

# HEAVY DUTY BASE MACHINE FOR FOUNDATION WORK

# KOBELCO

## BME550HD

**Max. Lifting Capacity: 55 t**  
**Max. Boom Length: 51.8 m**

## BME750HD

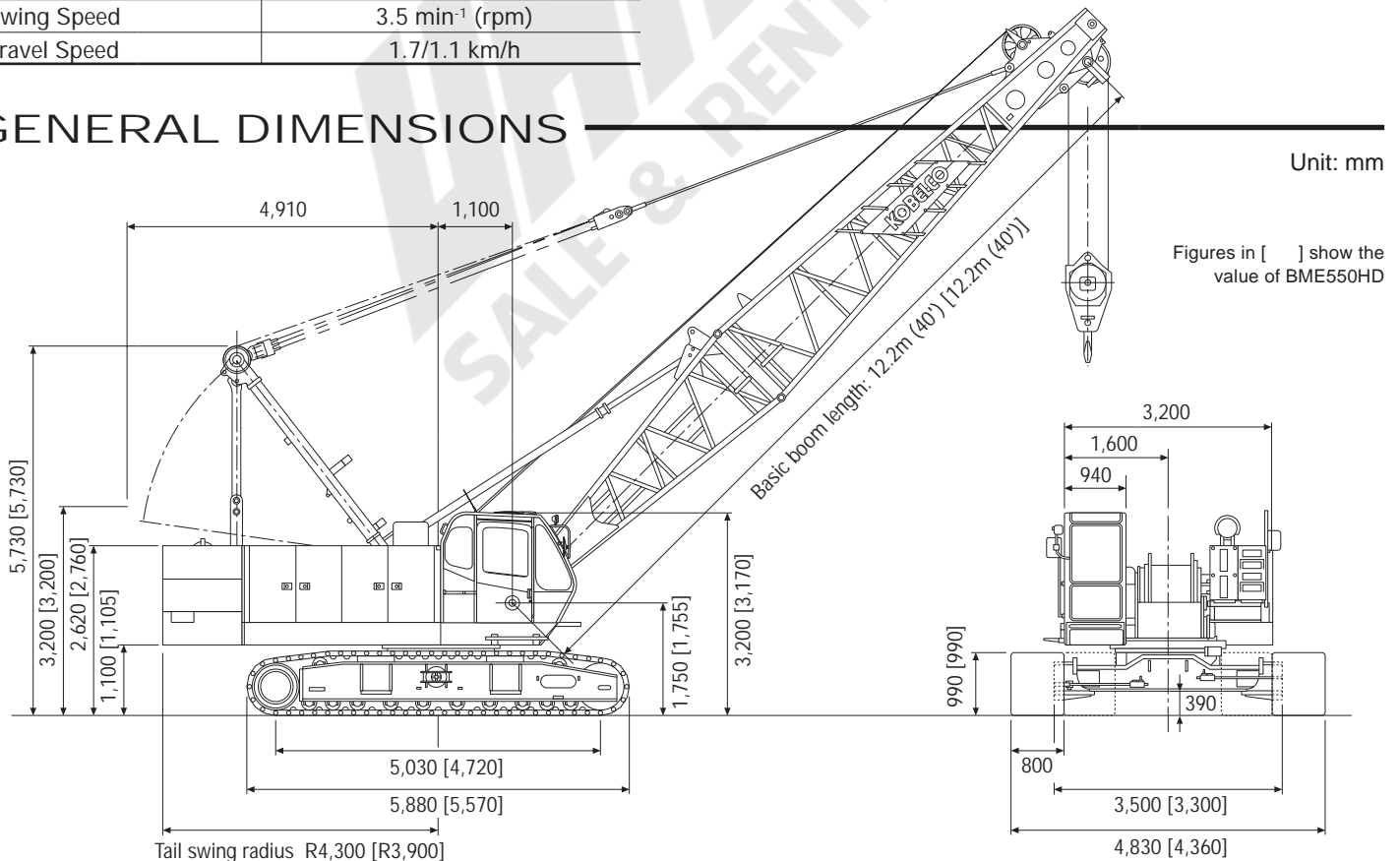
**Max. Lifting Capacity: 75 t**  
**Max. Boom Length: 54.9 m**  
**Max. Jib Combination: 42.7 + 18.3 m**

