BassiOffshore

Engineered Quality & Enhanced Reliability
Offshore and Onshore Hoses
for Oil & Gas Transfer Applications

Contact: Mr. Nicola Cisilino Technical & Sales Engineer

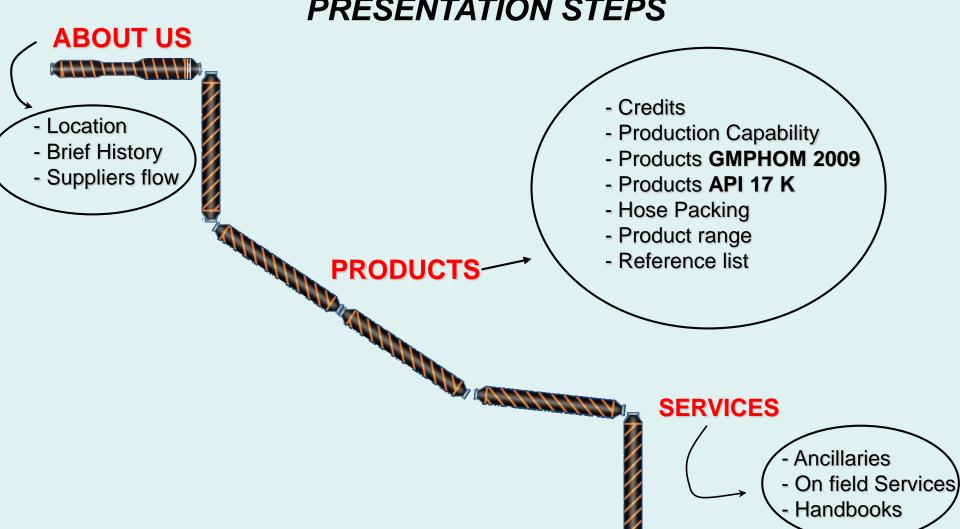








PRESENTATION STEPS





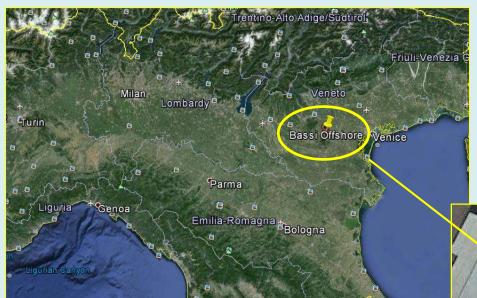








ABOUT US - LOCATION



BASSI OFFSHORE is located in North East of Italy, close to Padua













ABOUT US - BRIEF HISTORY

Founded in **1996**, Bassi Offshore soon established itself as a highly respected engineering company by to the major operators in the oil & gas industries offering expertise, consultation and support for offshore terminals worldwide and in particular floating and submerged marine hoses.

It started off as an engineering company providing services to some of the most well-known Oil and Gas operators.

In 2005, it became an **ENGINEERING AND MANUFACTURING COMPANY** with extensive interests in the field of **offshore hoses and ancillary equipment.**

Hoses are qualified according to **OCIMF 1991** and **GMPHOM 2009** for internal pressure of 15 to 21 bars with internal diameter from 150 mm to 600 mm and are also **prototyped and certified according to API 17 K.**

In November **2007** Bassi Offshore became **part of IVG Colbachini Group** (worldwide leader in flexible rubber hoses production).

Some of the most known references

TOTAL, APL NOV Norway, ENI, Statoil Hydro, NAOC, Bumi Armada, Pertamina, Vietsovpetro, PETROSA, PETROFAC, SARPOM EXXON MOBIL, Edison.











ABOUT US - SUB SUPPLIER CHAIN

EXTERNAL SUB SUPPLIER

RAW MATERIAL

Wire cord

Breaker and cords

Foam materials

Wire helix

SERVICES

Specialised Maintenance

Test facilities according to API 17K

INTERNAL SUB SUPPLIER - IVG Group



IVG Colbachini SpA

Raw Materials

All rubber compounds
Calendered rubber sheets
Steel cords reinforcements

Services

Information Technology
Administration
Logistic



IVG Fittings Division

Raw Materials
Fittings



Transfer Gomma

Labels for Marking



Bassi Offshore Products

Marine rubber hoses according to OCIMF
Diameter range from 6" up to 24"
Pressure range from 15 to 40 bar











