3 6,8	7,7 7,5	
Weight [g]	9,6	11,4	10,4	9,3	
Picture					
Pattern [Y/N]					

Current No.		5	6	7	8
Sidewall Data					
Brand		Hankook	Maxxis	Michelin	Nexen
Trade Designation		KINERGY ECO	PREMITRA 5	CROSSCLIMATE	Nblue HD Plus
Summer/ Winter/ All Season [S/W/A]		S	S	A	S
Tire Size		215/65 R 16	215/65 R 16	215/65 R 16	215/65 R 16
Load-Index (Single Point)		98	98	102	98
Speed Symbol (Single Point)		H	V	V	H
Plant-/ Size-/ Type-Code		2XT3 HV H	2U2H ABC	HC0D 047X	8EK2 MBFR
Date Code (DOT)		1616	0816 0816 0816 0816 0716	2816	2216
RR EU Label		C	C	B	C
Wet EU Label		A	A	A	B
Noise EU Label [x/db]		2 71	2 70	1 69	1 67
Production Country		Hungary	China	Spain	Korea
Treadwear		-	340	-	360
Traction		-	AA	-	A
Temperature		-	A	-	A
Tread Plies		2 Steel + 2 Polyester + 1 Nylon	1 Polyester + 2 Steel + 1 Nylon	-	2 Polyester + 2 Steel + 1 Nylon
Sidewall Plies		2 Polyester	1 Polyester	-	2 Polyester
DOT Sign [Y/N]		Y	Y	N	Y
Rotational Tread [Y/N]		N	N	Y	Y
Asymmetric Tread [Y/N]		Y	Y	N	N
Snowflake Symbol [Y/N]		N	N	Y	Y
M+S Symbol [Y/N]		N	N	Y	N
Other Sidewall Lettering (e-No. for ZR)					
Remarks (intern Set No.,...)		8 Stk.	8 Stk.	4 Stk.	8 Stk.
Measurements					
Hardness new @ °C 18 [ShA]		66	70	65	66
Hardness used @ °C 18 [ShA]		64	65	59	65
Pattern depth center/shoulder [mm]		7,4 7,6	7,5 7,0	7,1 6,3	7,4 7,2
Weight [g]		11,1	10,1	9,9	10,3
Picture					
Pattern [Y/N]					

Current No.		9	10	11	12
Sidewall Data					
Brand		Nokian	Yokohama		
Trade Designation		Line suv	BluEarth - A AE50		
Summer/ Winter/ All Season [S/W/A]		S	S		
Tire Size		215/65 R 16	215/65 R 16		
Load-Index (Single Point)		102	98		
Speed Symbol (Single Point)		H	H		
Plant-/ Size-/ Type-Code		60BB	4UHB YYY		
Date Code (DOT)		081608160816081609160916	061606160516071507150815		
RR EU Label		C	C		
Wet EU Label		A	A		
Noise EU Label [x/db]		2 71	2 71		
Production Country		Russia	Philippines		
Treadwear		500	-		
Traction		A	-		
Temperature		A	-		
Tread Plies		2 Polyester + 2 Steel + 1 Polyamide	-		
Sidewall Plies		2 Polyester	-		
DOT Sign [Y/N]		Y	N		
Rotational Tread [Y/N]		N	N		
Asymmetric Tread [Y/N]		Y	Y		
Snowflake Symbol [Y/N]		N	N		
M+S Symbol [Y/N]		N	N		
Other Sidewall Lettering (e-No. for ZR)					
Remarks (intern Set No.,...)		8Stk.	8 Stk.		
Measurements					
Hardness new @ °C	18 [ShA]	70	73		
Hardness used @ °C	18 [ShA]	66	71		
Pattern depth center/shoulder	[mm]	7,8	7,8	7,1	7,0
Weight	[g]	11,3	11,4		
Picture					
Pattern [Y/N]					



Autozurnal summer tire test 2016

Tirelist 215/65 R 16

objective

Audi A4

2,2 front // 2,4 rear

1A Continental

2 Bridgestone

3 12th-15th September 2016

4 Goodyear

5 Hankook

6 Maxxis

7 Michelin

8 Nexen

9 Nokian

10 Yokohama

1B Continental

subjective

VW Tiguan

2,3 front // 2,3 rear

1C Continental

2 Bridgestone

3 Dunlop

4 Goodyear

5 Hankook

6 Maxxis



7 Michelin

8 Nexen

9 Nokian

10 Yokohama

1D Continental

		rozměr: 215/65 R 16									
		vozidlo: VW Tiguan									
		Continental ContiPremiumContact 5	Bridgestone DUELER H/P Sport	Dunlop SPORT FASTRESPON	Goodyear FICIENTGRIP Performa	Hankook KINERGY ECO	Maxxis PREMITRA 5	Michelin CROSSCLIMATE	Nexen Nblue HD Plus	Nokian Line SUV	Yokohama BluEarth-A AE-50
											
Set-No.		1	2	3	4	5	6	7	8	9	10
Shore-hardness při 14°C (nové/opotřebené) DOT		72 2716	68 4715/4815	68 1716/2716	71 1816/1916	66 1616	70 0716/0816	65 2816	66 2216	70 0819/0916	73 0715/0815/0516/0616
Celkové hodnocení	váhy	100,0	93,2	95,9	98,7	97,7	99,2	93,6	95,4	96,8	95,6
MOKRÝ POCHRCH	50%	100,0	91,9	92,5	98,7	97,5	98,9	92,8	93,7	97,2	93,6
ABS brzdění na asfaltu ($\mu^*=0,771$)	30%	100,0	84,4	87,4	93,2	94,0	96,1	92,4	90,4	92,5	90,8
Aquaplaning podélný (pohon přední osa)	20%	100,0	98,6	95,5	102,5	100,0	100,5	92,5	93,2	99,3	94,9
Aquaplaning příčný (65-95 km/h)	10%	100,0	96,0	90,7	109,7	109,2	104,2	73,4	94,4	104,7	84,8
Mokrý okruh	10%	100,0	97,6	98,0	98,8	97,7	99,9	97,4	97,9	99,4	99,3
Mokrý handling	30%	100,0	91,6	94,4	98,1	95,5	98,6	98,3	95,7	97,3	96,6
<i>Mokrý handling subject.hodnocení</i>		<i>1</i>	<i>10</i>	<i>7</i>	<i>2</i>	<i>6</i>	<i>3</i>	<i>4</i>	<i>8</i>	<i>5</i>	<i>9</i>
SUCHÝ POVRCH	50%	100,0	94,5	99,2	98,7	97,9	99,5	94,4	97,0	96,4	97,5
ABS brzdění na asfaltu ($\mu^*=1,083$)	35%	100,0	93,4	97,3	97,7	96,1	100,3	86,5	97,8	94,9	96,0
Suchý handling	40%	100,0	98,2	100,2	98,9	99,5	100,6	98,6	98,9	99,8	99,3
<i>Suchý handling subject.hodnocení</i>		<i>1</i>	<i>7</i>	<i>3</i>	<i>9</i>	<i>4</i>	<i>2</i>	<i>5</i>	<i>10</i>	<i>6</i>	<i>7</i>
Suchý handling subject.hodnocení	5%	100,0	87,7	100,0	84,2	94,7	98,2	96,5	78,9	92,5	86,0
Komfort	2%	100,0	93,3	91,7	93,3	100,0	93,3	93,3	93,3	93,3	100,0
Hlučnost vnější 50 km/h	4%	100,0	100,3	101,2	99,0	101,2	101,3	103,0	103,4	101,0	102,4
Hlučnost vnější 80 km/h	4%	100,0	99,9	100,4	99,5	101,8	101,2	101,9	101,8	100,8	101,9
Válivý odpor	10%	100,0	82,0	102,0	109,0	95,5	92,7	98,2	92,1	86,5	97,2

Mokrý handling subjektivní vlastnosti zahrnuje následující hodnocení:
- přímá stabilita jízdy(25%)
- odezva na řízení (25%)
- lineární růst boční síly (25%)
- změna jízdního pruhu (25%)

