



SEN NAI
森耐机械

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Wechat



WhatsApp



Website



Full technological process,
professional, independent production,
multi-field pins and bushings products



PIN&BUSHING

Jinan Sennai Intelligent Technology Co., Ltd.

CORPORATE CULTURE

Forging a century-old enterprise with a century-old culture
and to approach every task in life with wholehearted care

CORE VALUES

INTEGRITY · DILIGENCE · UNITY



SEN NAI
森耐机械

Full technological process,
professional, independent production,
multi-field pins and bushings products

Superior Performance

Quality Guarantee

Custom Processing

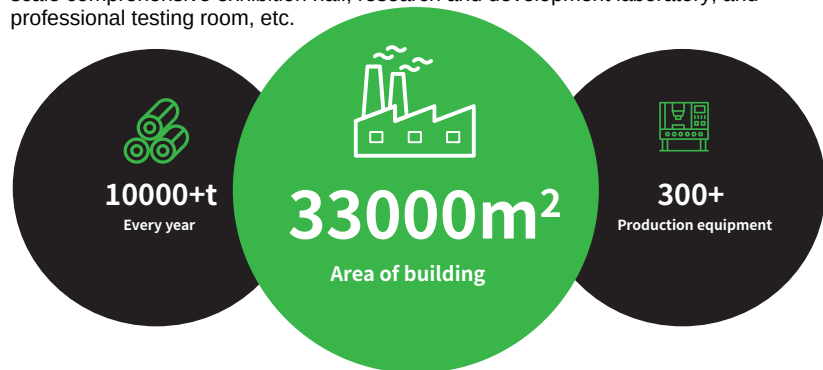
Quickly Delivery

Company Introduction



Jinan Sennai Intelligent Technology Co., Ltd. is located in Jinan City, Shandong Province. Sennai is a professional industrial and trade integrated enterprise that combines research, production, sales and technical services. Specializing in manufacturing related components such as pin and bushings for construction machinery. Sennai has over 20 years of industry experience and a global sales channel, able to provide supporting services to numerous well-known construction machinery and equipment manufacturers both domestically and internationally, and offers OEM/ODM services to nearly 100 trading companies every year.

Factory takes 33,000 square meters area. Possesses advanced equipment over 300 sets such as precision rolling pipe producing line, forging producing line, automatic CNC processing producing line, vertical machining center, horizontal machining center, complete heat treatment equipment, high-precision grinding equipment, physical analysis and testing equipment, etc. With supporting facilities include large-scale comprehensive exhibition hall, research and development laboratory, and professional testing room, etc.



Advanced Equipment

It now has more than 260 advanced production equipment such as finishing pipe production line, forging production line, CNC automatic production line, vertical machining center, horizontal machining center, heat treatment equipment of whole process, high-precision grinding equipment, physical and chemical analysis and testing equipment. Supporting facilities include large comprehensive exhibition hall, research and development room, professional laboratory, etc.



Technical Talents

With an excellent R&D team and research cooperation with many domestic universities and metal research institutes to solve technical problems in processing and production. Together we continuously develop a variety of new products and focus on the heat treatment technology. This creates a research, development and production system integrating university, research institute and our factory.



Management Capability

We actively implement the "8S" management method and ISO16949 Quality Management System, regulates staff behavior, optimizes the business operations, strengthens the site management system, promotes the standardized workshop regulations and ensures our production quality.

—Forging a century-old enterprise with a century-old culture—

Catalogue of Products



Steel bushing
Page: **05-14**



Blind hole/oil storage steel bushing
Page: **15-16**

Steel bushing/Blind hole/oil storage steel bushing Parameter Table
Page: **17-18**



Bimetallic composite self-lubricating bushing
Page: **19**



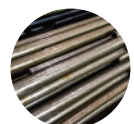
High strength wear-resistant shims
Page: **20**



Pins
Page: **21-25**



Bushing plinth
Page: **26**



Seamless steel pipe and forging service
Page: **27-28**

We can customize bushing, steel pipes and forging products in various industries



Construction machinery



Hydraulic industry



Automotive field



Bushing and pin for joint part

1 SN-H Steel Bushing



The inner surface of SN-H steel bushing is processed with various types of oil grooves, which improves the surface hardness and wear resistance after heat treatment. It is suitable for heavy-duty joint parts of construction machinery such as excavators, rotary drilling rigs, large loaders, wall grab and so on.

Performance Index		Data
Hardness	HRC	58~62
Max Load	N/mm ²	200
MaxLinear Velocity	m/s	1.5
Coefficient of Friction	-	<0.17
Highest Using Temperature	°C	350
Linear Expension Coefficient	10 ⁻⁵ /°C	1.1

The steel bushing bearing of our company is based on 45#, 40Cr, 20CrMo, GCr15 and other materials. From raw materials to finished products, each process is strictly controlled to ensure the product quality. It produces bushing with high wear resistance, high surface hardness and strong internal toughness.



