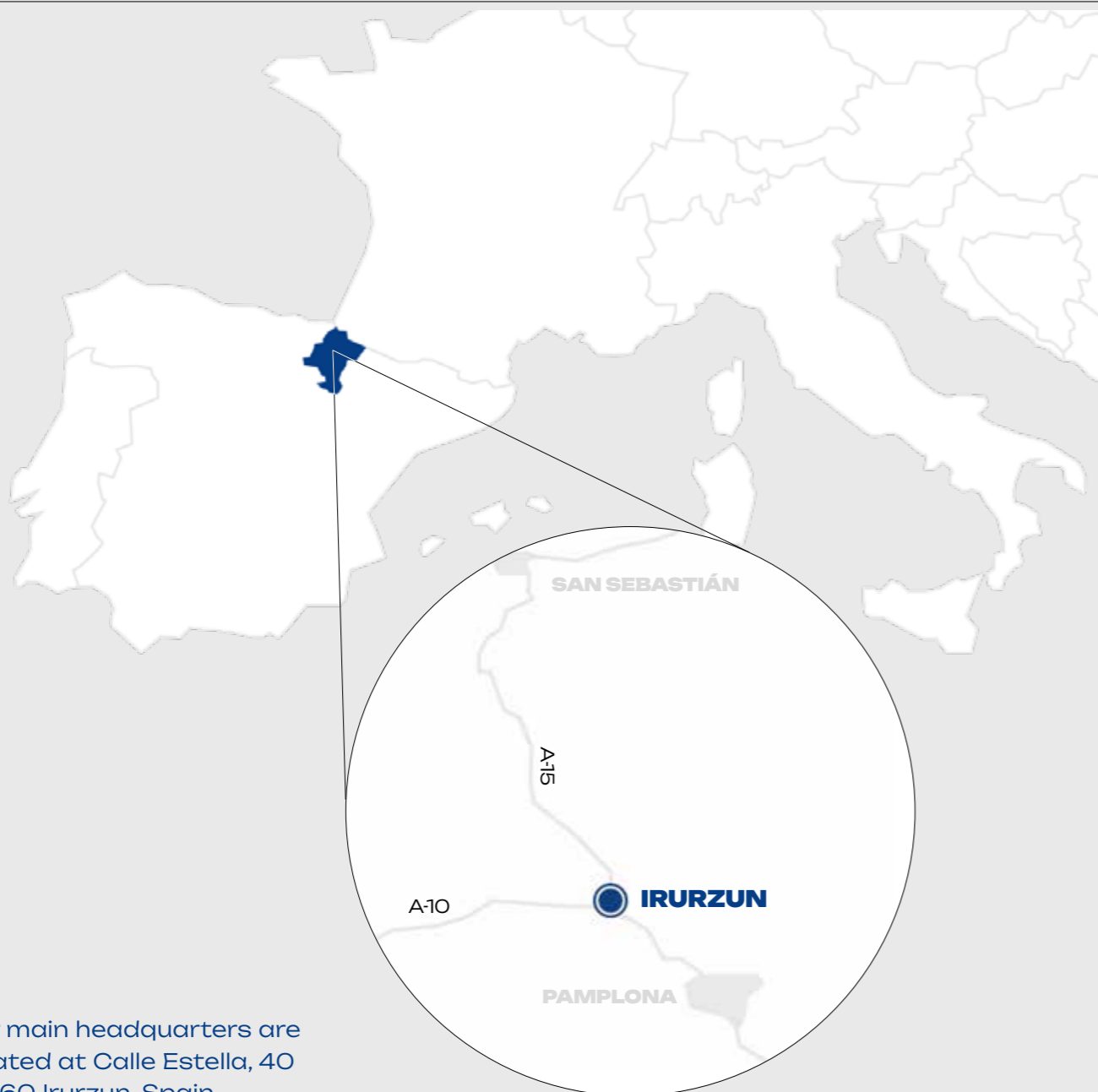
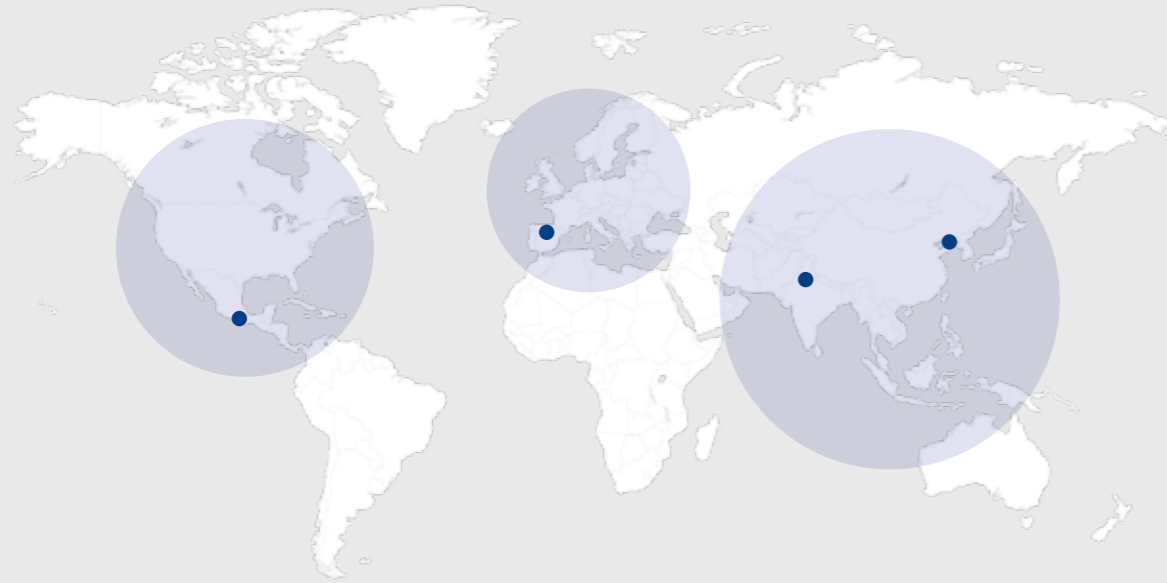


# ALUMINIUM WIRE



## OUR FACILITIES



Our main headquarters are located at Calle Estella, 40 31860 Irurzun, Spain.



