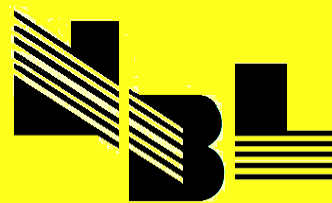


NBL INTERNATIONAL

Co., Ltd.



NBL International Technovator Co., Ltd.

URL: nbl-technovator.com

MANUFACTURING AND SELLING
Anti-Corrosion PIPE for oil well,
Tubing, Casing, Line Pipes

www.nbl-technovator.com

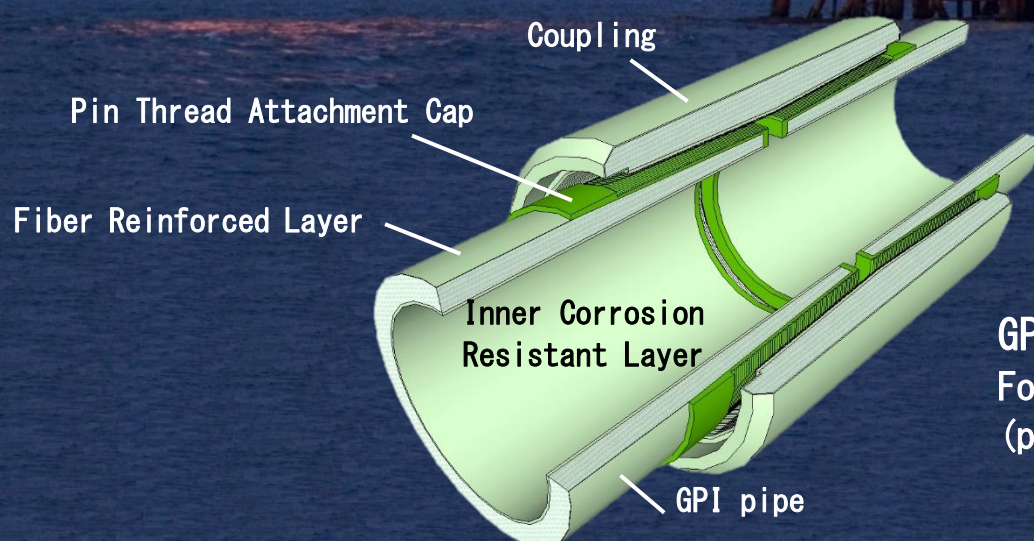
12 June, 2015

12 June, 2015 edition

Company Brochure (for Shareholders and Customers)

Offshore Oil Drilling Rig

*For the effective use of energy resources,
NBL International proposes the best
Solution, Innovation, and Renovation*



GPI DOWNHOLE TUBING
For Oil and Gas
(pH2, 250°C, 100MPa)

High pressure / High temperature / Anti-corrosion Tubing, Casing, Line Pipe
For Offshore Oil field, EOR, and Sand oil fields.

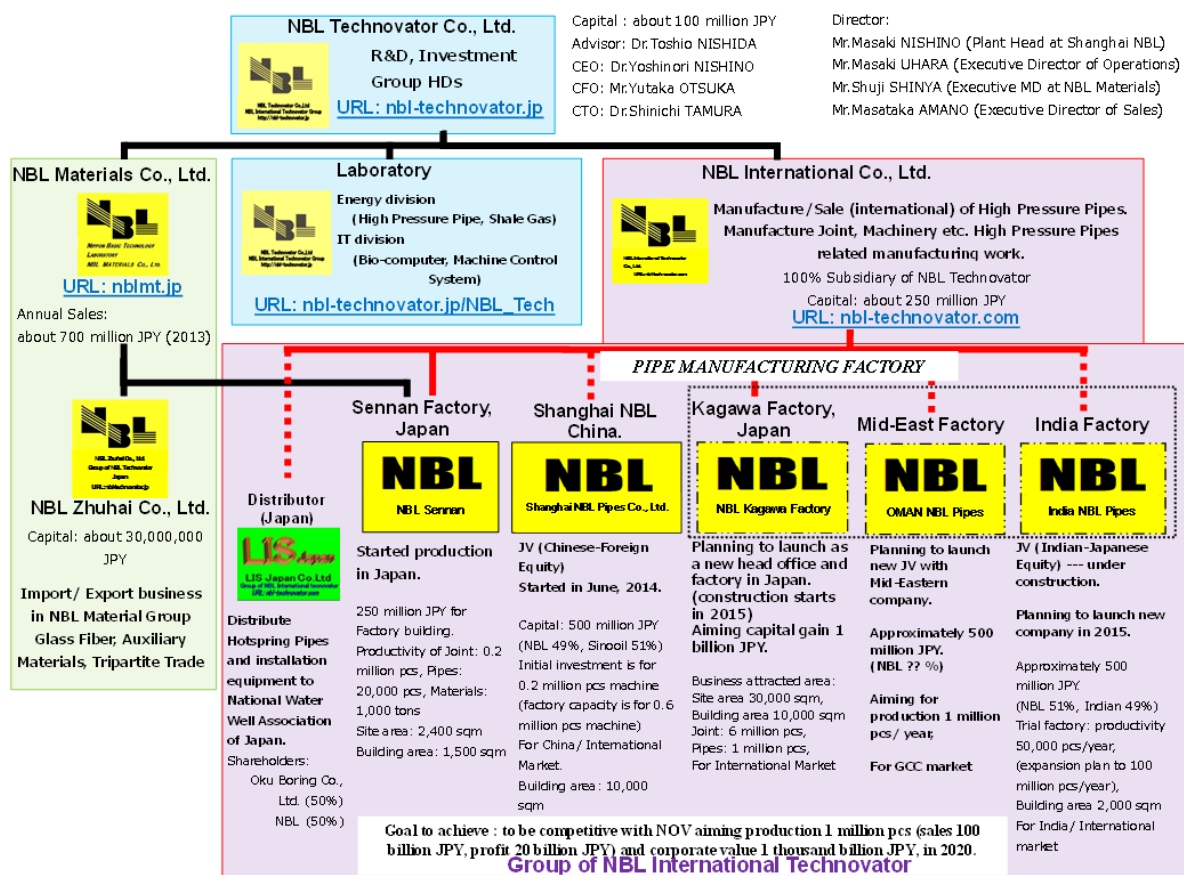
NBL International Co., Ltd.

<http://nbl-technovator.com>

●Establishment of NBL International●

Establishment: Company established in December 2012 with capital amount about JPY 100 million and total investment of JPY 250 million. The specification is to the manufacturing and sale of high pressure pipes in international market, which is a licensee of exclusive rights of use in patented technology and know-hows related to the anti-corrosive FRP pipes for oil well use developed by NBL Technovator Co., Ltd. Its major business area is the manufacture and sale of Fiber Reinforced Plastic (FRP), anti-corrosive oil well pipes, and import/export of necessary raw materials and products.

Products are GPI standard*¹ (Global oil & gas Pipe Institute) high pressure pipes. NBL International Co., Ltd. is the only company to distribute anti-corrosive high pressure pipes in NBL Technovator Group, to supply technology and capital, and also jointly collaborating with international enterprises. (*1: refer to page 9)



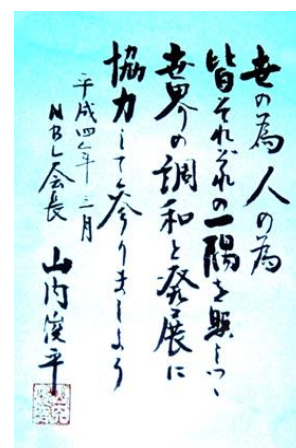
The above figure shows the relationship diagram of NBL Technovator Group. NBL International Co., Ltd.'s subsidiaries are in the red square as a "Group of NBL International technovator".

Aiming 10,000 pcs of producing/sale in 2014. We start from manufacturing pipes 2-3/8"- 13-3/8". Planning 100,000 pcs in 2015 at Shanghai factory, other factories in Japan/ India will add the amount up to 300,000 pcs in 2016, and the destination will be 1 million pcs of manufacturing/sale which make to be one of the world's top company/enterprise in 2020.

