Company Profile

FYOU PMEC, excellent in threading and gauging solutions, is one of the leading threading and gauging solutions supplier of API Oil Country Thread Gages, Graphite Electrodes Tread Gages, ANSI/ASME B1.20.1 /ISO 228 /BS 341/DIN 477 Thread Gages, and its measuring instruments in China. FYOU PMEC, Staying in the beautiful and industrial city, Suzhou City, China. Our products were used widely in Oil and Gas, Carbon and Metallurgical, Motor Sport, Aerospace and Defense, and Shipbuilding Industry and so on.

Since building, we do our best introducing the leading products and solutions in the world to China customers, and providing the leading products and solutions for the customers in global

At FYOU PMEC, our goal is to provide our customers with the highest quality threading and gauging solutions, service, and on time delivery available in the industry. We strive to continually upgrade our manufacturing capabilities and improve our technical abilities through continuing education of our employees and implementation of the latest technology. Our motto is FYOU, Just for you, for the customers. It is this kind of service that sets us apart from the competition

We provide the complete line of products or solutions as below:

Tubing/Casing Working/Master /Taper Thread Gauge (Standard: API Spec5B:2017)

Rotary Shouldered Working/Master/Taper Gauge (Standard: API Spec7-2:2017)

SUCKER&POLISHED ROD Working / Master Gauge(Standard: API Spec11B:2017)

Graphite Electrodes Working and Master Gauges (Standard: JIS 7202: 2008)

ANSI/ASME B1.20.1 /ISO 228 /BS 341/DIN 477 Thread Ring &Plug Gauges

Thread Measuring Instrument Solutions

We are one of the whole industry chain of the threading and its gaging, inspection solutions, now, especial in Oilfield. It becomes one of the appointed suppliers for more and more large companies in Oil &Gas Industry and in Machining shop.

Contact US:
Tel: (+86) 512 68327593 Mobile(+86) 13962168423

Email: edwin@szfyou.com WhatsApp /WeChat: (+86) 13962168423

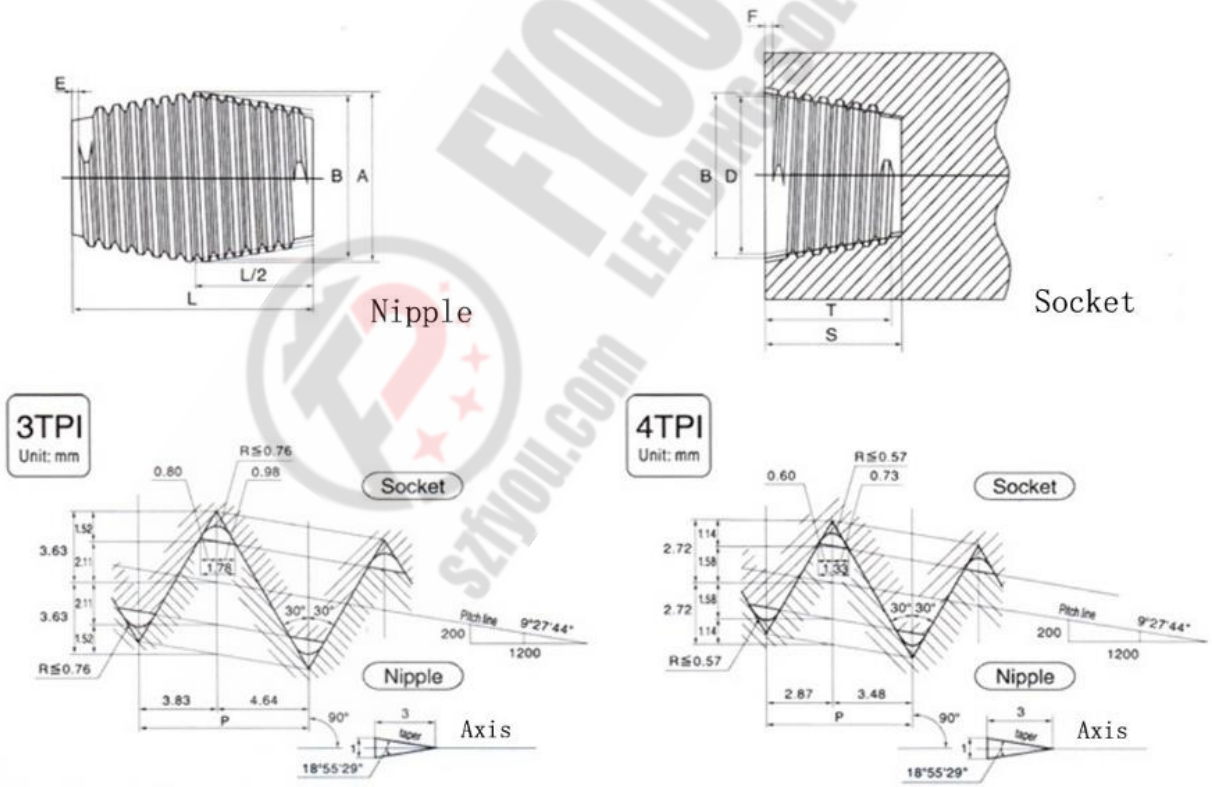
Address: No.350 Wen Chang Road, New &Hi-tech Industrial Development Zone, JS, China.