### IN-HOUSE LABORATORY

#### ALUMINIUM WIRE MANUFACTURING SPECIALISTS

**+50 YEARS**  
PROVIDING CUSTOMIZED WIRE SOLUTIONS

**6 FACTORIES**  
IN EUROPE, ASIA, AND NORTH AMERICA

PROACTIVE SUPPLIER  
**5K TONS OF RAW MATERIAL STOCK**

**WIDE RANGE**  
OF ALLOYS AND FORMS OF SUPPLY

**ENVIRONMENTALLY CONSCIOUS**  
THROUGHOUT THE SUPPLY CHAIN

## EXCELLENCE IN ALUMINIUM WIRE DRAWING MANUFACTURING SINCE 1973

Established in 1973, Manfisa Wire, S.L. specializes in the **manufacturing of drawn aluminium wire** across various alloys, diameters, and formats to cater to diverse industrial applications, including steel deoxidation.

**Our customers, spanning multiple industries,** utilize our aluminium wire for purposes such as metallization, electrical applications, and the production of rivets or staples for the food industry.

**Committed to continuous improvement,** we strive to deliver innovative solutions and top-quality products that exceed our customers' expectations.

In conjunction with Saprem (metal preforms) and Trefinasa (drawn products for the electrical industry), **Manfisa forms part of a group of leading companies in the metal sector** with extensive experience and a strong track record.

With production centers in Europe, America, and Asia, **Manfisa is widely recognized as a premier supplier of aluminium wire,** renowned for its excellence and extensive global presence. With over 50 years of industry expertise, we pride ourselves on delivering not only high-quality products but also expert guidance in addressing specific challenges.



# FORMS OF SUPPLY

## 1 | DRAWN ALUMINIUM WIRE

### 1.1 | COILS

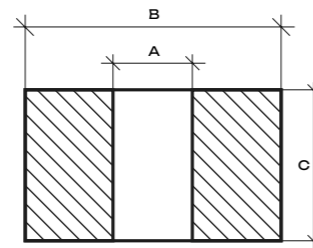


**STANDARD COILS**

REF.	D (mm)	d (mm)	A (mm)	WEIGHT (kg)
8	500	300	105	20 - 25
9	580 - 600	360	150	42
11	600/650/700*	400/500/550	150	40/50/75

REF 8	Ø Wire from 1,00 mm to 1,50 mm	Pallet dimensions: 1,20 m x 1,20 m
REF 9	Ø Wire from 1,50 mm to 4,00 mm	Pallet dimensions: 1,20 m x 1,20 m
REF 11	Ø Wire from 1,50 mm to 10,00 mm	Pallet dimensions: 0,80 m x 0,80 m for 75 kg coils Pallet dimensions: 1,20 m x 1,20 m for 40 kg coils

\* The outer diameter changes based on the inner diameter and desired weight.  
\*\* For larger Ø, please inquire.

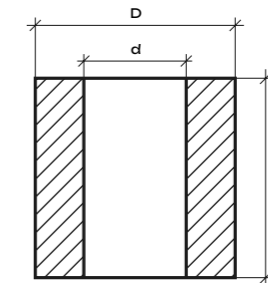


**LARGE CAPACITY COILS**

REF.	D (mm)	d (mm)	A (mm)	WEIGHT (kg)
15a	740/800/975	400	450	250/300/500
15b	780/850/1.000	500	450	250/300/500
15c	820/870/1.010	550	450	250/300/500
4a	1.100*	400	550	500 - 1.000
132	1.050 - 1.200	800	600	500 - 750
21	750 - 950	600	650	250 - 550

REF 15	Ø Wire from 2,00 mm to 18,00 mm	Pallet dimensions: 0,80 m x 0,80 m or 1,00 m x 1,00 m
REF 4a	Ø Wire from 2,00 mm to 4,00 mm	Pallet dimensions: 1,20 m x 1,20 m
REF 132	Ø Wire from 9,00mm to 15,00 mm	Pallet dimensions: 1,20 m x 1,20 m
REF 21	Ø Wire from 4,00mm to 15,00 mm	Pallet dimensions: 1,20 m x 1,20 m

\* The outer diameter changes based on the inner diameter and desired weight.

