



# NSSL Italia – reliable technology partner

Having a global presence in the spheres of quality, technology, after sale services and customer satisfaction, in 2009 the NECO Group entered Italy and established NSSL Italia srl, a manufacturing unit which is part of the group's vision to become one of the leading valve manufacturers in the world. NSSL believes the quality of a product goes beyond the label to include how it is engineered, machined, assembled and tested to the best of Italian technology. Through their engineering expertise and dedicated R&D facility, the company has helped various end users to optimize their resources with the aim of environmental protection.

### History

As a global player which has manufactured valves for 25 years, in 2009 NSSL decided it was time to start its own manufacturing plant in Italy. NSSL Italia integrated the Valve Division's portfolio with the addition of high technology products such as trunnion mounted ball and plug valves for the oil & gas upstream (production) and mid-stream (transmission) sectors. NSSL Italia is certified (API, ISO, PED) and ready for any challenge the market could bring. In early 2013, NSSL Italia moved to new premises in Rottofreno on the outskirts of Piacenza which cover a total area of 17,000m<sup>2</sup> (183,000 sqft) with a covered plant of 5,000m<sup>2</sup> (54,000sqft) and an equivalent area available for future expansion. The facility is organized into machining, assembly and testing units operating under a severe quality control system certified to API Q1 and ISO 9001:2008. Skilled and committed

personnel with years of experience gained in the ball valve industry, together with a well-equipped shop floor, makes the company a competent and qualified competitor on the global market, despite its relatively short history. Today the Company employs over 20 people with a turnover in excess of 7 million euro, with the expectation to double this within the next couple of years. Valve World sat down with Mr. Anand Jayaswal, NSSL Group President, to learn about the company.

### What are your objectives & strategy?

*Mr. Jayaswal:* The aim of the company is to serve the industry on a project basis, offering customized solutions for the most demanding applications, from very high pressure and corrosive media to cryogenic and high temperature services, sub-sea installations, emergency shutdowns and HIPPS.

We want to further grow in the market of special applications and become one of the leading suppliers worldwide. Our approach is to work with our customers in partnership, following them step by step, proposing solutions and providing assistance and support to their specific needs. Fast service and an efficient pre- and after-sales assistance are the basis of our growth and constant progress. In-house engineering and design facilities allow the company to respond promptly.

### What is your strength?

*Mr. Jayaswal:* Highly skilled mechanical engineers at our R&D department integrate traditional CAD software with the latest computerized technology such as F.E.M. and SolidWorks 3D modeling, transforming the customers' requirement into reality.



20" 300# Plug Valve.



Torque test with Norbar torque tool with capacity up to 100000 Nm.

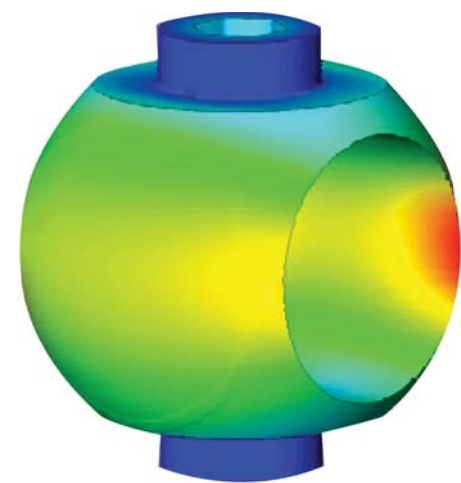
Our testing area is fully equipped with test benches for standard API 6D testing and facilities for HP gas testing, Fugitive Emission, torque testing, Cryogenic and Fire safe testing along with Metrological laboratory.

### What is the NSSL quality control process?

*Mr. Jayaswal:* Consistent quality and continual improvement are a major focus for NSSL. In an increasingly globalized market where product origin is often uncertain, our materials originate from prestigious Italian forging masters, take their final shape in our shop and are finally delivered only after going through accurate control procedures under our quality systems. We are continuously striving for an increase the valve life cycle, zero maintenance valves and targeting for reaching zero PPM.

### What are the products & special applications you offer?

*Mr. Jayaswal:* NSSL Italia's production program covers metal-to-metal lubricated plug valves 1/2" up to 36" in all pressure classes and materials, in ball valves forged /cast steel, trunnion mounted API 6D,



Finite Elements Analysis model.



Forged 18" #1500 Top Entry H.I.P.P.S. - SIL III Ball Valve under performance test.





Cryogenic Testing set-up.



30" #600 Cryogenic Valve under testing.



