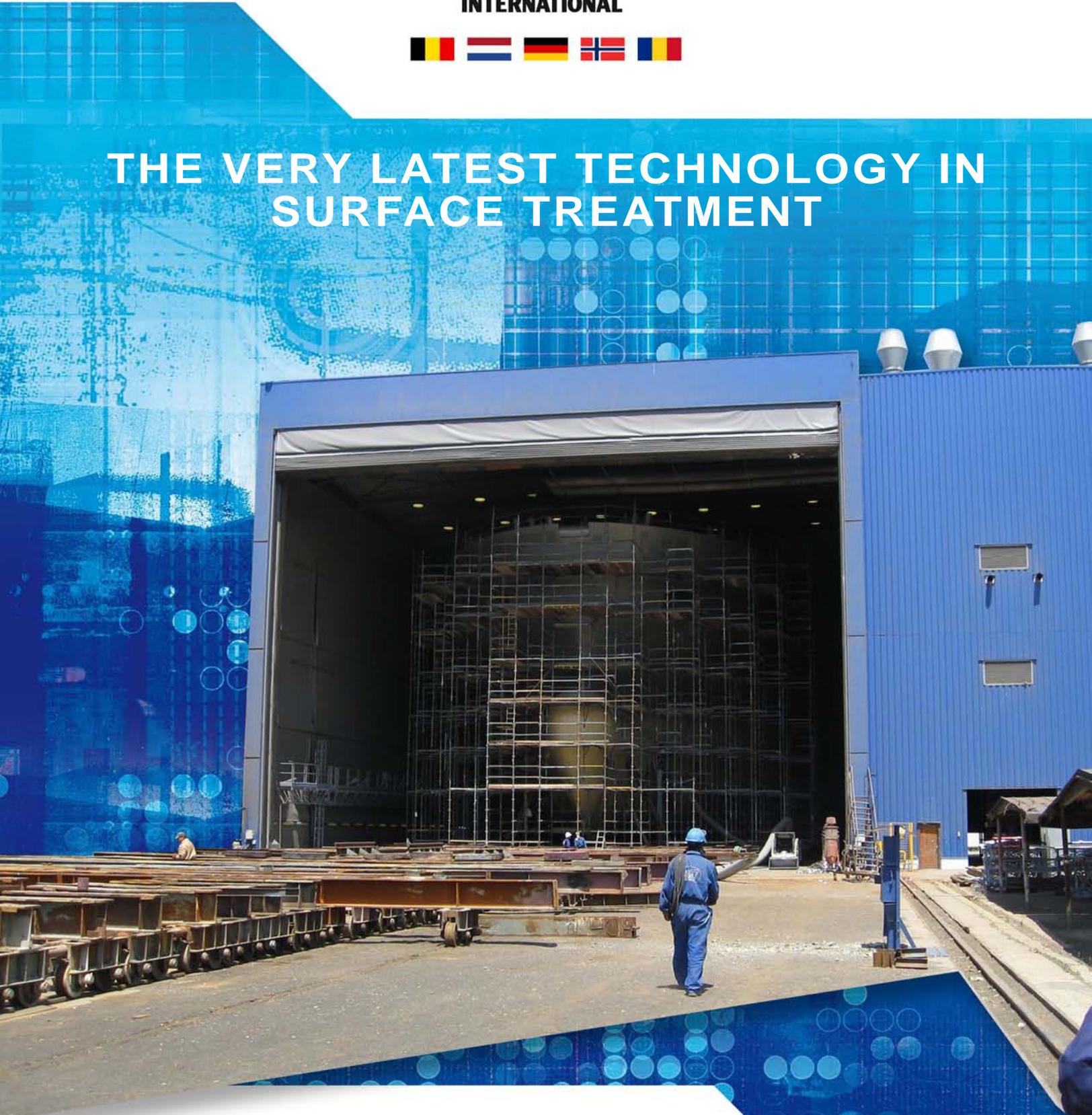




**THE VERY LATEST TECHNOLOGY IN
SURFACE TREATMENT**



**Straaltechniek International
Marine Technology**





Straaltechniek Group



Straaltechniek International B.V.