To gain 50% of the anti-corrosive oil well pipe market, we aim listing international market after achieving the sale of JPY 60 billion and 10 billion pretax profit in 2017, and accomplishing to gain pretax profit to 100 billion in the market of anti-corrosive high pressure pipes, the most important solution of the world's energy industries.

●Outline●

Company : **NBL International Co., Ltd.**
 URL: <http://www.nbl-technovator.com>
 Head Office : 631, Shindachimakino, Sennan City, Osaka, 590-0522
 TEL : +81-72-493-3091 FAX: +81-50-3495-6245
 E-MAIL: support@nbl-technovator.com
 Category : Manufacturing
 Representative : Yoshinori NISHINO
 Initiation : December, 2012 (Establishment: December, 2004)
 License : Received exclusive rights of use for designing, manufacturing, technology & know-hows related to anti-corrosive high pressure pipes from NBL Technovator Co., Ltd.
 Capital : JPY 99,000,002- (Authorized Capital : JPY 250,000,000 -)
 Share Holders : NBL Technovator Co., Ltd. (100%)



Management Philosophy of NBL Group

NBL International Co., Ltd. has commercialized the R&D technology of FRP oil well anti-corrosive high pressure pipes and know-hows developed and improved for forty-five years by NBL Technovator Co., Ltd. who originally started its commercialization. NBL Technovator was accepted at Japan-China Environmental Energy Forum (former Director General of Economic Planning Agency of Japan, Mr. Koji Omi) for the North Sea Project of CNPC on 15th Aug. 2008, and at CTW 2009 in India (hosted by Dept. of Science and Technology, ONGC, the Reinforced Plastics Society) for the Bombay Offshore Oil well project of ONGC on 17th April 2009. We also received the offer to join PDO trial supply project in Oman, and the approval of products for hot spring well by National Water Well Association of Japan, in Nov. 2009.

Somehow, the company overcame about 3 years of economical influences and hard experiences from Bankruptcy of Lehman Bros. in 2008, or crash of JV with Hitz Corp., NBL International made a fresh restart with increasing in capital and business expansion in Oct. 2014.



Scope of Business : Manufacture/sale of anti-corrosive FRP high pressure pipes, and import/export of necessary raw materials and products.

Line Bank: The Kiyo Bank Ltd. Sennan Brach, The Senshu Ikeda Bank Ltd. Sennan Branch

Domestic Factory in Japan :

«Sennan Factory, Osaka (Makino) »

631, Shindachimakino, Sennan City, Osaka Zip 590-0522

TEL : +81-72-493-3091, FAX: +81-50-3495-6245

Rent from Shareholder/ Site area: 2,000m², Building area: 1,300m²

Major Equipment: M-type CW machine * 1, Thread Machine * 3

Coupling Pipe machine * 1, Cutting machine * 2

Edge fabrication machine * 2, Hydro test machine * 1

Forklift conveyor * 1, other machines* 1 set

500KVA power supply, Binder machine (NBL Materials owned),

CW glass fiber machine etc.



Sennan Factory (Makino)

«Sennan Lab. (Okanaka) »

1160, Okanaka, Sennan City, Osaka Zip 590-0523

TEL: +81-50-1440-8067

Rent/ Site area: 1,200 m², Building area: 700 m²

Major Equipment: Storage of machinery & materials, Forklift conveyor, Resin machine (NBL Materials owned), Packing equipment

International Factory: «Shanghai Factory, China»

Company: Shanghai NBL Pipes Co., Ltd

Address: No.69u9, Ningfu Road, Nanqiao, Fengxian District, Shanghai, CHINA, Zip 201406
(40km South from Shanghai City)

TEL: +86-(0)21-6710-1969, FAX: +86-(0)21-6710-1913

E-MAIL: support@shanghainbl.cn

Form: Limited Company

(Chinese-Foreign Equity Joint Ventures)

Representatives: Mr. Juexin GU

Registration of Formation: November, 2013

Registered Capital: 30,000,000 RMB

Total Investment: 60,000,000 RMB

Workforces: 60

Shareholders: Shanghai Sinoil Energy Holding Corp. (51%)

NBL International Co., Ltd. (49%)

Scope of Business: Manufacturing and sales of FRP high pressure pipes, and import/export of its necessary raw materials and products. The business shall be within the range of authorized area and the certificate issued by government offices.



Shanghai NBL Pipes Co., Ltd.

Other factories: India Factory (under construction), Oman Factory (planning)

●Management Team biography●

Auditor / Chief Financial Officer: Mr. Yutaka OTSUKA (Certified Public Accountant)



Met NBL group through Dr. Nishida, I have experienced hard time with management team, which is written in published book "Garage Venture ...", while being an Auditor for 10 years, and now becoming 80 years old. I have strong intention for growing this company to become one of the world major companies. As being Audit & Supervisory Board Member of Shanghai NBL Pipes Co., Ltd., I expect and do the best of my ability, NBL International to be listed international market in four years.

Representative Director Chairman / Chief Executive Officer:

Dr. Yoshinori NISHINO (Doctor of Engineering)



Dr. Yoshinori Nishino, the founder of NBL born on 3 June, 1946 in Sennan City, Osaka Prefecture. He is 68 years old and he made each section of the company "independent". It's the final stage of my commercialization of the business which will be succeeded and managed by younger generation. In this way, I was able to fulfill the dream of the late Dr. Shunpei Yamauchi, and follow his will, contribute to the growth of South Korea and China, as they being communism countries, in providing composite materials technology.

My philosophy is: the foundations of research and development are - basic technology, development is from history, all needs considered international commercialization- all parts are combined for a healthy balance. all bases are from health. My final work is to focus on training the next generations on "International Technovator" spirit, and I desire to make our technology the best in the world, and we look forward to increase our profits accordingly.

Executive Director: Mr. Masaki NISHINO



With a background of industrial design at Kyoto Institute of Technology, joined Sharp Corporation in April 1976, successively took the post of design section, total of 10 years. I had been developing design of AQUOS as LCD items. I became a senior executive manager at the former NBL Co., Ltd. and supervised the high pressure pipe development project in 2007. I resigned after loss of managerial rights due to Hitachi Zosen, returned to Sharp (Shanghai) as a design adviser for large scale sales in 2010, finally moved back to NBL Laboratory to participate in the restart of the high pressure pipe project in December, 2012. As one of the founding fathers of our high pressure pipe, I'm in charge of the manufacturing business division at Shanghai NBL which produces in 200,000 pipes / year, to seek to make a further leap.

Executive Director of Management: Mr. Shuji SHINYA



Having worked at Kinokuni Credit Union, I decided to challenge myself by starting to do work at NBL. My main responsibility has been to look after the financial management of the group and claiming restitution of the damages incurred, as it formed shortly after the regrettable incident with Hitachi Zosen Corp. Being a youngest board members, as also being a Senior MD of NBL Materials Co., Ltd. especially supplying materials of FRP, I devote myself to fulfilling work life with a principle as to ensure what I can to.

Executive Director of Operations/ Project Manager: Mr. Masaki UHARA



Having worked and engaged in OCTG business development/ technology/ sales at Nippon Steel & Sumitomo Metal Corporation for about 32 years, I joined NBL as a director in 2014 then assumed the office of Project Manager in Oil Well Pipe business project of NBL International Co., Ltd, which is composed by end users, cooperative trading and materials companies. As a specialist of OCTG and Oil & Gas industry, my principal work in my last carrier is to operate the most important business of the group, and do my best for making it a valuable one through meeting the industry and customer's expectation.

