

# PREMIUM-ALUMINIUM

in three specifications:

ALU-PRÄZ®
PRECISION ROUND ALUMINIUM
ROUND ALUMINIUM



8 GRADES IN 4,307 DIMENSIONS
EX WORKS FROM OSNABRÜCK/GERMANY
DELIVERY IN 3-5 WORKING DAYS (SUBJECT TO AVAILABILITY)

WITHOUT MINIMUM ORDER VALUE
WITHOUT MINIMUM ORDER QUANTITY
SPECIAL CUSTOM DIMENSIONS SAWN - MILLED - GROUND

# CONSISTENTLY DYNAMIC!

... that is ABRAMS®.

New product line ABRAMS PREMIUM ALUMINIUM®	: 2020	
New product line <b>Hart-Präz®</b>	2018	Expansion to 70 PREMIUM steel grades and 32,629 dimensions
New product line ABRAMS® PREMIUM TOOLS	2015	
	2011	Expansion to 52 PREMIUM steel grades and 21,078 dimensions
The <b>ABRAMS STEEL GUIDE®</b> going live	2010	
	2009	Expansion to 35 PREMIUM steel grades and 8,259 dimensions
	2008	Expansions to 32 PREMIUM steel grades and 7,155 dimensions
	2007	Expansion to 22 PREMIUM steel grades and 5,954 dimensions
Print of the first <b>ABRAMS®</b> art calendar	2006	
	2005	Expansion to 10 Premium steel grades and 3,649 dimensions
Market launch of ABRAMS PREMIUM STEEL®	2003	Launch of 8 PREMIUM steel grades and 2,805 dimensions
Founding of ABRAMS®	2002	

Yours sincerely,

Dr. Järgen Abrams Managing Director

# **VERSATILE**







#### PREMIUM-ALUMINIUM

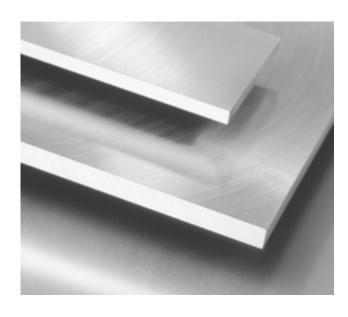
- 8 aluminium grades in 4,307 dimensions
- In 3 specifications
  - ALU-PRÄZ®
  - PRECISION ROUND ALUMINIUM
  - ROUND ALUMINIUM

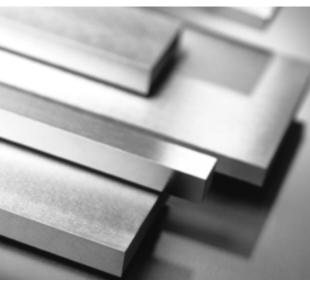
#### **PREMIUM STEEL**

- 70 steel grades in 32,629 dimensions
- PRECISION FLAT STEEL with / without machining allowance
- €co-Präz® Standardized precision blanks
- Hart-Präz® Hardened precision plates
- PRECISION ROUND STEEL
   with / without machining allowance
- ROUND STEEL
- EROSION BLOCK annealed / hardened
- WITHOUT MINIMUM ORDER VALUE OR QUANTITY
- SPECIAL CUSTOM DIMENSIONS SAWN MILLED GROUND

### **PREMIUM-UNIVERSAL-TAPS**

- 96 items in 6 categories
- Metric standard thread
  - For clearance holes
  - M-DIN 371-Form B
  - M-DIN 376-Form B
- For blind holes
- M-DIN 371-Form C
- M-DIN 376-Form C
- Metric fine thread
  - For clearnace holes
    - MF-DIN 374-Form B
- For blind holes
- MF-DIN 374-Form C







# **SPECIFICATIONS**

Our delivery program contains 4,307 different specifications/standard dimensions.

Any dimension is available in different **hights, width** and **length**. On your request - according to your needs!



# ALU-Präz® [ALU]

For example: 123 x 12.0 x 500 mm

- **W** sawn | tol. +3 /-0 mm
- T finely milled | tol. + 0.1 / 0.1 mm (both sides foiled)
- L sawn | tol. +5/-0 mm



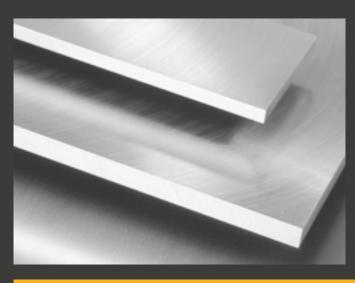
# Precision round aluminium [PRA]

- drawn | tol.: Ø EN754-3 (~h11)
- L sawn | tol. +10/-10 mm



# Round aluminium [RA]

- pressed | tol.: Ø +1 /-1 mm (aspired)
- L sawn | tol. +10/-10 mm







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PREMIUM EN AW-2007	EN AW-AlCu4PbMgMn	AlCuMgPb	3.1645		<b>✓</b>	<b>✓</b>	130	420	PI.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	EN AW- 2007
PREMIUM EN AW-2011	EN AW-AlCu6BiPb	AlCuBiPb	3.1655		<b>✓</b>		120	390		✓	EN AW- 2011
PREMIUM EN AW-5083	EN AW-AIMg4.5Mn0.7	AlMg4.5Mn	3.3547	<b>✓</b>		<b>✓</b>	100	290	<b>✓</b>		EN AW- 5083
PREMIUM EN AW-5754	EN AW-AIMg3	AIMg3	3.3535	<b>✓</b>		<b>✓</b>	50	210	<b>✓</b>		EN AW- 5754
PREMIUM EN AW-6060	EN AW-AIMgSi	AIMgSi0.5	3.3206			✓	80	240	<b>✓</b>	<b>✓</b>	EN AW- 6060
PREMIUM EN AW-6082	EN AW-AISi1MgMn	AIMgSi1	3.2315	<b>✓</b>	✓	✓	105	300	<b>✓</b>	<b>✓</b>	EN AW- 6082
PREMIUM EN AW-7021	EN AW-AIZn5.5Mg1.5	-	-	<b>✓</b>			120	350	<b>✓</b>	<b>✓</b>	EN AW- 7021
PREMIUM EN AW-7075	EN AW-AIZn5.5MgCu	AlZnMgCu1.5	3.4365	✓		<b>✓</b>	140	450	<b>✓</b>	✓	EN AW- 7075

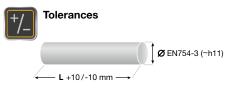


# PREMIUM EN AW-2007 - EN AW-AICu4PbMgMn (AICuMgPb/3.1645)

Precision round aluminium [PRA] Specification: drawn

Safe.	LENGT	H [mm]
	500	1,000
Ø[mm]	Available dir	mensions [•]
8.0	•	•
9.0	•	•
10.0	•	•
11.0	•	•
12.0	•	•
13.0	•	•
14.0	•	•
15.0	•	•
16.0	•	•
17.0	•	•
18.0	•	•
19.0	•	•
20.0	•	•
21.0	•	•
22.0	•	•
23.0	•	•
24.0	•	•
25.0	•	•
26.0	•	•
28.0	•	•
30.0	•	•
32.0	•	•
35.0	•	•
36.0	•	•
38.0	•	•
40.0	•	•
42.0	•	•
45.0	•	•
50.0	•	•
55.0	•	•
60.0	•	•







#### Standard values

Delivery condition: maximum 130 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Pb
						0			
0.8	0.8	4.6	1.0	1.8	0.1	0.2	0.8	0.2	1.5



#### If you need customised dimensions -

Any dimension available in different lengths (e.g. round blanks).