Cylindrical Machined Graphite Electrodes Thread Gages

The graphite electrodes used in steel making are processed with taper internal threads at both ends. They need to be connected through the taper external threads of the graphite electrode joint of the same material. The taper threads must not only firmly connect the two electrodes, but also It must also withstand the passage of strong currents, especially high-power and ultra-high-power electric smelting, which requires higher machining accuracy for the taper threads used for graphite electrode connection.

The graphite electrode thread gauge is the instruments used for the comprehensive measuring of the graphite electrode and the taper thread on the joint. It can efficiently and accurately detect the graphite electrode thread on the spot, ensure that the contact between the electrode and the joint is kept in good condition, and greatly enhance the interchangeability of electrodes produced by different manufacturers.

1.Cylindrical Machined Graphite Electrodes Thread Form and Dimensions



2.1 Graphite Electrodes Comparison list of Socket & Nipple With JIS&IEC&NEMA

Table 1—Comparison list of socket & nipple with JIS & IEC & NEMA (4TPI) Units: mm

Nominal dia. of electrode JIS IEC NEMA	Designation of jjoint JIS	Old JIS	Nipple						Depth of Socket(l2)		
			Max. diamater of pin(d1)			Length of pin (l1)					
			JIS	IEC	NEMA	JIS	IEC	NEMA	JIS	IEC	NEMA
75	45T4N	3T4	46.04	46.04	46.04	76.20	76.20	76.20	44.10	44.10	44.10
100	69T4N	4T4	69.85	69.85	69.85	101.60	101.60	101.60	56.80	56.80	56.80
130	79T4N	5T4	79.38	79.38	79.38	127.00	127.00	127.00	69.50	69.50	69.50
150	92T4N	6T4	92.08	92.08	92.08	139.70	139.70	139.70	75.90	75.90	75.90
175	107T4N	7T4	107.95	107.95	107.95	165.10	165.10	165.10	88.60	88.60	88.60
200	122T4N	8T4	122.24	122.24	122.24	177.80	177.80	177.80	94.90	94.90	94.90
225	139T4N	9T4	139.70	139.70	139.70	177.80	177.80	177.80	94.90	94.90	94.90
250	152T4N	10T4	152.40	152.40	152.40	190.50	190.50	190.50	101.30	101.30	101.30
300	177T4N	12T4	177.80	177.80	177.80	215.90	215.90	215.90	114.00	114.00	114.00
350	203T4N	14T4	203.20	203.20	203.20	254.00	254.00	254.00	133.00	133.00	133.00
350	—	—	—	203.20	203.20	—	304.80	304.80	—	158.40	158.40
400	222T4N	16T4	222.25	222.25	222.25	304.80	304.80	304.80	158.40	158.40	158.40
400	222T4L	16T4L	222.25	222.25	222.25	355.60	355.60	355.60	183.80	183.80	183.80
450	241T4N	18T4	241.30	241.30	241.30	304.80	304.80	304.80	158.40	158.40	158.40
450	241T4L	18T4L	241.30	241.30	241.30	355.60	355.60	355.60	183.80	183.80	183.80
500	269T4N	20T4	269.88	269.88	269.88	355.60	355.60	355.60	183.80	183.80	183.80
500	269T4L	20T4L	269.88	269.88	269.88	457.20	457.20	457.20	234.60	234.60	234.60
550	298T4N	22T4	298.45	298.45	298.45	355.60	355.60	355.60	183.80	183.80	183.80
550	298T4L	22T4L	298.45	298.45	298.45	457.20	457.20	457.20	234.60	234.60	234.60
600	317T4N	24T4	317.50	317.50	317.50	355.60	355.60	355.60	183.80	183.80	183.80
600	317T4L	24T4L	317.50	317.50	317.50	457.20	457.20	457.20	234.60	234.60	234.60
650	355T4N	26T4	355.60	355.60	355.60	457.20	457.20	457.20	234.60	234.60	234.60
650	355T4L	26T4L	355.60	355.60	355.60	558.80	558.80	558.80	285.40	285.40	285.40
700	374T4N	28T4	374.65	374.65	374.65	457.20	457.20	457.20	234.60	234.60	234.60
700	374T4L	28T4L	374.65	374.65	374.65	558.80	558.80	558.80	285.40	285.40	285.40
750	—	30T4	406.40	—	—	508.00	—	—	260.00	—	—
750	—	—	—	406.40	406.40	—	584.20	584.20	—	310.80	310.80
750	406T4N	30T4L	406.40	406.40	406.40	609.60	609.60	609.60	310.80	310.80	310.80