SN-H-1

Integrally quenched steel bushing

Material GCr15 bearing steel

Surface —

Process Integral quenching, hardness 58~62HRC.

SN-H-2

Carburized and quenched steel bushing

Material 20CrMnTi, 20CrMo and other low carbon or low carbon alloy steels

Surface Phosphating, molybdenum disulfide spraying on internal surface

Process Surface carburizing and quenching
Surface hardness 58~62HRC
The depth of carburized layer is 0.8~1.2mm.

SN-H-3

High frequency quenched steel bushing

Material 45, 40Cr

Surface Phosphating, molybdenum disulfide spraying on internal surface

Process Hardness of quenched and tempered treatment is 201~275HB, internal surface is highly quenched, surface hardness is 52~60HRC, and effective hardness of quench-hardened case is 1.0~2.0mm.

Optional Material

- ▶ **42CrMo**-Super high strength steel
- ▶ **40Cr**-Medium carbon quenched and tempered steel
- ▶ **20CrMo/20CrMnTi**-Low carbon alloy steel
- ▶ **Gcr15**-Bearing steel
- ▶ **45#**-Carbon steel

A variety of product materials can be customized to meet your different product needs



Optional Styles



SN-01



SN-08



SN-15



SN-22



SN-29



SN-35



SN-02



SN-09



SN-16



SN-23



SN-30



SN-36



SN-03



SN-10



SN-17



SN-24



SN-31



SN-37



SN-04



SN-11



SN-18



SN-25



SN-32



SN-38



SN-05



SN-12



SN-19



SN-26



SN-33



SN-39



SN-06



SN-13



SN-20



SN-27



SN-34



SN-40



SN-07



SN-14



SN-21



SN-28

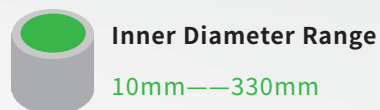
For more styles, please send the picture and customize.

Optional Specifications

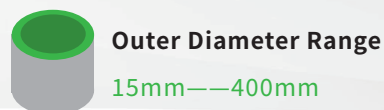
We can customize the product according to the customer's drawings, process, tolerance requirements, style and quantity. The following is the processing scope. Please contact pre-sale customer service for specific dimensions.



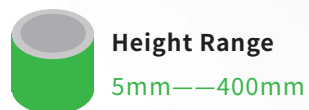
Custom Size



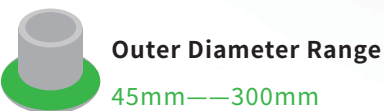
Inner Diameter Range
10mm—330mm



Outer Diameter Range
15mm—400mm



Height Range
5mm—400mm



Outer Diameter Range
45mm—300mm

Accuracy



Concentricity : $\pm 0.02\text{mm}$

Parallelism : 0.02mm

Verticality : 0.03mm

Circularity : 0.01mm

Roughness : 0.6

HRC Hardness : 58~62

High Precision : $\pm 0.1\text{mm}$

Inner Diameter Accuracy : $\pm 0.02\text{mm}$

Outer Diameter Accuracy : $\pm 0.01\text{mm}$

Customized Products

We are one of the few factories in China that can independently produce in full process. We can control the quality of products at every stage of manufacturing, and the following is a customized case display of some customers.



Sample Display



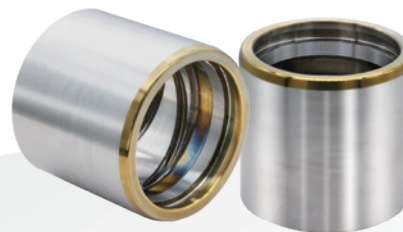
Hardness after basic quenching and tempering: HB 201~275

Process: High frequency quenching of inner surface

Hardness after quenching and tempering: HRC 52~60

Depth of quench-hardened case: 1.0~2.0mm

Any product can be customized according to customer requirements



Hardness of blank after quenching and tempering: HB 201~275

Hardness of high-frequency quenching and tempering: HRC 52~60

Depth of quench-hardened case: 1.0~2.0mm

Any product can be customized according to customer requirements



Process: Carburizing and quenching

Hardening depth: 0.8~1.2mm

Hardness of heat treatment: HRC 58~62

Any product can be customized according to customer requirements



Process: Multipurpose furnace carburizing

Thickness of carburized layer: 0.8~1.2mm

Hardness of carburized layer: HRC 58~62

Molybdenum disulfide spraying on inner surface

Any product can be customized according to customer requirements

We can customize bushing, steel pipes and forging products in various industries

2 SN-O

Blind hole/oil storage steel bushing

The inner surface of the blind hole oil storage steel bushing is sprayed with molybdenum disulfide, which has the advantages of low friction coefficient and good wear resistance, and can work under the condition without oil or with little oil. Products are widely used in construction machinery, heavy duty high load equipment.