PRODUCTS - CREDITS

ISO 9001 – 2008 QUALITY MANAGEMENT SYSTEM



API 17 K Certificate













PRODUCTS - CREDITS

ISO 9001 – 2008 QUALITY MANAGEMENT SYSTEM

According to ISO 9001:2008 certification

Bassi Offshore FIELDS OF ACTIVITIES cover

- ✓ Design and Engineering
- ✓ Manufacturing and Production
- ✓ Trade
- ✓ After Sales Services (Inspection, Repair works, Recommendations on use of lines)
- ✓ Advisory Services to Installation and Commissioning

of RUBBER OFFSHORE HOSES AND ONSHORE HOSES

The hoses are built and tested under internal quality system in accordance with **ISO 9001-2008**.

QMS is also in accordance to **API Q1**.











PRODUCTS – FACILITY LAYOUT

| | NEW BASSI OFFSHORE (PADUA – Italy) |
|---------------------------------|--|
| Covered Area [m2] | 3500 |
| Machines for hose manufacturing | 3 running + 1 available area (for future installation) |
| Steam ovens for vulcanization | 2 |
| Equipment for Dynamic Tests | Fully IN-HOUSE |
| Equipment for Hydrostatic Test | Fully IN-HOUSE |
| Equipment for Kerosene Test | Fully IN-HOUSE |
| Laboratory for Analysis | Fully IN-HOUSE |











PRODUCTS – OCIMF / GMPHOM 2009

6" ÷ 24" ID and 15 to 21 bar "MARINER" - Single Carcass Hoses (textile or metallic reinforcement / with or without helix)

6" ÷ 24" ID and 15 to 21 bar "COMMANDER" - Double Carcass Hoses (textile or metallic reinforcement with helix)

Bassi offshore hoses are used in all the most common and typical system configurations worldwide:

Catenary Anchor Leg Mooring (CALM), Single Anchor Leg Mooring (SALM), Tandem

Mooring System (FPSO / FSO and Shuttle Tanker),

Reel applications for both floating and submarine hoses.







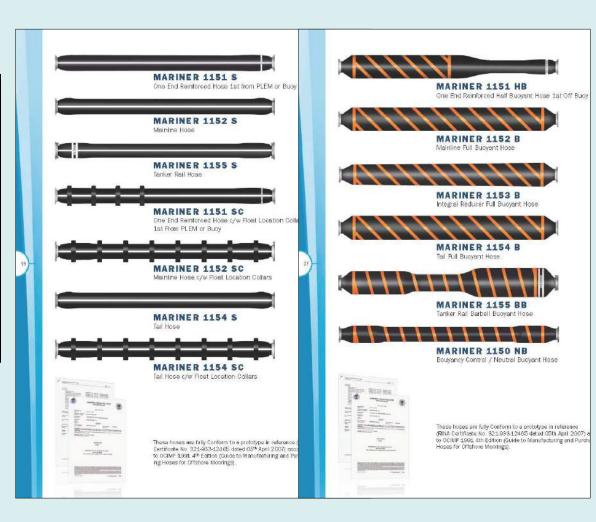




PRODUCTS – PRODUCT RANGE

Single Carcass Hoses

| Rating (Bar) | | 15 | 19 | 21 | | | | |
|---------------|------------------------|--------------------|--------------------|------|--|--|--|--|
| Size (") | 6" – 24" | | | | | | | |
| Reinforcement | Tex | Met | Met | Met | | | | |
| Helix | With | With or Without | With or Without | With | | | | |
| Configuration | Submarine Or Floating | | | | | | | |
| Cover | Rubber Or Poliurethane | | | | | | | |