2.2 Graphite Electrodes Comparison list of Socket & Nipple With JIS&IEC&NEMA

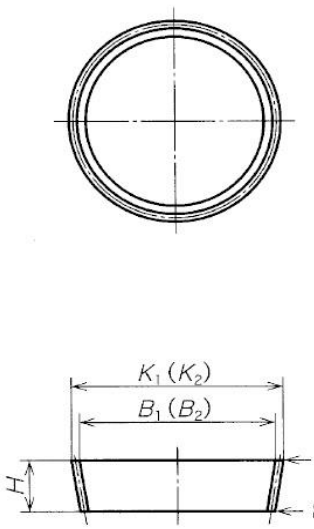
Table 2—Comparison list of socket & nipple with JIS & IEC & NEMA (3TPI) Units: mm

Nominal dia. of electrode JIS IEC NEMA	Designation of jjoint		Nipple						Depth of Socket(l2)		
	JIS	Old JIS	Max. diamater of pin(d1)			Length of pin (l1)					
			JIS	IEC	NEMA	JIS	IEC	NEMA	JIS	IEC	NEMA
225	139T3N	9T3	139.70	139.70	139.70	203.20	203.20	203.20	107.60	107.60	107.60
250	155T3N	10T3	155.57	155.57	155.57	220.00	220.00	220.00	116.00	116.00	116.00
300	177T3N	12T3	177.16	177.16	177.16	270.90	270.90	270.90	141.50	141.50	141.50
350	215T3N	14T3	215.90	215.90	215.90	304.80	304.80	304.80	158.40	158.40	158.40
350	215T3L	14T3L	215.90	215.90	215.90	355.60	355.60	355.60	183.80	183.80	183.80
400	215T3N	14T3	215.90	215.90	215.90	304.80	304.80	304.80	158.40	158.40	158.40
400	215T3L	14T3L	215.90	215.90	215.90	355.60	355.60	355.60	183.80	183.80	183.80
400	241T3N	16T3	241.30	241.30	241.30	338.70	338.70	338.70	175.30	175.30	175.30
400	241T3L	16T3L	241.30	241.30	241.30	355.60	355.60	355.6	183.80	183.80	183.80
450	241T3N	16T3	241.30	241.30	241.30	338.70	338.70	338.70	175.30	175.30	175.30
450	241T3L	16T3L	241.30	241.30	241.30	355.60	355.60	355.60	183.80	183.80	183.80
450	—	18T3	273.05	—	273.05	355.60	—	355.60	183.80	—	183.80
450	—	18T3L	273.05	—	—	457.20	—	—	234.60	—	234.60
500	273T3N	18T3	273.05	273.05	273.05	355.60	355.60	355.60	183.80	183.80	183.80
500	273T3L	18T3L	273.05	273.05	273.05	457.20	457.20	457.20	234.60	234.60	234.60
550	273T3N	18T3	273.05	—	273.05	372.60	—	355.60	183.80	—	183.80
550	—	18T3L	283.05	—	273.05	457.20	—	457.20	234.60	—	234.60
550	298T3N	20T3	298.45	—	298.45	372.60	—	372.60	192.20	—	192.20
550	298T3L	20T3L	298.45	298.45	298.45	457.20	457.20	457.20	234.60	234.60	234.60