Product Advantages

- The inner wall of the bushing is evenly distributed with blind holes with conical cross-section.
- The lubricating oil wedge is formed naturally during the grinding process of the inner hole of the bushing
- The oil storage capacity of oil pocket is large, which is 3~5 times of that of ordinary oil tank and can be free from maintenance for a long time.
- The oil pockets are evenly distributed on the inner wall, and the center distance of the oil pockets in the circumferential direction is fixed. No matter how large the bushing is, it only needs a small rotation angle to fill the inner surface of the bushing with the oil cloth, without lubrication dead area.
- The oil pockets evenly distributed in the inner holes do not damage the bearing capacity of the inner wall of the bushing and prolong the service life of the bushing.

Material: 20CrMnTi, 20CrMo and other low carbon alloy steels

Surface treatment: Molybdenum disulfide spraying

性能指标 Performance Index		有关数据 Data
Hardness	HRC	58~62
Max Load	N/mm ²	250
MaxLinear Velocity	m/s	1.5
Coefficient of Friction	-	<0.1
Highest Using Temperature	°C	350
Linear Expansion Coefficient	10 ⁻⁵ /°C	1.1



Process: Multipurpose furnace carburizing

Thickness of carburized layer: 1.0~1.5mm

Hardness of carburized layer: HRC58~62

Molybdenum disulfide spraying on inner surface

We can customize bushing, steel pipes and forging products in various industries

Parameter Table

NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size
1	25*35*30	51	45*65*60	101	55*75*70	151	65*75*70	201	70*85*75	251	80*100*110	301	80*90*55	351	85*95*95	401	90*135*90	451	105*125*100	501	120*140*110		
2	25*35*35	52	50*60*35	102	55*75*80	152	65*75*75	202	70*85*80	252	80*100*120	302	80*90*60	352	90*100*100	402	90*140*90	452	105*125*110	502	120*140*120		
3	25*35*40	53	50*60*40	103	60*70*40	153	65*75*80	203	70*85*85	253	80*100*55	303	80*90*70	353	90*100*110	403	95*110*100	453	105*125*160	503	120*140*130		
4	25*35*45	54	50*60*45	104	60*70*50	154	65*75*90	204	70*85*90	254	80*100*60	304	80*90*80	354	90*100*50	404	95*110*110	454	105*130*100	504	120*140*140		
5	30*40*30	55	50*60*50	105	60*70*55	155	65*77*70	205	70*85*95	255	80*100*65	305	80*90*85	355	90*100*60	405	95*110*70	455	105*130*110	505	120*140*150		
6	30*40*40	56	50*60*60	106	60*70*60	156	65*77*90	206	70*86*70	256	80*100*70	306	80*90*90	356	90*100*70	406	95*110*80	456	105*135*100	506	120*140*90		
7	30*40*45	57	50*60*70	107	60*70*65	157	65*80*100	207	70*86*80	257	80*100*80	307	80*90*95	357	90*100*80	407	95*110*90	457	105*140*110	507	120*145*100		
8	30*40*50	58	50*60*80	108	60*70*70	158	65*80*35	208	70*90*100	258	80*100*85	308	80*95*100	358	90*100*90	408	95*115*100	458	110*125*100	508	120*145*110		
9	30*40*60	59	50*60*90	109	60*70*75	159	65*80*40	209	70*90*50	259	80*100*90	309	80*95*105	359	90*105*100	409	95*115*110	459	110*125*110	509	120*145*120		
10	30*45*40	60	50*65*40	110	60*70*80	160	65*80*45	210	70*90*60	260	80*100*95	310	80*95*110	360	90*105*110	410	95*115*90	460	110*125*120	510	120*145*125		
11	30*45*50	61	50*65*45	111	60*70*90	161	65*80*50	211	70*90*70	261	80*105*100	311	80*95*120	361	90*105*120	411	100*110*100	461	110*125*130	511	120*145*130		
12	30*50*40	62	50*65*50	112	60*75*40	162	65*80*55	212	70*90*75	262	80*105*50	312	80*95*130	362	90*105*130	412	100*110*90	462	110*125*135	512	120*145*140		
13	30*50*50	63	50*65*55	113	60*75*45	163	65*80*60	213	70*90*80	263	80*105*55	313	80*95*140	363	90*105*140	413	100*115*100	463	110*125*140	513	120*145*150		
14	35*45*35	64	50*65*60	114	60*75*50	164	65*80*65	214	70*90*85	264	80*105*60	314	80*95*45	364	90*105*40	414	100*115*110	464	110*125*160	514	120*150*120		
15	35*45*40	65	50*65*65	115	60*75*55	165	65*80*70	215	70*90*90	265	80*105*65	315	80*95*50	365	90*105*50	415	100*115*120	465	110*125*50	515	120*150*130		
16	35*45*45	66	50*65*70	116	60*75*60	166	65*80*75	216	70*95*100	266	80*105*70	316	80*95*55	366	90*105*60	416	100*115*130	466	110*125*70	516	120*150*140		
17	35*45*50	67	50*65*75	117	60*75*65	167	65*80*80	217	70*95*45	267	80*105*75	317	80*95*60	367	90*105*65	417	100*115*140	467	110*125*90	517	120*150*150		
18	35*45*60	68	50*65*80	118	60*75*70	168	65*80*85	218	70*95*70	268	80*105*80	318	80*95*65	368	90*105*70	418	100*115*50	468	110*126*100	518	120*155*130		
19	35*50*35	69	50*70*40	119	60*75*75	169	65*80*90	219	70*95*80	269	80*105*85	319	80*95*70	369	90*105*75	419	100*115*60	469	110*126*110	519	120*155*150		
20	35*50*40	70	50*70*45	120	60*75*80	170	65*80*95	220	70*95*90	270	80*105*90	320	80*95*75	370	90*105*80	420	100*115*70	470	110*130*100	520	125*145*100		