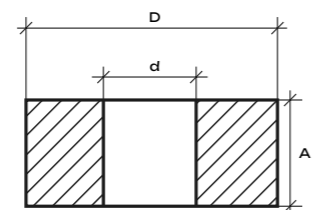


**COILS SPECIAL APPLICATIONS**

REF.	D (mm)	d (mm)	A (mm)	WEIGHT (kg)
102	320	205	90	10
130	320	205	84	8,5
130	320	205	100	10
109	650 - 670	450	100	30
133	700	550	150	50
105	700	500	220	90
104	900	500/600	320	250

REF 102 y 130	Ø Wire from 1,50 mm to 3,00 mm	Pallet dimensions: 1,20 m x 1,00 m
REF 109	Ø Wire from 2,00 mm to 7,00 mm*	Pallet dimensions: 0,80 m x 1,35 m
REF 133	Ø Wire from 6,00 mm to 10,00 mm	Pallet dimensions: 0,80 m x 0,80 m
REF 105	Ø Wire from 6,00 mm to 10,00 mm	Pallet dimensions: 0,80 m x 0,80 m
REF 104	Ø Wire from 6,00 mm to 11,00 mm	Pallet dimensions: 1,00 m x 1,00 m

\* The outer diameter changes based on the inner diameter and desired weight.  
\*\* For special uses only, please inquire.

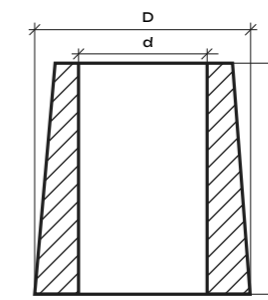


**CONICAL COILS**

REF.	D (mm)	d (mm)	A (mm)	WEIGHT (kg)
18a	740/800/975	400	450	250/300/500*
18b	780/850/1.000	500	450	250/300/500*
18c	820/870/1.010	550	450	250/300/500*
4b	1.100**	400	550	500 - 1.000
21b	920	600	640	500

REF 18	Ø Wire from 2,00 mm to 7,90 mm	Pallet dimensions: 0,80 m x 0,80 m or 1,00 m x 1,00 m
REF 4b	Ø Wire from 2,00 mm to 7,00 mm	Pallet dimensions: 0,80 m x 1,35 m
REF 21b	Ø Wire from 5,00 mm to 14,70 mm	Pallet dimensions: 1,00 m x 1,00 m

\* The weight of the coils will depend on the angle of inclination.  
\*\* The outer diameter will depend on the weight.



OTHER FORMATS AVAILABLE UPON REQUEST.

## 1.1 | COILS

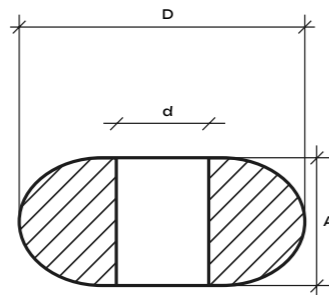


### STATIC OR ACCUMULATION COILS

REF.	D (mm)	d (mm)	A (mm)	WEIGHT (kg)
1a	430 - 450	350	according to weight	10 - 20
1b	750	500	according to weight	25 - 60
1d	920 - 950	720 - 750	according to weight	25 - 60
134-AC	800	500	according to weight	40 - 50

REF	Wire specification	Pallet dimensions
REF 1a	Ø Wire from 0,80 mm to 3,20 mm	Pallet dimensions: 1,20 m x 1,20 m or 1,00 m x 1,00 m
REF 1b	Ø Wire from 2,50 mm to 6,00 mm	Pallet dimensions: 0,80 m x 1,20 m or 0,80 m x 0,80 m
REF 1d	Ø Wire from 2,50 mm to 5,50 mm	Pallet dimensions: 1,20 m x 1,20 m
REF 134-AC	Ø Wire from 5,00 mm to 8,00 mm	Pallet dimensions: 0,80 m x 0,80 m

\* For other Ø, please inquire.  
\*\* Possibility of shipping in cardboard boxes.



## 1.2 | CARDBOARD DRUMS



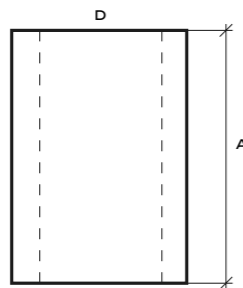
### CARDBOARD DRUMS

REF.	D (mm)	d (mm)	A (mm)	TARE (kg)	WEIGHT (kg)
41	500	360	890	6	60 - 80
41M	510	330	770	6	60

Ø Wire from 0,80 mm to 3,20 mm

REF 41 Pallet dimensions: 1,00 m x 1,00 m

REF 41M Pallet dimensions: 1,05 m x 1,05 m



## 1.3 | FORMERS



### METALLIC FORMER

REF.	D (mm)	d (mm)	A (mm)	TARE (kg)	WEIGHT (kg)
73	1.100	600	1.820	35	500 - 700
75	800	500	1.400/1.500	16	350

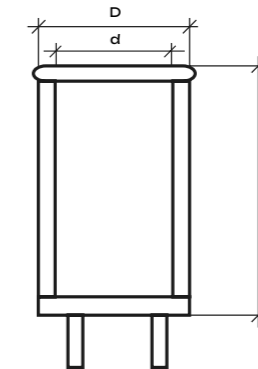
REF 73 Ø Wire from 2,50 mm to 6,00 mm

Pallet dimensions: 1,05 m x 1,05 m

REF 75 Ø Wire from 2,50 mm to 7,00 mm

Pallet dimensions: 0,80 m x 0,80 m

\* For other Ø, please inquire.