On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910 E: sales@abrams-industries.co.uk



#### Direct access to our online shop

www.premium-aluminium.co.uk/2007-3-A



#### **Technical properties**

The age-hardenable alloy EN AW-2007 is the mainly used free-cutting alloy. It is ideal for machining due to it's high strenght and short chip-break and makes it possible to machine it on high-speed automatic lathes and multi-spindle machines. Due to its low corrosion resistance it is recommended to anodise finished parts for protection.

Tensile strength (on delivery): approx. 370-470 N/mm<sup>2</sup>.



# **Applications**

Drilling-, turning- and milling properties (free cutting alloy), mechanical engineering and jigs and fixtures, screws, nuts.



# EN AW-2007 - all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/2007



# PREMIUM EN AW-2007 - EN AW-AICu4PbMgMn (AICuMgPb/3.1645)

Round aluminium [RA] Specification: pressed

Sof!	LENGT	H [mm]
	500	1,000
Ø[mm]	Available di	mensions [•]
8	•	•
10	•	•
12	•	•
15	•	•
16	•	•
18	•	•
20	•	•
25	•	•
28	•	•
30	•	•
32	•	•
35	•	•
38	•	•
40	•	•
42	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65		•
70		•
75		•
80		•
90		•
100		•

Larger diameters Ø and different lengths (e.g. round blanks) available on request!





#### Tolerances

Ø +1 /-1 mm (aspired) - L +10/-10 mm



#### Standard values

Delivery condition: maximum 130 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Pb
						0			
0.8	0.8	4.6	1.0	1.8	0.1	0.2	0.8	0.2	1.5



# If you need customised dimensions -

Any dimension available in different lengths (e.g. round blanks).

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Tensile strength (on delivery): approx. 370-470 N/mm<sup>2</sup>.



### **Applications**

Drilling-, turning- and milling properties (free cutting alloy), mechanical engineering and jigs and fixtures, screws, nuts.



# EN AW-2007 - all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/2007

via smartphone/tablet:



EN AW-2007

EN AW-5083

EN AW-6060





# PREMIUM EN AW-2011 - EN AW-AICu6BiPb (AICuBiPb/3.1655)

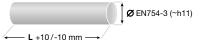
Precision round aluminium [PRA] Specification: drawn

2.0	LENGT	H [mm]		
	500	1,000		
Ø[mm]	Available dir	mensions [•]		
3.0	•	•		
4.0	•	•		
5.0	•	•		
6.0	•	•		
7.0	•	•		
8.0	•	•		
10.0	•	•		
12.0	•	•		
15.0	•	•		
20.0	•	•		
25.0	•	•		
30.0	•	•		
35.0	•	•		
40.0	•	•		
45.0	•	•		
50.0	•	•		
55.0	•	•		
60.0	•	•		





#### Tolerances





#### Standard values

Delivery condition: maximum 120 HB Chemical composition:

Si	Fe	Cu	Bi	Zn	Pb
0	0	5.0	0.2	0	0.2
0.4	0.7	6.0	0.6	0.3	0.6



#### If you need customised dimensions -

Any dimension available in different lengths (e.g. round blanks).

On request - according to your needs!



#### Contact us

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#### Direct access to our online shop

www.premium-aluminium.co.uk/2011-3-A



### **Technical properties**

The alloy EN AW-2011 is an enhancement of the EN AW-2007. It is especially suitable for high cutting speeds due to the very short chip-break. This material can also be heat treated. Tensile strength (on delivery): approx. 370-410 N/mm<sup>2</sup>.



# **Applications**

Drilling-, turning- and milling properties (free cutting alloy), mechanical engineering, aviation and aerospace, defence technology.



# EN AW-2011 – all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/2011

via smartphone/tablet:



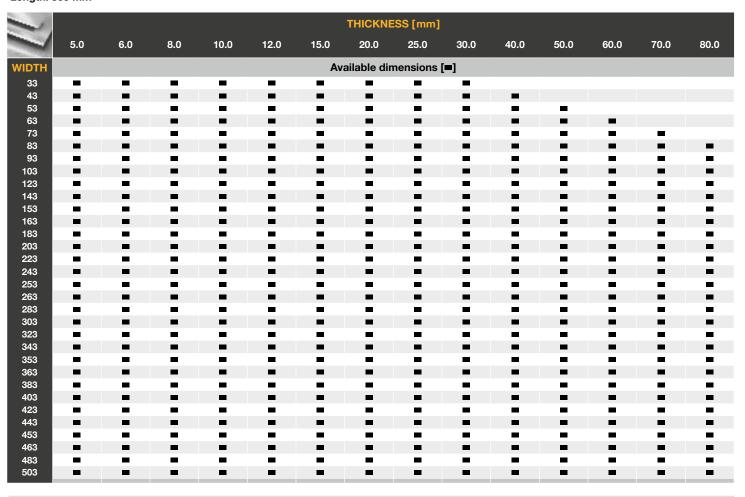
EN AW-2011

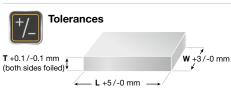
EN AW-5083

EN AW-6060

# PREMIUM EN AW-5083 - EN AW-AIMg4.5Mn0.7 (AIMg4.5Mn/3.3547)

# ALU-Präz® 500 [ALU] Length: 500 mm







#### Standard values

Delivery condition: maximum 100 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
0	0	0	0.4	4.0	0.05	0	0
0.4	0.4	0.1	1.0	4.9	0.25	0.25	0.15



#### If you need customised dimensions -

Any dimension available in different heights, widths and lengths.

On request - according to your needs!



#### Contact us

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#### Direct access to our online shop

www.premium-aluminium.co.uk/5083-1-A



#### **Technical properties**

This universal alloy (here cast version) has a very high corrosion resistance and can be used effectively in seawater. The cast material is stress-free and therefore easier to machine. Furthermore, EN AW-5083 is very well suited for hard anodising, technical anodising and protective coatings.

Tensile strength (on delivery): approx. 275-315 N/mm².



#### **Applications**

Apparatus engineering, container and vehicle construction, refrigeration technology, naval construction, laminating tools, blow moulds, injection moulds, tool making, mould- and model making.