### S P E C I F I C A T I O N S

Crane Boom	BME550HD	BME750HD
Max. Lifting Capacity	55 t / 3.4 m	75 t / 3.5 m
Max. Length	51.8 m	54.9 m
Crane Jib		
Max. Lifting Capacity	NA	6.6 t
Max. Length	NA	18.3 m
Max. Combination	NA	42.7 m + 18.3 m
Main & Aux. Winch		
Max. Line Speed	100 m/min (1st layer)	
Rated Line Pull	108 kN (11 tf)	
Max. Line Pull	196 kN (20 tf)	
Wire Rope	26 mm	
Wire Rope Length	160 m (Main) 110 m (Aux.)	170 m (Main) 125 m (Aux.)
Brake Type	Wet-type multiple-disc brake	
Free-Fall	Standard	
Working Speed		
Swing Speed	3.5 min <sup>-1</sup> (rpm)	
Travel Speed	1.7/1.1 km/h	

Power Plant	BME550HD	BME750HD
Model	Mitsubishi 6D24-TLU2D	
Engine Output	235 kW/2,000 min <sup>-1</sup> (rpm)	
Fuel Tank Capacity	400 liters	
Hydraulic System		
Main Pumps	3 variable displacement	
Max. Pressure	30.9 MPa (315 kgf/cm <sup>2</sup> )	
Hydraulic Tank Capacity	520 liters	
Weight		
Operating Weight	Approx. 53.0 t	Approx. 69.0 t
Counterweight	15.8 t	22.9 t
Transport Weight	35.9 t	43.9 t
	(Main machine with crawler and lower boom)	
Ground Pressure	68 kPa (0.69 kgf/cm <sup>2</sup> )	78 kPa (0.80 kgf/cm <sup>2</sup> )

## GENERAL DIMENSIONS



**KOBELCO CRANES CO., LTD.**

# CLAMSHELL

## BME550HD

Clamshell ratings in metric tons for 360° working area (Crawler fully extended)

(With side load condition)

Working radius (m)	Boom length (m)	12.2	15.2	18.3	21.3	24.4
5.0	5.0					
6.0	5.0	5.0				
7.0	5.0	5.0	5.0			
8.0	5.0	5.0	5.0	5.0		
9.0	5.0	5.0	5.0	5.0	4.8	
10.0	5.0	5.0	5.0	5.0	4.7	
12.0		5.0	5.0	4.6	4.4	
14.0			5.0	4.5	4.3	
16.0			5.0	4.4	4.1	
18.0				4.3	3.8	
20.0					3.6	
22.0					3.4	

(No side load condition)

Working radius (m)	Boom length (m)	12.2	15.2	18.3	21.3	24.4
5.0	5.0	6.5				
6.0	5.0	6.5	6.5			
7.0	5.0	6.5	6.5	6.5		
8.0	5.0	6.5	6.5	6.5	6.5	
9.0	5.0	6.5	6.5	6.5	6.5	6.4
10.0	5.0	6.5	6.5	6.5	6.5	6.2
12.0		6.5	6.5	6.5	6.2	5.8
14.0			6.5	6.5	6.0	5.6
16.0				6.5	5.8	5.3
18.0					5.3	5.1
20.0						4.5
22.0						4.0

## BME750HD

Clamshell ratings in metric tons for 360° working area (Crawler fully extended)

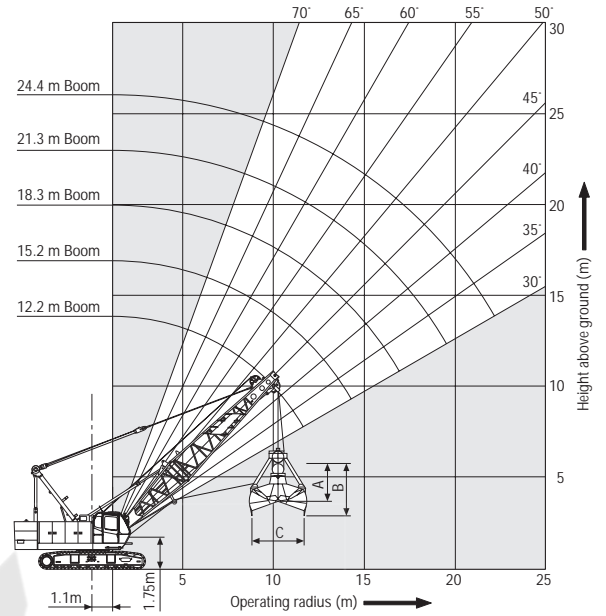
(With side load condition)