Abbreviated Curriculum Vitae:

Position at NBL Technovator or Group	Position at NBL International	Name & Birth date	Personal History Last Education Curriculum Vitae	Related Companies		
				NBL Technovator	NBL Materials	Shanghai NBL Pipes
CFO	Auditor	Mr. Yutaka Otsuka 1 st Oct.1938	Last Education: Kobe University CPA Abbreviated Curriculum Vitae: Auditor at KPMG Azsa LLC Inauguration: Dec 2012	Advisor	Advisor	Auditor
Representative Director Chairman / CEO	Representative Director	Dr. Yoshinori Nishino 3 rd June 1946	Last Education: Osaka Institute of Technology, Ph.D. Abbreviated Curriculum Vitae: Doctor of Engineering Hitachi Zosen Corporation R&D (Composites) Inauguration: Dec. 2012	Representative Director	Representative Director	Vice-Chairman
CTO	Operating Officer	Dr. Shinichi Tamura	Last Education: Osaka University (Engineering) Abbreviated Curriculum Vitae: Professor Emeritus of Osaka University (Specializing in Medical Data Analysis)	Director (Head of Research)	Advisor	Advisor
Executive Director of Operations/ Project Manager	Director / PM	Mr. Masaki Uhara	Last Education: Wakayama University (Business Administration), Abbreviated Curriculum Vitae: Nippon Steel & Sumitomo Metal Corp. (OCTG) Inauguration: Dec. 2014	Director (Operations)	Director / PM	
Executive Director of Management	Director	Mr. Shuji Shinya 12 th July 1954	Last Education: Kokugakuin University (Law) Abbreviated Curriculum Vitae: Kinokuni Credit Union Inauguration: Dec. 2012 (Finance)	Director (Administration)	Director / Senior Managing Director	Director

	Advisor	Dr. Toshio Nishida	Last Education: Kyoto University Ph.D. Abbreviated Curriculum Vitae: Professor Emeritus (Management) of Osaka University	Advisor	Advisor	
	Director	Mr. Masaki Nishino	Last Education: Kyoto Institute of Technology Abbreviated Curriculum Vitae: Sharp Corporation (Design Division) Inauguration: Dec. 2012	Director		Director / Dy. GM
	Operating Officer	Mr. Masataka Amano	Last Education: Tokyo University Abbreviated Curriculum Vitae: Marubeni Corporation (International Division)	Director (Sales)	Director (Sales)	Advisor
	Advisor (Management)	Dr. Kozo Okazaki	Last Education: Osaka University (Engineering) Abbreviated Curriculum Vitae: Professor Emeritus of Fukui University (specializing in information sciences)	Advisor / Observer	Advisor	
	Advisor (Engineering)	Dr. Takio Shimosakon	Last Education: Osaka University (Economics), Ph.D. Abbreviated Curriculum Vitae: Specialist in Business Administration, and an Associate Professor at Osaka Institute of Technology	Advisor	Advisor	

NBL International Co., Ltd. Official Staff: 8 staff - 4 Directors, 3 Executive Staff, 1 Auditor

Advisory Staff: 2 staff- 1 Management, 1 Engineering

NBL's stock percentage in affiliated companies :

NBL Materials Co., Ltd. (100% capital of NBL Technovator)

Zhuhai NBL Composites Limited (100% capital of NBL Technovator)

NBL International Co., Ltd. (100% capital of NBL Technovator)

Japan LIS Co., Ltd. (50% capital of NBL Technovator)

Shanghai NBL Pipes Co., Ltd. (49% capital of NBL International)

Licensing from NBL Technovator to affiliated companies :

Affiliated companies granted the licence by NBL Technovator are as follows,

- Patent licensing related to the manufacture/sale of high pressure pipes for oil & gas
Exclusive licensee : NBL International Co., Ltd.
Sub-licensee : Shanghai NBL Pipes Co., Ltd. (also planned "NBL India", "NBL Mid-east")
- Patent licensing related to the manufacture/sale of materials for high pressure pipes
Exclusive licensee : NBL Materials Co., Ltd.
- Patent licensing related to the manufacture/sale of glass fibers & auxiliary materials etc.
Exclusive licensee : NBL Materials Co., Ltd. (Sub licence will be granted to partners)

●Licensed Products ●

Products of NBL International is applied the design technology of anti-corrosive FRP high pressure pipes, and the Centrifugal Winding method with using continuous glass fibers & high pressure injection moulding etc. Design know-hows and the patents related to the products are owned by NBL Technovator Co., Ltd., and endowed to Preparatory Committee for Global oil & gas Pipe Institute (GPI) and opened to public for the growth of anti-corrosive high pressure pipes technology.

«Applications»

Fossil energy in deep ground sparsely exists in stones in earth crust under high temperature and high pressure which make petroleum or methane gas by the action of bacteria on sediments of organic matter on the ocean floor from several tens of million years to hundreds of millions of years ago.

Oilfields are made by the movement and sparse oil is gathered to the wrinkle of earth crust. Primary drilling can take 10-20% of the reserves with hole on the top (①), and 15% more can be taken with water injection at surroundings and pump up (②). Maximum about 50% of the reserves can be taken with these improved recovery using chemical agents etc. (③), which costs more but kept about 30 years because of the increase of market price at the same time. Moreover, the latest technology enables Enhanced Oil Recovery (EOR) to decrepit oilfield, yielding oil and gas in shale, or sand oil which are sparse existing. EOR enables the production maximum 80% of the reserves with thermal method (④), and also works for sand oil production by steam heating. It's not too much to say that the forecast of fossil energy production become limitless. The quality of oil well pipes is important, since the severe conditions of pH, high

GPI Joint of Pipe (GPI 管継手技術標準)

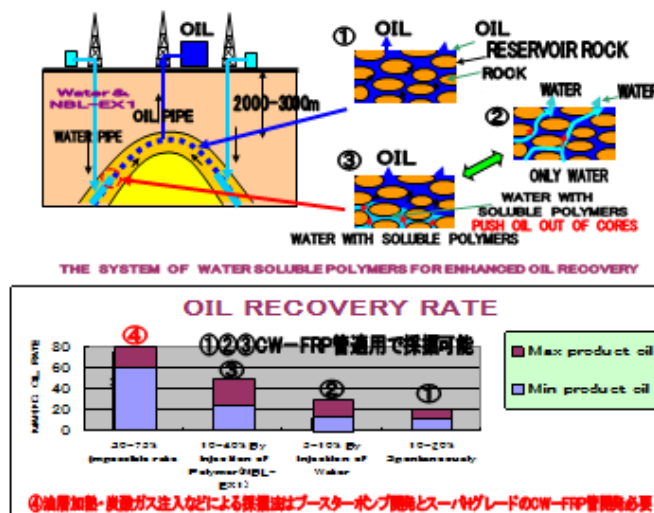
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2013年3月2日、第1回大阪国際シンポジウムで、GPI暫定基準の制定が定まり、運用が開始される。

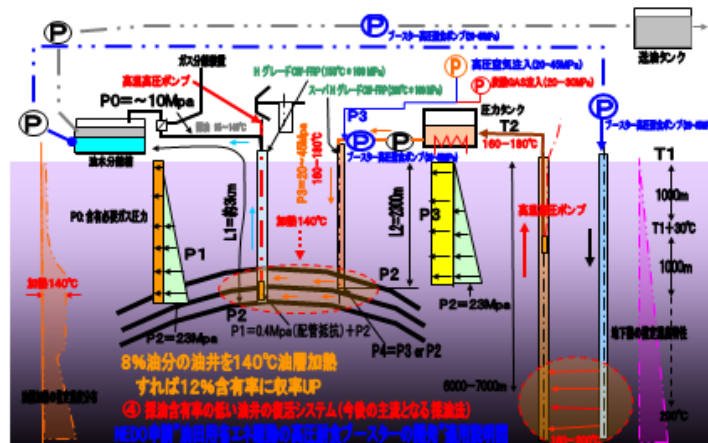
＜GPIの基本＞
GPI公開技術標準を適用すれば、100MPaまでの高圧管の製品設計・製造・検査・保証ができる。

＜GPIの適用＞
GPI標準継手構造を採用して、GPI設計基準・試験評価法を適用して、管の設計・製作を行い、品質・性能評価をGPI標準試験法を用いて、破壊試験と非破壊試験により行い、出荷製品には全数トレサビリティ検索ラベルを貼り、原材料の品質管理情報・管の生産情報・検査結果情報をインターネットでGPIネットワーク接続検索により、第三者機関による(GPI)12年間有効の品質保証に係るデータ保管を行うことにより、安全性の管理に関わる品質管理を行う。

The previous oil well and possible harvest yields



The new Excavation method by the previous method of heat extraction



temp, high pressure with H_2S and carbon dioxide increases in the procedure of after ② stage.