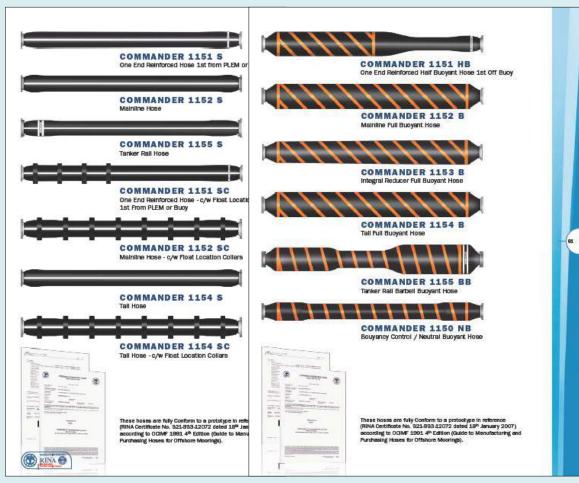




PRODUCTS – PRODUCT RANGE

Double Carcass Hoses

| Rating (Bar) | 15 | 19 | 21 | | | | | | |
|---------------|-----------------------|-----------------|-----|--|--|--|--|--|--|
| Size (") | 8" - | 8" - 20" | | | | | | | |
| Reinforcement | Met | | | | | | | | |
| Helix | With | | | | | | | | |
| Configuration | Submarine Or Floating | | | | | | | | |
| Cover | Rubb | er Or Poliureth | ane | | | | | | |













PRODUCTS – API 17K

ADMIRAL – Single Carcass Hoses for heavy applications in DEEPWATER OIL OFFLOADING SYSTEMS

and also successfully applied in

REEL application

(high performance hose with operating pressure 40 bar and allowable tensile load 200 ton)











PRODUCTS – HOSE PACKING



PACKING: hoses will be wrapped with one layer of polyethylene plus an additional layer of high resistance waterproof synthetic fibre, each flange will be blanked with a ply wooden disc













PRODUCTS – REFERENCE LIST

| CLIENT | PROJECT | APPLICATION | DEST | PR (bar) | Hose type | TYPE | Year | Location | Water depth | Reel Diam |
|-----------------------|--|-------------------|-------------|----------|------------------------------------|------------------------|------|-----------------------------------|-------------|-----------|
| Edison gas | Alba Marina | FSO | Italy | 15 | 20" single carcass | Floating | 2007 | Adriatic Sea | 71m | - |
| Compagnia Italpetroli | Civitavecchia turret buoy | Calm buoy | Italy | 15 | 16" double & 12"single carcass | Floating | 2007 | Tyrrhenian Sea | 90 m | - |
| Total | R1 & R2 platform | Calm buoy | Italy | 15 | 16" double carcass | Floating | 2007 | Tyrrhenian Sea | 60 m | - |
| Pertamina | na | FPSO | Indonesia | 15 | 12" double carcass | Floating | 2007 | Various | na | - |
| Bumi armada | Armada Perkasa | FPSO | Nigeria | 15 | 12" single carcass | Floating | 2007 | Okoro Field (Nigeria) | 14 m | - |
| APL | Nexus | FPSO Reel storage | South Korea | a 15 | 20" single carcass | Submarine | 2007 | na | na | 7 m |
| APL | LukOil FSU Caspian Sea | FPSO Reel storage | Azerbaijian | 15 | 16" double carcass | Floating | 2007 | Yuri Korchagin (Caspian Sea) | 13 m | 7 m |
| Total | R1 & R2 platform | Calm buoy | Italy | 15 | 16" double carcass | Floating | 2008 | Tyrrhenian Sea | 60 m | - |
| Compagnia Italpetroli | Civitavecchia turret buoy | Calm buoy | Italy | 15 | 20"- 16"-12" double/single carcass | Floating | 2008 | Tyrrhenian Sea | 90 m | - |
| Exxon Mobil | Campo Boe Sarpom | Lazy S | Italy | 15 | 20"/16"/12" single carcass | Submarine | 2008 | Vado Ligure - Med. Sea | 21,5 m | - |
