



1

1.1

S51

1993-2009

2009

2014

2015

S51

2017

2017

S51

60m

1.2

1

2

3

4



2

2.1

	1993-2009		2009	2014
2015		S51		2017
2017				
	1993			
2	1	1	1	
	1	3		1

2.2

	3	0.1m	0.3m
3		0.5~0.9m	
	3	0.5m	
0.9m			
		BDT15	
	BDT9		
	BDT15		
80m	BDT0		



3

3.1

S51

60m

3.2

3.3

3.3-1

3.3- 1

4

4.1

4.2

1

2

3

4.3

4.3.1

4.3 1

		OISER _{nc} kg ⁻¹ m ⁻¹
		1.21E-06

5

5.1

SF

RfD

SF_o

RfD_o

HJ25.3-2014

B

G

5.1-1

5.1- 1



7.1

7.1.1

1

2

3

4

7.1.2

1

2

3

4



8

8.1

3

ABS_d

5.75E-03

1

1.06E-01~4.90E-01

1

8.2

1

2