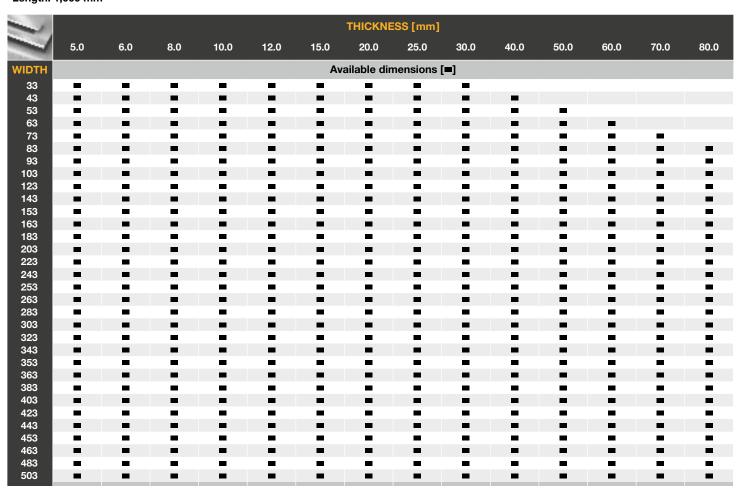
# EN AW-5083 – all at a glance!

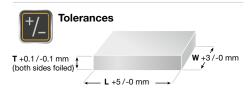
Datasheets and online shop: www.premium-aluminium.co.uk/5083



# PREMIUM EN AW-5083 - EN AW-AIMg4.5Mn0.7 (AIMg4.5Mn/3.3547)

ALU-Präz® 1,000 [ALU] Length: 1,000 mm





#### Standard values

Delivery condition: maximum 100 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
0	0	0	0.4	4.0	0.05	0	0
0.4	0.4	0.1	1.0	4.9	0.25	0.25	0.15



#### If you need customised dimensions -

Any dimension available in different heights, widths and lengths.

On request - according to your needs!



#### Contact us

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#### Direct access to our online shop

www.premium-aluminium.co.uk/5083-2-A



### **Technical properties**

This universal alloy (here cast version) has a very high corrosion resistance and can be used effectively in seawater. The cast material is stress-free and therefore easier to machine. Furthermore, EN AW-5083 is very well suited for hard anodising, technical anodising and protective coatings.

Tensile strength (on delivery): approx. 275-315 N/mm<sup>2</sup>.



#### **Applications**

Apparatus engineering, container and vehicle construction, refrigeration technology, naval construction, laminating tools, blow moulds, injection moulds, tool making, mould- and model making.



# EN AW-5083 – all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/5083

via smartphone/tablet:



NAVIGATION ALLOY

EN AW-2007

EN AW-2011

EN AW-5083

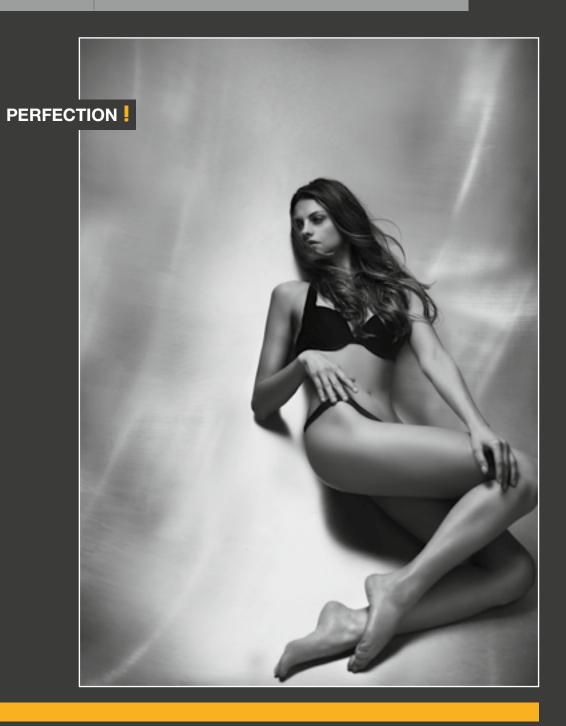
14 AVV-5000

N AW-5754

EN AW-6060

EN AW-6082

EN AW-7021





# PREMIUM EN AW-5083 - EN AW-AIMg4.5Mn0.7 (AIMg4.5Mn/3.3547)

Round aluminium [RA] Specification: pressed

-		
Total.	LENGT	H [mm]
	500	1,000
Ø[mm]	Available dir	mensions [•]
15	•	•
16	•	•
20	•	•
25	•	•
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65		•
70		•
75		•
80		•
90		•
100		•

Larger diameters Ø and different lengths (e.g. round blanks) available on request!



**ALUMINIUM** 



#### **Tolerances**

Ø +1 /-1 mm — **L** +10/-10 mm



#### Standard values

Delivery condition: maximum 100 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
0	0	0	0.4	4.0	0.05	0	0
0.4	0.4	0.1	1.0	4.9	0.25	0.25	0.15



### If you need customised dimensions -

Any dimension available in different lengths (e.g. round blanks).

On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910

E: sales@abrams-industries.co.uk



#### Direct access to our online shop

www.premium-aluminium.co.uk/5083-4-A



#### **Technical properties**

This universal alloy has a very high corrosion resistance and can be used effectively in seawater. The material is stress-free and therefore easier to machine. Furthermore, EN AW-5083 is very well suited for hard anodising, technical anodising and protective

Tensile strength (on delivery): approx. 275-315 N/mm<sup>2</sup>.



# **Applications**

Apparatus engineering, container and vehicle construction, refrigeration technology, naval construction, laminating tools, blow moulds, injection moulds, tool making, mould- and model making.



# EN AW-5083 - all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/5083

via smartphone/tablet:





EN AW-2007

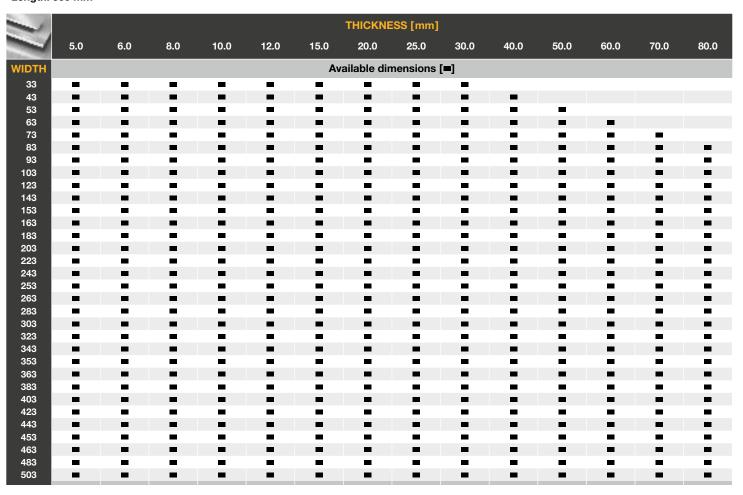
EN AW-2011

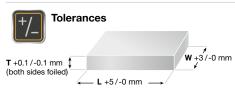
EN AW-5083

EN AW-6060

# PREMIUM EN AW-5754 - EN AW-AIMg3 (AIMg3/3.3535)

# ALU-Präz® 500 [ALU] Length: 500 mm







#### Standard values

Delivery condition: maximum 50 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Mn+C
								0.1
0.4	0.4	0.1	0.5	3.6	0.3	0.2	0.15	0.6



#### If you need customised dimensions -

Any dimension available in different heights, widths and lengths.