| APL / Statoil | Statfjord - OLS A | SAL system | Norway | 40 | 20" single carcass | Submarine | 2008 | Stafjord Oil Field - North Sea | 144 m | - |
| APL / Statoil | Statfjord - OLS B | SAL system | Norway | 40 | 20" single carcass | Submarine | 2008 | Stafjord Oil Field - North Sea | 144 m | - |
| APL / Petrofac | West Don Oil Field | SAL system | UK | 40 | 8" single carcass | Submarine | 2008 | North Sea | 170 m | - |
| Gani international | na | Calm buoy | Nigeria | 15 | 20" double carcass | Submarine | 2008 | Nigeria | na | - |
| Eni | Porto Petroli terminal | Calm buoy | Italy | 15 | 20" double carcass | Floating | 2008 | Multedo Terminal (Genova) | 10 m | - |
| APL / Statoil | Statfjord - OLS B | SAL system | Norway | 40 | 20" single carcass | Submarine | 2009 | Stafjord Oil Field - North Sea | 144 m | - |
| Total | R1 & R2 platform | Calm buoy | Italy | 15 | 12" double & single carcass | Floating | 2009 | Tyrrhenian Sea | 60 m | - |
| IVG / Vietsovpetro | Hoses for tankers VT-035/09- VSP1/BTD | FSO Tankers | Vietnam | 15 | 16" double carcass | Floating | 2009 | na | na | - |
| Imbema Cleton | OLT for F3 - FB platform | FSO | Nederlands | 15 | 10" single carcass | Submarine | 2009 | Den Helder - Nederlands | 28 m | - |
| Exxon Mobil | Multi Buoy Mooring - Sarpom | Lazy S | Italy | 15 | 20"/16"/12" single carcass | Submarine | 2009 | Vado Ligure - Med. Sea | 21,5 m | - |
| Edison gas | Alba Marina | FSO | Italy | 15 | 20" single carcass | Floating | 2009 | Adriatic Sea | 71m | - |
| Total | R1 & R2 platform | Calm buoy | Italy | 15 | 12" double & single carcass | Floating | 2010 | Tyrrhenian Sea | 60 m | - |
| APL / Statoil | Statfjord - OLS A/B | SAL system | Norway | 40 | 20" single carcass | Submarine | 2010 | Stafjord Oil Field - North Sea | 144 m | - |
| IVG / Vietsovpetro | Hoses for tankers VT-100/10-VSP01 | FSO Tankers | Vietnam | 15 | 16" double / 8" single carcass | Floating/Submari ne | 2010 | na | na | - |
| Bumi Armada | Armada Perkasa | FPSO | Nigeria | 15 | 12" single carcass | Floating | 2010 | Okoro Field (Nigeria) | 14 m | = |
| Palmali Shipping | LukOil FSU Caspian Sea | FPSO Reel storage | Azerbaijian | 15 | 12"/10"/8" double carcass | Floating | 2010 | Yuri Korchagin (Caspian Sea) | 13 m | 7 m |
| APL / Petrobras | Papa Terra oil field (FPSO P63) | FPSO Reel storage | Brasil | 21 | 20" double carcass | Floating | 2010 | Campos Basin off. Brasil | 1.200 m | 7,5 m |
| EP Petroecuador | Hoses for Petroecuador installations | Calm Buoy | Ecuador | 15 | 12" double carcass | Submarine/Floati ng | 2010 | Various | na | - |
| Exxon Mobil | MBM Berth - Palermo | MBM | Italy | 15 | 10" single carcass | Submarine | 2010 | Palermo | 16,5 m | - |











