

# ODS, making a difference in Dutch shipbuilding quality



Dutch yacht builders have to live up to an international reputation when it comes to designing and constructing luxury yachts. Extremely high requirements are set within the sector on material selection, quality, certification, delivery reliability and loyalty.

**ODS**

**klöckner & co** multi metal distribution

**metal & more**

It is no wonder that with our wealth of experience, product and market knowledge we play a leading role in the Netherlands as an aluminium supplier for yacht building. What's more, we are taking on this role outside the Netherlands to an even greater extent. Wherever you are based in the world, our experienced export team ensures that we deliver your goods as scheduled. We are also happy to take care of all the transport and associated export documentation on your behalf.

### ODS makes a difference

ODS is synonymous with more than 200 years' knowledge of non-ferrous products, steel products and materials for the construction sector and industry, and expertise in the same. ODS - one of the largest multi-metal distributors in the Netherlands - offers an extremely comprehensive product range, streamlined logistics and a wide range of machining processes. ODS is a subsidiary of the German Klöckner & Co concern. Although ODS may initially appear to pivot on metal, in practice our core business is comprised of a cast-iron combination of quality, engineering and service.

### Quality

Our many years' experience with all the leading manufacturers and suppliers enables us to maintain the high quality of our product range. In addition, our quality is assured by a permanently-monitored quality system based on NEN-ISO 9001. This system is issued by Lloyd's Register Quality Assurance. Moreover, our products are supplied in accordance with the prevailing international standards and, if so required, accompanied by 2.2, 3.1 or 3.2 material certificates.

### Why opt for ODS?

We offer a comprehensive range of materials, streamlined logistics, a wide range of machining processes and expert advice.



## Mechanical properties

Mechanical properties of plates								
Specification	Temper	Thickness in mm		Rm MPa		Rp0.2 MPa		Elongation/%
		from	to	min.	max.	min.	max.	
EN AW-5083 with 3.2 LRS	O/H111	0,5	0,5	275	350	125		11
		0,5	1,5	275	350	125		12
		1,5	3,0	275	350	125		13
		3,0	6,0	275	350	125		15
		6,0	12,5	275	350	125		16
		12,5	50,0	275	350	125		15
EN AW-5083 with 3.2 LRS/ABS	H321	3	6	305	380	215		8
		6	12	305	380	215		10
		12	40	308	380	215		9

### Processing the aluminium: Cutting, bending and forming

At our own service centre in Ridderkerk as well as within our extensive network we have excellent facilities to arrange further processing of the materials. Plates and profiles can be cut, bent and formed

according to drawing or detailed specification. All items will be efficiently marked, packed and delivered to you as a complete building kit.

## Aluminium plates 5083 (AlMg4.5Mn) O/H111 and H321

Dimensions in mm
6,000 x 2,000 x 3
6,000 x 2,000 x 4
8,000 x 2,000 x 4
6,000 x 2,000 x 5
6,000 x 2,500 x 5
8,000 x 2,000 x 5
6,000 x 2,000 x 6
6,000 x 2,500 x 6
8,000 x 2,000 x 6
6,000 x 2,000 x 7
6,000 x 2,000 x 8
6,000 x 2,000 x 10
6,000 x 2,000 x 12
6,000 x 2,000 x 15
6,000 x 2,000 x 20
6,000 x 2,000 x 25
6,000 x 2,000 x 30
6,000 x 2,000 x 35
6,000 x 2,000 x 40

Other grades and sizes are available upon request

## LRS certificated profiles

In addition to the aluminium plates, we offer a full range of profiles in grades 6060 and 6082. Almost our entire range of profiles in 6082 T6: angles, bulb, flag, tube and T-profiles are available from stock with 3.2 LRS certificates. Larger quantities or tailor-

made solutions can be offered on short delivery notice by one of the approved manufacturers ODS closely co-operates with. We highly value proper marking and corresponding certificates to assure maximum traceability of delivered materials: nowadays an absolute requirement imposed by every shipping register.