Bunsenstraat 1
NL-3316 GC Dordrecht / **The Netherlands**
P.O. Box 65 - 3300 AB Dordrecht
Tel.: +31 78 651 14 77
Fax: +31 78 651 14 01
info@straaltechniek.net



Straaltechniek International NV

Antwerpsesteenweg 100
B-2630 Aartselaar / **Belgium**
Tel.: +32 38 70 61 70
Fax: +32 38 70 61 76
info@straaltechniek.com



Strahltechnik Naaykens International GmbH

Froser Strasse 4
D-06463 Stadt Falkenstein / Harz OT Reinstedt / **Germany**
Tel.: +49 347 41 78 90 24
Fax: +49 347 41 78 90 25
Email: info@naaykens.de

Florastrasse 134
D-45888 Gelsenkirchen / **Germany**
Tel.: +49 209 21 435 / 21 485
Fax: +49 209 20 70 41
Email: info@naaykens.de



Straaltechniek International Norway A/S

Kverneviksveien 305
N-4070 Randaberg / **Norway**
P.O. Box 4017 Tasta - 4092 Stavanger
Tel.: +47 5141 9605
Fax: +47 5141 7576
arnes@straaltechniek.no

Narverødveien 47
N-3113 Tønsberg / **Norway**
Tel.: +47 9517 4012
vegar.ek.pettersen@straaltechniek.no



S.C. Straaltechniek Minex International S.R.L.

Bvd. Metalurgiei nr. 85
041832 Sector 4 Bucuresti / **Romania**
Tel.: +40 21 30 60 281
Fax: +40 21 30 60 284

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Certified

For years Straaltechniek International aims at improving the quality of their products, managing systems and communication. In February 2007 this expertise has been rewarded with the ISO 9001:2000 certification. This precision of operating within many levels of the company is practised to maintain the certification and is now rewarded with the ISO 9001:2008 certification.



Member of DNV and HME

Det Norske Veritas (DNV) is a global provider of services for managing risk. DNV is an independent foundation with a unique risk management approach to services which provides us with the possibility to offer innovative services that meet customers' needs across industries and countries. DNV is recognised as a trusted partner for improved quality, safety and efficient operations in high risk global industries.



Straaltechniek International is also a member of Holland Marine Equipment (HME). The Holland Marine Equipment Association represents the Dutch suppliers of maritime equipment and services. The association stimulates the development of technical innovations, the clustering of know-how, and strengthens the presence of the membership at foreign markets. The member companies are active in the fields of maritime engineering & contracting, fabrication of installations and components, the supply of maritime services and ship repair.



Quality assurance

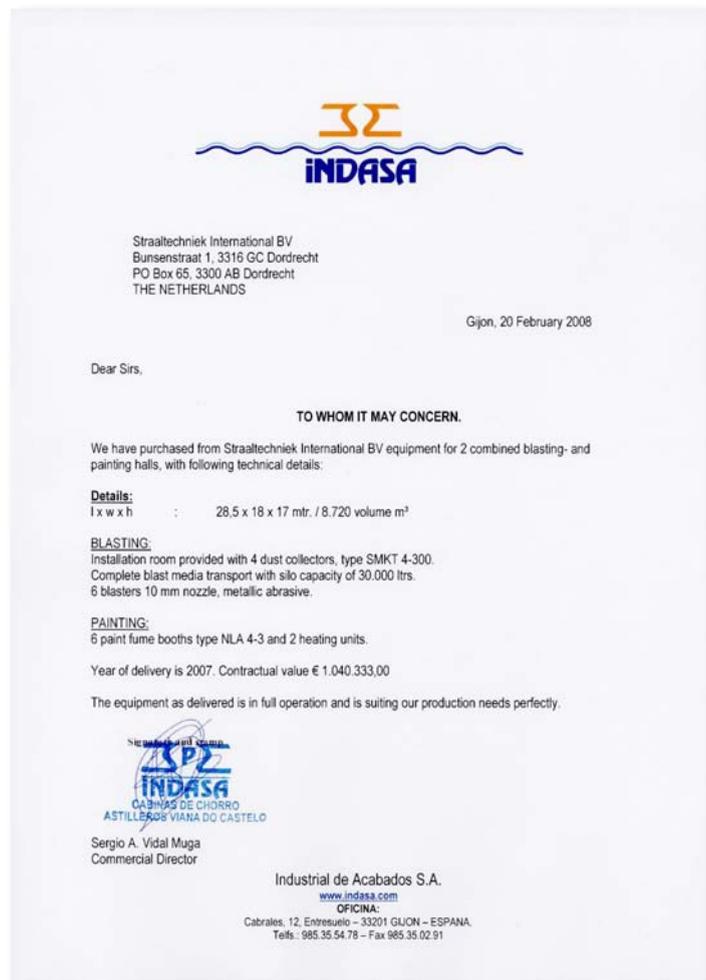
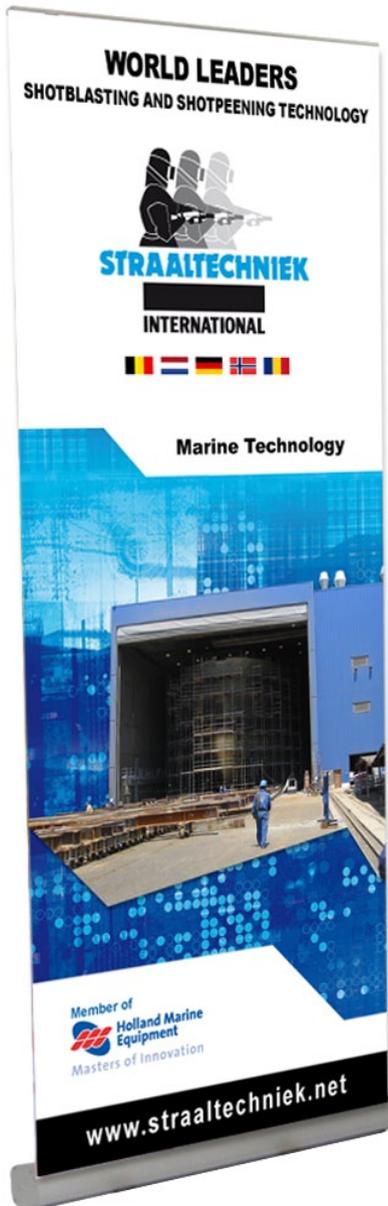