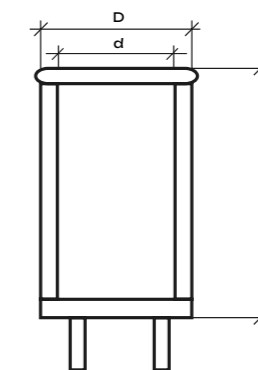
### CARDBOARD FORMER

REF.	D (mm)	d (mm)	A (mm)	TARE (kg)	WEIGHT (kg)
91	800	400	1.270	16	400
99	1.100	470	1.700	36	800

Ø Wire from 1,50 mm to 6,00 mm

REF 91 Pallet dimensions: 0,80 m x 0,80 m

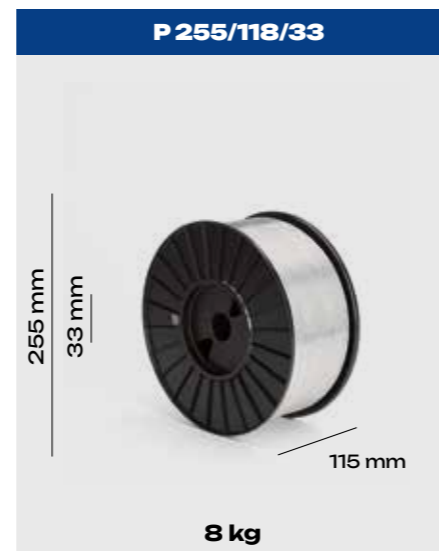
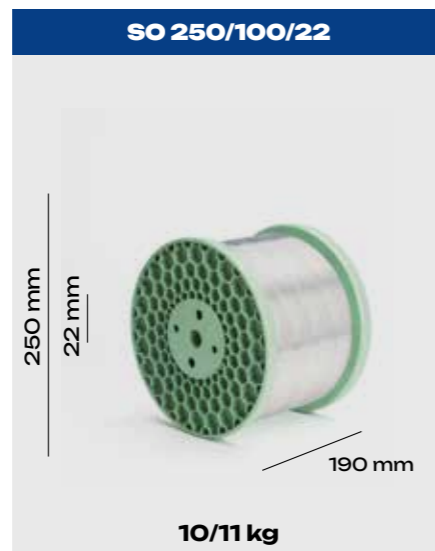
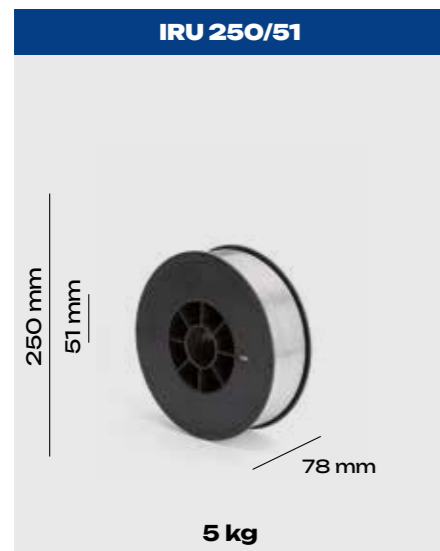
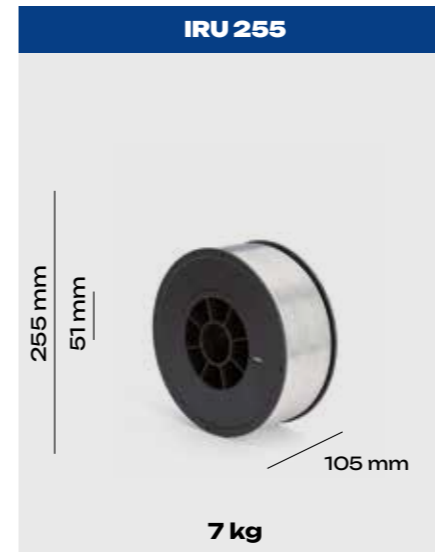
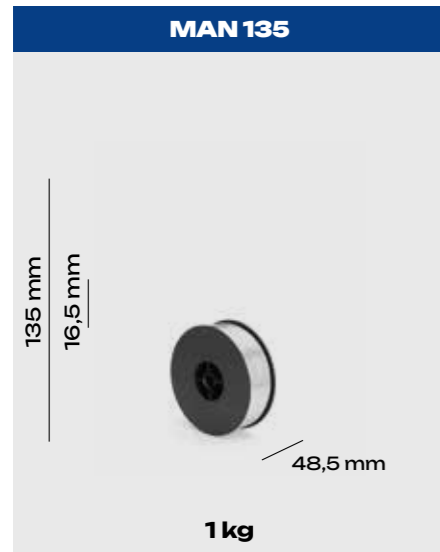
REF 99 Pallet dimensions: 1,05 m x 1,05 m



OTHER FORMATS AVAILABLE UPON REQUEST.

More information at [www.manfisa.com](http://www.manfisa.com)

**1.4 | PLASTIC SPOOLS**

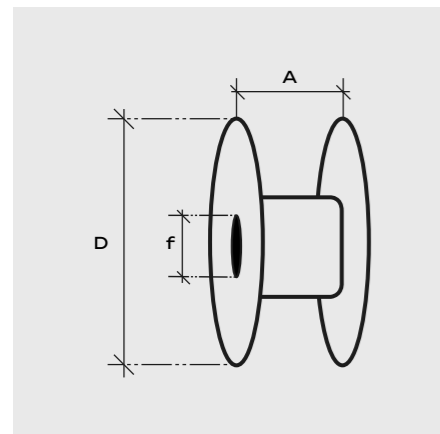


## 1.4 | PLASTIC SPOOLS



Ø Wire from 1,00 mm to 3,17 mm

"A" is the outer width of a full spool.



FOR WELDING, PLEASE REFER TO OUR WEBSITE OR REQUEST A SPECIFIC CATALOGUE.

## PACKAGING AND DIMENSIONS



Road consignments: in cardboard boxes on pallets with dimensions 1.00 m. x 1.20 m.