21	35*50*50	71	50*70*50	121	60*75*90	171	65*85*100	221	70*95*95	271	80*110*100	321	80*95*80	371	90*105*85	421	100*115*80	471	110*130*110	521	125*145*130		
22	35*50*60	72	50*70*55	122	60*80*45	172	65*85*60	222	71*86*50	272	80*110*110	322	80*95*85	372	90*105*90	422	100*115*90	472	110*130*120	522	125*145*140		
23	40*50*45	73	50*70*60	123	60*80*50	173	65*85*65	223	71*86*55	273	80*110*40	323	80*95*90	373	90*105*95	423	100*115*95	473	110*130*130	523	125*155*150		
24	40*50*50	74	50*70*70	124	60*80*55	174	65*85*70	224	71*86*60	274	80*110*45	324	80*95*95	374	90*106*100	424	100*116*100	474	110*130*140	524	130*145*120		
25	40*50*55	75	50*70*80	125	60*80*60	175	65*85*80	225	71*86*65	275	80*110*50	325	80*96*90	375	90*106*110	425	100*116*110	475	110*130*70	525	130*145*130		
26	40*50*60	76	50*75*50	126	60*80*65	176	65*85*90	226	71*86*70	276	80*110*55	326	85*100*100	376	90*106*120	426	100*116*90	476	110*130*80	526	130*145*140		
27	40*55*40	77	50*75*60	127	60*80*70	177	65*90*65	227	71*86*75	277	80*110*60	327	85*100*110	377	90*106*130	427	100*120*100	477	110*130*90	527	130*145*145		
28	40*55*45	78	50*75*70	128	60*80*75	178	65*90*70	228	71*86*80	278	80*110*65	328	85*100*120	378	90*106*90	428	100*120*110	478	110*135*100	528	130*150*130		
29	40*55*50	79	50*80*60	129	60*80*80	179	65*95*60	229	71*86*85	279	80*110*70	329	85*100*45	379	90*106*90	429	100*120*120	479	110*135*110	529	130*150*140		
30	40*55*60	80	55*65*40	130	60*80*85	180	65*95*65	230	71*86*90	280	80*110*75	330	85*100*60	380	90*110*100	430	100*120*130	480	110*135*120	530	130*150*150		
31	40*60*40	81	55*65*45	131	60*80*90	181	70*100*80	231	71*86*95	281	80*110*80	331	85*100*70	381	90*110*120	431	100*120*70	481	110*135*130	531	130*155*130		
32	40*60*50	82	55*65*50	132	60*85*45	182	70*100*90	232	75*85*100	282	80*110*85	332	85*100*80	382	90*110*70	432	100*120*80	482	110*135*160	532	130*160*140		
33	40*60*60	83	55*65*55	133	60*85*50	183	70*80*50	233	75*85*50	283	80*110*90	333	85*100*85	383	90*110*80	433	100*120*90	483	110*135*85	533	130*160*145		
34	40*65*50	84	55*65*60	134	60*85*55	184	70*80*55	234	75*85*60	284	80*110*95	334	85*100*90	384	90*110*90	434	100*125*100	484	110*135*90	534	130*165*142		
35	40*65*55	85	55*65*65	135	60*85*60	185	70*80*60	235	75*85*65	285	80*115*70	335	85*105*100	385	90*110*95	435	100*125*110	485	110*140*100	535	140*160*140		
36	40*65*60	86	55*65*70	136	60*85*65	186	70*80*65	236	75*85*70	286	80*115*80	336	85*105*70	386	90*115*100	436	100*125*120	486	110*140*110	536	140*160*150		
37	45*55*30	87	55*65*75	137	60*85*70	187	70*80*70	237	75*85*75	287	80*115*90	337	85*105*80	387	90*115*90	437	100*125*90	487	110*140*120	537	140*160*160		
38	45*55*35	88	55*65*80	138	60*85*75	188	70*80*75	238	75*85*80	288	80*115*95	338	85*105*85	388	90*120*100	438	100*130*100	488	110*145*110	538	140*165*160		
39	45*55*45	89	55*65*85	139	60*85*80	189	70*80*80	239	75*85*85	289	80*120*100	339	85*105*90	389	90*120*105	439	100*130*110	489	115*130*100	539	140*170*120		
40	45*55*50	90	55*70*40	140	60*85*85	190	70*80*85	240	75*85*90	290	80*120*110	340	85*110*90	390	90*120*110	440	100*130*120	490	115*130*130	540	140*170*140		
41	45*55*55	91	55*70*45	141	60*85*90	191	70*80*90	241	75*90*40	291	80*120*120	341	85*115*90	391	90*120*115	441	100*130*130	491	115*135*120	541	140*170*145		
42	45*55*60	92	55*70*50	142	60*90*60	192	70*80*95	242	75*90*50	292	80*120*70	342	85*95*100	392	90*120*120	442	100*130*90	492	115*135*135	542	140*170*150		
43	45*55*65	93	55*70*55	143	60*90*70	193	70*85*100	243	75*90*60	293	80*120*80	343	85*95*110	393	90*120*130	443	100*135*100	493	115*140*120	543	140*170*160		
44	45*55*70	94	55*70*60	144	60*95*60	194	70*85*40	244	75*90*65	294	80*120*90	344	85*95*40	394	90*120*90	444	100*135*110	494	115*145*120	544	150*170*150		
45	45*60*45	95	55*70*65	145	65*75*100	195	70*85*45	245	75*90*70	295	80*120*95	345	85*95*50	395	90*125*100	445	100*135*120	495	120*135*100	545	150*170*160		
46	45*60*50	96	55*70*70	146	65*75*40	196	70*85*50	246	75*90*75	296	80*90*100	346	85*95*60	396	90*125*110	446	100*135*90	496	120*135*110	546	150*170*165		
47	45*60*55	97	55*70*80	147	65*75*50	197	70*85*55	247	75*90*85	297	80*90*110	347	85*95*70	397	90*125*90	447	100*140*100	497	120*135*120	547	150*180*140		
48	45*60*60	98	55*75*50	148	65*75*55	198	70*85*60	248	75*90*90	298	80*90*120	348	85*95*80	398	90*130*100	448	100*140*90	498	120*135*130	548	150*180*150		
49	45*65*45	99	55*75*55	149	65*75*60	199	70*85*65	249	75*95*90	299	80*90*40	349	85*95*85	399	90*130*110	449	105*120*100	499	120*135*140	549	150*180*160		
50	45*65*50	100	55*75*60	150	65*75*65	200	70*																