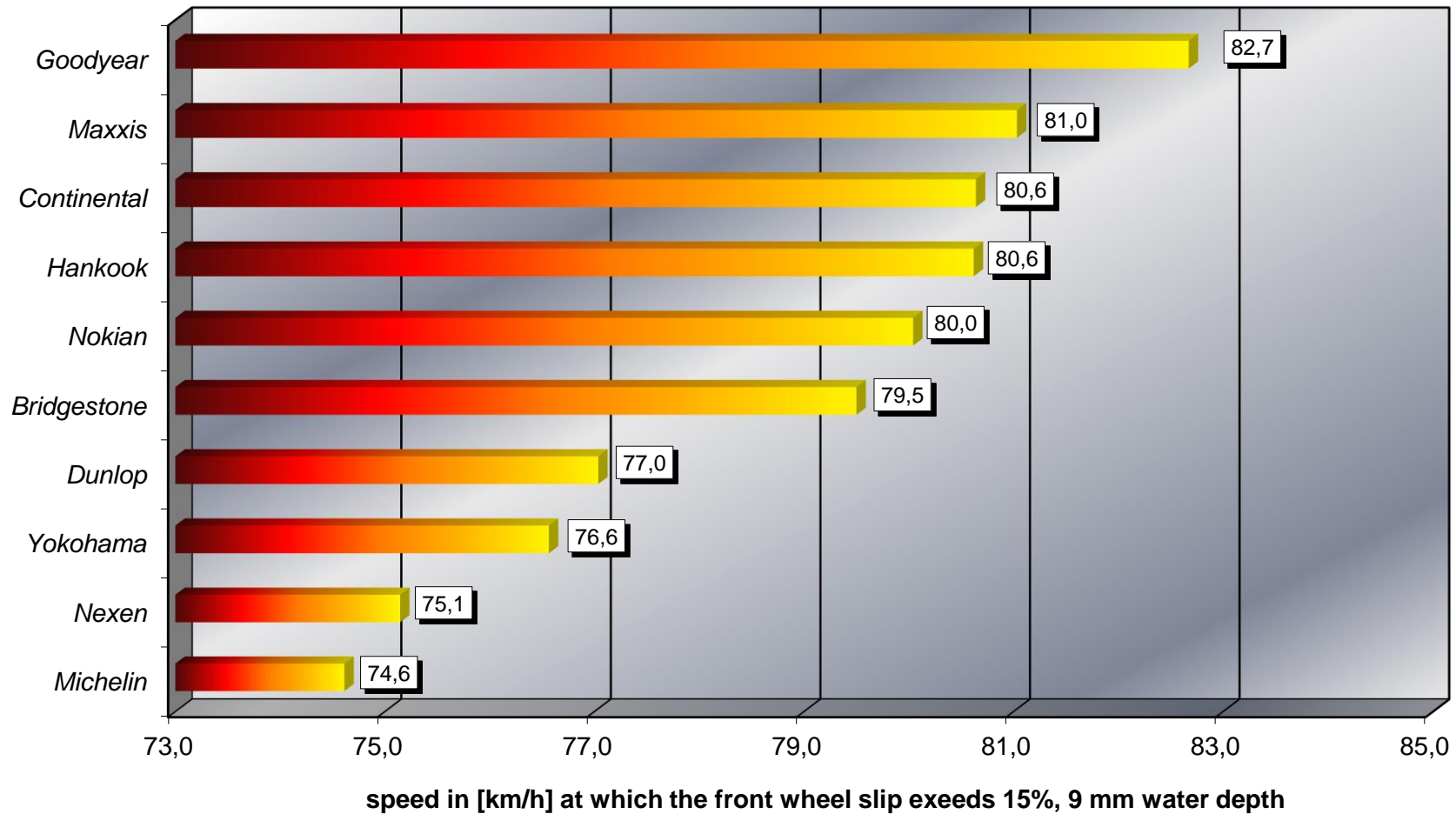
Suchý handling: Téměř všechny opotřebené pneumatiky jsou velmi ploché a velmi progresivní v lineární oblasti a mají obdélníkový otisk stopy . Z toho důvodu je celkové subjektivní hodnocení odsunuto směrem dolů u použitých pneumatik (suchý handling subjektivní hodnocení a hodnocení vlastnosti), i když měly dobré časy na okruh.

Výsledky:

velmi dobrý
dobrá
slabý
špatný
nedostatečný

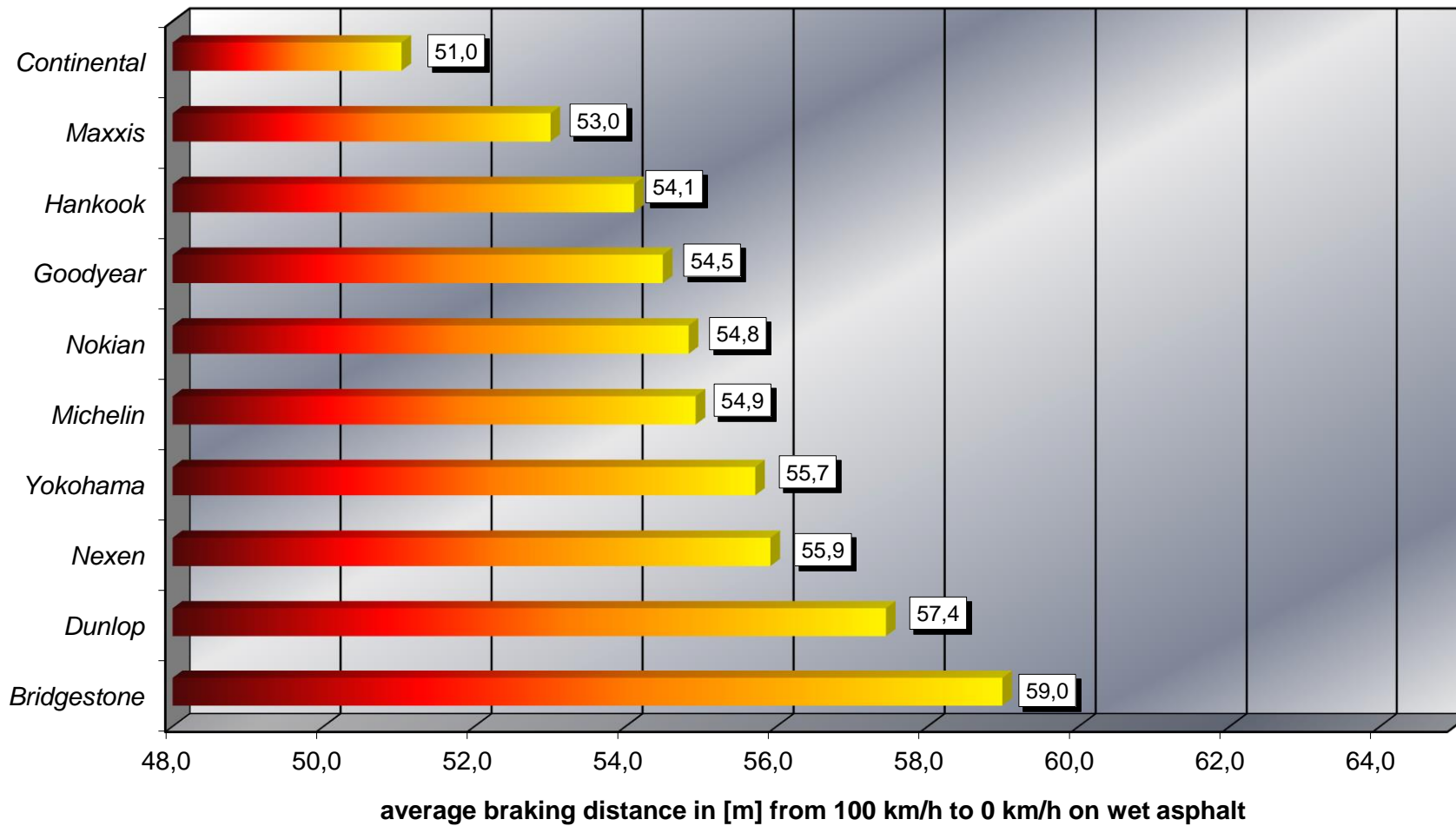


Autožurnál Summer Tire Test 215/65 R 16 aquaplaning-longitudinal, frontdriven car