Sea consignment: in specific cardboard boxes for maritime transit + VCI plastic bags + desiccant bags on treated pallets with measurements of 1.00 m x 1.20 m. Optionally we can make shipments in custom-made treated wooden boxes.

Type	REF.	D (mm)	d (mm)	F (mm)	A (mm)	Capacity (kg)
MAN135	40	135	56,5	16,5	48,5	1
MAN150	21	147	57	18	49	1,2
DIN160	78	160	100	22	160	2,5
MAN200	31	200	100	51	52	2
MAN200E	110	200	70	51	82	4,4
IRU250/18	60	250	125	18	78	5
IRU250/51	61	250	125	51	78	5
SO 250/100/22	83	250	100	22	190	10/11
P255/118/33	96	255	118	33	115	8
IRU255	30	255	125	51	105	7
IRU265	66	265	88	38	74	6,5
IRU280/18	63	280	125	18	80,5	7,1
IRU 280/51	64	280	125	51	80,5	7,1
IRU 300E	37	300	127	52	104	10,5
EXP300	29	300	206	206	104	6,2
MAN 301	33	301	213	52	104	7
IRU 305	36	305	125	39	83	7
IRU 310	94	311	121	39	84	9,5
IRU 320	71	320	127	51	84/90	10
IRU 320 R	107	320	127	51	66/73	8,2
IRU 360	114	360	100	51	64,5/74	11,8
IRU 360 W	116	360	100	51	81/89	14,2
SD 370 H	76	370	310	304	88	4,5
SH 390 K	85	397	310	304	90	7,8

More information at [www.manfisa.com](http://www.manfisa.com)

## 2 | STEEL DEOXIDATION

### 2.1 | COILS

ALUMINIUM MINIMUM 99.5% \*

#### COILS 2000 kg

##### VARIANTS

###### RANDOM

Ø 9,50 - 11,50 - 13,00 mm

###### LAYER BY LAYER

Ø 9,50 - 11,50 - 13,00 mm



##### \* CHEMICAL COMPOSITION

Alloy designation		Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	Notes	Other <sup>a</sup>		Aluminium min.
Numeric	Symbolic													Each	Total <sup>b</sup>	
ENAW-1050A	ENAW-AI99.5	0,25	0,40	0,05	0,05	0,05	-	-	0,07	0,05	-	-	-	0,03	-	99,50%

THE COILS CAN BE SUPPLIED WITH METALLIC FORMER OR WITHOUT FORMER, IN VERTICAL OR HORIZONTAL AXIS. FOR OTHER FORMATS AND DIAMETERS, PLEASE INQUIRE.

### 2.2 | GRANULES

ALUMINIUM MINIMUM 99.5% \*

#### WIRE GRANULES

**DIMENSIONS** 6 - 12 mm

**PACKAGING** BIG-BAG. 50 kg bags on 1.000 - 1.500 kg pallet.

Pallet dimensions: 1,00 m x 1,00 m

#### ROD GRANULES

**DIMENSIONS** 10 - 10 mm

**PACKAGING** BIG-BAG. 50 kg bags on 1.000 - 1.500 kg pallet.

Pallet dimensions: 1,00 m x 1,00 m

##### \* CHEMICAL COMPOSITION

Alloy designation		Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	Notes	Other <sup>a</sup>		Aluminium min.
Numeric	Symbolic													Each	Total <sup>b</sup>	
ENAW-1050A	ENAW-AI99.5	0,25	0,40	0,05	0,05	0,05	-	-	0,07	0,05	-	-	-	0,03	-	99,50%

### 2.3 | INGOTS

ALUMINIUM MINIMUM 96% \*\*



#### PYRAMID INGOT

**NET WEIGHT** 30 - 80 g

##### DIMENSIONS

Length: 40 - Height: 30 - Width: 40 mm

**PACKAGING** BIG-BAG 500 - 1000 kg.

Pallet dimensions: 1,00 m x 1,00 m. In bulk.

##### \*\* CHEMICAL COMPOSITION

Aluminum Content	Maximum Values (%)						
	Si	Mg	Zn	Cu	Mn	Pb	Fe
96% (min)	2.00	0.75	0.75	0.75	0.75	0.1	2.00

# CHEMICAL COMPOSITION OF ALUMINIUM

## 1000 SERIES

Alloy designation		Chemical composition %														Other elements		AI
Numeric	Chemical symbols	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ga	V	Ti	Bi/Pb	Be	B	each	total	minim.
<b>EN AW 1050 A</b>	EN-AW-AL 99,50	0,25	0,40	0,05	0,05	0,05	-	-	0,05	-	-	0,05	-	-	-	0,03	-	99,50
<b>EN AW 1370</b>	EN-AW-E AL 99,7	0,10	0,25	0,02	0,01	0,02	0,01	-	0,04	0,03	0,02	V+Ti	-	-	0,02	0,02	0,10	99,7
<b>EN AW 1080 A</b>	EN-AW-E AL 99,80 (A)	0,15	0,15	0,03	0,02	0,02	-	-	0,06	0,03	-	0,02	-	-	-	0,02	-	99,80
<b>EN AW 1090</b>	EN-AW-AL 99,90	0,07	0,07	0,02	0,01	0,01	-	-	0,03	0,03	0,05	0,01	-	-	-	0,01	-	99,90
<b>EN AW 1099</b>	EN-AW-AL 99,99	0,0006	0,0006	0,0006	0,0002	0,0006	-	-	0,0006	0,0005	0,0005	0,0002	-	-	-	0,0002	-	99,99
<b>EN AW 1100</b>	EN-AW-AL 99,0 Cu	0,95	Si+Fe	0,05-0,20	0,05	-	-	-	0,10	-	-	-	-	-	-	0,05	0,15	99,0