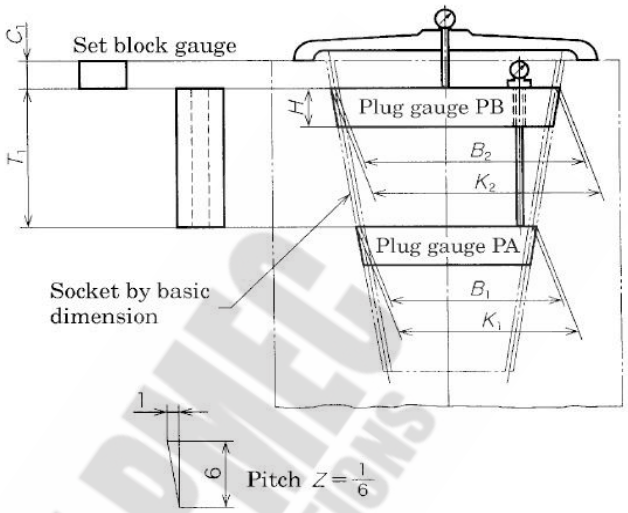
3.1 Classification of Measuring Instruments

Measuring item		Taper thread gauge	Instrument
Socket	Taper thread angle	Plug gauge	• The dial gauge specified • The hand torque wrench • Set block gauge
	Pitch diameter		
Nipple	Taper thread angle	Ring gauge	
	Pitch diameter		

3. 2 **Cylindrical Machined Graphite Electrodes Thread Plug Gages**



Shape of plug gauge

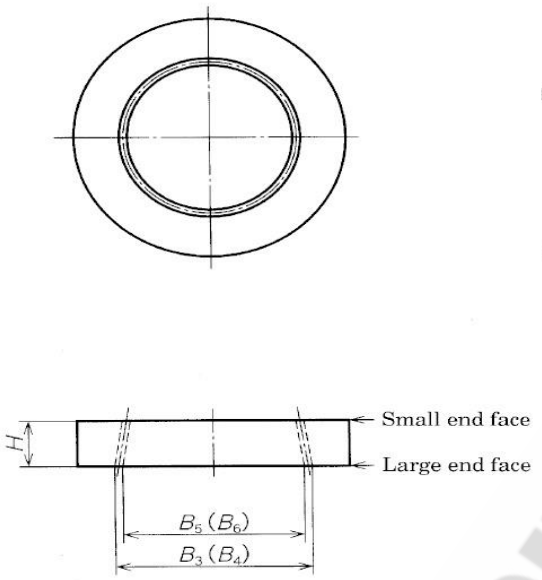


Combination of plug gauges

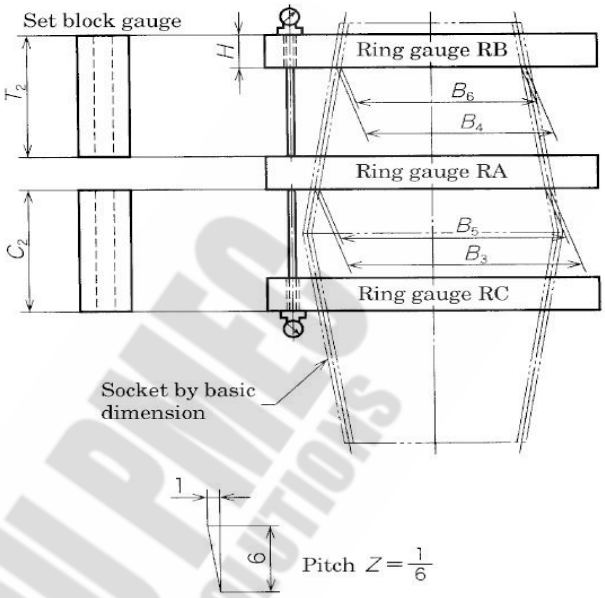
Large End Face Working Plug Gages

Small End Face Working Plug Gages

3. 3 **Cylindrical Machined Graphite Electrodes Thread Ring Gages**



Shape of ring gauge



Combination of ring gauges

Working Ring Gages (RA、RB、RC)

Working Ring Gages and Nipple

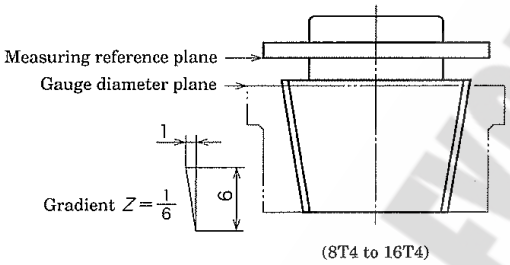
3. 4 Cylindrical Machined Graphite Electrodes Thread Master Gages

Table 5-1 Shape of taper thread master gauge, dimensions and tolerances thereon (4TPI)