On request - according to your needs!



#### Contact us

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E: sales@abrams-industries.co.uk



#### Direct access to our online shop

www.premium-aluminium.co.uk/5754-1-A



#### **Technical properties**

The alloy EN AW-5754 (here cast version) has a medium strength even in soft condition. The very good corrosion resistance, especially against seawater, should be emphasized. Furthermore, it is easily weldable and suitable for use at an elevated workpiece temperature.

Tensile strength (on delivery): approx. 190-240 N/mm<sup>2</sup>.



#### Applications

Vehicle construction, naval construction, metal- and container construction, apparatus engineering, architecture, food industry, mechanical engineering.



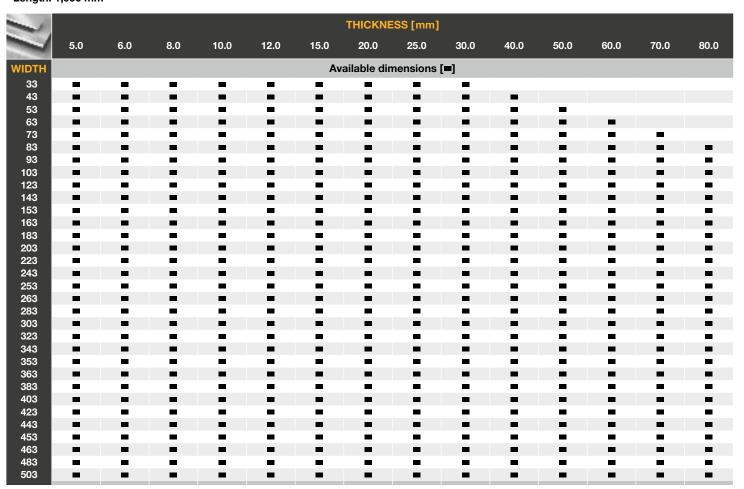
#### EN AW-5754 – all at a glance!

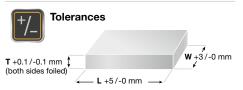
Datasheets and online shop: www.premium-aluminium.co.uk/5754



# PREMIUM EN AW-5754 - EN AW-AIMg3 (AIMg3/3.3535)

ALU-Präz® 1,000 [ALU] Length: 1,000 mm







#### Standard values

Delivery condition: maximum 50 HB Chemical composition:

EN AW-5754

EN AW-6060

EN AW-7021

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Mn+Cr
								0.1
0.4	0.4	0.1	0.5	3.6	0.3	0.2	0.15	0.6



#### If you need customised dimensions -

Any dimension available in different heights, widths and lengths.

On request - according to your needs!



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E: sales@abrams-industries.co.uk



#### Direct access to our online shop

www.premium-aluminium.co.uk/5754-2-A



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Tensile strength (on delivery): approx. 190-240 N/mm<sup>2</sup>.



#### **Applications**

Vehicle construction, naval construction, metal- and container construction, apparatus engineering, architecture, food industry, mechanical engineering.



#### EN AW-5754 - all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/5754







# PREMIUM EN AW-5754 - EN AW-AIMg3 (AIMg3/3.3535)

Round aluminium [RA] Specification: pressed

Total.	LENGT	H [mm]
	500	1,000
Ø[mm]	Available dir	mensions [•]
20	•	•
25	•	•
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65		•
70		•
75		•
80		•
85		•
90		•
100		•

Larger diameters Ø and different lengths (e.g. round blanks) available on request!





#### **Tolerances**

Ø +1 /-1 mm - L +10/-10 mm



### Standard values

Delivery condition: maximum 50 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Mn+C
								0.1
0.4	0.4	0.1	0.5	3.6	0.3	0.2	0.15	0.6



#### If you need customised dimensions -

Any dimension available in different lengths (e.g. round blanks).

On request - according to your needs!



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E: sales@abrams-industries.co.uk



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www.premium-aluminium.co.uk/5754-4-A



#### **Technical properties**

The alloy EN AW-5754 has a medium strength even in soft condition. The very good corrosion resistance, especially against seawater, should be emphasized. Furthermore, it is easily weldable and suitable for use at an elevated workpiece temperature.

Tensile strength (on delivery): approx. 190-240 N/mm<sup>2</sup>.



### **Applications**

Vehicle construction, naval construction, metal- and container construction, apparatus engineering, architecture, food industry, mechanical engineering.



# EN AW-5754 – all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/5754

via smartphone/tablet:





EN AW-5754

EN AW-6060





Round aluminium [RA] Specification: pressed

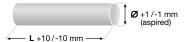
Total.	LENGT	H [mm]
	500	1,000
Ø[mm]	Available dir	mensions [•]
4	•	•
5	•	•
6	•	•
8	•	•
10	•	•
12	•	•
15	•	•
20	•	•
25	•	•
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
55	•	•
60	•	•
70		•
80		•
90		•
100		•

Larger diameters Ø and different lengths (e.g. round blanks) available on request!





#### Tolerances





#### Standard values

Delivery condition: maximum 80 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
				0.35			
0.6	0.3	0.1	1.0	0.6	0.05	0.15	0.1



### If you need customised dimensions -

Any dimension available in different lengths (e.g. round blanks).

On request - according to your needs!



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# Direct access to our online shop

www.premium-aluminium.co.uk/6060-4-A



#### **Technical properties**

The alloy EN AW-6060 is a widely used alloy in the extrusion sector. The corrosion resistance, with respect to seawater and normal environment, is very good. Further it is easily weldable and has excellent properties for anodising, especially in the decorative area.

Tensile strength (on delivery): approx. 215-260 N/mm<sup>2</sup>.



### **Applications**

Windows and doors, metal construction, air conditioning technology, exhibition construction, interior design, textile industry, household articles, screws, decoration, architecture, pipelines and profiles.



# EN AW-6060 - all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/6060

via smartphone/tablet:



NAVIGATION ALLOY

EN AW-2007

EN AW-2011

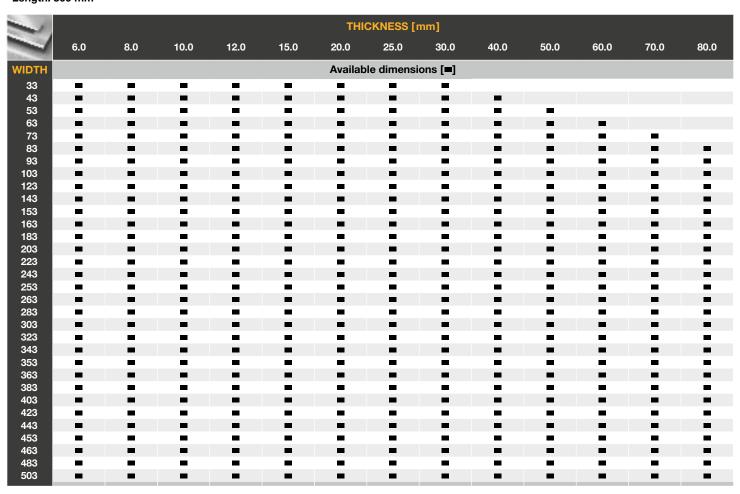
EN AW-5083

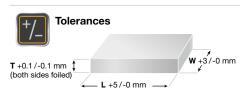
EN AW-5754

EN AW-6060

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# ALU-Präz® 500 [ALU] Length: 500 mm







#### Standard values

Delivery condition: maximum 105 HB Chemical composition:

				_	Cr		
0.7	0	0	0.4	0.6	0	0	0
1.3	0.5	0.1	1.0	1.2	0.25	0.2	0.1



#### If you need customised dimensions -

Any dimension available in different heights, widths and lengths.