## 2000 SERIES

Alloy designation		Chemical composition %														Other elements		AI
Numeric	Chemical symbols	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ga	V	Ti	Bi/Pb	Be	B	each	total	minim.
<b>EN AW 2011 A</b>	EN-AW-AL Cu6BiPb(A)	0,40	0,50	4,5-6,0	-	-	-	-	0,30	-	-	-	0,20-0,6Bi 0,20-0,6Pb	-	-	0,05	0,15	Rest
<b>EN AW 2017 A</b>	EN-AW-AL Cu4MgSi(A)	0,20-0,8	0,7	3,5-4,5	0,40-1,0	0,4-1,0	0,10	-	0,25	-	-	0,25 Zr+Ti	-	-	-	0,05	0,15	Rest

## 3000 SERIES

Alloy designation		Chemical composition %														Other elements		AI
Numeric	Chemical symbols	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ga	V	Ti	Bi/Pb	Be	B	each	total	minim.
<b>EN AW 3003</b>	EN-AW-AL Mn 1 Cu	0,60	0,7	0,05-0,2	1,0-1,5	-	-	-	0,10	-	-	-	-	-	-	0,05	0,15	Rest
<b>EN AW 3103</b>	EN-AW-AL Mn 1	0,50	0,7	0,10	0,9-1,5	0,30	0,10	-	0,20	-	-	0,10 Zr+Ti	-	-	-	0,05	0,15	Rest

## 4000 SERIES

Alloy designation		Chemical composition %														Other elements		AI
Numeric	Chemical symbols	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ga	V	Ti	Bi/Pb	Be	B	each	total	minim.
<b>EN AW 4043 A</b>	EN-AW-AL Si 5 (A)	4,5-6,0	0,6	0,30	0,15	0,20	-	-	0,10	-	-	0,15	-	0,0003	-	0,05	0,15	Rest
<b>EN AW 4047</b>	EN-AW-AL Si 12 (A)	11,0-13,0	0,6	0,30	0,15	0,10	-	-	0,20	-	-	0,15	-	0,0003	-	0,05	0,15	Rest

## 5000 SERIES

Alloy designation		Chemical composition %														Other elements		AI
Numeric	Chemical symbols	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ga	V	Ti	Bi/Pb	Be	B	each	total	minim.
<b>EN AW 5005 A</b>	EN-AW-AL Mg 1 (B)	0,30	0,7	0,20	0,20	0,50-1,1	0,10	-	0,25	-	-	-	-	-	-	-	0,15	Rest
<b>EN AW 5050 A</b>	EN-AW-AL Mg 1,5 (D)	0,40	0,7	0,20	0,30	1,1-1,8	0,10	-	0,25	-	-	-	-	-	-	0,05	0,15	Rest
<b>EN AW 5051 A</b>	EN-AW-AL Mg 2 (B)	0,30	0,45	0,05	0,25	1,4-2,1	0,30	-	0,20	-	-	0,10	-	-	-	0,05	0,15	Rest
<b>EN AW 5052</b>	EN-AW-AL Mg 2,5	0,25	0,40	0,10	0,10	2,2-2,8	0,15-0,35	-	0,10	-	-	-	-	-	-	0,05	0,15	Rest
<b>EN AW 5754</b>	EN-AW-AL Mg 3	0,40	0,40	0,10	0,50	2,6-3,6	0,30 0,10-0,6 (Mn+Cr)	-	0,20	-	-	0,15	-	-	-	0,05	0,15	Rest
<b>EN AW 5554</b>	EN-AW-AL Mg 3Mn(A)	0,25	0,40	0,10	0,50-1,0	2,4-3,0	0,05-0,20	-	0,25	-	-	0,05-0,20	-	0,0003	-	0,05	0,15	Rest
<b>EN AW 5154 A</b>	EN-AW-AL Mg 3,5 (A)	0,50	0,50	0,10	0,50	3,1-3,9	0,25 (0,10-0,50 Mn+Cr)	-	0,20	-	-	0,20	-	0,0003	-	0,05	0,15	Rest
<b>EN AW 5082 A</b>	EN-AW-AL Mg 4,5	0,20	0,35	0,15	0,15	4,0-5,0	0,15	-	0,25	-	-	0,10	-	-	-	0,05	0,15	Rest
<b>EN AW 5183</b>	EN-AW-AL Mg 4,5 Mn0,7(A)	0,40	0,40	0,10	0,50-1,0	4,3-5,2	0,05-0,25	-	0,25	-	-	0,15	-	0,0003	-	0,05	0,15	Rest
<b>EN AW 5019</b>	EN-AW-AL Mg 5	0,40	0,50	0,10	0,10-0,6	4,5-5,6	0,20 0,10-0,6 (Mn+Cr)	-	0,20	-	-	0,20	-	-	-	0,05	0,15	Rest
<b>EN AW 5356</b>	EN-AW-AL Mg 5 Cr (A)	0,25	0,40	0,10	0,05-0,20	4,5-5,5	0,05-0,20	-	0,10	-	-	0,06-0,20	-	0,0003	-	0,05	0,15	Rest