Working radius (m)	Boom length (m)	12.2	15.2	18.3	21.3	24.4
5.0	5.0	7.5				
6.0	5.0	7.5	7.5			
7.0	5.0	7.5	7.5	7.5		
8.0	5.0	7.5	7.5	7.5	7.5	
9.0	5.0	7.5	7.5	7.5	7.5	7.4
10.0	5.0	7.5	7.5	7.5	7.5	7.1
12.0	5.0	7.5	7.5	7.5	7.2	6.8
14.0	5.0	7.5	7.5	7.0	6.5	
16.0		7.5	7.5	6.8	6.2	
18.0			7.5	6.5	5.9	
20.0				6.2	5.6	
22.0					5.3	

(No side load condition)

Working radius (m)	Boom length (m)	12.2	15.2	18.3	21.3	24.4
5.0	5.0	10.0				
6.0	5.0	10.0	10.0			
7.0	5.0	10.0	10.0	10.0		
8.0	5.0	10.0	10.0	10.0	10.0	
9.0	5.0	10.0	10.0	10.0	10.0	9.8
10.0	5.0	10.0	10.0	10.0	10.0	9.4
12.0	5.0	10.0	10.0	10.0	9.6	9.0
14.0	5.0	10.0	10.0	9.3	8.6	
16.0		10.0	10.0	9.0	8.2	
18.0			10.0	8.1	7.8	
20.0				7.0	6.9	
22.0					6.1	

## WORKING RANGE



Note:

- Total weight of bucket and materials must not exceed rated load.  
 $\text{Bucket capacity (m}^3\text{)} \times \text{Specified gravity of material (t/m}^3\text{)} + \text{Bucket weight (t)} = \text{Rated load}$

## CLAMSHELL BUCKET

(Reference only)

Bucket capacity (m³)	Approximate weight (t)	Bucket dimensions (m)		
		A	B	C
1.6	3.2	3.3	3.6	3.0
2.0	3.8	3.5	3.9	3.1
1.25	3.6	2.9	3.7	3.0
1.6	4.6	3.2	4.0	3.2

# DRAGLINE

## BME550HD

A	Boom length (m)	12.2			15.2			18.3			21.3		
θ	Boom angle (°)	30	40	50	30	40	50	30	40	50	30	40	50
D	Operating radius (m)	11.9	10.7	9.2	14.5	13.0	11.2	17.2	15.4	13.1	19.9	17.7	15.1
G	Max. digging reach (m)	16.8	15.3	13.3	20.2	18.3	15.7	23.4	21.3	18.2	26.7	24.3	20.6
	Rated load (t)	6.3	7.2	8.7	4.8	5.5	6.7	3.8	4.4	5.5	3.1	3.4	4.6

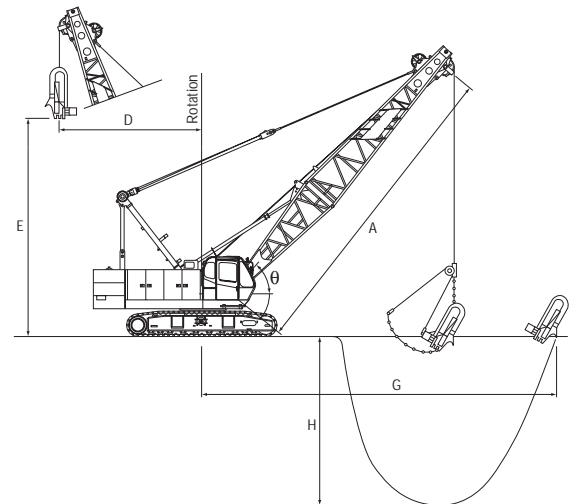
## BME750HD

A	Boom length (m)	12.2			15.2			18.3			21.3			24.4		
θ	Boom angle (°)	30	40	50	30	40	50	30	40	50	30	40	50	30	40	50
D	Operating radius (m)	11.9	10.7	9.2	14.5	13.0	11.2	17.2	15.4	13.1	19.9	17.7	15.1	22.5	20.0	17.2
G	Max. digging reach (m)	16.8	15.3	13.3	20.2	18.3	15.7	23.4	21.3	18.2	26.7	24.3	20.6	30.0	27.3	23.0
	Rated load (t)	9.5	10.9	11.0	7.5	8.5	10.3	5.7	6.7	8.4	4.7	5.5	6.9	3.9	4.6	6.2