«Anti-Corrosion FRP Pipes»

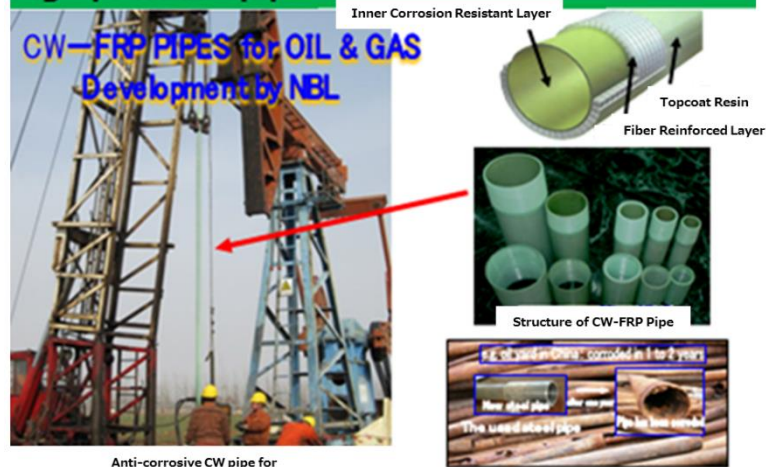
The hydrogen sulfide and carbon dioxide are high density concentration in the Middle Eastern oil field. The pipe used in these markets required improvement of anti-corrosive performance. In EOR markets of the relatively near future, request for heat resisting performance will be added. Therefore 13Cr based steel cannot be dealt with in the present market, thus it is needed special anti-corrosive steel pipe such as 25Cr-35Ni. However the cost of special anti-corrosive steel pipe in these new markets is 10 times more expensive than conventional cost of steel pipe, and it has become a serious problem of utilizing the resources.

In 2007, for resolving these problems, much attention was given to FRP pipes with its highest acid resistance, and the NOV (National Oilwell Varco) of U.S. entered the markets ahead of the world.

Requirements of FRP pipes standardized in API (American Petroleum Institute) especially Tubings were aimed for 1,100m depth oil wells with pH 3-4, and it was set about 25 years ago. Therefore its pressure resistant level and heat resistant level were low as 20MPa. The latest market requirements and specifications are increased to pH 2, 250 °C, and 100MPa. The technical solution is to enable the strength improvement of coupling and a high temperature durability. Those problems were resolved by Dr.Nishino and others of NBL Technovator Co., Ltd. They released "GPI standard" as a necessary design technical standard.

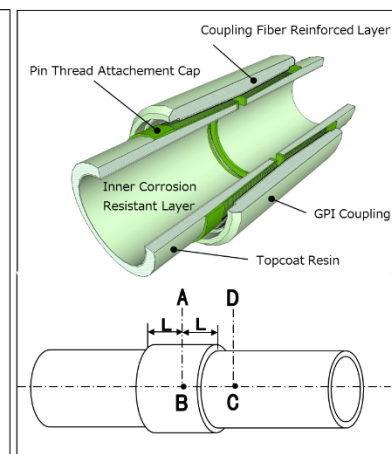
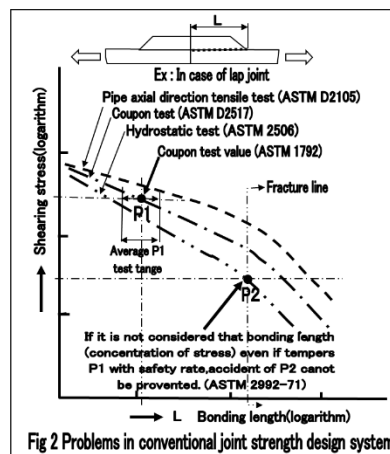
For maintaining high strength, at first it should prevent initial destruction (condition of the matrix for prevention of crack outbreak in the different kind

Applied technological development: Deep underground drilling by CW anticorrosion high pressure pipe

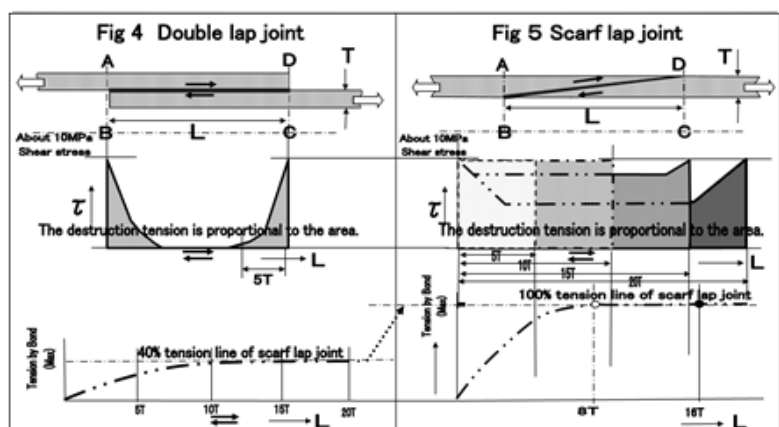


[Developed tecnology with receiving a subsidy from NEDO]

Problem cases of technical standards API · AWWA · ASTM



Destruction of junction: surface is concentrating shearing stress



materials interface from notch and the progressing deterioration at notch part), and subsequently it needs a guaranteed technical standard of durability that elucidate prevention of the interface crack progress (multilayer structure for relaxing the stress concentration).

FRP pipe of GPI standard is one-fifth lighter than metal pipe, and it solves the conventional corrosion problems of oil well.

When the composite material doesn't have continuity of reinforcing fiber, problems of shear failure as joining fiber and resin and pipe joint will emerge. The continuity problem is solved by CW molding method which is multilayer molding with uniform tension on glass fiber.

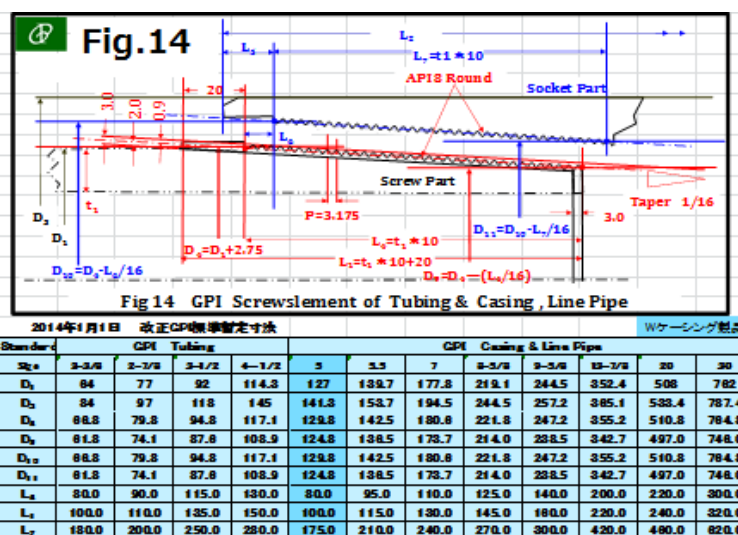
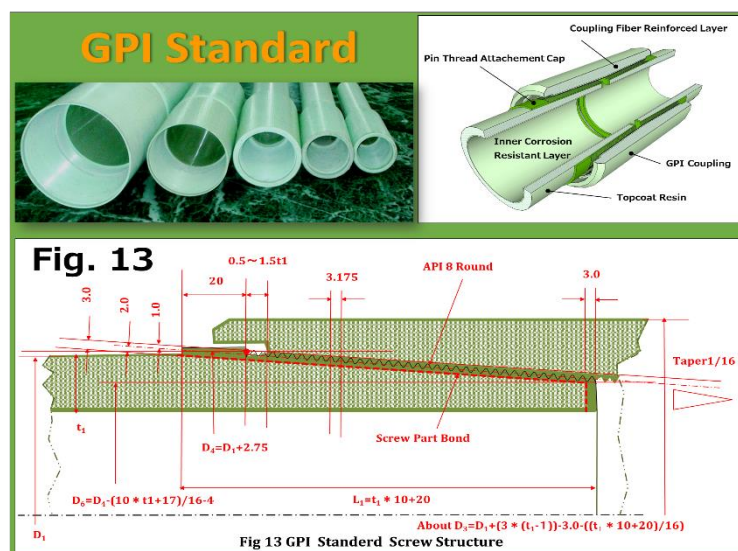
Threaded coupling joint problem: it's impossible to be a high pressure pipe joint without relaxing stress of shearing tension. The structure in Fig.13 overcame the essential problem through the development and improvement.