## 6000 SERIES

Alloy designation		Chemical composition %														Other elements		AI
Numeric	Chemical symbols	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ga	V	Ti	Bi/Pb	Be	B	each	total	minim.
<b>EN AW 6101</b>	EN-AW-AL MgSi	0,30-0,7	0,50	0,10	0,03	0,35-0,8	0,03	-	0,10	-	-	-	-	-	0,06	0,03	0,10	Rest
<b>EN AW 6056</b>	EN-AW-AL Si1 Mg Cu Mn	0,7-1,3	0,50	0,50-1,1	0,40-1,0	0,6-1,2	0,25	-	0,10-0,7	-	-	0,2 Zr+Ti	-	-	-	0,05	0,15	Rest
<b>EN AW 6060</b>	EN-AW-AL Mg Si	0,30-0,6	0,10-0,30	0,10	0,10	0,35-0,6	0,05	-	0,15	-	-	0,10	-	-	-	0,05	0,15	Rest
<b>EN AW 6061</b>	EN-AW-AL Mg 1 SiCu	0,30-0,8	0,7	0,15-0,40	0,15	0,8-1,2	0,04-0,35	-	0,25	-	-	0,15	-	-	-	0,05	0,15	Rest
<b>EN AW 6063</b>	EN-AW-AL Mg 1 Si	0,20-0,6	0,35	0,10	0,10	0,45-0,9	0,10	-	0,10	-	-	0,10	-	-	-	0,05	0,15	Rest
<b>EN AW 6082</b>	EN-AW-AL Si 1 MgMn	0,7-1,3	0,50	0,10	0,40-1,0	0,6-1,2	0,25	-	0,20	-	-	0,10	-	-	-	0,05	0,15	Rest

## 7000 SERIES

Alloy designation		Chemical composition %														Other elements		AI
Numeric	Chemical symbols	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ga	V	Ti	Bi/Pb	Be	B	each	total	minim.
<b>EN AW 7075</b>	EN-AW-AL Zn 5,5MgCu	0,4	0,5	1,2-2,0	0,30	2,1-2,9	0,18-0,28	-	5,1-6,1	-	-	0,20-0,25 (Zr+Ti)	-	-	-	0,05	0,15	Rest

Chemical composition of aluminium and aluminium alloys according to EN 573-3.

More information at [www.manfisa.com](http://www.manfisa.com)



# MECHANICAL PROPERTIES OF ALUMINIUM

## 1000 SERIES (Al)

Material Designation	Temper	Diameter d up to and including (mm)	Tensile strength		Typical 0.2 Yield strength	Elongation at 100 mm (typical %)
			minimum	maximum		
EN AW-1100 [Al 99,0 Cu]	O	20	-	150	-	35
	H14	18	175	-	165	5
	H18	10	200	-	190	3
EN AW-1050 A [Al 99,5]	O	20	-	95	-	35
	H14	18	100	-	95	5
	H18	10	140	-	135	3
EN AW-1370 [Al 99,7]	O	20	-	95	-	35
	H14	18	100	-	95	5
	H18	10	140	-	135	3
EN AW-1080 A [Al 99,8 (Al)]	O	20	-	80	-	35
	H14	18	90	-	85	5
	H18	10	120	-	115	3
EN AW-1090 [Al 99,9]	O	20	-	80	-	35
	H14	18	90	-	85	5
	H18	10	120	-	115	3
EN AW-1199 [Al 99,99]	O	20	-	75	-	35
	H14	18	80	-	75	5
	H18	10	100	-	95	3

## 2000 SERIES (Al Cu)

Material Designation	Temper	Diameter d up to and including (mm)	Tensile strength		Typical 0.2 Yield strength	Elongation at 100 mm (typical %)
			minimum	maximum		
EN AW-2011 [Al Cu6BiPb]	T3	18	310	-	295	6
	T8	18	370	-	310	4
EN AW-2017 A [Al Cu4MgSi (Al)]	H13	18	210	300	190	5
	T4	18	380	-	255	18
	H18	10	315	-	-	-

## 3000 SERIES (Al Mn)

Material Designation	Temper	Diameter d up to and including (mm)	Tensile strength		Typical 0.2 Yield strength	Elongation at 100 mm (typical %)
			minimum	maximum		
EN AW-3003 [Al Mn1 Cu]	O	20	-	130	60	35
	H14	18	135	180	120	5
	H18	10	180	-	175	3
EN AW-3103 [Al Mn1]	O	20	-	130	60	35
	H14	18	135	180	120	5
	H18	10	170	-	165	3

## 4000 SERIES (Al Si)

Material Designation	Temper	Diameter d up to and including (mm)	Tensile strength		Typical 0.2 Yield strength	Elongation at 100 mm (typical %)
			minimum	maximum		
EN AW-4043 A [Al Si 5 (Al)]	O	20	-	150	70	25
	H14	18	170	220	170	5
	H18	10	190	-	180	3

## 5000 SERIES (Al Mg)

Material Designation	Temper	Diameter d up to and including (mm)	Tensile strength		Typical 0.2 Yield strength	Elongation at 100 mm (typical %)
			minimum	maximum		
EN AW-5005 [Al Mg1 (B)]	O	20	-	170	-	15
	H12	18	150	190	-	6
	H14	18	170	220	-	4
	H18	10	220	-	-	3
EN AW-5051 A [Al Mg2 (B)]	O	20	-	195	85	15
	H12	18	170	220	155	6
	H14	18	195	245	200	4
	H18	10	245	-	200	3
EN AW-5052 [Al Mg2,5]	O	20	-	225	100	15
	H12	18	200	250	180	6
	H14	18	225	275	225	4
	H18	10	275	-	275	3
	H32	18	190	240	145	11
	H34	15	215	265	195	8
EN AW-5754 [Al Mg3]	O	20	-	250	110	16
	H12	18	230	280	200	6
	H14	18	255	305	250	3
	H18	10	305	-	300	2
	H32	18	220	270	160	11
	H34	15	245	295	210	8
	H38	10	290	-	260	4
	H38	10	290	-	260	4
EN AW-5554 [Al Mg3 Mn (Al)]	O	20	-	260	110	16
	H12	18	235	285	205	5
	H14	18	260	310	255	3
	H18	10	310	-	305	1
	H32	18	225	275	165	10
	H34	15	250	300	215	7
	H38	10	295	-	265	3
EN AW-5154 [Al Mg3,5 (Al)]	O	20	-	275	125	16
	H12	18	255	305	220	6
	H14	18	280	330	270	3
	H18	10	330	-	320	2