PRODUCTS – REFERENCE LIST

| CLIENT | PROJECT | APPLICATION | DEST | PR (bar) | Hose type | TYPE | Year | Location | Water depth | Reel Diam. |
|--|-----------------------------|-------------------|------------------|----------|--|-----------|-----------|-----------------------------------|-------------|------------|
| APL / Eni Norge | Goliat field | FPSO reel storage | Norway | 40 | 20" single carcass - API 17K | Submarine | 2011 | Goliat field - Barents Sea | 400 m | 12,5 m |
| Petroli Investimenti | Civitavecchia turret buoy | Calm buoy | Italy | 15 | 12" single & 12"/20" double carcass | Floating | 2011 | Tyrrhenian Sea | 90 m | - |
| Petrofac | Berantai field development | FPSO | Malaysia | 15 | 16" single carcass | Floating | 2011 | Berantai field - Malaysia | 72 m | - |
| Total | R1 & R2 platform | Calm buoy | Italy | 15 | 16",12" double / single carcass | Floating | 2011 | Tyrrhenian Sea | 60 m | - |
| Imbema Cleton - Gaz de France | OLT for F3 - FB platform | FSO | Nederlands | 15 | 10" single carcass | Submarine | 2011 | Den Helder - Nederlands | 28 m | - |
| Exxon Mobil | Multi Buoy Mooring - Sarpom | Lazy S | Italy | 15 | 20"-16" single carcass | Submarine | 2012 | Vado Ligure - Med. Sea | 21,5 m | - |
| Petro SA | Mossel Bay SBM development | SBM | South Africa | 15 | 8" double carcass (Viton) | Floating | 2012 | Mossel Bay | 21 m | - |
| Petroli Investimenti | Civitavecchia turret buoy | Calm buoy | Italy | 15 | 20"-16"12" double & single carcass | Floating | 2012 | Tyrrhenian Sea | 90 m | - |
| Petrofac | Berantai field development | FPSO | Malaysia | 15 | 16" single carcass | Floating | 2012 | Berantai field - Malaysia | 72 m | - |
| Palmali Shipping | LukOil FSU Caspian Sea | FPSO Reel storage | Azerbaijian | 15 | 16"/12"/10"/8" double & single carcass | Floating | 2012 | Yuri Korchagin (Caspian Sea) | 13 m | 7 m |
| Radcoflex | na | - | Australia | 15 | 8" single carcass | Submarine | 2012 | na | na | - |
| Seablinc | na | СВМ | Latin America | 15 | 10" single carcass | Submarine | 2012 | Latin America | 40 m | - |
| Petroli Investimenti | Civitavecchia turret buoy | Calm buoy | Italy | 15 | 20"-16" double carcass | Floating | 2013 | Tyrrhenian Sea | 90 m | - |
| Exxon Mobil | Multi Buoy Mooring - Sarpom | Lazy S | Italy | 15 | 20"-16" single carcass | Submarine | 2013 | Vado Ligure - Med. Sea | 21,5 m | - |
| Petrofac | Berantai field development | FPSO | Malaysia | 15 | 16" single carcass | Floating | 2013 | Berantai field - Malaysia | 72 m | - |
| APL / Statoil | Gullfaks System 1 & 2 | SAL system | Norway | 40 | 20" single carcass | Submarine | 2013/2014 | Gullfaks Oil Field - North Sea | 144 m | - |
| Petroli Investimenti | Civitavecchia turret buoy | Calm buoy | Italy | 15 | 20"-16" double carcass | Floating | 2014 | Tyrrhenian Sea | 90 m | - |
| Hass Petroleum / Somali Fuels Company | Mogadishu Depot | SPM | Somaliland | 15 | 10" single carcass | Submarine | 2014 | Mogadishu Depot | 20 m | - |







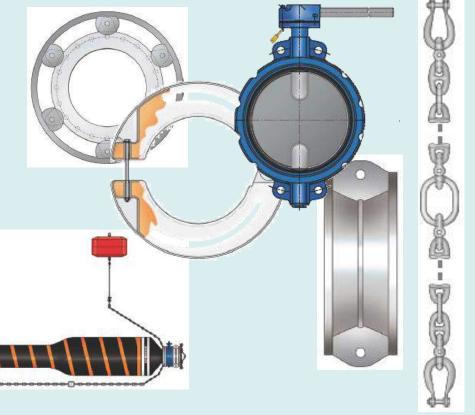




More than a hose designer and manufacturer...

Clients can look towards **Bassi Offshore** not only as a marine hose manufacturer but also a **packaged solution supplier**, inclusive of the hoses, **MARINE BREAKAWAY COUPLINGS**, Butterfly Valves, Camlock, Spool Pieces, Chains, Marker and Pick up Buoys, Floats, Stud bolts and Gaskets, etc.

...SERVICES - ANCILLARIES



A <u>Single Point Responsibility</u> for the Customer for the complete string could be considered since both hoses and MBC are designed, manufactured and supplied by the <u>team Bassi</u>

Offshore – MIB Italiana which work closely to assure the <u>maximum system reliability</u>.











More than a hose designer and manufacturer...

Thanks to the collaboration between the R&D department of its mother company IVG Colbachini, leader in the manufacturing of flexible rubber hoses, Bassi Offshore can be considered a worldwide leader in heavy duty and critical applications for EVERY KIND OF FLUID INCLUDING (i.e. ethanol, methanol, etc) and can study and design customized solutions for different kinds of fluid transportation in the Oil & Gas field.

...R&D for Customized Solutions













SERVICES – ON FIELD

- Global Freight Shipping by Sea or Air
- Advisory Services to Installation and Commissioning
- On Site Repairs for hoses
- Recommendation on the most suitable solution for customized applications
- Project Engineering and Project Management for complete string
- Installation and Operating Manuals











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