«Performance of GPI products»

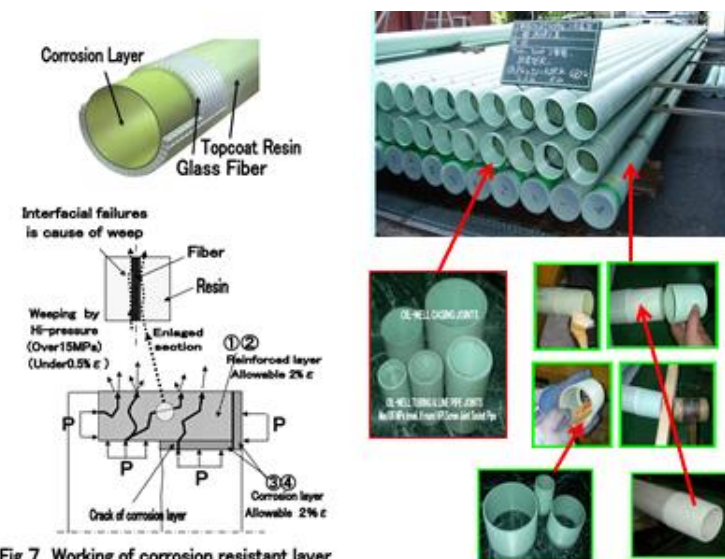
Materials of GPI products for oil well use are set to be acid/ corrosion resistance, therefore none of material deterioration can be seen in general corrosive environment such as over 2 of pH. Thus, nothing shall be worried about corrosion fracture such as SCC (Stress Corrosion Cracking) of steel materials.

One characteristics of the GPI standard pipes consists of coupling and pipe. The pin thread attachment cap is attached to both ends of the pipe. With the structure that the whole pipe is covered with the corrosion resistance resin layer, it maintains the prevention of fluid transmission by the internal pressure and the corrosion resistance.

Basic dimension of GPI pipes is constructed with numerical functions in red shown in Fig.14. A case of the product dimensions of Special Double Casing is shown in the right bottom. For the detailed dimensions of each sizes, please refer to GPI design standard.



2014年1月1日 改正GPI標準寸法											Wケーシング製品	
Standard	GPI Tubing				GPI Casing & Line Pipe							
	3-3/8	2-7/8	3-1/2	4-1/2	5	5.5	7	8-5/8	9-5/8	10-3/4	20	30
D ₁	84	77	92	114.3	127	139.7	177.8	219.1	244.5	352.4	508	782
D ₂	84	97	118	145	141.3	153.7	194.5	244.5	257.2	385.1	538.4	787.4
D ₃	86.8	79.8	94.8	117.1	129.8	142.5	180.8	221.8	247.2	355.2	510.8	784.8
D ₄	81.8	74.1	87.8	108.9	124.8	138.5	173.7	214.0	238.5	342.7	497.0	746.0
D ₅	86.8	79.8	94.8	117.1	129.8	142.5	180.8	221.8	247.2	355.2	510.8	784.8
D ₆	81.8	74.1	87.8	108.9	124.8	138.5	173.7	214.0	238.5	342.7	497.0	746.0
L ₁	80.0	90.0	115.0	130.0	80.0	95.0	110.0	125.0	140.0	200.0	220.0	300.0
L ₂	100.0	110.0	135.0	150.0	100.0	115.0	130.0	145.0	160.0	220.0	240.0	320.0
L ₃	180.0	200.0	250.0	280.0	175.0	210.0	240.0	270.0	300.0	420.0	480.0	620.0



«Traceability»

Another characteristics of GPI standard is its 12-year traceability service through the internet device connection including Smart Phone. All the information of IC chip, optical bar-code, and general texture are in GPI traceability label implanted in each products. All records are ensured to be stored in a database for 12 years by contracted server providing information storage services which prohibits external rewriting.

Please refer to the user's manual of GPI for details.

«Indication of GPI standardized products»

NBL International Co., Ltd. handles 8 kinds of GPI standard pipes for oil well from 2-3/8 inch to 13-3/8inch (as of July 2014, standard products), 6 grade pressure resistant (6 types of E10, E20, E40, G, M, H), 6 grades of heat-resistant products. Then the sign E10 means 10MPa, E20 is 20MPa, E40 is 40MPa, and the sign of E only means 40MPa of withstanding pressure.

PRODUCTION ITEM	: Anti-Corrosion FRP High pressure Pipes (GPI pipes)
STANDARD SIZE	: 2-3/8", 2-7/8", 3-1/2", 5", 5-1/2", 7", 9-5/8", 13-3/8" (length : 9,600mm)
USAGE	: Tubing pipes for Oil and Gas, Casing pipes, Line pipe, Tubing pipes for hot spring, Double wall tube Casing pipe. Example of GPI marking:"3-1/2 M-110".
PRODUCT APPLICATION STANDARD	: GPI standard (Maximum H Grade, Pressure 100 MPa \approx 1,000 atmospheric pressure \approx 14,696 psi) : GPI product marking; [Pipe Nominal (ex. 3-1/2) Withstanding pressure grade (M) Withstanding temperature (110)] : GPI traceability marking is shown by 10 digits, product marking in 4 and production date in 6.

Pipe Nominal: Choose from following 20 types; 2-3/8", 2-7/8", 3-1/2", 4", 4-1/2", 5", 5-1/2", 6-5/8", 7", 7-5/8", 8-5/8", 9-5/8", 10-3/4", 11-3/4", 13-3/8", 16", 16-5/8", 20", 23-5/8", 30"									
Detailed Specification: Customising 4 types of withstanding pressure grades + 6 types of withstanding temperature in below chart for your required specification.									
Withstanding Pressure Grade		Tubing & Casing		Line Pipe		Designed Pressure	Short-term Load	10 years Durability	50 years Durability
E	E10	Tap water well, 100 m		For water		10 MPa	5 MPa	3 MPa	2 MPa
	E20	Tap water well, 200 m below		For water		20 MPa	10 MPa	6 MPa	4 MPa
	E40	Hot spring wells, 1,500-4,000 m		Shale gas, CNG		40 MPa	20 MPa	12 MPa	8 MPa
G		2,000-6,000 m for oil field		CNG gas tank		60 MPa	30 MPa	20 MPa	12 MPa
M		3,000-9,000 m for oil field		Special purpose 1		80 MPa	40 MPa	26 MPa	16 Mpa
H		4,000-12,000m for oil field		Special purpose 2		100 MPa	50 MPa	33 MPa	20 Mpa
Withstanding Temperature (deg.C.)		-20~60℃	-10~80℃	0~110℃	25~150℃	25~200℃	Maximum 250℃		
		60	80	110	150	200	250		
Product Marking		Examples of products 2-7/8 G-80: One coupling, in GPI tube with the othe rpin screw, outer diameter 2-7/8 inches, G grade withstanding pressure, 80 degrees C. heat.							
		Examples of products 5(W) E20-80: in GPI tube with both ends pin screw, outer diameter 5 inches(casing inner tube), E20 grade withstanding pressure, 80 degrees C. heat.							