Recommendations

Many companies experience the benefits of the expertise in wheelblasting by Straaltechniek International. These companies are willing to give their recommendation because of the more than sufficient performance of blasting jobs and installation performances.



STRAALTECHNIEK
INTERNATIONAL





Newsletter | Also Odense Steel Shipyard, member of the A.P. Møller-Maersk Group - Denmark recognized the advantage of the 'Combi Hall'

Odense Steel Shipyard is a Danish shipyard which belongs to a group of five yards. In addition to being the parent company in the Group, Odense Steel Shipyard Ltd. operates the Odense-Lindø shipyard, the largest single unit in the Group's operation. This yard is known for designing and building vessels that expand the envelope within their particular category or class.



Combi Hall at Odense Steel Shipyard

Designers from Straaltechniek International also applied the well known 'Combi Hall' in which the ship-sections can undergo blasting, cleaning, painting and drying in one stop. The three prior blasting machines were equipped with six Rutten wheels at both sides, each of the twelve wheels blasts the lift from different angles. Due to limited budgets and capacity in the plant in Turnhout, Straaltechniek developed a free flowing blasting machine with a moveable panel to mount the wheels. This moveable panel makes it possible to position the wheels in every possible angle for blasting, therefore the blasting machine for Turnhout is only equipped with five wheels.



Blasting of the ship section in progress.



A ship section at the combi hall for the 'one-stop shop' process. Dimensions: L x W x H = 38 x 38 x 20 meter.

Straaltechniek International built a double blasting and painting hall for 16 operators, which includes blast pots, dust collectors, dehumidifiers, vacuum units and a media recovery system. The steel grit on the floor is reclaimed by this media recovery system.

After blasting the inside of the ship-sections, vacuum units are used to recollect the blast media. The reclaimed steel grit is transported to an abrasive cleaning device and stored in a silo, which divides the abrasive back into 8 blast pots each executed with two outlets.



Newsletters



Newsletter | Largest one-stop blast and paint facility at Aker Tulcea.



Two combined blasting and painting halls.

Aker Yards is a Norwegian shipbuilding group which belongs to one of the largest shipyard groups of the world. With 13 yards throughout Europe and Brazil, Aker focuses on offshore service vessels, ferries and merchant vessels. In November 2000, Aker Yards bought the shipyard at Tulcea, Romania.

Straaltechniek International already provided Rutten wheels for the wheelblast line of the shipyard in 1998. The strong relationship between this shipyard and Straaltechniek International remained and resulted into another inquiry for a manual blastingpainting facility. Designers from

Straaltechniek Minex in Romania, Straaltechniek in Holland and Shipyard Aker Tulcea worked together in order to create a hall in which the block sections could undergo blasting, cleaning, painting and drying. The result was a double blasting and painting hall for 8 operators, which includes blast pots, dust collectors, dehumidifiers, vacuum units and a media recovery system. After blasting the inside of the ship sections, vacuum units can be used to recollect the blast media. The steel grit on the floor is reclaimed by a steel grit recovery system. The reclaimed steel grit is transported to an abrasive cleaning device and collected in a silo, which divides the abrasive back into the 8 blast pots.