20" #600 Cryogenic Valve after testing.

Arabia, under Aramco specifications. The valves were designed, produced, tested and shipped in a time span of 10 weeks.

### Can you explain NSSL Italia as a reliable technology partner?

**Mr. Jayaswal:** NSSL's approach to business has since the very beginning been one of cooperation. We like to work in partnership with our customers, whether they are trading houses, contractors or end users. We study their requirements carefully, ask for details when not provided, verify their specifications vs. actual valves service on the basis of pressure, temperature and media and in case of any discrepancy we try to guide them by proposing alternative solutions either in construction or materials that would better suit their needs.

### How does NSSL Italia contribute to the European economy?

**Mr. Jayaswal:** NSSL Italia is committed to the growth of the European community by providing job opportunities for local aspirants and completely establishing supply chain management within Europe by way of procuring materials from local European manufacturers. This is essential for our esteemed line of products which is '100% Made In Italy', unlike the current trend in the market which is to source material from China to reduce costs, ultimately impacting on product quality.

### Certificates

NSSL Italia holds a full range of valid system and product certifications:

- API 6D Monogram (6D-1385),
- API Q1 (Q1-1996)
- ISO 9001:2008 (API 2107 / DNV CERT-17406-2006-AQ-IND-SINCERT) CE - PED Module H (DNV 115988-2012-CE-ITA-ACCREDIA)
- CE - PED Module HI (DNV 115989-2012-CE-ITA-ACCREDIA) ATEX Cat. 2 (DNV 3897-2013-CE-ITA-NA PROD 021)
- IEC EN 61508 (TUV C-IS-232471-01 - SIL II / III -)

### NSSL Italia achievements

- Successfully supplied 48" 600# TMBV (LF2 .3Pc Construction) valve to Russia
- Current Order for 42" 600# TMBV qty 4 no's for Gas application
- 18" 1500# top entry ball valve qty 4 no's with pneumatic actuator for High Integrity Pressure Protection System Valves (HIPPS application Valves) under SIL 2 Certification
- Successfully completed project for BERGERMER GAS STORAGE (The Netherlands) & supplied valves up to 30" 1500# qty more than 300 valves
- Cryogenic valves up to 24" 300 # to RAS GAS, Qatar
- Successfully supplied valves to PETRONAS SOGT project through SAMSUNG, Malaysia up to 36" 300#
- Fully welded design valves up to 30" 600# hydraulic actuated TMBV supplied to Cross Country pipeline project
- 12" 1500# TMBV to Qatar Petroleum
- 32" 900# TMBV (A105) construction with pneumatic actuator supplied for natural gas application.
- 16" 2500# ball valves supplied to German customer
- 10" 600# ball valves to KJO Al-Khafji, Saudi Arabia
- Supplied to SGC -North Middle East, Syria project sizes up to 12" 600#.
- 16" 2500# globe valve to German customer



10" #1500 "TMBV" for natural gas service.

We also participated in the execution of the Gas Storage Bergermeer plant in Alkmaar, The Netherlands which is now operated by TAQA (Abu Dhabi National Energy Company PJSC). Long-term analysis shows that the decline in gas production will create a substantial decrease in flexibility in the market. To fill this gap TAQA has developed Europe's



Forged Top Entry 6" #900 BW with pups under hydro-testing.

largest open-access gas storage which will provide the northwestern regions of Europe with 46TWh of seasonal storage capacity, a guaranteed security of supply regardless seasonal and short-term fluctuations in the demand for gas. NSSL Italia was awarded the actuated valves package, approx. 300 valves in various sizes and ratings up to 30"



30" #1500 Forged Side Entry Ball V.



Electro-Hydraulic actuators and 12" #900 Top Entry Ball Valves.

and, not least, lip seals. Thanks to the expertise and commitment of our staff the job was properly executed and delivered on time.

#1500 complete with electric, hydraulic and pneumatic actuators, most of them under SIL I & II certification. During the execution of the job the company worked closely with the customer, helping with the timely solution of in-process changes to the maximum satisfaction of its partner.

### How do you want to broaden the company's horizons?

**Mr. Jayaswal:** NSSL Italia has recently supplied LUKOIL Uzbekistan Operating Company with a number of forged top entry ball valves in various sizes and ratings, up to 12" #900 for the development of gas-condensate fields Adamtash, Gumbulak, and Djarkuduk - Yangi Kizilcha. The job has been quite challenging as the valves incorporated a range of features, from BW ends with pups to extended stems for underground installation, electro-hydraulic operation