3 SN-B

Bimetallic composite self-lubricating bushing



The bimetallic self-lubricating graphite copper bushing is based on low carbon steel, and the inner surface is Tin Phosphorus Bronze, the thickness can be customized 0.5-5mm. The ZCuSn10P1 tin-phosphorus bronze has high hardness and wear resistance. It can be used to manufacture parts that work under heavy load, high speed and high temperature, and the copper bushing is subject to strong friction. The surface of the bimetallic self-lubricating graphite bushing is inlaid with a special formula of solid lubricant at a certain angle and density, which is precisely processed, so that the copper bushing has the advantages of high wear resistance, high hardness and high toughness.

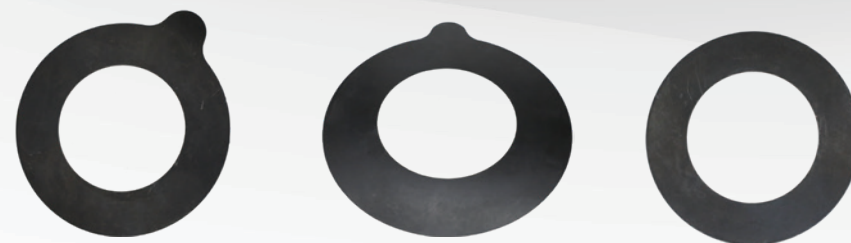
Performance Index		Data
Maximum Load	Mpa	20
Working Temperature	°C	-280 ~ +350
Maximum Linear Velocity	m/s	8
Coefficient of Friction	-	<0.16
Minimum hardness of Sliding Layer	HB	≥220
Minimum Hardness of Dual Parts	HRC	40