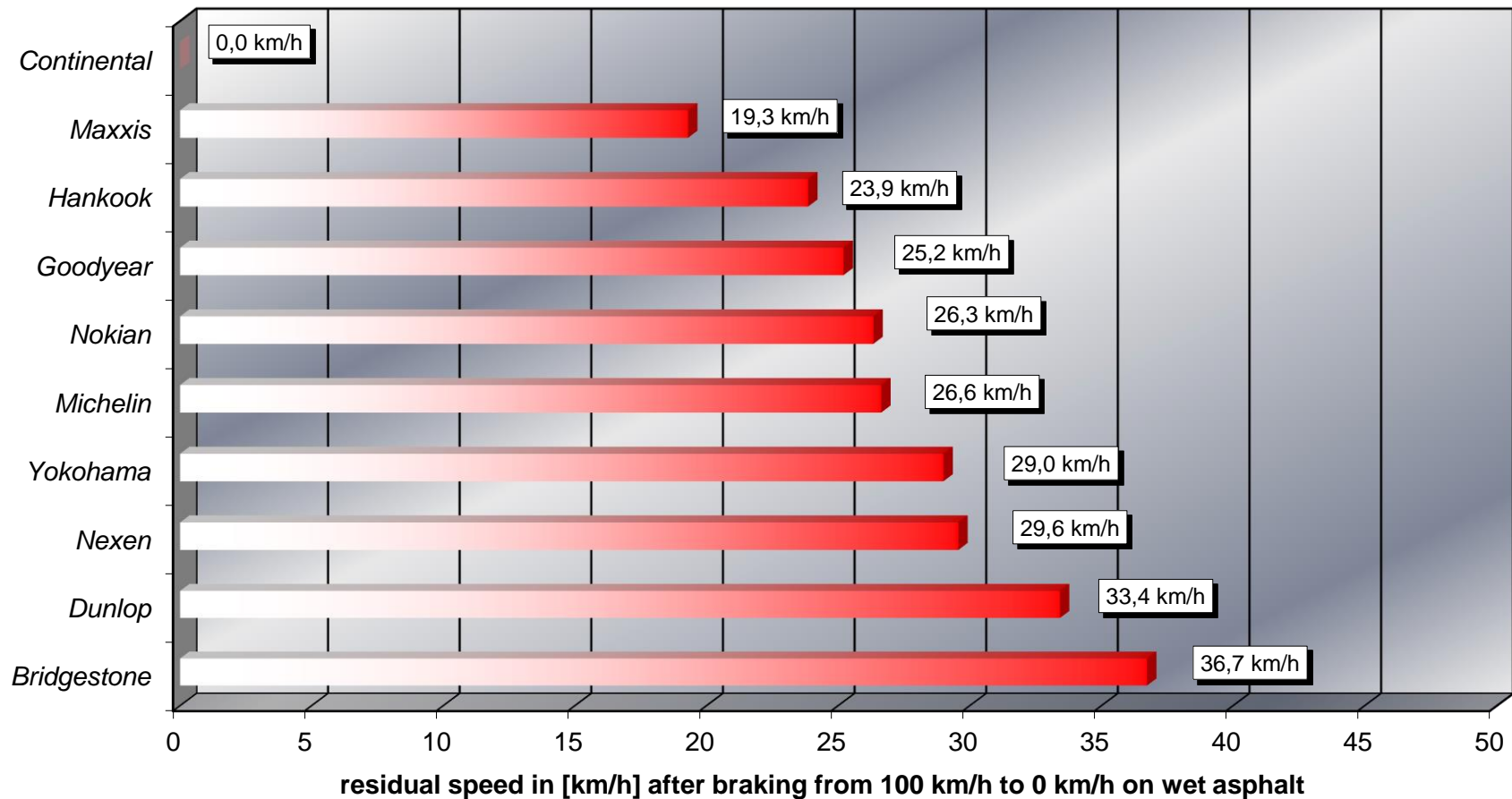


Autožurnál Summer Tire Test 215/65 R 16 4-wheel ABS wet braking



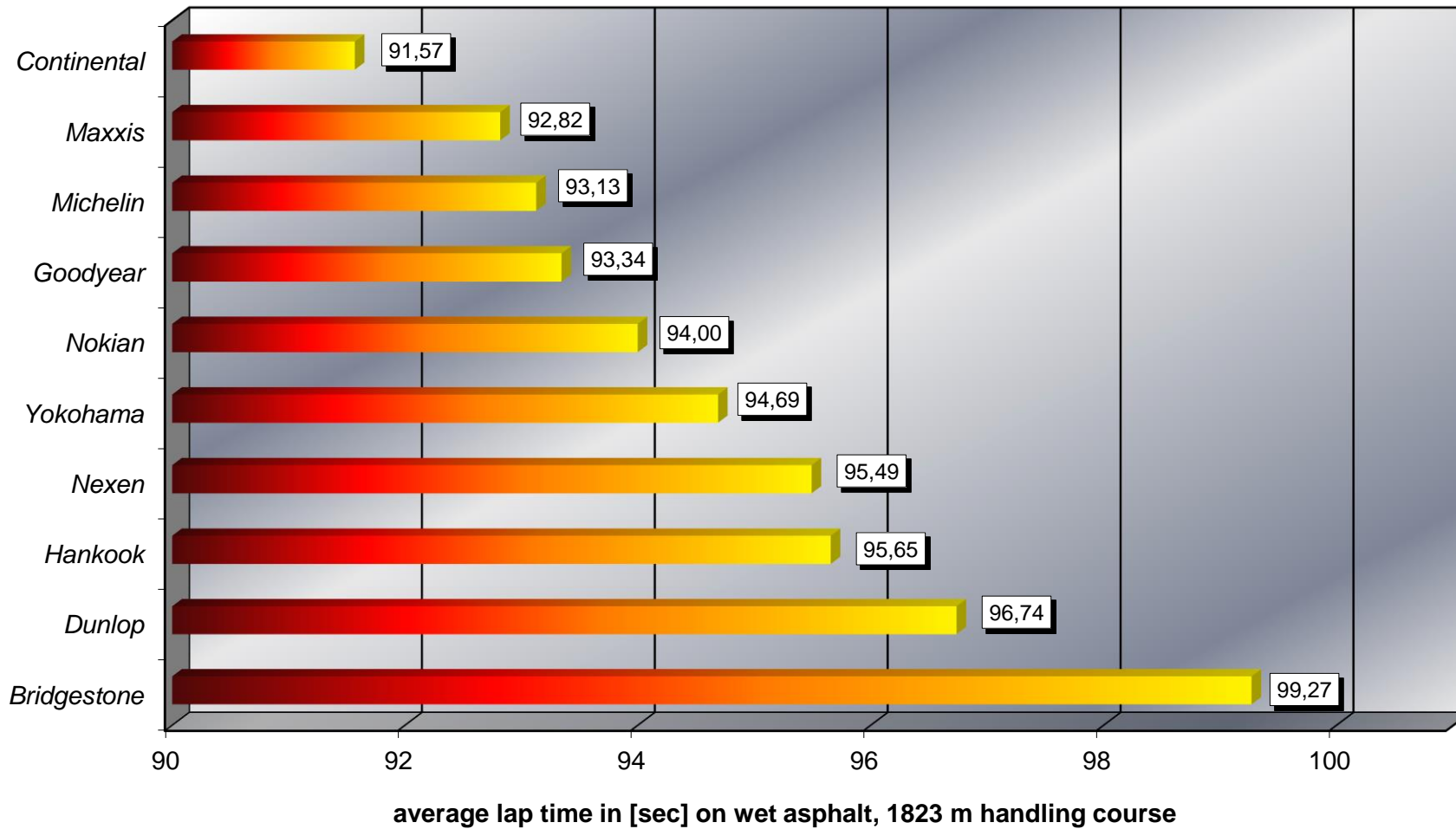


Autožurnál Summer Tire Test 215/65 R 16 4-wheel ABS wet braking residual speed, after the best tire already stopped