Note:

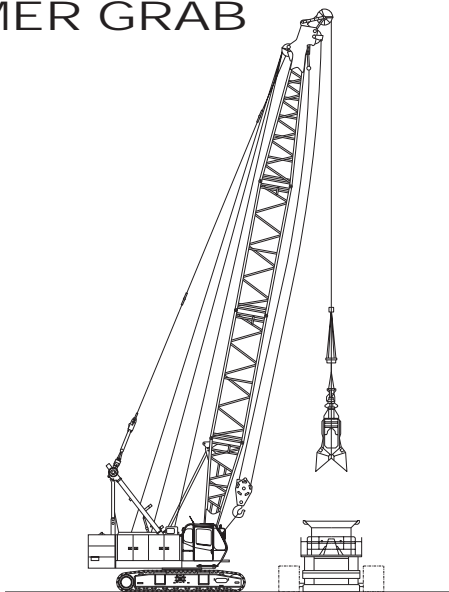
- Dimension G may vary depending on digging conditions and the skill of operator.
- Dimension H may vary depending on digging material.
- Dimension E may vary depending on bucket size.
- Total weight of bucket and materials must not exceed rated load.  
 $\text{Bucket capacity (m}^3\text{)} \times \text{Specified gravity of material (t/m}^3\text{)} + \text{Bucket weight (t)} = \text{Rated load}$

## WORKING RANGE



# APPLICATIONS

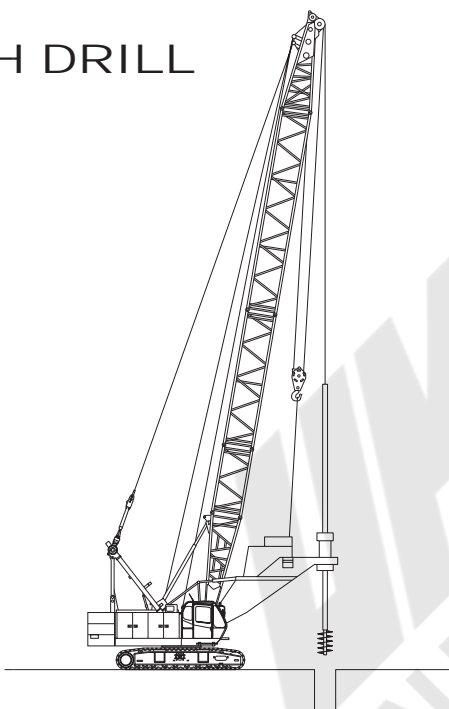
## HAMMER GRAB



RECOMMENDED SPECIFICATION		
MODEL	BME550HD	BME750HD
Boom length (m)	21.3	21.3
Lifting capacity at 7m (t)	22.5	32.6
Bucket rated load (kN)	110	110
Max. line pull (Approx.) (kN)	200	200
Wire rope (mm dia.)	26	26
Power plant (kW)	184	184
Capacity of wire rope by drum layer	1st 42m	1st 42m
	2nd 45m	2nd 45m
Suitable layer	1st to 2nd	1st to 2nd