4 SN-S

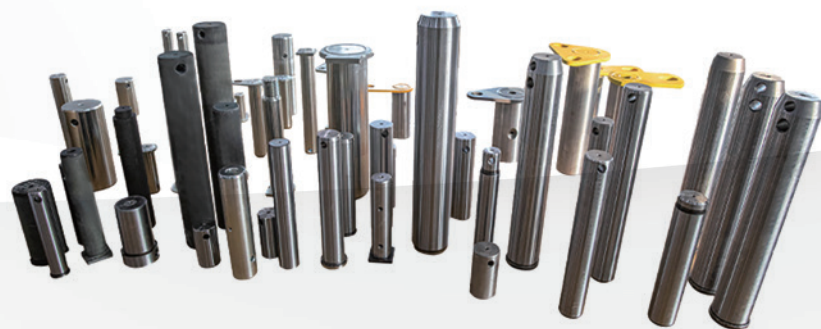
High strength wear-resistant shims



The adjustment shims with high strength and high wear resistance is made of spring steel C70 with superior mechanical properties, strength, hardness, elasticity, toughness and hardenability are very good, with overheating sensitivity and tempering brittleness tendency, low cold deformation plasticity, is a kind of high strength and high wear resistance of adjustable parts, widely used in excavators, loaders and other construction machinery fields.



5 SN-P Pin



Choose 45#, 40Cr, 42CrMo and other materials as the main material, can also be customized according to customer requirements, according to the advanced heat treatment process, surface hardness can reach HRC 58-62, has good toughness, yield resistance and tensile properties, tensile strength can reach σ_b (MPa) : $\geq 1080(110)$, yield strength σ_s (MPa) : $\geq 930(95)$.

Optional Material

We can meet various customer requirements, from raw materials and material grades to processing techniques, as well as product properties such as hardness, tensile strength, and yield strength.



Crafted from materials of every kind



Comprehensive manufacturing processes



Various Heat Treatment Methods

Engineered for dependable performance

Performance Index		Data
Hardness	HRC	58~t62
Tensile Strength	MPa	1080 ₍₁₁₀₎
Yield Strength	MPa	930 ₍₉₅₎
Hardening Depth	mm	2.5
WorkingTemperature Limit	°C	-70~+300
Chrome Layer Thickness	mm	0.02~0.03

Optional Styles

We offer an extensive range of pin designs, from standard cylindrical pins to custom-made non-standard parts, each meticulously crafted to meet diverse application needs.



Optional Specifications

We can customize the product according to the customer's drawings, process, tolerance requirements, style and quantity. The following is the processing scope. Please contact pre-sale customer service for specific dimensions.