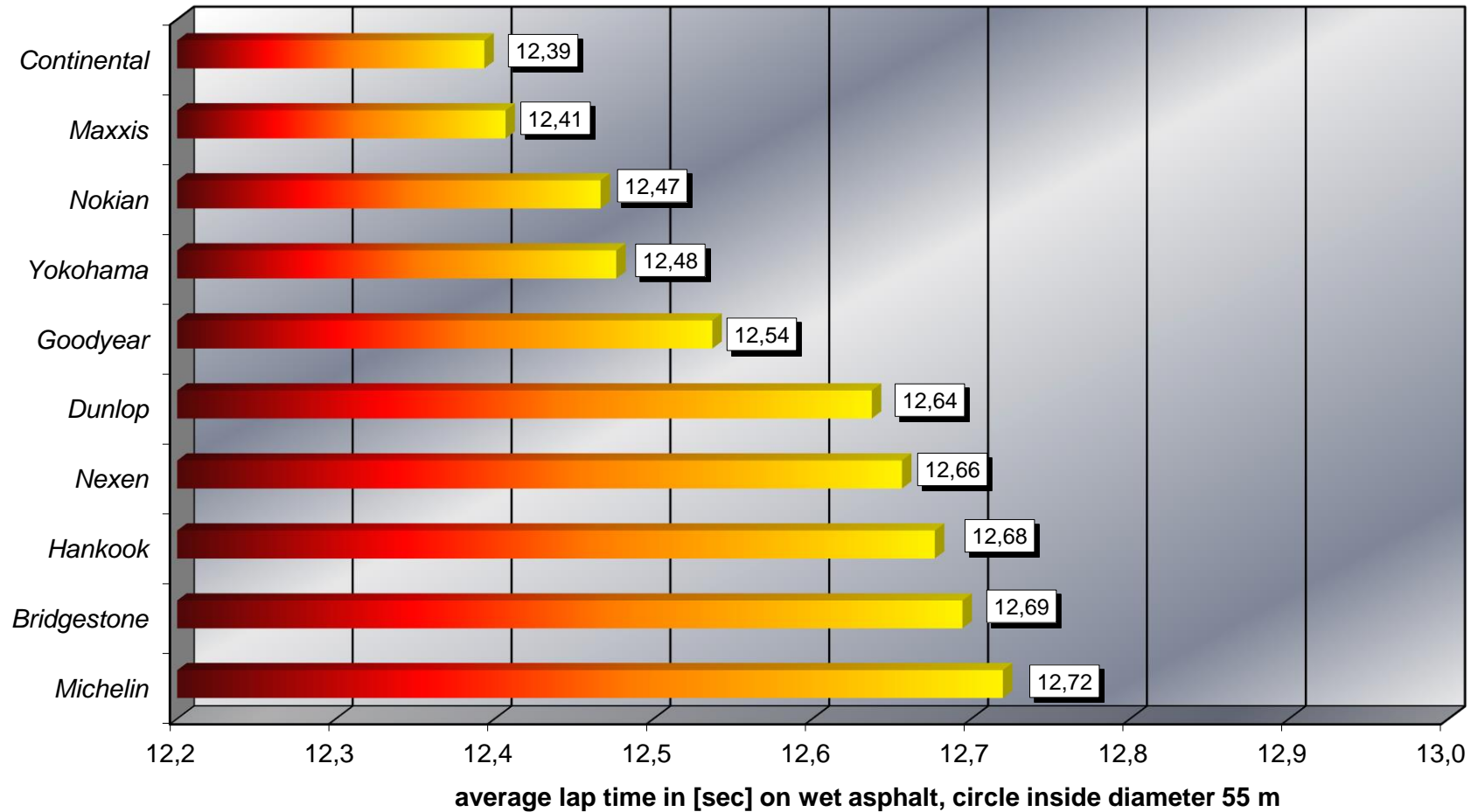




Autožurnál Summer Tire Test 215/65 R 16 wet handling

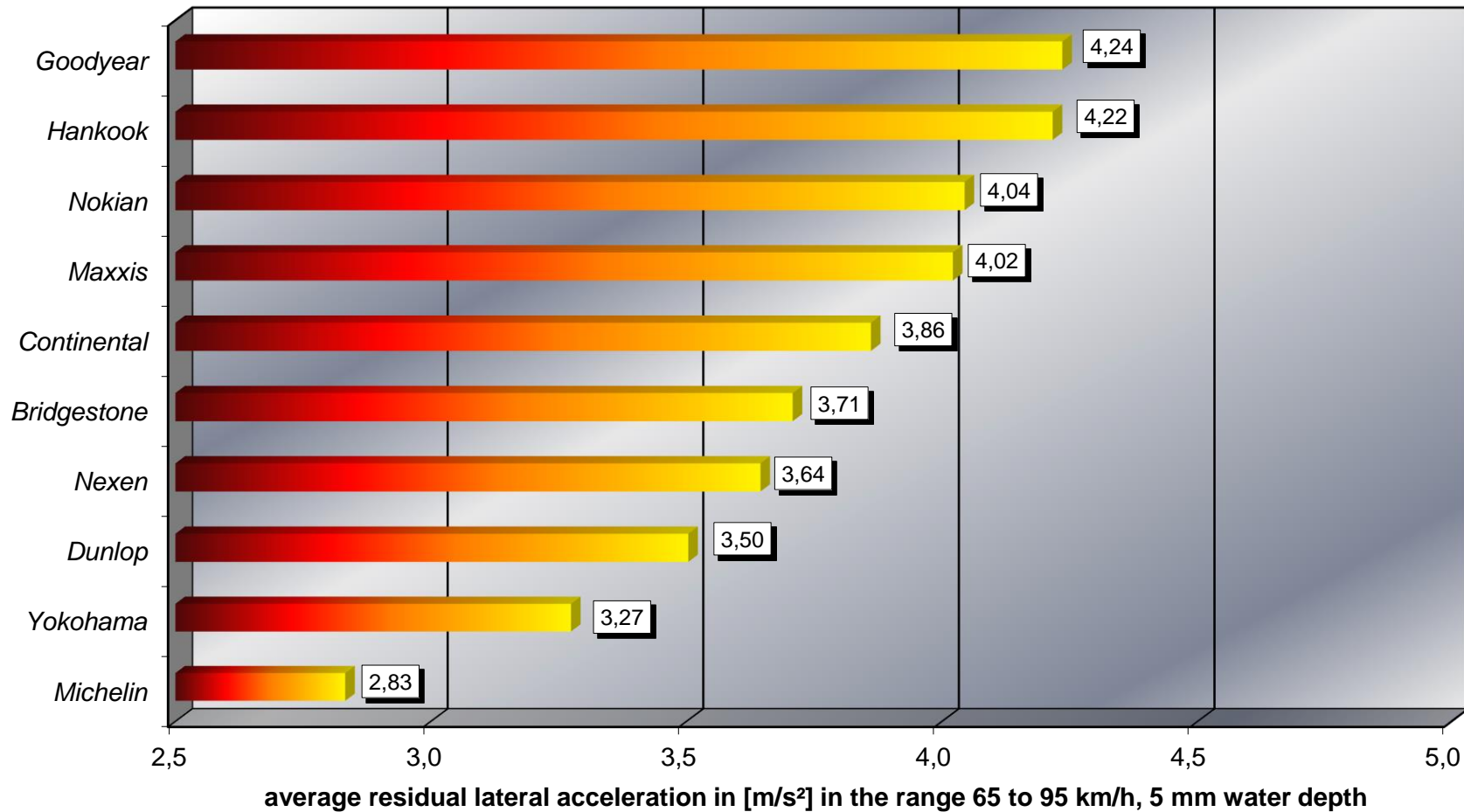


Autožurnál Summer Tire Test 215/65 R 16 wet cornering, asphalt