On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910

E: sales@abrams-industries.co.uk



#### Direct access to our online shop

www.premium-aluminium.co.uk/6082-1-A



#### **Technical properties**

The alloy EN AW-6082 is one of the most frequently used age-hardenable wrought aluminium grades. Depending on the application, medium to high strenght can be achieved with this alloy. In addition, this material has a high corrosion resistance and is very easy to weld and polish.

Tensile strength (on delivery): approx. 300-350 N/mm<sup>2</sup>.



#### **Applications**

Food industry, decoration, vehicle construction, naval construction, railway vehicles, boiler and tank construction, offshore, aviation and aerospace, defence technology.

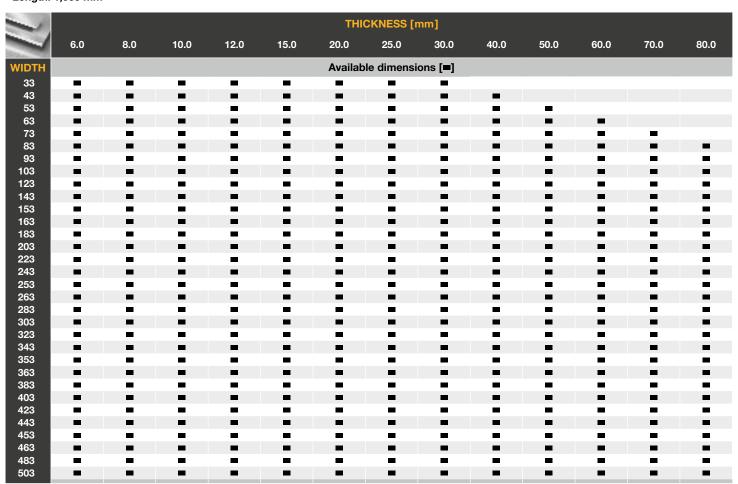


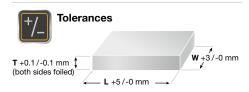
#### EN AW-6082 – all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/6082



ALU-Präz® 1,000 [ALU] Length: 1,000 mm







#### Standard values

Delivery condition: maximum 105 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
0.7	0	0	0.4	0.6	0	0	0
1.3	0.5	0.1	1.0	1.2	0.25	0.2	0.1



#### If you need customised dimensions -

Any dimension available in different heights, widths and lengths. On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910

E: sales@abrams-industries.co.uk



# Direct access to our online shop

www.premium-aluminium.co.uk/6082-2-A



### **Technical properties**

The alloy EN AW-6082 is one of the most frequently used age-hardenable wrought aluminium grades. Depending on the application, medium to high strenght can be achieved with this alloy. In addition, this material has a high corrosion resistance and is very easy to weld and polish.

Tensile strength (on delivery): approx. 300-350 N/mm<sup>2</sup>.



### **Applications**

Food industry, decoration, vehicle construction, naval construction, railway vehicles, boiler and tank construction, offshore, aviation and aerospace, defence technology.



# EN AW-6082 - all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/6082

via smartphone/tablet:



EN AW-6082





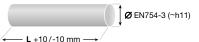
Precision round aluminium [PRA] Specification: drawn

Total.	LENGT	H [mm]
	500	1,000
Ø[mm]	Available dir	mensions [•]
2.0	•	•
6.0	•	•
8.0	•	•
10.0	•	•
12.0	•	•
15.0	•	•
16.0	•	•
18.0	•	•
20.0	•	•
22.0	•	•
24.0	•	•
25.0	•	•
28.0	•	•
30.0	•	•
32.0	•	•
35.0	•	•
38.0	•	•
40.0	•	•
42.0	•	•
45.0	•	•
50.0	•	•
55.0	•	•
60.0	•	•





#### Tolerances





#### Standard values

Delivery condition: maximum 105 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
0.7	0	0	0.4	0.6	0	0	0
1.3	0.5	0.1	1.0	1.2	0.25	0.2	0.



#### If you need customised dimensions -

Any dimension available in different lengths (e.g. round blanks).

On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910

E: sales@abrams-industries.co.uk



# Direct access to our online shop

www.premium-aluminium.co.uk/6082-3-A



### **Technical properties**

The alloy EN AW-6082 is one of the most frequently used age-hardenable wrought aluminium grades. Depending on the application, medium to high strenght can be achieved with this alloy. In addition, this material has a high corrosion resistance and is very easy to weld and polish.

Tensile strength (on delivery): approx. 300-350 N/mm<sup>2</sup>.



# **Applications**

Food industry, decoration, vehicle construction, naval construction, railway vehicles, boiler and tank construction, offshore, aviation and aerospace, defence technology.



# EN AW-6082 – all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/6082

via smartphone/tablet:



EN AW-6082





Round aluminium [RA] Specification: pressed

10/2	LENGT	H [mm]
	500	1,000
Ø[mm]	Available dir	mensions [•]
8	•	•
10	•	•
12	•	•
15	•	•
16	•	•
18	•	•
20	•	•
25	•	•
28	•	•
30	•	•
32	•	•
35	•	•
38	•	•
40	•	•
42	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65		•
70		•
75		•
80		•
90		•
100		•

Larger diameters  $\varnothing$  and different lengths (e.g. round blanks) available on request!





#### **Tolerances**

Ø +1 /-1 mm (aspired)



### Standard values

Delivery condition: maximum 105 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
					0		
1.3	0.5	0.1	1.0	1.2	0.25	0.2	0.



#### If you need customised dimensions -

Any dimension available in different lengths (e.g. round blanks).

On request - according to your needs!



#### Contact us

T: +49 541/357 39-0

E: sales@abrams-industries.co.uk



#### Direct access to our online shop

www.premium-aluminium.co.uk/6082-4-A



#### **Technical properties**

The alloy EN AW-6082 is one of the most frequently used age-hardenable wrought aluminium grades. Depending on the application, medium to high strenght can be achieved with this alloy. In addition, this material has a high corrosion resistance and is very easy to weld and polish.

Tensile strength (on delivery): approx. 300-350 N/mm<sup>2</sup>.



#### **Applications**

Food industry, decoration, vehicle construction, naval construction, railway vehicles, boiler and tank construction, offshore, aviation and aerospace, defence technology.