Material Designation	Temper	Diameter d up to and including (mm)	Tensile strength		Typical 0.2 Yield strength	Elongation at 100 mm (typical %)
			minimum	maximum		
EN AW-5154 [Al Mg3,5 (Al)]	H32	18	235	285	170	11
	H34	15	265	315	230	8
	H36	10	290	340	250	6
	H38	10	310	-	280	4
EN AW-5183 [Al Mg4,5 Mn0,7 (Al)]	O	20	-	340	170	15
	H12	18	300	370	275	5
	H14	18	340	410	335	3
	H18	10	390	-	340	2
	H32	18	290	350	215	9
	H34	15	320	390	285	7
EN AW-5019 [Al Mg5]	O	20	-	330	150	17
	H12	18	295	355	255	6
	H14	18	325	385	315	3
	H18	18	370	-	360	2
	H32	18	280	340	205	11
EN AW-5356 [Al Mg5Cr(Al)]	O	20	-	335	155	17
	H12	18	300	365	260	6
	H14	18	330	395	320	3
	H18	18	375	-	365	2
	H32	18	285	350	210	11
	H34	15	315	380	270	8
	H38	10	365	-	325	4

## 6000 SERIES (Al Mg Si)

Material Designation	Temper	Diameter d up to and including (mm)	Tensile strength		Typical 0.2 Yield strength	Elongation at 100 mm (typical %)
			minimum	maximum		
EN AW-6101 [Al Mg Si]	O	≤18	-	130	-	25
	H12	≤18	120	160	-	5
	H14	≤18	140	180	-	5
	H18	≤18	180	-	-	3
	T3	≤18	260	-	-	5
	T4	≤18	160	-	90	15
	T6	≤18	180	-	160	20
	T8	≤18	300	-	-	8
	T9	≤18	310	-	-	3
EN AW-6056 [Al Si1MgCuMn]	O	≤22	-	180	-	20
	H13	≤22	160	240	140	4
	H18	≤22	240	-	210	2
	H32	≤22	150	230	-	-
	H34	≤22	170	250	-	-
	T4	≤22	300	380	-	13
EN AW-6060 [Al Mg Si]	T6	≤22	400	-	360	10
	T8	≤22	420	-	-	-
	T39	≥6	220	-	-	-
	T39	<6	270	-	-	-
	T4	≤20	140	210	90	13
EN AW-6061 [Al Mg1 SiCu]	T6	≤20	210	-	160	10
	T8	≤20	210	-	135	13
	T9	≤18	340	-	260	8
	T8	≤18	320	-	-	8
	T9	≤18	340	-	-	3
	T89	≤6	260	-	-	-
EN AW-6063 [Al Mg2 (B)]	O	≥6	230	-	-	-
	T39	<6	280	-	-	-
	T4	≤20	150	-	100	13
	T6	≤20	220	-	190	10
	T89	<6	270	-	-	-
EN AW-6082 [Al Mg0,7 Si]	O	≤22	-	180	-	20
	H13	≤22	165	225	130	4
	H18	≤22	220	-	200	2
	H32	≤22	155	-	-	-
	H34	≤22	175	-	-	-
	T4	≤22	205	-	135	13
	T6	≤22	300	-	270	10
T8	≤22	340	-	-	-	

## 7000 SERIES (Al Zn)

Material Designation	Temper	Diameter d up to and including (mm)	Tensile strength		Typical 0.2 Yield strength	Elongation at 100 mm (typical %)
			minimum	maximum		
EN AW-7075 [Al Zn5,5MgCu]	O	20	-	275	110	13
	H13	18	230	310	230	2,5
	T6	20	510	-	485	10
	T7	20	480	-	455	11
	T7	20	480	-	455	11

Mechanical properties of aluminium and aluminium alloys according to EN 1301-2  
Typical values are provided for informational purposes and are influenced by the diameter and drawing conditions.

# CUSTOMER APPLICATIONS WITH MANFISA'S WIRE



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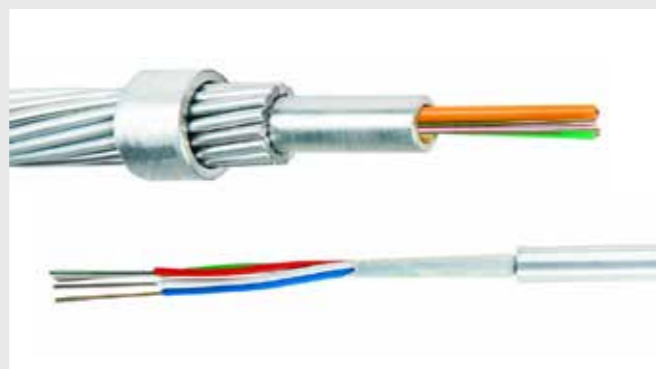
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RIVETS



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