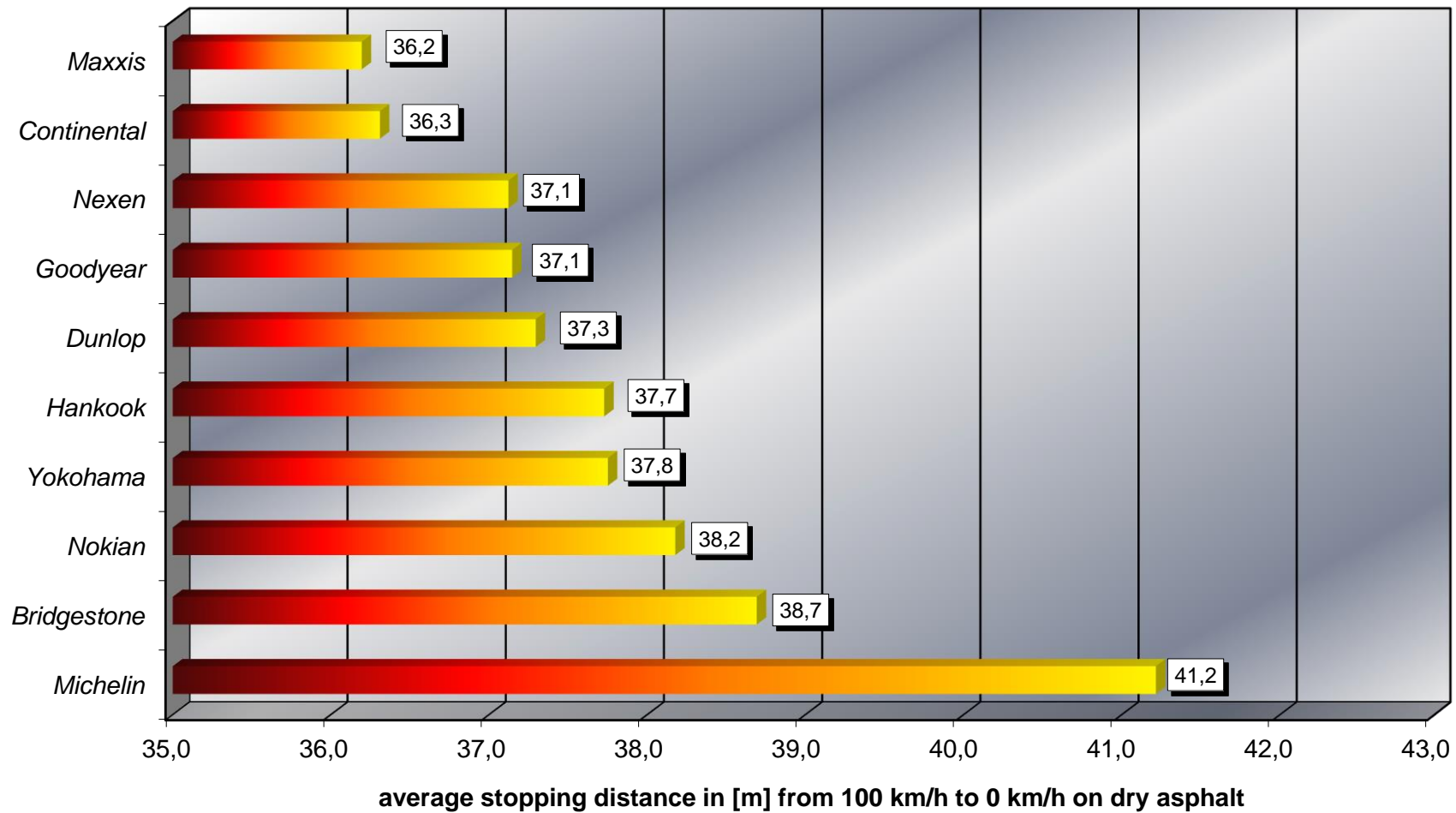


Autožurnál Summer Tire Test 215/65 R 16 aquaplaning-lateral





Autožurnál Summer Tire Test 215/65 R 16 ABS dry braking

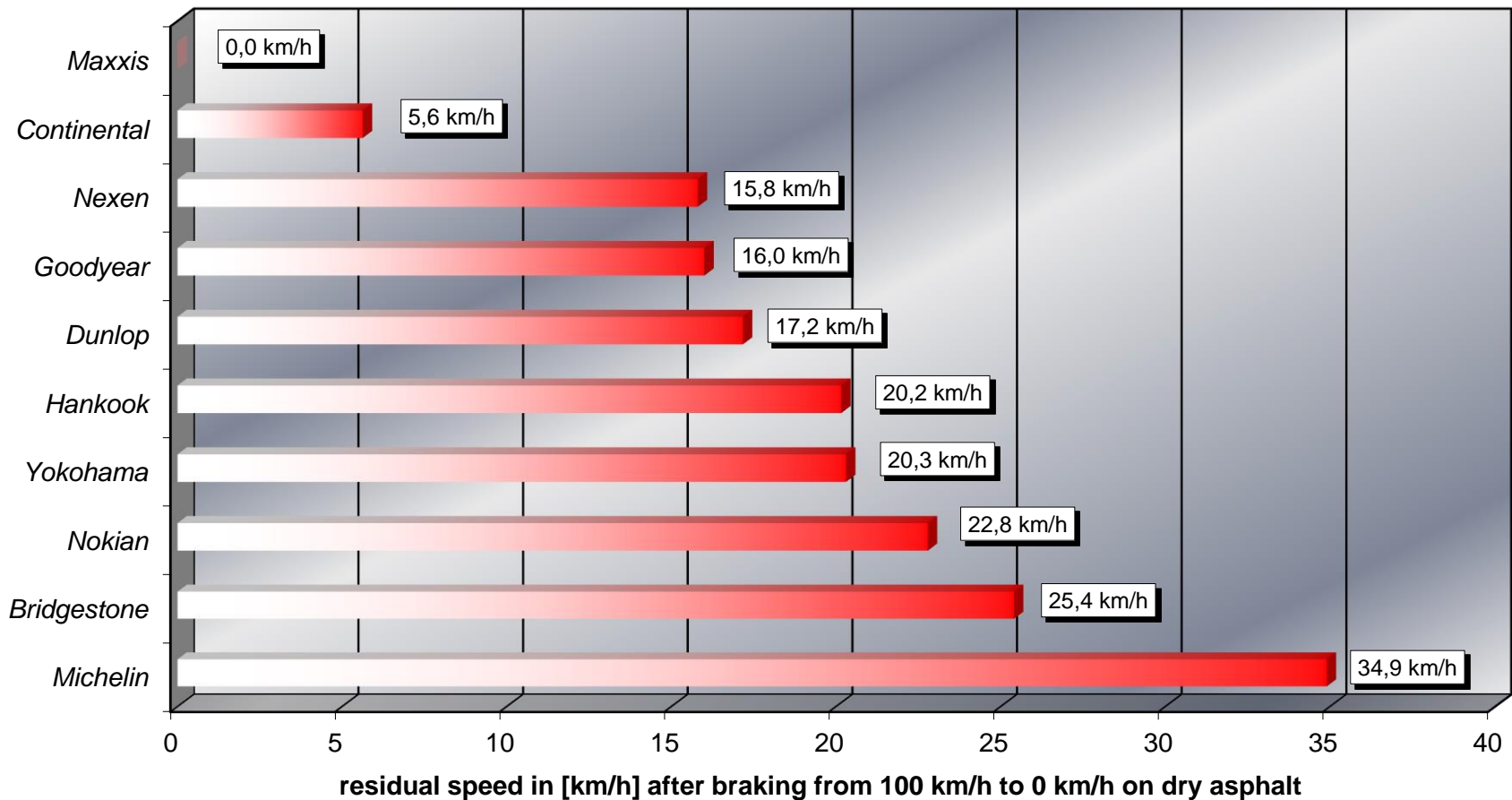




Autožurnál Summer Tire Test 215/65 R 16

