

Hodaka Aluminum Billet

Hodaka Strength

- 2 tons R&D experimental casting line
- Customized alloy design & development
- Ingot purity $\geq 99.85\%$
- Hydrogen content ≤ 0.12 c.c. / 100g Al
- Inclusions ≤ 0.08 mm² / kg Al
- Set much tighter range than AA composition spec.
- Available to adopt 100% recycled material
- SCADA / PLC traceability management system

Alloys

- 1XXX
- 2XXX
- 3XXX
- 5XXX
- 6XXX
- 7XXX
- Customized alloys

Billets Capabilities

- Size: 3" - 14"
- 10 tons - 30 tons tiltable furnaces / holding furnaces
- Capacity: 144,000 tons / year
- High performance online degasser
- Dual-staged CFF & PTF filtration
- Hydrogen, inclusions detection

Taiwan Hodaka Technology Co., Ltd.

2 Huandong Rd., Sec 1 Sinshin District., 74146 Tainan, Taiwan

TEL: +886-6-505-0560 service@hodakatec.com

FAX: +886-6-505-0619 www.hodakatec.com



see more on our website

Alloys Mechanical Properties & Application

		Alloy and Description		Temper	Mechanical Properties ⁽²⁾					Application
					UTS		YS		ε	
					(MPa)	(ksi)	(MPa)	(ksi)	(%)	
2XXX	Al-Cu-Mn-Zr-V	AA2219		T6	388	56	278	40	14	Aviation
	Al-Cu-Mg-Ni-Fe	AA2618		T6	446	65	402	58	8	Rotor, Piston
	Al-Cu-Mn-Mg-Si	AA2014		O	183	27	114	17	17	Aviation
				T6	459	67	409	59	11	
	Al-Cu-Mg-Mn	AA2024		O	214	31	102	15	14	Aviation ⁽³⁾
				T3511	440	64	327	47	14	
				T4	576	84	405	59	14	
				T351	589	85	476	69	10	
				T6	495	72	396	57	11	
6XXX	Al-Mg-Si	AA6101		T6	210	30	185	27	12	Busbar
		AA6063	Commercial	T5	225	33	200	29	15	Cosmetic
			Better crushability	T5	254	37	224	32	15	Automotive
		AA6060		T5	245	36	220	32	11	Cosmetic, Automotive
		AA6005		T5	260	38	240	35	8	Automotive
		AA6082		T5	310	45	285	41	13	Automotive
	Al-Mg-Si-Cu	AA6061		O	108	16	43	6	19	Aviation ⁽³⁾
				T42	212	31	97	14	19	
				T62	325	47	285	41	10	
				T5	303	44	285	41	14	
		AA6013		T5	325	47	300	44	13	Sport
		AA6056		T6	360	52	320	46	9	Sport
		AA6069		T6	395	57	355	51	12	Sport
		AA6066		T6	390	57	340	49	15	Sport
7XXX	Al-Zn-Mg	AA7003		T5	370	54	325	47	16	Structure
		AA7005		T6	360	52	325	47	10	Structure
		H7005	HODAKA design ⁽¹⁾ , uniform microstructrue.	T5	425	62	403	58	12	Cosmetic
		H7046	HODAKA design ⁽¹⁾ , Better formability.	T5	458	66	425	62	10	Structure
		AA7046		T6	460	67	410	59	12	Structure
	Al-Zn-Mg-Cu	AA7050		T6	565	82	505	73	9	Sport
		AA7075		O	209	30	114	16	12	Aviation ⁽³⁾
				T6511	596	86	531	77	10	
				T76511	542	79	484	70	10	
				T73511	535	78	463	67	11	
		AA7150		T77511	610	88	566	82	9	Aviation
		AA7136		T76511	621	90	593	86	8	Aviation
		AA7055		T76511	624	91	603	88	9	Aviation
		AA7068		T6	670	97	655	95	11	Sport
		AA7349		T6	722	105	695	101	10	Aviation
	Al-Zn-Mg-Cu-Sc	M9H4	HODAKA design ⁽¹⁾ , contain Scandium	T6	660	96	640	93	9	Sport
		M9I2	HODAKA design ⁽¹⁾ , contain Scandium	T6	670	97	645	94	10	Sport

1. Composition is out of AA. Specification.

2. The information is collected from extruded examples. The property of cold-finished or drawn sample would be better.

3. Applicable specifications are AMS-QQ-A-200 and AMS-QQ-A-225.

Extrusion Capability

Alloys	Product Type	Dimensions	Typical Tolerance Range
2xxx\3xxx\5xxx\6xxx\7xxx Aluminum-Scandium Alloy: M6\ M7\ M9 Customized Aluminum Alloy	Seamless Tube	OD: 19~190 mm Thickness: 1.0 mm (Min.)	OD: ±0.15 mm Thickness: ±0.1 mm
	Rod & Bar	OD: 6~125 mm	OD: ±0.1 mm
	Wire	OD: 2.6~15 mm	OD: ±0.01 mm
	Plate	Width: 420 mm (Max.)	Width: ±0.2 mm
		Height: 1.2 mm (Min.)	Height: ±0.1 mm
	Rim Profile	Depends on the external profile Wall Thickness: 0.55 mm (Min.)	Wall Thickness: ±0.05 mm
	Drawn Tube	OD: 16~85 mm Thickness: 0.66 mm (Min.)	OD: ±0.05 mm Thickness: ±0.03 mm
	Drawn Bar	OD: 10~30 mm	OD: ±0.05 mm
	Special Shape's Profile	Circumcircle <420 mm	Customized
	3C Cases	Customized	Wall Thickness: ±0.07 mm (Min.) Profile: 0.15 mm