## Aluminium profiles in 6082 T6 (AlMgSi1)

Description	Cert. 3.1	Cert 3.2 LRS
Flat bar 30x4 mm LRS		X
Flat bar 25x5 mm LRS		X
Flat bar 30x5 mm	X	
Flat bar 30x5 mm LRS		X
Flat bar 40x5 mm	X	
Flat bar 40x5 mm LRS		X
Flat bar 50x5 mm	X	
Flat bar 50x5 mm LRS		X
Flat bar 60x5 mm LRS		X
Flat bar 20x6 mm LRS		X
Flat bar 25x6 mm LRS		X
Flat bar 30x6 mm LRS		X
Flat bar 40x6 mm LRS		X
Flat bar 50x6 mm LRS		X
Flat bar 60x6 mm	X	
Flat bar 60x6 mm LRS		X
Flat bar 70x6 mm LRS		X
Flat bar 80x6 mm LRS		X
Flat bar 100x6 mm	X	
Flat bar 100x6 mm LRS		X
Flat bar 40x8 mm LRS		X
Flat bar 50x8 mm LRS		X
Flat bar 60x8 mm	X	
Flat bar 60x8 mm LRS		X
Flat bar 70x8 mm LRS		X
Flat bar 75x8 mm LRS		X
Flat bar 80x8 mm	X	
Flat bar 80x8 mm LRS		X
Flat bar 100x8 mm	X	
Flat bar 100x8 mm LRS		X
Flat bar 15x10 mm	X	
Flat bar 20x10 mm	X	
Flat bar 25x10 mm	X	
Flat bar 30x10 mm	X	
Flat bar 40x10 mm	X	
Flat bar 50x10 mm	X	
Flat bar 50x10 mm LRS		X
Flat bar 60x10 mm	X	
Flat bar 60x10 mm LRS		X
Flat bar 70x10 mm	X	
Flat bar 80x10 mm	X	
Flat bar 80x10 mm LRS		X
Flat bar 90x10 mm	X	
Flat bar 100x10 mm	X	
Flat bar 100x10 mm LRS		X
Flat bar 120x10 mm	X	
Flat bar 120x10 mm LRS		X
Flat bar 150x10 mm	X	
Flat bar 150x10 mm LRS		X
Flat bar 200x10 mm	X	
Flat bar 200x10 mm LRS		X
Flat bar 30x12 mm	X	
Flat bar 40x12 mm	X	
Flat bar 50x12 mm	X	
Flat bar 60x12 mm	X	
Flat bar 20x15 mm	X	
Flat bar 25x15 mm	X	
Flat bar 30x15 mm	X	
Flat bar 40x15 mm	X	
Flat bar 50x15 mm	X	
Flat bar 50x15 mm LRS		X
Flat bar 60x15 mm	X	
Flat bar 70x15 mm	X	
Flat bar 80x15 mm	X	
Flat bar 80x15 mm LRS		X
Flat bar 100x15 mm	X	
Flat bar 100x15 mm LRS		X
Flat bar 125x15 mm	X	
Flat bar 150x15 mm	X	
Flat bar 150x15 mm LRS		X
Flat bar 200x15 mm	X	
Flat bar 25x20 mm	X	
Flat bar 30x20 mm	X	
Flat bar 40x20 mm	X	
Flat bar 50x20 mm	X	
Flat bar 60x20 mm	X	
Flat bar 80x20 mm	X	
Flat bar 100x20 mm	X	
Flat bar 120x20 mm LRS		X
Flat bar 150x20 mm	X	
Flat bar 150x20 mm LRS		X
Flat bar 200x20 mm	X	
Flat bar 30x25 mm	X	
Flat bar 40x25 mm	X	
Flat bar 50x25 mm	X	
Flat bar 60x25 mm	X	
Flat bar 50x30 mm	X	
Flat bar 60x30 mm	X	
Flat bar 80x30 mm	X	