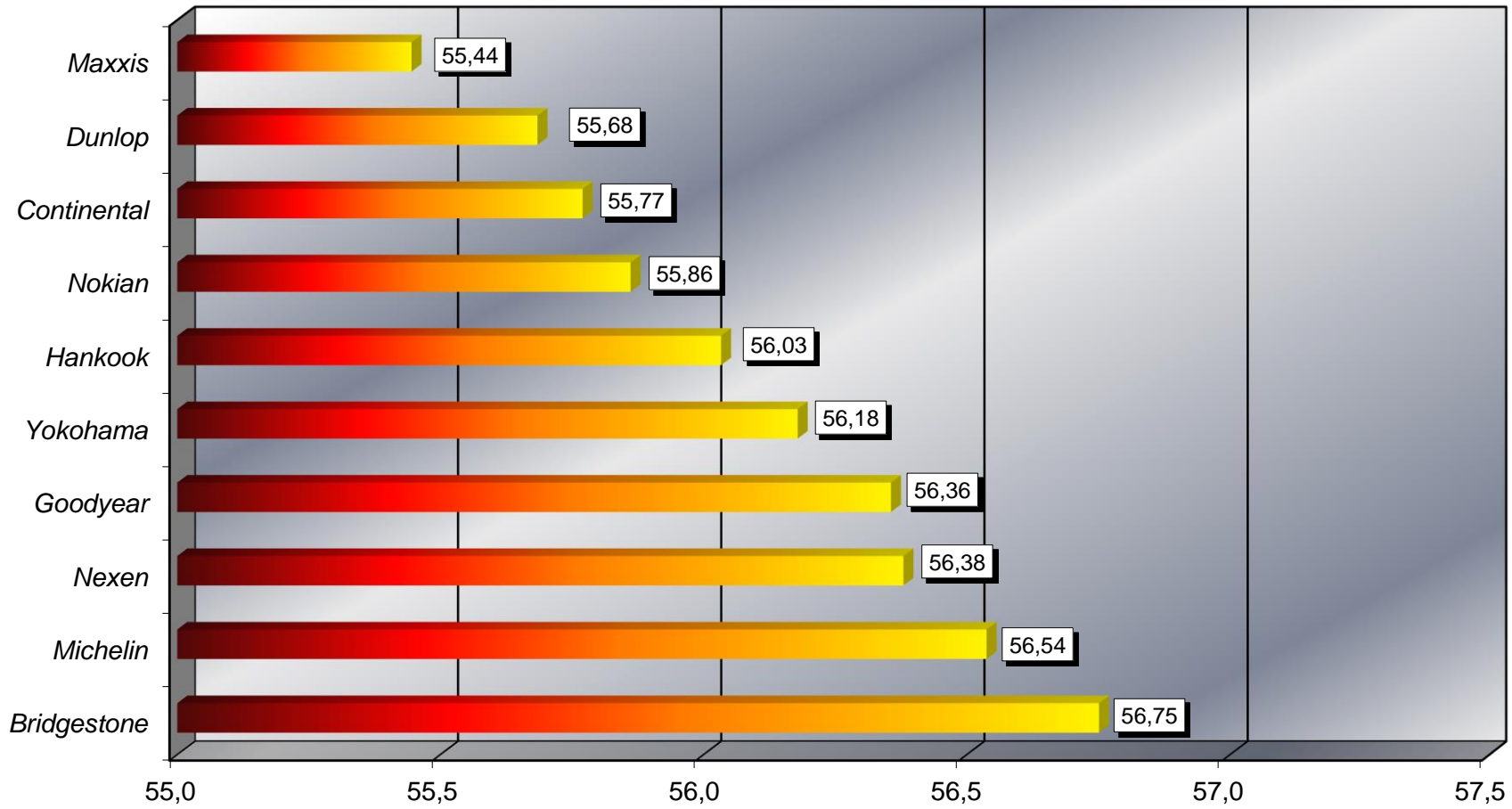
4-wheel ABS dry braking

residual speed, after the best tire already stopped





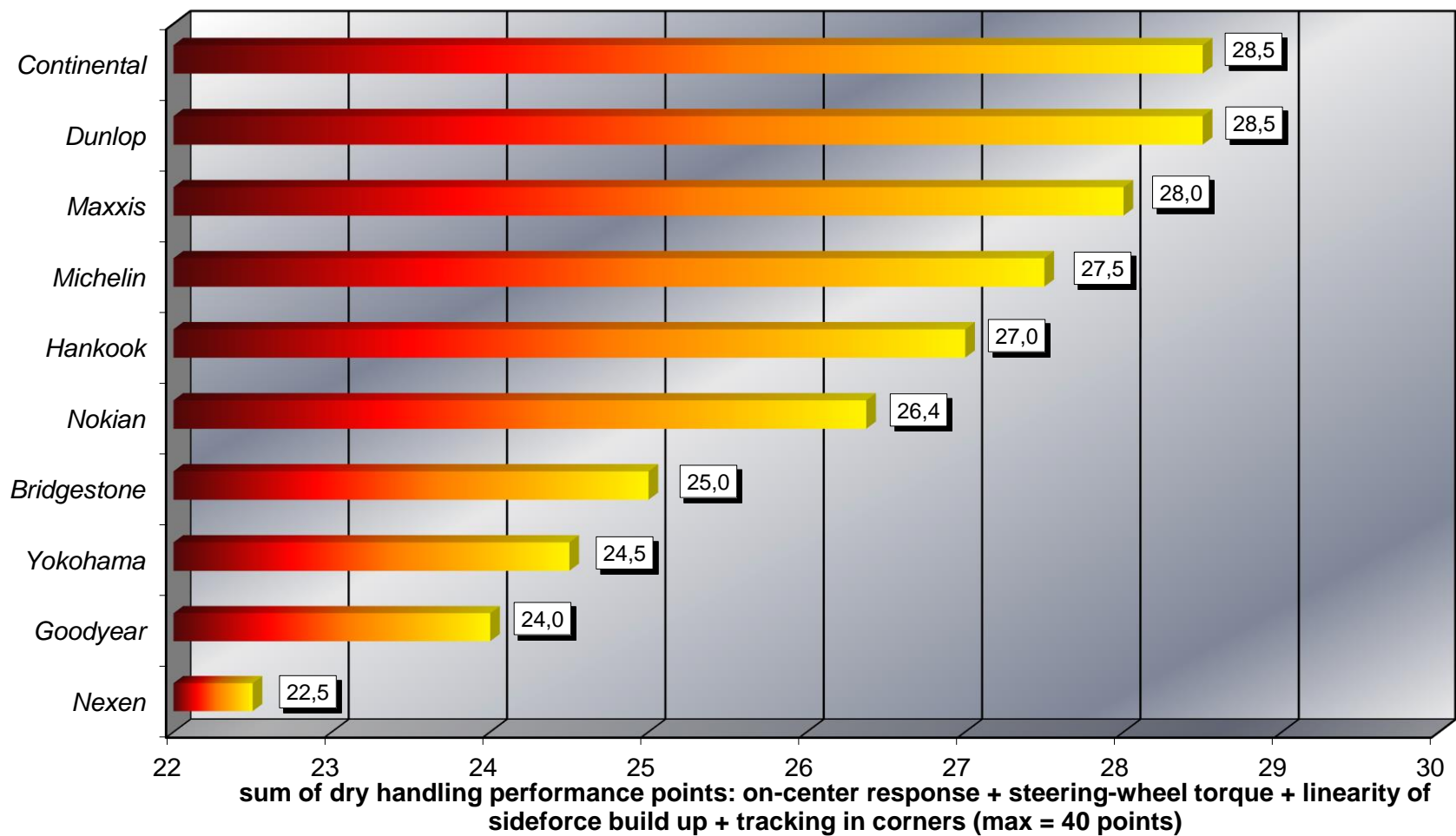
Autožurnál Summer Tire Test 215/65 R 16 dry handling