**Bucket rated load: Bucket weight + soil**

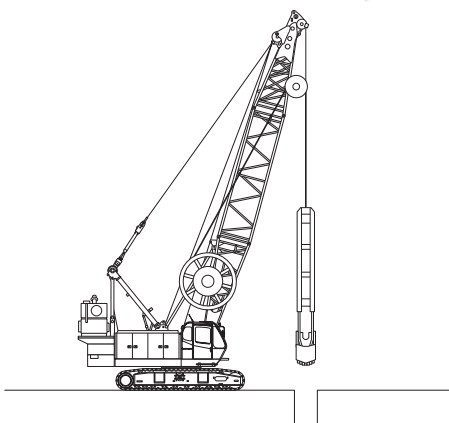
## EARTH DRILL



RECOMMENDED SPECIFICATION		
MODEL	BME550HD	BME750HD
Boom length (m)	27.4	27.4
Lifting capacity at 7m (t)	20.8	30.2
Bucket rated load (kN)	110	110
Max. line pull (Approx.) (kN)	200	200
Wire rope (mm dia.)	26	26
Power plant (kW)	184	184
Capacity of wire rope by drum layer	1st 42m	1st 42m
	2nd 45m	2nd 45m
Suitable layer	1st to 2nd	1st to 2nd

**Bucket rated load: Bucket weight + Kelly-bar weight + soil**

## HYDRAULIC DIAPHRAGM WALL BUCKET



RECOMMENDED SPECIFICATION		
MODEL	BME550HD	BME750HD
Boom length (m)	15.2	15.2
Lifting capacity at 7m (ton)	24.5	35.4
Bucket rated line pull (kN)	110	110
Max. line pull (Approx.) (kN)	200	200
Wire rope (mm dia.)	26	26
Power plant (kW)	184	184
Capacity of wire rope by drum layer	1st 42m	1st 42m
	2nd 45m	2nd 45m
Suitable layer	1st to 2nd	1st to 2nd

**Bucket rated line pull: (Bucket weight + soil)/ No. of parts of line**

**Note:** Each applications are in general values. It may vary in certain conditions. If you need further information, please consult with our dealer or branch near you.

# MAIN BOOM LIFTING CAPACITY

# BME550HD

Rated loads in metric tons for 360° working area (Counterweight: 15.8 t)

Crawlers fully extended

Boom length m (ft)	12.2 (40)	15.2 (50)	18.3 (60)	21.3 (70)	24.4 (80)	27.4 (90)	30.5 (100)	33.5 (110)	36.6 (120)	39.6 (130)	42.7 (140)	45.7 (150)	48.8 (160)	51.8 (170)	
Working radius (m)	3.0	3.4/55.0													
	4.0	51.1	4.1/45.9	4.6/37.4											
	5.0	38.5	36.3	34.4	5.2/31.5	5.7/27.0									
	6.0	30.8	29.3	27.9	26.7	25.5	6.2/23.5	6.8/20.8							
	7.0	24.9	24.5	23.4	22.5	21.6	20.8	20.0	7.3/18.5	7.8/16.5					
	8.0	20.6	20.5	20.1	19.4	18.7	18.0	17.4	16.8	16.2	8.3/14.9	8.9/13.5			
	9.0	17.6	17.4	17.3	17.0	16.4	15.8	15.3	14.8	14.3	13.8	13.3	9.4/12.3	9.9/11.1	
	10.0	15.3	15.1	15.0	15.0	14.6	14.1	13.7	13.2	12.7	12.3	11.9	11.5	11.1	10.5/10.1
	12.0	11.8/12.2	11.9	11.7	11.7	11.5	11.5	11.1	10.8	10.4	10.0	9.7	9.3	9.0	8.7
	14.0		9.7	9.6	9.5	9.4	9.3	9.2	9.0	8.7	8.4	8.1	7.8	7.5	7.2
	16.0		14.5/9.3	8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.1	6.8	6.6	6.3	6.0
	18.0			17.1/7.3	6.8	6.6	6.5	6.4	6.3	6.2	6.1	5.8	5.6	5.3	5.1
	20.0				19.8/6.0	5.7	5.6	5.5	5.4	5.3	5.2	5.0	4.8	4.6	4.4
	22.0					5.0	4.9	4.8	4.7	4.5	4.4	4.3	4.2	3.9	3.7
	24.0					22.4/4.9	4.3	4.2	4.1	3.9	3.8	3.7	3.6	3.4	3.2
	26.0						25.0/4.0	3.7	3.6	3.4	3.3	3.2	3.1	2.9	2.8
	28.0							27.7/3.3	3.1	3.0	2.9	2.8	2.6	2.5	2.4
	30.0								2.8	2.6	2.5	2.4	2.3	2.1	2.0
	32.0								30.3/2.7	2.3	2.2	2.1	2.0	1.8	1.7
	34.0									33.0/2.2	1.9	1.8	1.7	1.5	1.4
36.0										35.6/1.8	1.6	1.4	1.3	1.2	
38.0											1.4	1.2	1.1		
40.0											38.2/1.3	1.1			

- Note: 1. Rating according to DIN 15018/3 and prEN 13000.  
 2. Rating shown in  are determined by the strength of the boom or other structural components.  
 3. Instruction in the operator's manual must be strictly observed when operating the machine.