Description	Cert. 3.1	Cert 3.2 LRS
Flat bar 100x30 mm	X	
Flat bar 200x30 mm	X	
Flat bar 60x40 mm	X	
Flat bar 80x40 mm	X	
Flat bar 100x40 mm	X	
Flat bar 80x50 mm	X	
Flat bar 100x50 mm	X	
Round tube 25x20 mm LRS		X
Round tube 30x20 mm LRS		X
Round tube 35x25 mm LRS		X
Round tube 40x20 mm LRS		X
Round tube 6 40x30 mm LRS		X
Round tube 50x30 mm LRS		X
Round tube 50x40 mm LRS		X
Round tube 60x40 mm LRS		X
Round tube 60x50 mm LRS		X
Round tube 70x50 mm LRS		X
Round tube 70x60 mm LRS		X
Round tube 80x60 mm LRS		X
Round tube 80x70 mm LRS		X
Round tube 90x70 mm LRS		X
Round tube 100x70 mm LRS		X
Round tube 90x80 mm LRS		X
Round tube 100x80 mm LRS		X
Round tube 100x90 mm LRS		X
Round tube 130x90 mm	X	
Round tube 120x100 mm LRS		X
Round tube 120x110 mm	X	
Round tube 150x110 mm	X	
Round tube 200x160 mm	X	
Round tube 200x180 mm	X	
Angle profile 20x20x3 mm LRS		X
Angle profile 30x30x3 mm LRS		X
Angle profile 30x30x4 mm LRS		X
Angle profile 30x30x5 mm LRS		X
Angle profile 40x40x4 mm LRS		X
Angle profile 40x40x5 mm LRS		X
Angle profile 50x50x5 mm LRS		X
Angle profile 50x50x6 mm LRS		X
Angle profile 60x60x5 mm LRS	X	
Angle profile 60x60x6 mm LRS		X
Angle profile 70x70x7 mm LRS		X
Angle profile 80x80x8 mm LRS		X
Angle profile 100x100x10 mm LRS		X
Angle profile 50x30x5 mm LRS		X
Angle profile 60x40x4 mm LRS		X
Angle profile 60x40x5 mm LRS		X
Angle profile 75x50x5 mm LRS		X
Angle profile 75x50x6 mm LRS		X
Angle profile 80x40x5 mm LRS		X
Angle profile 80x40x6 mm LRS		X
Angle profile 80x50x5 mm	X	
Angle profile 80x50x8 mm LRS		X
Angle profile 100x50x5 mm LRS		X
Angle profile 100x50x8 mm LRS		X
Angle profile 100x65x8 mm LRS		X
Angle profile 125x80x8 mm LRS		X
Tee profile 50x50x5 mm LRS		X
Tee profile 60x60x6 mm LRS		X
Tee profile 70x70x7 mm	X	
Tee profile 80x80x8 mm LRS		X
Tee profile 30x45x4,5 mm	X	
Tee profile 32x55x6 mm	X	
Tee profile 32x65x5 mm	X	
Tee profile 32x75x6 mm LRS		X
Tee profile 40x100x8 mm	X	
Tee profile 50x65x8/6 mm	X	
Tee profile 50x75x8/6 mm LRS		X
Tee profile 50x100x8/6 mm LRS		X
Tee profile 65x100x8 mm LRS		X
Tee profile 65x125x10/8 mm LRS		X
Tee profile 75x150x8 mm LRS		X
Bulb profile 40x18x4mm LRS		X
Bulb profile 55x20x7mm LRS		X
Bulb profile 100x20x8mm LRS		X
Bulb profile 160x24x8mm LRS		X
HP profile triangular 60x12x3,3mm LRS		X
HP profile triangular 80x16x3,7mm LRS		X
HP profile triangular 100x21x4,2mm LRS		X
HP profile triangular 215x40x6,5mm LRS		X
HP profile square 60x20x5mm LRS		X
HP profile square 70x21x4mm LRS		X
HP profile square 100x27x5mm LRS		X
HP profile square 110x29x5mm LRS		X
HP profile square 120x32x5mm LRS		X
HP profile square 160x40,5x6,5mm LRS		X
Quarter round tube 30x30x5mm LRS		X
Quarter round tube 50x50x5mm LRS		X

Other grades and sizes available upon request

## Aluminium-steel Transition Joints

These explosion-bonded structural transition joints are used to bond aluminium to steel structures.

Super layer: Aluminium EN AW - 5083 / 5086  
Interlayer: Aluminium EN AW - 1050A  
Underlayer: Steel

Standard height: approx. 34.5 mm (19 mm + 9.5 mm + 6 mm)

Random length: 3,800 mm

Standard strip width: 16, 20, 24, 25, 30 mm

Other sizes and shapes are available upon request

Technical information:

100% Ultrasonic tested

Tensile strength (Rm) min. 76 Mpa

Certificates acc. to EN 10204 / 3.1 and 3.2  
LRS / ABS / DNV / BV / RINA

## Services

We deliver our products for your convenience not only in standard sizes and shapes but also to your specification.

We have many years of experience with the specific needs of exporting and international markets ranging from specialised packaging requirements to export documentation, shipping, and financing arrangements. Furthermore, we can supply you with certificates from RINA, GL, LRS, ABS, BV, DNV, etc. upon request.

## Logistics

In addition to our head office in Barendrecht, ODS has warehouses in Barendrecht, Amsterdam, Almelo and Ridderkerk. These warehouses are located near the ports of Rotterdam and Antwerp. Our own fleet of over 40 trucks and reliable logistics partners enable us to guarantee high flexibility and prompt delivery of the ordered materials.

## Product Range

### Stainless Steel

- Stainless steel 316L / 1.4404
- Stainless steel 304 / 1.4301
- Duplex 1.4462
- Sheets
- Round bars and profiles
- Other stainless grades are available upon request

### Aluminium

- Sheets / plates 6082 T6 / T651
- Tread plates
- Shipbuilding plates 5083 H111 / H321
- Profiles 6060 T66 / 6082 T6
- Bars
- Tubes
- Explosion-welded transition joints, steel-aluminium

### Construction Steel

- General construction steel in grade S355J2G3+N with certificate EN 10204 / 3.2 LRS
- Hot-rolled 25-290 mm
- Forged pre-machined 300-650 mm

### Machinery Steel

- Unalloyed carbon steel C45E+N
- Unalloyed carbon steel C22.8N
- Alloyed steel 42CrMo4QT and 34CrNiMo6QT  
30CrNiMo8QT

### CuNiFe Water Supply System

- Press connecting system with seamlessly drawn pipes and fittings
- Non-combustible, combustible substance class A1 in acc. with DIN 4102-1
- With certificate EN 10204 / 3.2



**Detailed information** To learn more about our export delivery programme, please contact the export sales department:

**ODS**

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