average laptime in [sec] on dry asphalt, 3330 m handling course

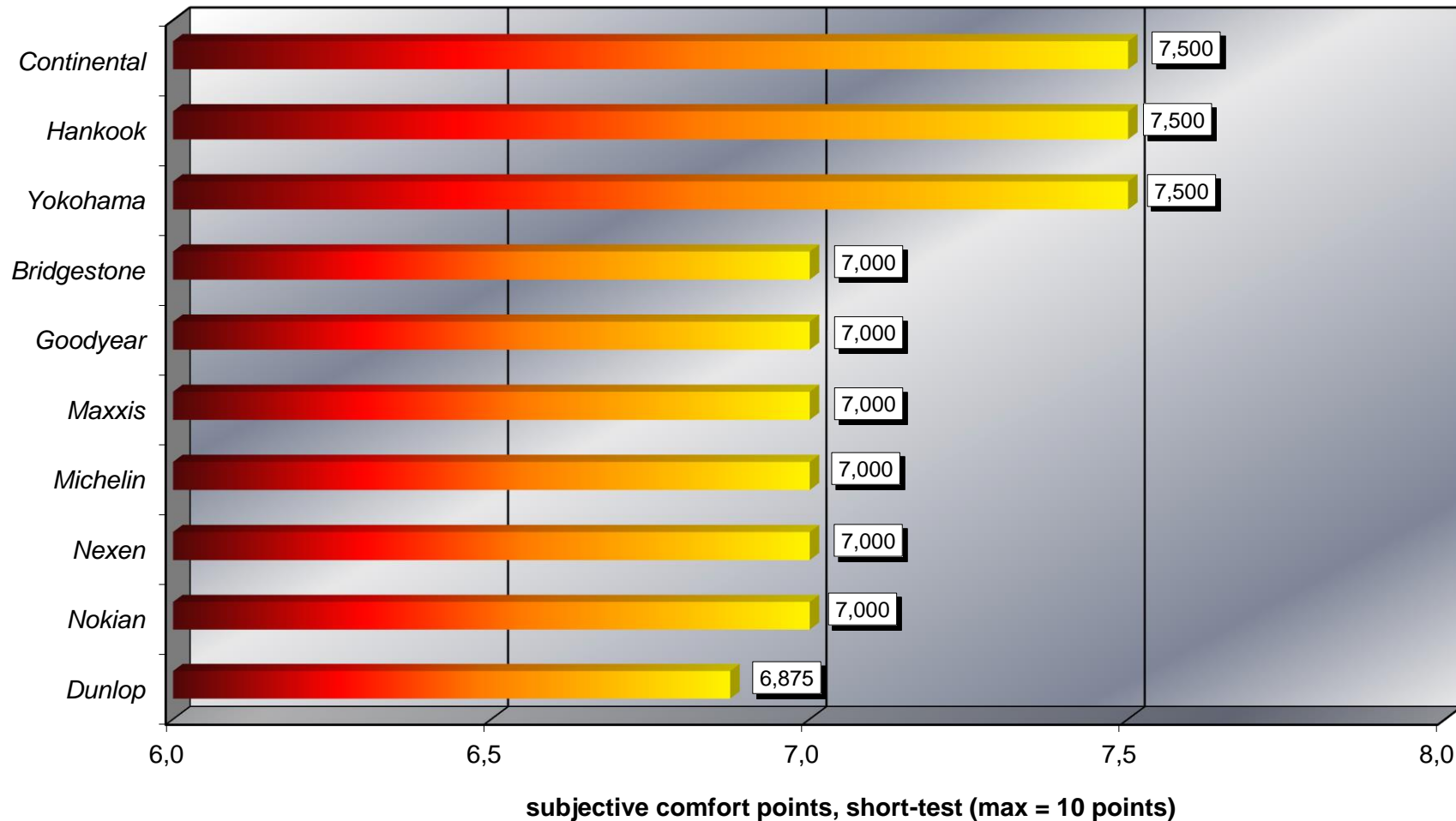


Autožurnál Summer Tire Test 215/65 R 16 subjective dry performance





Autožurnál Summer Tire Test 215/65 R 16 subjective comfort



TEST REPORT

Test Order Results

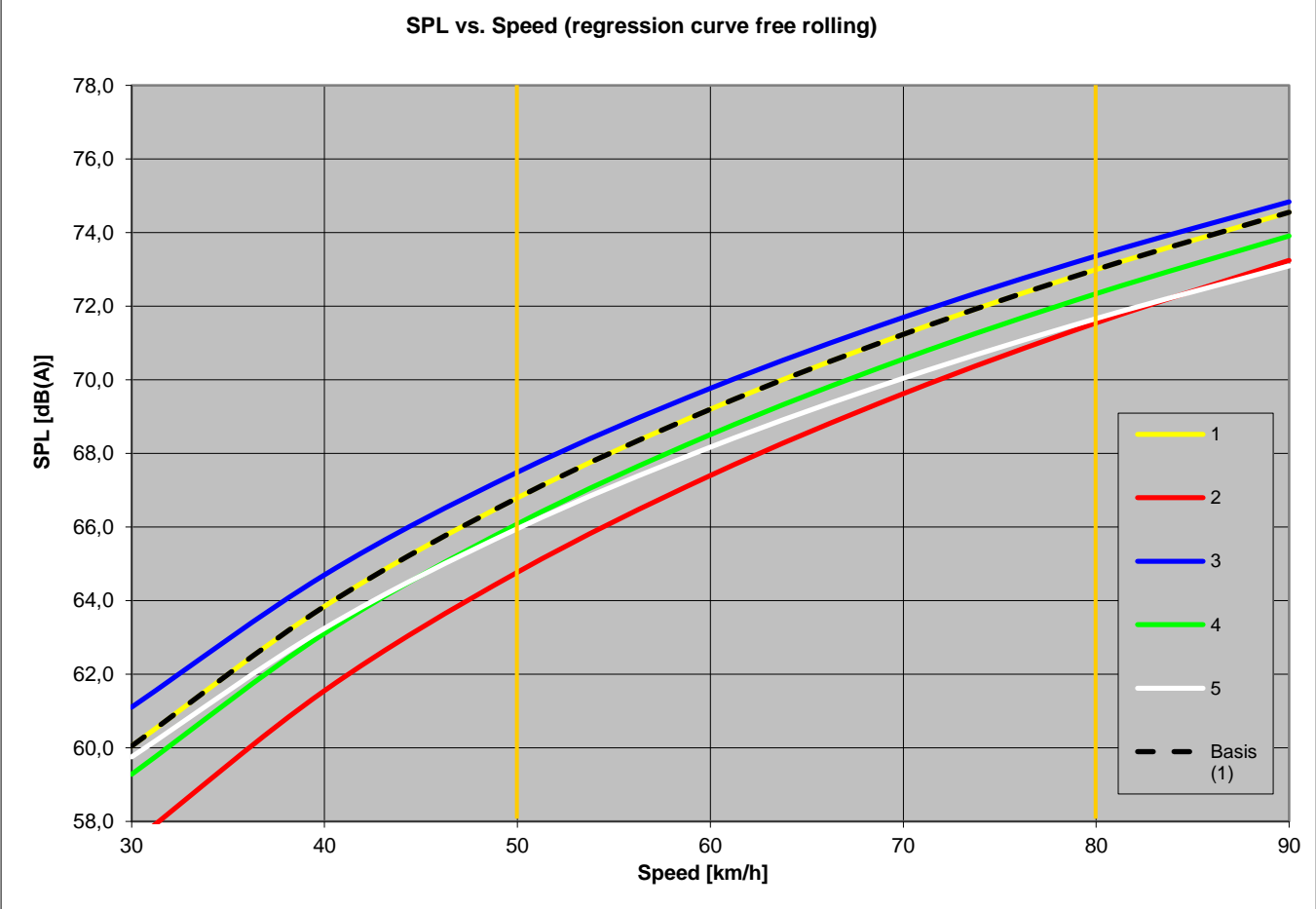
TEST PLAN
TEST ORDER
TEST/Gen./Var.

0
2
NCB

Test Plan text	Autozurnal Summer Tire Test 2016 VW Tiguan 215/65 R 16				
Group No.	1	2	3	4	5
Tire Size	215/65 R 16	215/65 R 16	215/65 R 16	215/65 R 16	215/65 R 16
Shorehärte					
LI SSS Add.LI Add.SSY	98 H	102 V	98 H	98 H	98 H
Brand	Continental	Michelin	Goodyear	Nokian	Hankook
Trade Name	NTIPREMIUMCON	CROSSCLIMATE	ENTGRIP PERFORM	LINE SUV	KINERGY ECO K425
Order No. DOT	CT121943	CT121944	CT121945	CT121946	CT121947

TEST PARAMETERS 12th-15th September 2016 Test Track Date Of Test Surface temperature [°C] Air temperature [°C] Rim Load front / rear [kg] Inflation pressure front / rear [bar]	VW Tiguan ISO10844 Track Contidrom (LKW)				
	26.08.2016	26.08.2016	26.08.2016	26.08.2016	26.08.2016
	24,7	27,4	29,7	31,4	40,6
	27,7	28,3	29,3	30,5	34
	7Jx16 ET33	7Jx16 ET33	7Jx16 ET33	7Jx16 ET33	7Jx16 ET33
	empty	empty	empty	empty	empty
	2,2 / 2,2	2,2 / 2,2	2,2 / 2,2	2,2 / 2,2	2,2 / 2,2

RESULTS					
Free Rolling					
SPL at 50 km/h	66,7 ± 0,2	64,7 ± 0,2	67,4 ± 0,2	66,0 ± 0,2	65,9 ± 0,2
SPL at 80 km/h	72,9 ± 0,2	71,5 ± 0,2	73,3 ± 0,2	72,3 ± 0,2	71,6 ± 0,2
speed gradient	30,400	33,195	28,779	30,657	27,962
EU-Label (indicative)	71	70	72	71	70
Acceleration					
SPL at 2. Gear					
SPL at 3. Gear					
Average					



TEST REPORT

Test Order Results

TEST PLAN
TEST ORDER
TEST/Gen./Var.