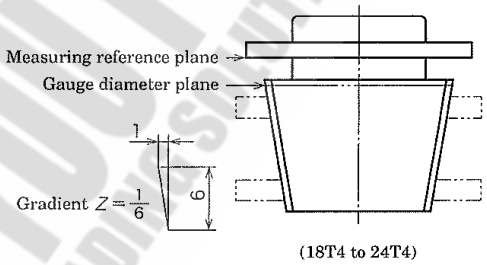
Unit: mm

Designation of thread	Major diameter at gauge diameter plane		Pitch diameter at gauge diameter plane		Included angle (half angle)		Pitch of thread			1/2 of taper		Distance from gauge diameter plane to measuring reference plane
	Dimension	Tolerance	Dimension	Tolerance	Angle	Tolerance	Dimension	Tolerance on single pitch	Tolerance on cumulative pitch	Angle	Tolerance	
8T4	122.238	±0.050	119.078	±0.020	30°	±7′	6.350	±0.010	±0.013	9°27′44″ (1/6)	+1′20″ 0	10
9T4	139.700		136.540									
10T4	152.400		149.240			±8′			±0.020		+1′00″ 0	86.2 a)
12T4	177.800		174.640									10
14T4	203.200		200.040									67.15 a)
16T4	222.250		219.090									10
18T4	241.300	±0.060	238.140	±0.025								
20T4	269.880		266.720									
22T4	298.450		295.290									
24T4	317.500		314.340									

Note a) They are composite taper thread master gauge of 10T and 12T, 14T and 16T respectively.



(8T4 to 16T4)



(18T4 to 24T4)

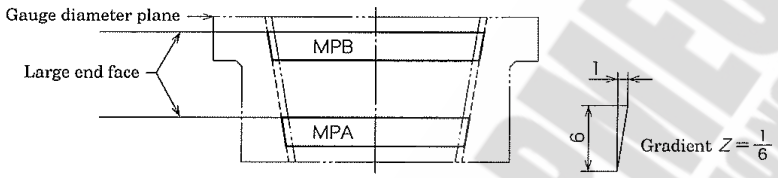
Thread Master Ring Gages

Thread Master Plug Gauge

Table 5-2 Shapes of taper thread master gauge (divided type), dimensions and tolerances thereon (4TPI)

Unit: mm

Designation of thread	Type of gauge	Major diameter at gauge diameter plane		Pitch diameter at gauge diameter plane		Included angle (half angle)		Pitch of thread			1/2 of taper		Distance from gauge diameter plane to large end face
		Dimension	Tolerance	Dimension	Tolerance	Angle	Tolerance	Dimension	Tolerance on single pitch	Tolerance on cumulative pitch	Angle	Tolerance	
26T4	MPA	309.667	±0.060	306.507	±0.025	30°	±8′	6.350	±0.010	±0.018	9°27′44″ (1/6)	+1′00″ 0	137.800
	MPB	352.267		349.107									10
28T4	MPA	328.717		325.557									137.800
	MPB	371.317		368.157									10
30T4	MPA	360.467		357.307	±0.030		±10′			±0.020			137.800
	MPB	403.067		399.907									10



(26T4 to 30T4)

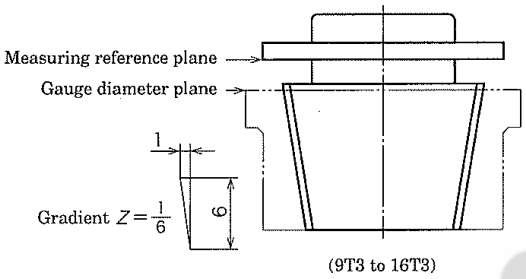
Working Plug Gage VS Master Ring Gage

Working Ring Gage VS Master Plug Gage

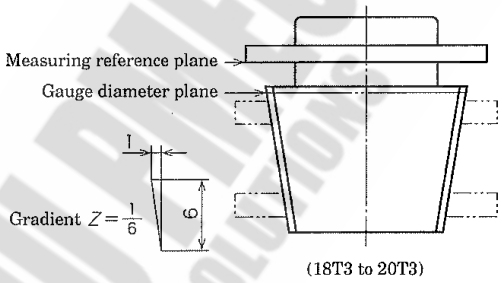
Table 5-3 Shapes of taper thread master gauge, dimensions and tolerances thereon (3TPI)