# MAIN BOOM LIFTING CAPACITY

# BME750HD

Rated loads in metric tons for 360° working area (Counterweight: 22.9 t)

Crawlers fully extended

Boom length m (ft)	12.2 (40)	15.2 (50)	18.3 (60)	21.3 (70)	24.4 (80)	27.4 (90)	30.5 (100)	33.5 (110)	36.6 (120)	39.6 (130)	42.7 (140)	45.7 (150)	48.8 (160)	51.8 (170)	54.9 (180)	
Working radius (m)	3.0	3.5/75.0														
	4.0	69.5	4.1/67.5	4.6/54.6												
	5.0	56.2	52.9	50.1	5.2/45.7	5.7/39.1										
	6.0	44.7	42.5	40.5	38.7	37.0	6.2/34.1	6.8/30.2								
	7.0	36.0	35.4	33.9	32.6	31.3	30.2	29.1	7.3/26.9	7.8/24.2						
	8.0	29.8	29.6	29.1	28.1	27.0	26.2	25.3	24.4	23.6	8.3/21.9	8.9/19.8				
	9.0	25.3	25.1	25.0	24.6	23.8	23.0	22.3	21.6	20.9	20.3	19.6	9.4/18.2	9.9/16.7		
	10.0	22.0	21.8	21.7	21.5	21.1	20.5	19.9	19.3	18.7	18.1	17.5	17.1	16.6	10.5/15.3	11.0/14.1
	12.0	11.8/17.4	17.1	17.0	16.9	16.7	16.7	16.3	15.8	15.3	14.9	14.4	14.1	13.7	13.2	12.8
	14.0		14.1	13.9	13.8	13.6	13.5	13.4	13.3	12.9	12.5	12.1	11.8	11.5	11.1	10.8
	16.0		14.5/13.5	11.7	11.5	11.4	11.3	11.2	11.1	11.0	10.7	10.3	10.1	9.8	9.5	9.2
	18.0			17.1/10.7	9.9	9.7	9.6	9.5	9.4	9.3	9.2	8.9	8.8	8.5	8.2	7.9
	20.0				19.8/8.8	8.4	8.3	8.2	8.1	8.0	7.9	7.7	7.6	7.4	7.1	6.8
	22.0					7.4	7.3	7.2	7.1	6.9	6.8	6.6	6.6	6.5	6.2	6.0
	24.0					22.4/7.2	6.5	6.4	6.2	6.1	6.0	5.8	5.7	5.6	5.5	5.2
	26.0						25.0/6.1	5.7	5.5	5.4	5.3	5.1	5.0	4.9	4.8	4.6
	28.0							27.7/5.2	4.9	4.8	4.7	4.5	4.4	4.3	4.2	4.0
	30.0								4.4	4.3	4.2	4.0	3.9	3.8	3.6	3.5
	32.0								30.3/4.4	3.9	3.7	3.5	3.5	3.4	3.2	3.1
	34.0									33.0/3.7	3.3	3.2	3.1	3.0	2.8	2.7
36.0										35.6/3.1	2.8	2.8	2.6	2.5	2.3	
38.0											2.5	2.5	2.3	2.2	2.0	
40.0											38.2/2.5	2.2	2.1	1.9	1.8	
42.0												40.9/2.1	1.8	1.7	1.5	
44.0													43.5/1.7	1.4	1.3	
46.0														1.3	1.1	
48.0														46.2/1.2		

- Note: 1. Rating according to DIN 15018/3 and prEN 13000.  
 2. Rating shown in  are determined by the strength of the boom or other structural components.  
 3. Instruction in the operator's manual must be strictly observed when operating the machine.



Note: Due to our policy of continual product improvements all designs and specifications are subject to change without advance notice.

## KOBELCO CRANES CO., LTD.

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