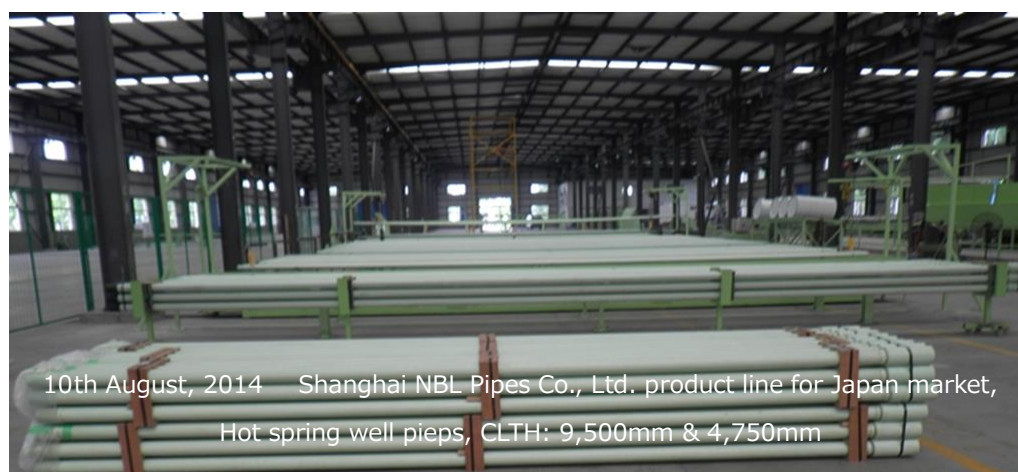


Attach an IC Chip and Heat-resistant Aluminium Bar code on products.



●Production line, Productivity●

CW machine :	M-type 20 numbers of rotation mould (pitch 500mm). Injection facility with 2 mins/ pcs ability * 1. (the below picture is at Shanghai factory for the first production)
Product standard :	GPI, API, JIS, ASTM, AWWA (M-type: 2-3/8"-13-3/8", CLTH: 9,600mm)
Productivity :	Max. 200,000 pcs annually
Products :	GPI standard products
Facilities:	3 lines of 20 rotation moulds at Shanghai factory, 1 line at India abuilding factory, 1 line at Japan Sennan factory.
Research equipment :	Burst & compression test machine, Tension & bend test machine
Building area :	Required about 3,000 m ² / line
Electricity usage:	Maximum 200kw/line
Operating personnel :	2 for machine operating, 3 for materials preparation, and 6 for secondary processing & check per line
Factory waste:	Recycle 100% of industrial waste for producing by-products, i.e. Permeable Pipes etc.
Ambient criteria:	Energy usage is electricity only. Neither industrial water nor heat of boiler etc. are required.
Production line:	below picture of Shanghai factory



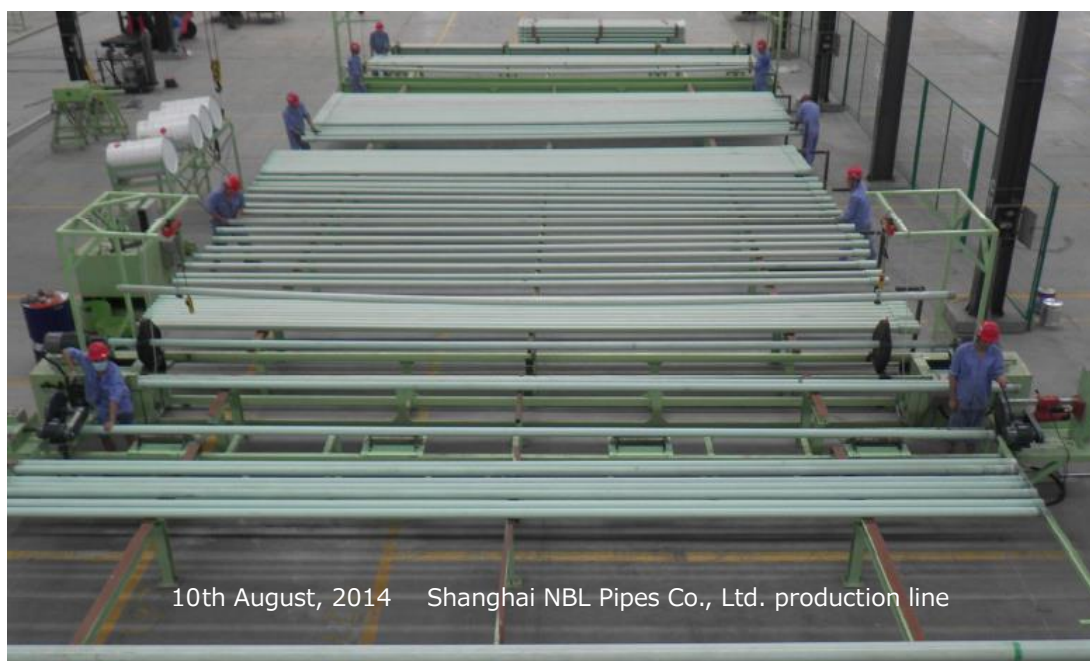
The CW moulding machine (centrifugal moulding machine) is the only one equipment in the world to wind consecutive fiber within a rotary mould from the inside and impregnates resin by centrifugal force, and manufacture the pipe by heat-curing. The equipment have high-speed production speed. It takes two minutes per pipe for material injection and demoulding. It needs 20 minutes/per pipe for resin being cured in the mould.

The manufacturing facilities are classified in five types of different sizes as SS, S, M, L and LL type. As additional facilities there are a preparation facility of glass fiber materials named pre-winder and a resin filling facility named resin pump unit.

Facilities of coupling and pin thread attachment cap are separated from the above.

Production line is also included

The facilities of pin cutting on pipe both ends, adhesion of the pin thread attachment cap and the coupling, hydraulic test of the products, an examination for appearance, and packing for delivery are also in the production line.

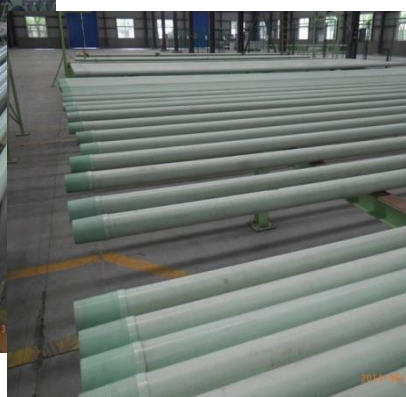


10th August, 2014 Shanghai NBL Pipes Co., Ltd. production line

Productivity: 200,000 pcs/ line,

Maximum productivity of Shanghai factory: 600,000 pcs annually

Production plan in 2014: Maximum 100,000 pcs/ year, Size: 2-3/8"-13-3/8", Grade: E/G/M grade tubing, E grade Casing, E grade Line pipe.



●Affiliated Companies Outline●

《Shanghai NBL Pipes Co., Ltd.》

Shanghai NBL Pipes Co. Ltd. was established in Shanghai, China, as a Joint Venture Company of Shanghai Sinoil Energy Holding Corporation; former Shanghai CNPC Enterprise Group Co., Ltd. (Executive Director: Mr. Weng Tianbo) and NBL International Co., Ltd. (President: Dr. Yoshinori NISHINO). Our scope of business is the manufacturing and sale of high pressure pipes made by Fiber Reinforced Plastic (FRP), and the import/ export of its necessary raw materials and products. The aim of establishment is as follows; a) To introduce the designing and manufacturing technology of GPI standard (Global oil & gas Pipe Institute) high pressure pipes, b) To manufacture and sale of GPI pipes, c) To conduct and operate the business and company through learning the innovative and international centrifugal forming technology, and d) To divide profits to the investors.

We, Shanghai NBL Pipes Co., Ltd. will break into the growing Chinese energy industry, and contribute to the user needs through providing solution products with advanced technology and know-how of NBL group, in addition to the advantages and strength of experienced sales & marketing teams from Shanghai Sinoil Energy Holding Corp.

NBL Co., Ltd., the previous incarnation of NBL Technovator Co., Ltd., successfully developed high pressure pipe manufacture, using the world's only centrifugal moulding method and subsequently received an "A" ranking from a technical evaluation committee in Kyoto. They finally completed a demonstration plant in Rinku, Izumisano city, Osaka, funded by NEDO (New Energy and Industrial Technology Development Organization), being successful in business development in 2008.