Custom Size



Outer Diameter Range

10mm—500mm



Height Range

30mm—9000mm



Height Range

10mm—9000mm



Outer Diameter Range

Unlimited

Accuracy



Concentricity : 0.05mm

Parallelism : 0.02mm

Verticality : 0.03mm

Circularity : 0.005mm

Roughness : 0.2~0.8

HRC Hardness : 58~62

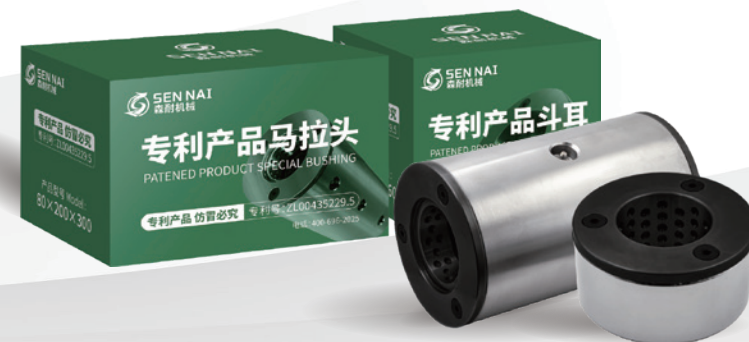
High Precision : $\pm 0.1\text{mm}$

Outer Diameter Accuracy : $\pm 0.02\text{mm}$

Parameter Table

NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size	NO.	Size
1	23*89.5	65	35*111	129	40*300	193	50*160	257	55*300	321	70*128	385	80*277
2	25*100	66	35*128.2	130	40*306	194	50*161	258	55*320	322	70*141	386	80*287
3	25*102	67	35*130	131	40*350	195	50*164	259	55*338	323	70*147	387	80*300
4	25*110	68	35*149	132	40*353	196	50*165	260	55*360	324	70*150	388	80*360
5	25*115	69	35*160	133	40*400	197	50*170	261	55*368.3	325	70*155	389	80*380
6	25*120	70	35*167	134	40*415	198	50*173	262	55*370	326	70*159	390	80*420
7	25*125	71	35*190	135	40*491	199	50*174	263	55*430	327	70*160	391	80*423.5
8	25*138	72	35*196	136	45*105	200	50*176	264	55*500	328	70*185	392	80*430
9	25*140	73	35*210	137	45*117	201	50*181	265	55*700	329	70*195	393	80*434
10	25*151.5	74	35*218	138	45*130	202	50*185	266	60*106	330	70*200	394	80*443
11	25*152	75	35*220	139	45*132	203	50*187	267	60*1200	331	70*212	395	80*445
12	25*160	76	35*230	140	45*134	204	50*195	268	60*139	332	70*218	396	80*460
13	25*175	77	35*234	141	45*135	205	50*200	269	60*147	333	70*220	397	80*465
14	25*180	78	35*240	142	45*137	206	50*205	270	60*150	334	70*235.5	398	80*475
15	25*188	79	35*250	143	45*140	207	50*210	271	60*160	335	70*300	399	80*480
16	25*195	80	35*257	144	45*145	208	50*225	272	60*165	336	70*380	400	80*500
17	25*200	81	35*260	145	45*147	209	50*240	273	60*172	337	70*400	401	80*505
18	25*205	82	35*265	146	45*150	210	50*250	274	60*180	338	70*430	402	80*510
19	25*210	83	35*270	147	45*156	211	50*254	275	60*210	339	70*434	403	80*515
20	25*238	84	35*272	148	45*157	212	50*254.5	276	60*229	340	70*440	404	80*520
21	25*246.8	85	35*280	149	45*160	213	50*255.5	277	60*244	341	70*460	405	80*523
22	25*53	86	35*300	150	45*162	214	50*256	278	60*248	342	70*465	406	80*525
23	25*60	87	35*329	151	45*165	215	50*260	279	60*250	343	70*475	407	80*526
24	25*81	88	35*97	152	45*172	216	50*265	280	60*269	344	70*480	408	80*530
25	25*90	89	38*222	153	45*175	217	50*270	281	60*274	345	70*483	409	80*533.4
26	30*100	90	38*234	154	45*182	218	50*271	282	60*288	346	70*485	410	80*538
27	30*105	91	38*240	155	45*185	219	50*272	283	60*300	347	70*500	411	80*539
28	30*110	92	38*337	156	45*195	220	50*278	284	60*324	348	70*505	412	80*540
29	30*116	93	40*110	157	45*200	221	50*280	285	60*345	349	70*550	413	80*550
30	30*123	94	40*120	158	45*210	222	50*283	286	60*352	350	70*580	414	80*560
31	30*130	95	40*1200	159	45*215	223	50*285	287	60*380	351	70*650	415	80*561
32	30*142	96	40*122	160	45*230	224	50*290	288	60*400	352	70*690	416	80*570
33	30*149	97	40*125	161	45*238	225	50*292	289	60*430	353	70*700	417	80*580
34	30*155	98	40*126	162	45*245	226	50*296	290	60*434	354	71*235	418	80*585
35	30*160	99	40*127	163	45*250	227	50*297	291	60*450	355	71*380	419	80*600
36	30*160.5	100	40*130	164	45*260	228	50*298	292	60*470	356	71*445	420	80*6000
37	30*170	101	40*135	165	45*262	229	50*300	293	60*480	357	71*460	421	80*630
38	30*175	102	40*145	166	45*270	230	50*308	294	60*500	358	71*720	422	80*640
39	30*185	103	40*150	167	45*277	231	50*320	295	60*590	359	72*432	423	80*650
40	30*187	104	40*160	168	45*280	232	50*323	296	60*700	360	75*285	424	80*700
41	30*188	105	40*170	169	45*285	233	50*324	297	61*300	361	75*352	425	80*721
42	30*190	106	40*175	170	45*289	234	50*330	298	62*74	362	75*435	426	80*750
43	30*191	107	40*177	171	45*290	235	50*335	299	62-79	363	75*450	427	80*790
44	30*191.5	108	40*189	172	45*292	236	50*337	300	65*130	364	75*500	428	80*800
45	30*194	109	40*190	173	45*300	237	50*340	301	65*200	365	75*700	429	80*802
46	30*198	110	40*196	174	45*306	238	50*347	302	65*300	366	76*320.5	430	82.52*293
47	30*202	111	40*205	175	45*307	239	50*350	303	65*355	367	76.2*196	431	82.53*240
48	30*210	112	40*209	176	45*310	240	50*371	304	65*360	368	76.5*512	432	85*200
49	30*215	113	40*210	177	45*315	241	50*373	305	65*380	369	79.87*222	433	85*260
50	30*230	114	40*211	178	45*320	242	50*400	306	65*385	370	79.94*522	434	85*430
51	30*250	115	40*215	179	45*330	243	50*445	307	65*400	371	80*1200	435	85*460
52	30*255	116	40*220	180	45*350	244	50*450	308	65*430	372	80*160	436	85*510
53	30*260	117	40*221	181	45*353	245	50*500	309	65*435	373	80*170	437	85*700
54	30*300	118	40*222	182	45*380	246	50*6000	310	65*440	374	80*217	438	85*750
55	30*6000	119	40*230	183	45*390	247	50*700	311	65*450	375	80*225	439	88.87*257
56	30*74	120	40*239	184	45*400	248	50.6*288	312	65*460	376	80*227	440	88.9*762
57	30*80.5	121	40*240	185	45*450	249	50.72*195	313	65*481	377	80*230	441	89.85*626
58	30*84	122	40*242	186	45*532	250	50.8*184.5	314	65*490	378	80*240	442	90*239
59	30*85	123	40*249	187	45*6000	251	53*140	315	65*500	379	80*241	443	90*240
60	30*86	124	40*250	188	45*700	252	55*1200	316	65*582	380	80*245	444	90*243
61	30*94	125	40*260	189	48*100	253	55*140	317	65*6000	381	80*247	445	90*245
62	31.72*117	126	40*266	190	50*140	254	55*200	318	65*700	382	80*250	446	90*265
63	35*100	127	40*270	191	50*150	255	55*222	319	66*176	383	80*270	447	90*284
64	35*105	128	40*280	192	50*155	256	55*274	320	69.85*454	384	80*275	448	90*360