# EN AW-6082 - all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/6082

via smartphone/tablet:



NAVIGATION ALLOY

EN AW-2007

-N ΔW-2011

N AW-5083

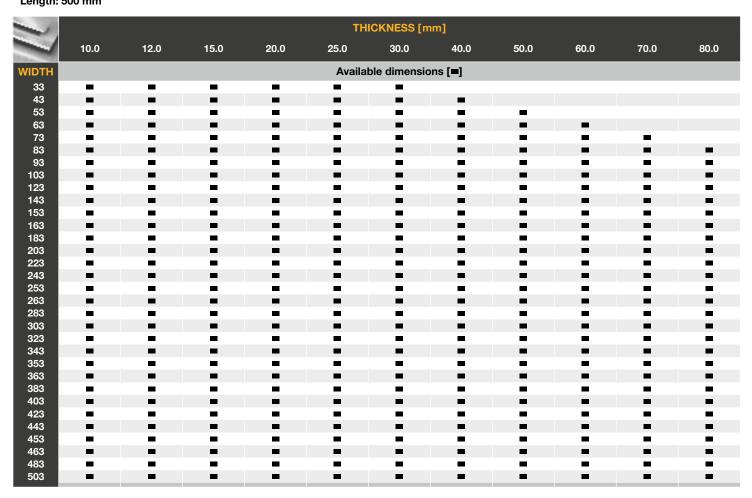
NI AVAL EZEA

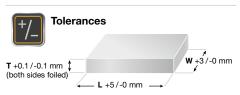
EN AW-6082

EN AW-7021

# PREMIUM EN AW-7021 - EN AW-AIZn5.5Mg1.5

# ALU-Präz® 500 [ALU] Length: 500 mm







### Standard values

Delivery condition: maximum 120 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
0	0	0	0	1.2	0.08	5.0	0
0.25	0.4	0.25	0.1	1.8	0.18	6.0	0.1



#### If you need customised dimensions -

Any dimension available in different heights, widths and lengths.

On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910

E: sales@abrams-industries.co.uk



#### Direct access to our online shop

www.premium-aluminium.co.uk/7021-1-A



#### **Technical properties**

This high strength cast aluminium plate is particularly characterised due to its very good dimensional stability which is combined with very good machinability and is both technically and hard anodisable. In addition the material is weldable and has a good corrosion resistance.

Tensile strength (on delivery): approx. 320-380 N/mm<sup>2</sup>.



#### **Applications**

Tool making, mould making, model making, transfer plates, base plates, table tops, mounting plates, mechanical parts, mechanical engineering, jigs and fixtures, injection moulding tools, defence technology, press components.



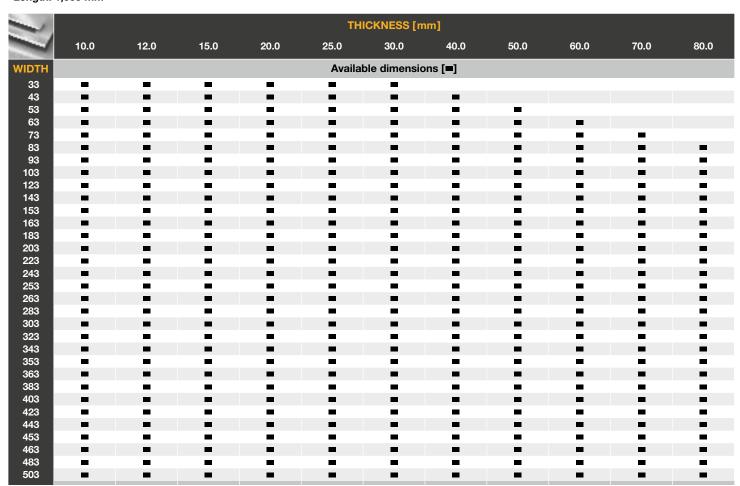
# EN AW-7021 – all at a glance!

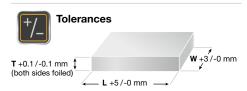
Datasheets and online shop: www.premium-aluminium.co.uk/7021



# PREMIUM EN AW-7021 - EN AW-AIZn5.5Mg1.5

ALU-Präz® 1,000 [ALU] Length: 1,000 mm







#### Standard values

Delivery condition: maximum 120 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
					0.08		
0.25	0.4	0.25	0.1	1.8	0.18	6.0	0.1



#### If you need customised dimensions -

Any dimension available in different heights, widths and lengths.

On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910

E: sales@abrams-industries.co.uk



Direct access to our online shop

www.premium-aluminium.co.uk/7021-2-A



#### **Technical properties**

This high strength cast aluminium plate is particularly characterised due to its very good dimensional stability which is combined with very good machinability and is both technically and hard anodisable. In addition the material is weldable and has a good corrosion resistance.

Tensile strength (on delivery): approx. 320-380 N/mm<sup>2</sup>.



Tool making, mould making, model making, transfer plates, base plates, table tops, mounting plates, mechanical parts, mechanical engineering, jigs and fixtures, injection moulding tools, defence technology, press components.



# EN AW-7021 – all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/7021

via smartphone/tablet:





EN AW-2007

EN AW-2011

EN AW-5083

EN AW-5754

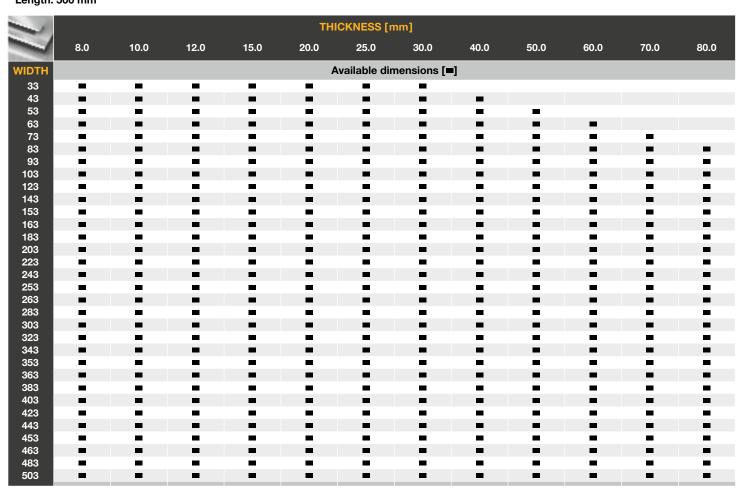
EN AW-6060

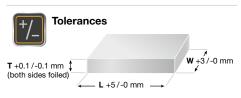
EN AW-6082

EN AW-7021

# PREMIUM EN AW-7075 - EN AW-AIZn5.5MgCu (AIZnMgCu1.5/3.4365)

# ALU-Präz® 500 [ALU] Length: 500 mm







### Standard values

Delivery condition: maximum 140 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
0	0	1.2	0	2.1	0.18	5.1	0
0.4	0.5	2.0	0.3	2.9	0.28	6.1	0.2



# If you need customised dimensions -

Any dimension available in different heights, widths and lengths.