Unit: mm

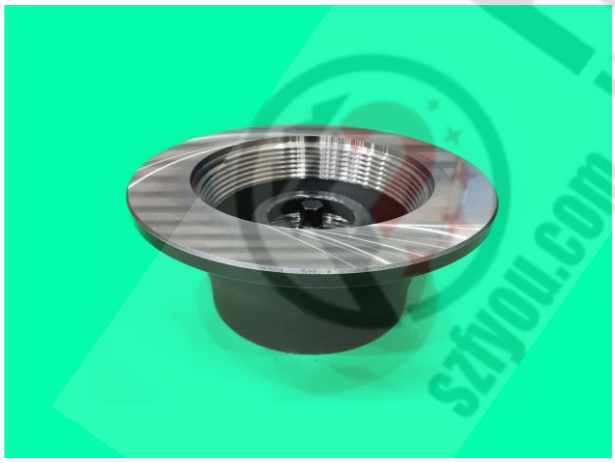
Designation of thread	Major diameter at gauge diameter plane		Pitch diameter at gauge diameter plane		Included angle (half angle)		Pitch of thread			1/2 of taper		Distance from gauge diameter plane to measuring reference plane
	Dimension	Tolerance	Dimension	Tolerance	Angle	Tolerance	Dimension	Tolerance on single pitch	Tolerance on cumulative pitch	Angle	Tolerance	
9T3	139.700	±0.050	135.488	±0.020	30°	±7′	8.467	±0.010	±0.013	9°27′44″ (1/6)	+1′20″ 0	10
10T3	155.575		151.363									
12T3	177.165		172.953									
14T3	215.900	±0.060	211.688	±0.025		±8′						
16T3	241.300		237.088									
18T3	273.050		268.838						±0.018		+1′00″ 0	
20T3	298.450		294.238									



(9T3 to 16T3)



(18T3 to 20T3)



Thread Master Ring Gages

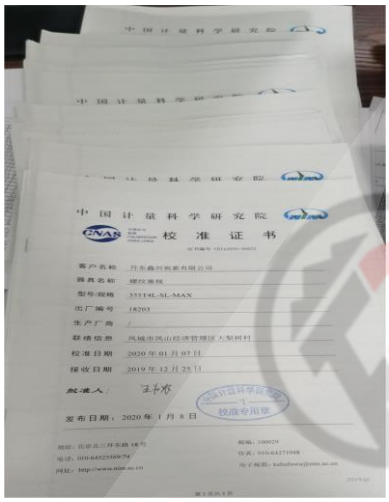
Thread Master Plug Gauge

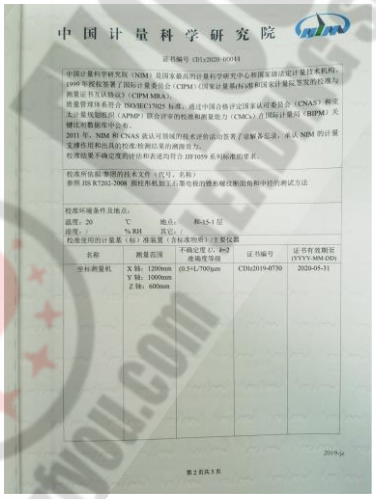
4. Calibration Certificates

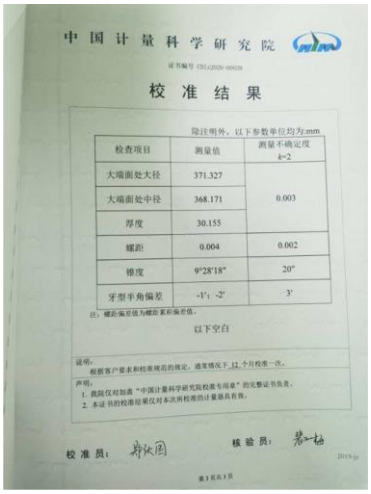
4.1 All the Working and Master Gages will come with calibration certificates issued by our manufacturers. The following item shall be included in the report if necessary.

a) Number of the Standard and Name;
b) Measurement day and Measurment environment;
c) Product number of socket
d) Angle of taper thread of socket
e) Pitch diameter of taper thread of socket
f) Product name of Nipple
g) Angle taper thread of nipple
h) Pitch diameter of taper thread of nipple
i) Other special instruction as your request.

4.2. **Also, if requested, we would like to support you to do the calibration by the NIM (Beijing , National Institute of Metrology , China), Please refer as below sample :**







Request of the Quotation

If you have any request or questions please contact us freely as below:

E-mail: edwin@szfyou.com Mobile: + 86 139 6216 8423

WhatsApp / We Chat: + 86 139 6216 8423