Company Name:	Shanghai NBL Pipes Co., Ltd.
Address :	No.699, Ningfu Road, Nanqiao, Fengxian District, Shanghai, CHINA, Zip 201406 (40km South from Shanghai City) TEL : +86-(0)21-6710-1969 / FAX: +86-(0)21-6710-1913 E-MAIL: support@nbl-technovator.com
Form :	Limited Company (Chinese-Foreign Equity Joint Ventures)
Representatives :	Mr. Juexin GU
Initiation :	November, 2013
Registered Capital :	30,000,000 RMB
Total Investment :	60,000,000 RMB
Shareholders :	Shanghai Sinoil Energy Holding Corp. (51%) NBL International Co., Ltd. (49%)
Scope of Business :	The manufacture and sale of FRP high pressure pipes, and import/export of its necessary raw materials and products. The business shall be within the range of authorized area and the certificate issued by government offices.
Licensing :	Patent & technology know-hows that Shanghai NBL Pipes Co., Ltd. uses are supplied by NBL International Co., Ltd. Shanghai NBL Pipes Co., Ltd. shall pay license fee to NBL International Co., Ltd. for straight 20 years calculated by sales amount basis. Both Shanghai Sinoil Energy Holding Corp. and NBL International Co., Ltd. has the prior rights to purchase the products at the same pricing decided by Shanghai NBL, according to the investment ratio. Furthermore, distribution area of this purchased products shall be restricted in China for Shanghai Sinoil Energy Holding Corp., and in any other area except China for NBL International Co., Ltd.

Executive Team :

Chairman (part-time)

Mr. Juexin GU

(Shanghai Sinoil Energy Holding Corp. /General Manager)

Vice-Chairman (part-time)

Dr. Yoshinori NISHINO

(NBL International Co., Ltd. / President)

Director (part-time)

Ms. Gu MIN

(Shanghai Sinoil Energy Holding Corp. / Dy. Manager of Planning & Finance Dept.)

Director/ General Manager (fulltime)

Mr. Bin YU

(Shanghai Sinoil Energy Holding Corp.)

Director / Dy. General Manager

(fulltime) , Factory manager

(concurrent)

Mr. Masaki NISHINO

(NBL International Co., Ltd.)

Audit & Supervisory Board Member

(part-time)

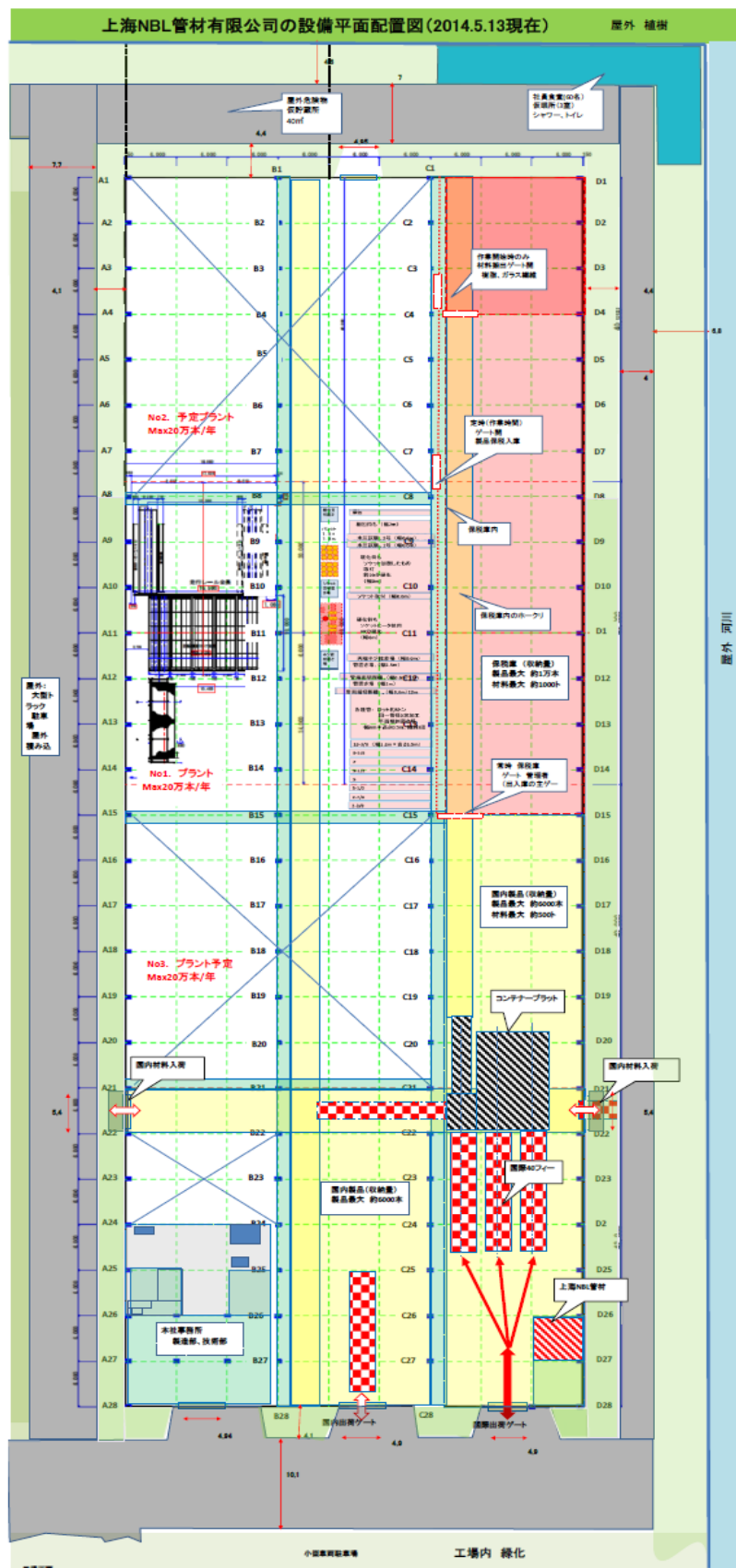
Mr. Yutaka OTSUKA

(Certified Public Accountant)

Right; Plane arrangement of machine & equipment at Shanghai NBL factory as of June, 2014, planning 3 production lines in maximum. Storing capacity of bonded area is about for 6,000 products, 500 tons of materials, and for 6,000 of domestic storage. Maximum annual production is 600,000 pcs.

Main production are E-grade GPI pipes (for shale gas application etc.) and M-grade GPI pipes (for oil and gas application less than 150 deg. C)

The 50% of production amount will be supplied to international market, and another 50% to domestic market. Necessary materials will be supplied from NBL Material Co., Ltd. (JAPAN).



《NBL Technovator Co., Ltd.》

NBL Technovator Co., Ltd. a private company having R&D laboratory, Composites Division, Information Technology Division and contracted R&D / test Division, running by gaining technology licence fee. NBL International Co., Ltd. is 100% subsidiary company. Please refer our website URL:nbl-technovator.jp for details.