On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910

E: sales@abrams-industries.co.uk



#### Direct access to our online shop

www.premium-aluminium.co.uk/7075-1-A



#### **Technical properties**

This hardenable material is characterizsed by its good dimensional stability and high strength. To achieve the potential of strength a heat treatment such as solution heat treatment and subsequently artificial ageing is recommended.

Tensile strength (on delivery): approx. 360-540 N/mm².



#### **Applications**

Aviation, mechanical engineering, tool making, jigs and fixtures, mould making, machine casing, reference plates, robotic arms, defence technology.



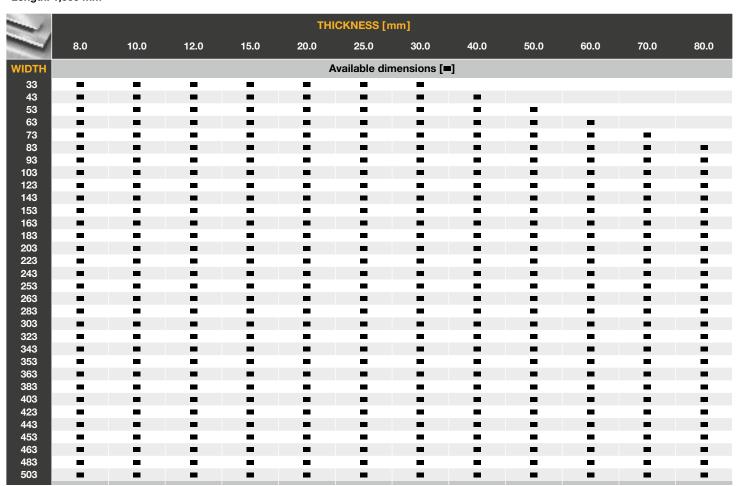
# EN AW-7075 – all at a glance!

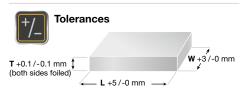
Datasheets and online shop: www.premium-aluminium.co.uk/7075



# PREMIUM EN AW-7075 - EN AW-AIZn5.5MgCu (AIZnMgCu1.5/3.4365)

ALU-Präz® 1,000 [ALU] Length: 1,000 mm







#### Standard values

Delivery condition: maximum 140 HB Chemical composition:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
					0.18		
0.4	0.5	2.0	0.3	2.9	0.28	6.1	0.2



#### If you need customised dimensions -

Any dimension available in different heights, widths and lengths.

On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910

E: sales@abrams-industries.co.uk



Direct access to our online shop

www.premium-aluminium.co.uk/7075-2-A



### **Technical properties**

This hardenable material is characterizsed by its good dimensional stability and high strength. To achieve the potential of strength a heat treatment such as solution heat treatment and subsequently artificial ageing is recommended.

Tensile strength (on delivery): approx. 360-540 N/mm².



#### **Applications**

Aviation, mechanical engineering, tool making, jigs and fixtures, mould making, machine casing, reference plates, robotic arms, defence technology.



# EN AW-7075 – all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/7075

via smartphone/tablet:

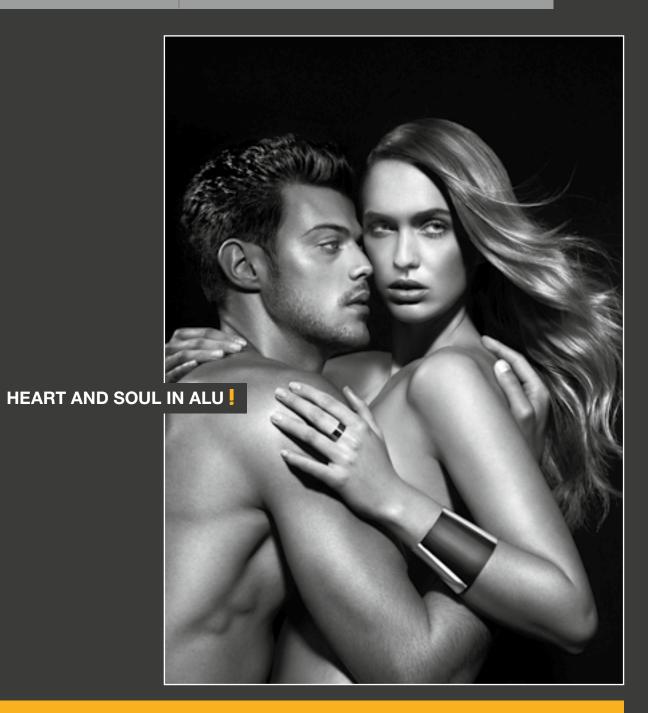


"NI AVA! E7E4

EN AW-6060

EN AW-6082

EN AW-7021





# PREMIUM EN AW-7075 - EN AW-AIZn5.5MgCu (AIZnMgCu1.5/3.4365)

Round aluminium [RA] Specification: pressed

To file	LENGT	H [mm]
	500	1,000
Ø[mm]	Available dir	mensions [•]
8	•	•
10	•	•
12	•	•
15	•	•
16	•	•
18	•	•
20	•	•
22	•	•
25	•	•
30	•	•
35	•	•
40	•	•
42	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65		•
70		•
75		•
80		•
90		•
100		•

Larger diameters Ø and different lengths (e.g. round blanks) available on request!



### **Technical properties**

This hardenable material is characterizsed by its good dimensional stability and high strength. To achieve the potential of strength a heat treatment such as solution heat treatment and subsequently artificial ageing is recommended. Tensile strength (on delivery): approx. 360-540 N/mm<sup>2</sup>.



Aviation, mechanical engineering, tool making, jigs and fixtures,

mould making, machine casing, reference plates, robotic arms,



#### Tolerances





### Standard values

Delivery condition: maximum 140 HB Chemical composition:

				_	Cr		
					0.18		
0.4	0.5	2.0	0.3	2.9	0.28	6.1	0.2



#### If you need customised dimensions -

Any dimension available in different lengths (e.g. round blanks).

On request - according to your needs!



#### Contact us

T: +44 (0) 121 368 0910

E: sales@abrams-industries.co.uk



# Direct access to our online shop

www.premium-aluminium.co.uk/7075-4-A



# EN AW-7075 – all at a glance!

Datasheets and online shop: www.premium-aluminium.co.uk/7075

via smartphone/tablet:





EN AW-7075

**Applications** 

defence technology.