Ground floor overview.



Left to right: Silo cleaning unit, PLC control box, Pre-separator

This process reduces extreme waste of material and the emission of dust and waste material into the environment. Especially the replacement of copper slag by steel abrasive reduces waste remarkably.

The design of the halls and its installation was completed with the co-operation of Straaltechniek Minex and Straaltechniek Holland. Both provided mechanics in order to install the blasting installations.



Newsletter | Sedef Ship Building Incorporation – Turkey

The Sedef Ship Building Incorporation is Turkish most modern shipyard and is located in Tuzla, a suburb of İstanbul. Sedef Shipbuilding Inc. is an affiliate company of Kalkavan Group of Companies. The mother company has a container shipping company called as Turkon Maritime which operates seven container vessels between the USA and İstanbul, and a land transport company namely Turkon Land, that supports with its 100 (one hundred) trucks to the container liner.



For the specific demands of Sedef Shipyard Straaltechniek International built two double blasting and painting halls (so four halls in total) for 16 operators, which includes blast pots, dust collectors, dehumidifiers, vacuum units and a media recovery system. The used steel grit on the floor is reclaimed by this media recovery system.

The Sedef Ship Building Inc. is well known for designing and building vessels that expand the envelope within their particular category or class. They have their order book completely filled until late 2010 and besides a full order book they will expand also with building larger vessels in the near future (from 1.200 TEU up to 1.900 TEU).

To assure this growth in capacity and to assure the ship owner a high quality level of the painting system on their vessel, the technical management of Sedef Ship Building Inc. has searched the market for the optimum solution for the blasting- and painting application. They have seen, during their many technical visits to other shipyards one of the combi-halls, as supplied by Straaltechniek International.



After many technical meetings Straaltechniek International received an order for a manual blasting/painting facility. Designers from Straaltechniek International also here applied the well known 'Combi Hall concept' in which the ship-sections can undergo blasting, cleaning, painting and drying in one stop.

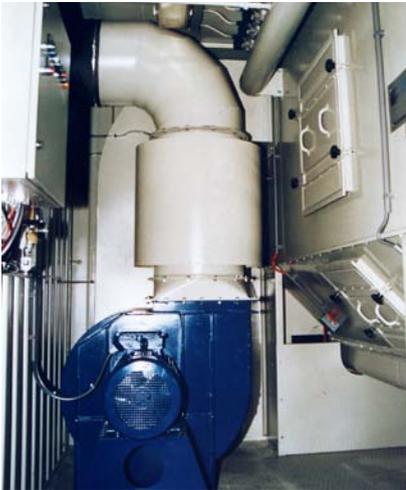
After blasting the inside of the ship-sections, vacuum units are used to recollect the blast media. This steel grit recovery process reduces extreme loss of material and emission of dust into the environment. Especially the replacement of copper slag by steel grit reduces waste remarkably. In addition, the usage of paint spray booths used during painting activities decreases pollution extremely.



*2 Halls with dimension L x W x H = 36 x 20 x 20 meter
2 Halls with dimension L x W x H = 36 x 20 x 10 meter*

Furthermore, the one-stop shop concept minimizes transport of the ship-sections at the shipyard. This means that the complete surface preparation can occur in only one workshop. While blasting a ship-section in one hall, the other hall can be occupied with the painting and/or drying process of another ship-section. To increase the speed of the drying process, Straaltechniek International provided heaters and dehumidifiers to ensure a perfect climate control. The indoor hall activities enables the contractor the continuous delivery of products all year long, which considerably increases production capabilities.

(Transportable) Dust collectors and transport installations for abrasives



Skilled Engineering



Dehumidifiers

Vacuum suction units





Blasting and painting Halls



Maersk Shipyards



Constanta Shipyards - Building Process



Deawoo Shipyards



Aker Shipyards

Reference list



References



CONSTANTA SHIPYARD





"When the finish counts"



"Safety first"



"Perfect conditions"



"Complete installations"



General Program



"Parameter precision"



"Exceptional wear resistance"



"Perfectioning and automatisaton"





for more information please visit
www.straaltechniek.net