Company Name: **NBL Technovator Co., Ltd.**

Email: support@nbl-technovator.jp

Head Quarters and Laboratory:

631, Shindachi Makino, Sennan City, Osaka , Prefecture, Japan Zip 590-0522

TEL : +81-(0)72-493-3091 / FAX; +81-(0)50-3495-6245

Test Site:

1160, Shindachi Okanaka, Sennan City, Osaka, Japan Zip 590-0523

TEL : +81-(0)50-1440-8067

Management: (○ = Part Time)

○ Advisor:	Dr. Toshio Nishida
○ Advisor:	Mr. Yutaka Otsuka
Representative Director:	Dr. Yoshinori Nishino
Director (Head of Research):	Dr. Shinichi Tamura
Director:	Mr. Masaki Nishino
Director (Operations):	Mr. Masaki Uhara
Director (Sales):	Mr. Masataka Amano
Director (Administration):	Mr. Shuji Shinya
Advisor / Observer:	Dr. Kozo Okazaki
○ Auditor:	Mr. Yoshio Mita
○ Advisor:	Dr. Takio Shimosakon
○ Advisor:	Mr. Shuichi Tsujio
○ Advisor:	Dr. Yoshio Tabata
○ Advisor:	Mr. Yutaka Oku

Company: Privately Owned

Established: April 1988 (Technovator became independent in August 2010)

Capital: Approximately JPY 100,000,000

Sales: Approximately JPY 800,000,000 (2012 consolidated)

Staff: Approximately 20 (excluding part-time and overseas)

Shareholders: Approximately 34 (Main Stockholder: Dr. Yoshinori Nishino)

Line Banks: Kiyo Bank (Sennan Branch), Kinokuni Credit Union (Ozaki Branch), Bank of Tokyo-Mitsubishi UFJ (Izumisano Branch)

Awards: Received from academic associations and government

Thesis Award	Reinforced Plastics Association (1983), FRP pipe joint design method
Academic Award	Japan Fiber Machine Award (1984), Analysis of degassing mechanism of centrifugal molding
Yellow Ribbon Award	Reinforced Plastics (1984) , Centrifugal molded FRPM pipe and FRP pipe
Special Inventors Award	Director General of Science and Technology Agency (1987), Molding method of reinforced resin balls for valves
1 st Osaka Venture Business Prize	Centrifugal Molding (1998)
Shandong People's Government (China)	Foreigner's Commendation (2005), Contributions to the glass fiber industry
Kyoto Venture Judging Committee	"A" ranking (No. 69) certification (2009), Commercialization of FRP high pressure pipe for oil wells
New Energy and Industrial Technology Development Organization (NEDO)	Certification (2008 & 2009), Centrifugal Molding Method for FRP high pressure pipe able to withstand 500 atmospheres
as above	Adoption of development for energy rationalization technology (2008 & 2009), Soil Penetration Expansion Waterproof Membrane
Organization for Small and Medium Enterprises and Regional Innovation	Adoption: (2007 & 2008), Gypsum & FRP materials for the development of earth moving and construction products used in environmental purification (utilizing centrifugal molding)
Kyoto Venture Enterprise R&D Subsidy Program	Recognized (2009), Development of artificial reefs made from waste plaster materials
Japan/China Shanghai Forum	Shanghai Environmental Energy Meeting Project Award (2008), centrifugal molded FRP pipe for oil wells
India ONGC	Received certificate of adoption for high pressure pipe technology at CTW-2009 invitation to participate, sponsored by India's Oil and Natural Gas Corporation

Published Papers

Technical Development and Technical Service Site (Free Download Site)	
Roughly 100 papers related to composite materials science	(Public Site PDF - http://nbl-technovator.jp)
Roughly 200 papers related to information science	(Public Site PDF - http://nbl-technovator.jp)

Published Announcements

NHK (Japan Broadcasting Company)	5 television interviews and roughly 10 newspaper articles
NHK Satellite TV Entrepreneur Group	Dr. Yoshinori Nishino introduced on 30 minute broadcast (latter half of 2 part series) in April, 1997
NHK News	Introduced CHN electronic business system (3 minute segment on 4 February, 2000)
NHK News	Showing NBL Technovator participation in 3 races (10 minutes)
NHK News	Featured NBL's entry as a venture enterprise in Osaka City's Business Incubator Program

Patents

Roughly 1,000 patent applications (including joint patents)
Roughly 100 owned patents (including joint patents)
Applications in Japan, America, Canada, Germany, Italy, New Zealand, South Korea, China, India
Related fields: FRP manufacture, production methodology, materials, parking equipment, leisure yachts and electronic business systems

*To see the full list of patents, please visit our public web site - <http://www.nbl-technovator.jp>

«NBL Materials Co., Ltd.»

NBL Materials Co., Ltd. began as a spin-off of Glass Fiber Division in former NBL and transformed into an independent company. The reasons are, to survive cost competitiveness in Auxiliary Materials market, and due to JV cooperation between High Pressure Pipes Division (another department of former NBL) and Hitachi Zosen Corp. Moreover, necessity of cost-cutting of auxiliary materials for glass fiber products which is the major business, and also cost-saving in total forwarded the transformation since the market size is small (approximately 10 billion JPY = 40,000 tons annually, and had business about 10% of it). Therefore NBL Materials Co., Ltd. is specific for manufacturing auxiliary materials of glass fibers. Head Quarters has been set in Sennan city, Osaka, with the function of glass fiber R&D and secondary processing, also manufacturing auxiliary materials. Manufacturing division is running as an entrepreneurship, and also Sales division is planning rebuilding and independence. Tokyo office inherited its international sales, also China office inherited former liaison office in Shanghai specialized for auxiliary materials business, and Delhi liaison office and former Zhuhai Composites Co., Ltd. will do agency service.

Company name: **NBL Materials Co., Ltd**

Address: 631 Shindachi Makino, Sennan City, Osaka , Japan Zip 590-0522

Tel : +81-(0)724-93-3091 Fax : +81-(0)50-1440-8067

E-mail : support@nblmt.jp URL : <http://nblmt.jp>

Representative Director: Dr. Yoshinori Nishino

Senior MD/ Director: Mr. Shuji Shinya

Director (sales) Mr. Masataka Amano

Director / PM: Mr. Masaki Uhara

Auditor: Mr. Yoshio Mita

Advisor: Dr. Shinichi Tamura

Advisor: Mr. Yutaka Otsuka

Advisor: Dr. Toshio Nishida

Advisor: Dr. Kozo Okazaki

Advisor: Dr. Takio Shimosakon

Company: Privately Owned

Established: June 2009

Capital Assets: JPY 880,000

Sales forecast: 8 billion JPY (2013), 10 billion JPY (2009)

Employees: 5 (full time staff)

- Shareholders: Dr.Yoshinori Nishino (100%)
- Business Scope: Manufacture/sales of glass fiber/auxiliary materials and its manufacturing machine, manufacture of resin for composite materials products, and export/import for the above.
- Business Succession: Inherited the manufacture/ sale of auxiliary materials and its machines from former NBL. Also all of glass fiber related business of former NBL such as R&D technology, products, know-hows, machines and skilled workers etc. are inherited. International liaison office in Shanghai and India, also Zhuhai Composites Co., Ltd. from former NBL are inherited as well.

«LIS Japan»

LIS Japan Co., Ltd. was established in November 2010 in cooperation between Oku Boring Co., Ltd. and NBL Technovator for joint development and production of boring equipment, and to act as a distributor of NBL International and as an agency for Chinese excavation equipment manufacturers (sales of products/maintenance /lease) for earthworks, oil wells and the National Water Well Association of Japan. Providing the following services.

- Equipment for boring : Various bits, high-pressure pumps for boring , top drives for drilling up to 12,000m, various safety valves / equipment, winches, etc. (Distributor of CNPC related machinery supplier, and also for oil well products companis.)
- Equipment for completion : Various installation materials, gas separation machine, FRP casing pipes/ tubing / line pipes / various FRP valves, etc. (Various products for commission sales of Chinese well equipment manufacturers)
- Equipment for maintenance construction : Power tongs/elevator/slitter (for Steel or FRP pipe), electric winch (for FRP pipe only), top drive drilling unit for FRP dual casing pipes, hand wrench for FRP pipes, drain pump, sand/soil separator, hydraulic unit,
- Scale removal solution for hot spring pipes : Distributor of an environment-friendly scale calcium washing liquid build up inside of hot spring well pipes. Co-developed by Shanghai CNPC BIO Technology Co., Ltd. and NBL Materials Co., Ltd.

For detailed products, specification, price, stock, delivery etc., please refer to our website <http://www.nbl-technovator.com>

- Registered address: 631, Shindachi Makino, Sennan City Osaka Japan Zip 590-0522
Tel : +81-(0)72-493-3091 / Fax: +81-(0)50-3496-6245
- Representative Director: Masayoshi NISHIDA (50% shareholding by NBL Technovator)
- Director: Syuji SHINYA
- Auditor: Yoshio MITA
- Advisors: Yutaka OKU, Yoshinori NISHINO, Shinichi TAMURA