# WEIGHT TABLES!

Weight table for flat, square and round aluminium (in kg with a nominal dimension of 1,000 mm in length). Also see www.premium-aluminium.co.uk/weights

1							THICKNE	SS [mm]						
	5.0	6.0	8.0	10.0	12.0	15.0	20.0	25.0	30.0	40.0	50.0	60.0	70.0	80.0
WIDTH							Weight	[kg/m]						
33	0.5	0.6	0.8	1.0	1.2	1.5	2.0	2.5	2.9					
43	0.6	0.8	1.0	1.3	1.5	1.9	2.5	3.1	3.8	5.0				
53	0.8	0.9	1.2	1.5	1.8	2.3	3.1	3.8	4.6	6.1	7.6			
63	0.9	1.1	1.4	1.8	2.2	2.7	3.6	4.5	5.4	7.2	9.0	10.8		
73	1.0	1.2	1.7	2.1	2.5	3.1	4.1	5.2	6.2	8.3	10.3	12.4	14.5	
83	1.2	1.4	1.9	2.3	2.8	3.5	4.7	5.9	7.0	9.4	11.7	14.1	16.4	18.7
93	1.3	1.6	2.1	2.6	3.1	3.9	5.2	6.5	7.8	10.5	13.1	15.7	18.3	20.9
103	1.4	1.7	2.3	2.9	3.5	4.3	5.8	7.2	8.7	11.5	14.4	17.3	20.2	23.1
123	1.7	2.1	2.7	3.4	4.1	5.1	6.9	8.6	10.3	13.7	17.2	20.6	24.0	27.5
143	2.0	2.4	3.2	4.0	4.8	6.0	8.0	9.9	11.9	15.9	19.9	23.9	27.8	31.8
153	2.1	2.5	3.4	4.2	5.1	6.4	8.5	10.6	12.7	17.0	21.2	25.5	29.7	34.0
163	2.3	2.7	3.6	4.5	5.4	6.8	9.0	11.3	13.6	18.1	22.6	27.1	31.6	36.2
183	2.5	3.0	4.1	5.1	6.1	7.6	10.1	12.7	15.2	20.3	25.3	30.4	35.5	40.5
203	2.8	3.4	4.5	5.6	6.7	8.4	11.2	14.0	16.8	22.4	28.1	33.7	39.3	44.9
223	3.1	3.7	4.9	6.2	7.4	9.2	12.3	15.4	18.5	24.6	30.8	36.9	43.1	49.2
243	3.3	4.0	5.4	6.7	8.0	10.0	13.4	16.7	20.1	26.8	33.5	40.2	46.9	53.6
253	3.5	4.2	5.6	7.0	8.4	10.5	13.9	17.4	20.9	27.9	34.9	41.8	48.8	55.8
263	3.6	4.3	5.8	7.2	8.7	10.9	14.5	18.1	21.7	29.0	36.2	43.5	50.7	58.0
283	3.9	4.7	6.2	7.8	9.3	11.7	15.6	19.5	23.4	31.2	38.9	46.7	54.5	62.3
303	4.2	5.0	6.7	8.3	10.0	12.5	16.7	20.8	25.0	33.3	41.7	50.0	58.3	66.7
323	4.4	5.3	7.1	8.9	10.7	13.3	17.8	22.2	26.6	35.5	44.4	53.3	62.2	71.0
343	4.7	5.7	7.5	9.4	11.3	14.1	18.8	23.6	28.3	37.7	47.1	56.5	66.0	75.4
353	4.8	5.8	7.8	9.7	11.6	14.5	19.4	24.2	29.1	38.8	48.5	58.2	67.9	77.6
363	5.0	6.0	8.0	10.0	12.0	15.0	19.9	24.9	29.9	39.9	49.8	59.8	69.8	79.7
383	5.3	6.3	8.4	10.5	12.6	15.8	21.0	26.3	31.5	42.1	52.6	63.1	73.6	84.1
403	5.5	6.6	8.8	11.1	13.3	16.6	22.1	27.6	33.2	44.2	55.3	66.3	77.4	88.5
423	5.8	7.0	9.3	11.6	13.9	17.4	23.2	29.0	34.8	46.4	58.0	69.6	81.2	92.8
443	6.1	7.3	9.7	12.1	14.6	18.2	24.3	30.4	36.4	48.6	60.7	72.9	85.0	97.2
453	6.2	7.5	9.9	12.4	14.9	18.6	24.8	31.0	37.3	49.7	62.1	74.5	86.9	99.4
463	6.3	7.6	10.2	12.7	15.2	19.0	25.4	31.7	38.1	50.8	63.5	76.2	88.8	101.5
483	6.6	7.9	10.6	13.2	15.9	19.9	26.5	33.1	39.7	52.9	66.2	79.4	92.7	105.9
503	6.9	8.3	11.0	13.8	16.5	20.7	27.6	34.5	41.3	55.1	68.9	82.7	96.5	110.2

DIAMETER Ø [mm]															
	3	5	10	15	20	25	30	40	50	60	70	80	90	100	<b>»</b>
	Weight [kg/m]														
	0.02	0.05	0.2	0.5	0.9	1.3	1.9	3.4	5.3	7.7	10.4	13.6	17.2	21.3	
**	120	140	160	180	200	250	300	350	400	450	500	550	600	650	
	Weight [kg/m]														
	30.6	41.7	54.5	69.0	85.1	133.0	191.6	260.7	340.5	431.0	532.1	643.8	766.2	899.3	



**INFORMATIONEN** 

# TRANSPARENCY IN ALL DETAILS!

#### Information regarding our portfolio (valid as of August 2024):

This product catalogue gives you an overview of our 8 aluminium grades with 4,307 dimensions.

For our current prices please refer to our online shop under www.premium-aluminium.co.uk/shop.

#### Minimum order value:

Any quantity - however small - there is no minimum order value for you!

#### Packaging:

All ALU-PRÄZ® articles are delivered foiled on both sides of the For deliveries outside the EU, deliveries on Saturdays or express thickness.

All products are carefully packed.

#### **Handling and Delivery Fees:**

Consignments of up to 40kg are dispatched via parcel. Consignments above 40kg are dispatched via freight forwarders. At ABRAMS PREMIUM ALUMINIUM®, we base all of our shipping costs on the principle that they are as transparent and comprehensible for our clients as possible.

Our current shipping costs are available on request: sales@abrams-industries.eu

For larger quantities please contact us.

delivery services (guaranteed date and time) please contact us.

#### **Delivery Time:**

Standard products defined in our programme will be delivered as quickly as possible from stock. Individual custom requests will be manufactured and delivered on a short term basis. The standard delivery time is 3-5 working days.

#### Condition of payment:

Within 14 days net from invoice (subject to a positve credit screening).

ABRAMS PREMIUM ALUMINIUM®			ABRAMS PREMIUM STEEL®		
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The price list gives an overview of the general attributes and possible applications of aluminium which will support your choice of product depending on the various applications of the products, a guarantee of specific attributes and values must be confirmed contractually.

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# **PREMIUM EN AW-2007**

EN AW-AlCu4PbMgMn AlCuMgPb 3.1645

# **PREMIUM EN AW-2011**

EN AW-AlCu6BiPb AlCuBiPb 3.1655

# **PREMIUM EN AW-5083**

EN AW-AIMg4.5Mn0.7 AIMg4.5Mn 3.3547

# **PREMIUM EN AW-5754**

EN AW-AIMg3 AIMg3 3.3535

# PREMIUM EN AW-6060

EN AW-AIMgSi AIMgSi0.5 3.3206

# **PREMIUM EN AW-6082**

EN AW-AlSi1MgMn AlMgSi1 3.2315

# PREMIUM EN AW-7021

EN AW-AlZn5.5Mg1.5

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# **PREMIUM EN AW-7075**

EN AW-AlZn5.5MgCu AlZnMgCu1.5 3.4365

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#### **SALES**

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