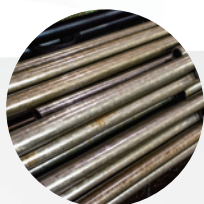
6 SN-BP Bushing plinth



The patented product selection of high strength alloy steel, 16Mn as the workpiece body, has good tensile and yield strength, excellent welding performance, the supporting flange type bushing, selection of high quality 40Cr alloy steel as raw materials; After forging process, advanced heat treatment process, so that the product has high hardness, high wear resistance, good flexibility, impact resistance. The product of the invention is a practical patented product with "cost-effective, one-time replacement and lifetime use".

7 Seamless steel pipe products and forging services

We provide various types of finish rolled seamless steel pipe products



- Various specifications of steel pipe
- Various steel pipe materials
- Large inventory
- Supply chain stability



We Provide Forging Services

Sample after forging and sandblasting

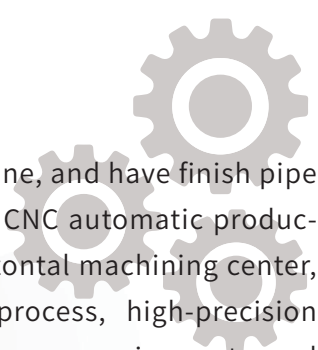


Scope of Service



We can provide supporting services and OEM/ODM services for many well-known construction machinery and equipment manufacturers at home and abroad.

Production Process

Three interlocking gray gears of different sizes are positioned in the upper right corner of the slide.

We own a complete product production line, and have finish pipe production line, forging production line, CNC automatic production line, vertical machining center, horizontal machining center, heat treatment equipment of whole process, high-precision grinding equipment, can meet various process requirements, and are equipped with professional technical team to provide technical support for customers.



Product Raw Materials

We purchase more than 10,000 tons of seamless steel tubes every year, and have high-quality steel suppliers with large inventory and complete models, and ensure strong supply capacity of products



Seamless steel pipe finishing production line



CNC automatic production line



Forging production line



CNC processing equipment

CNC machining center



Vertical machining center



Vertical machining center



Horizontal machining center

The factory has vertical and horizontal machining center equipment and professional and technical personnel team, high efficiency, strong comprehensive ability, can complete the shape of complex, high precision requirements of the single processing. And has a perfect staff skills training system, talent selection training plan.

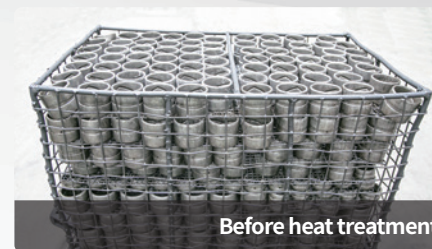


Technology For Heating Processing

Thickness of carburizing layer: 0.8~1.2mm

Surface hardness: HRC 58~62

We have a rich cluster of heat treatment equipment, complete solutions to various steel heat treatment problems and rigorous quality control systems. We can heat treat various precision components, and can accurately control the hardening depth and hardness of carburizing. The technicians conduct in-depth experimental research on each work-piece to ensure that the hardness, strength, plasticity and toughness of the different materials are optimized after tempering. Make the metallographic structure tend to be stable and ensure that no deformation occurs in later use process.



Before heat treatment



After heat treatment



Internal grinding



External grinding



QC quality inspection



Finished product area



Product packaging



Logistics transportation

Professional QC quality inspection team shall be responsible for the overall work of the department and organize implementation of relevant quality management regulations. Report batch quality problems timely, timely provide the information of unqualified products, and dispose unqualified products to ensure that the product quality meets the requirements.

Product Testing R&D Center