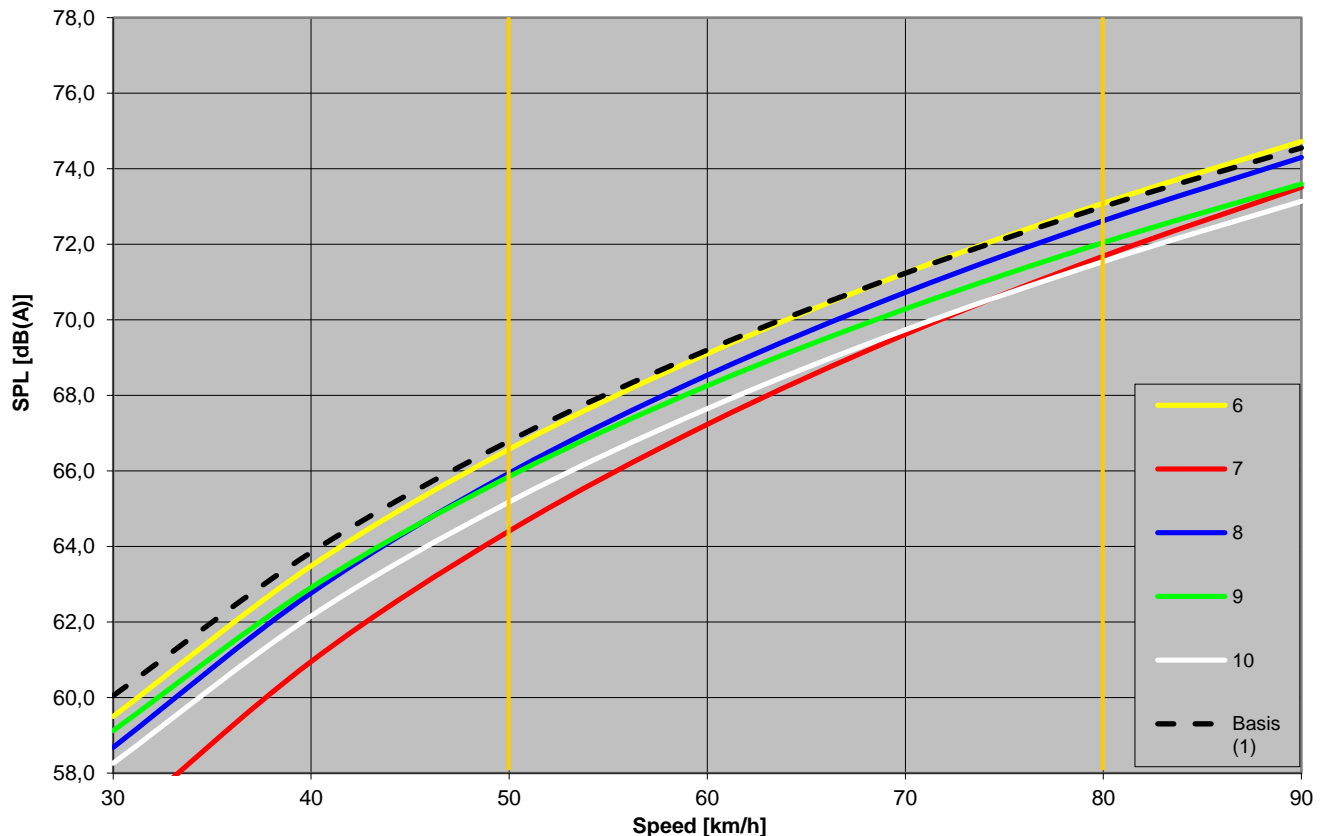
0
2
NCB

Test Plan text	Autozurnal Summer Tire Test 2016 VW Tiguan 215/65 R 16				
Group No.	6	7	8	9	10
Tire Size	215/65 R 16	215/65 R 16	215/65 R 16	215/65 R 16	215/65 R 16
Shorehärte					
LI SSS Add.LI Add.SSY	98 H	98 H	98 H	98 V	98 H
Brand	Bridgestone	Nexen	Dunlop	Maxxis	Yokohama
Trade Name	DUELER H/P SPORT	N BLUE HD PLUS	SPORT FASTRESP	PREMITRA HP5	BLUEARTH-A AE50
Order No. DOT	CT121948	CT121949	CT121950	CT121951	CT121952
TEST PARAMETERS	VW Tiguan				
Vehicle	ISO10844 Track Contidrom (LKW)				
Test Track					
Date Of Test	26.08.2016	26.08.2016	26.08.2016	26.08.2016	26.08.2016
Surface temperature [°C]	42	36,6	33	35,1	39,3
Air temperature [°C]	34,6	32,2	31,3	31,6	33,6
Rim	7Jx16 ET33	7Jx16 ET33	7Jx16 ET33	7Jx16 ET33	7Jx16 ET33
Load front / rear [kg]	empty	empty	empty	empty	empty
Inflation pressure front / rear [bar]	2,2 / 2,2	2,2 / 2,2	2,2 / 2,2	2,2 / 2,2	2,2 / 2,2

RESULTS

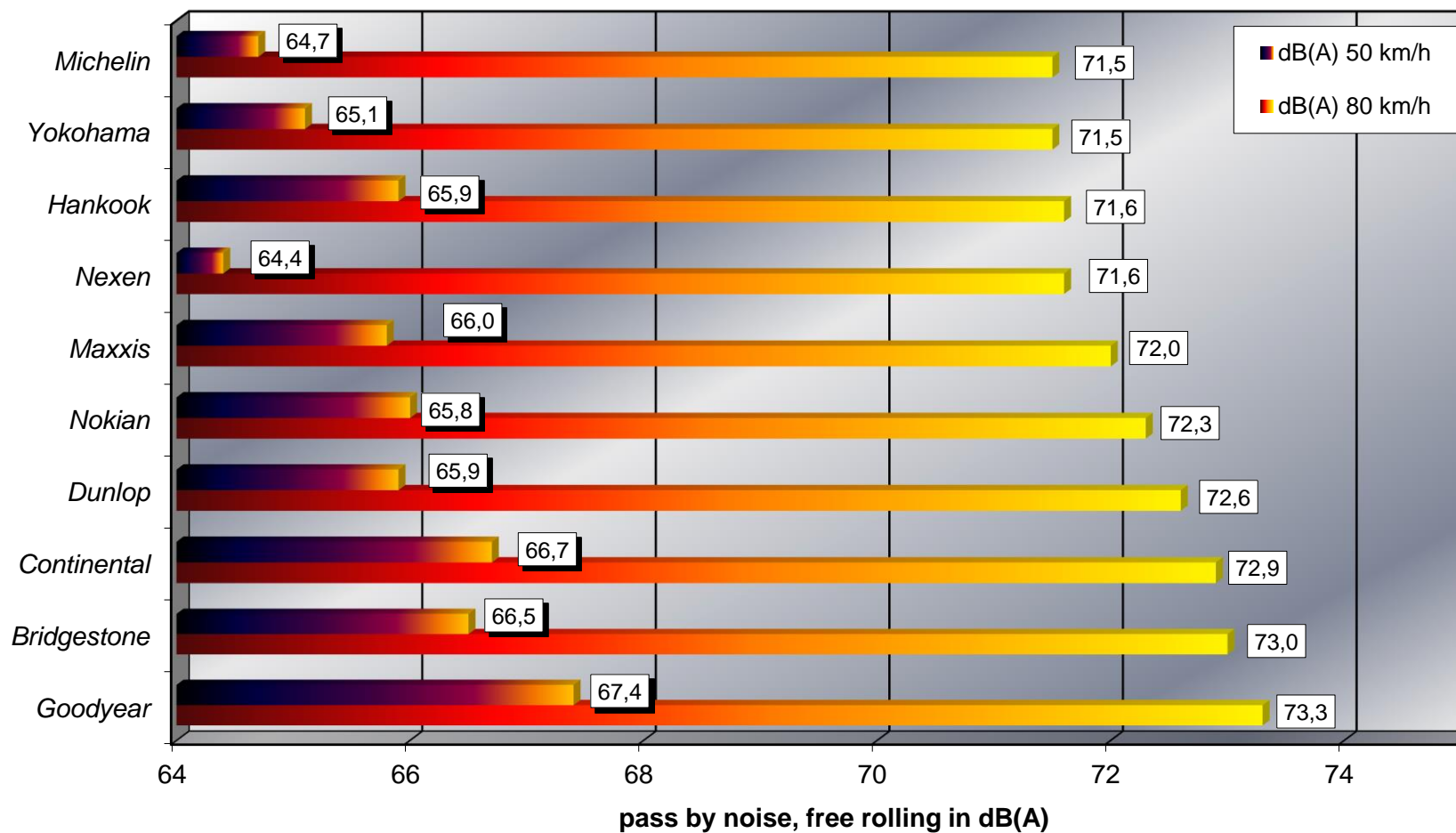
Free Rolling					
SPL at 50 km/h	66,5 ± 0,2	64,4 ± 0,2	65,9 ± 0,2	65,8 ± 0,2	65,1 ± 0,2
SPL at 80 km/h	73,0 ± 0,2	71,6 ± 0,2	72,6 ± 0,2	72,0 ± 0,2	71,5 ± 0,2
speed gradient	31,903	35,648	32,732	30,336	31,182
EU-Label (indicative)	72	70	71	71	70
Acceleration					
SPL at 2. Gear					
SPL at 3. Gear					
Average					

SPL vs. Speed (regression curve free rolling)





Autožurnál Summer Tire Test 215/65 R 16 pass-by noise outside



Autoklub/Autozurnal Summer Tire Test 2016 in 215/65 R 16

Rolling Resistance

Brand	Tread Pattern	LI	% relative to Reference	cr [Li=98]	Label
Continental	ContiPremiumContact 5	98 H	100,0	0,772	7,9 C
Bridgestone	Dueler H/P Sport	98 H	82,0	0,941	9,6 E
Dunlop	SP Sport Fast Response	98 H	102,0	0,757	7,8 C
Goodyear	Efficient Grip Performance	98 H	109,0	0,708	7,3 B
Hankook	Kinergy Eco K425	98 H	95,5	0,808	8,3 C
Maxxis	Premitra HP5	98 V	92,7	0,833	8,5 C
12th-15th Sep Michelin	CrossClimate	102 V	98,2	0,786	8,0 -
Nexen	N Blue HD Plus	98 H	92,1	0,838	8,6 C
Nokian	Line SUV	102 H	86,5	0,892	9,1 -
Yokohama	BluEarth-A AE50	98 H	97,2	0,794	8,1 C

Load SL 5886 N

Infl.Pressure SL 2,1 bar

Calculation % = $CR_{(Reference)} / CR_{(Test)} \times 100$



Autožurnál Summer Tire Test 215/65 R 16 rolling resistance

