tekno valves
driven by excellence

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An ISO 9001 : 2008 Organisation

EXCELLENCE EVOLVES...

WHEN SOMETHING
IS MADE WITH RESPONSIBILITY
AND CARE.
IT IS ALWAYS
HIGHLY VALUED.

WHEN CRAFTSMANSHIP
OF THE HIGHEST CALIBER
CREATES A SPECIAL
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When something
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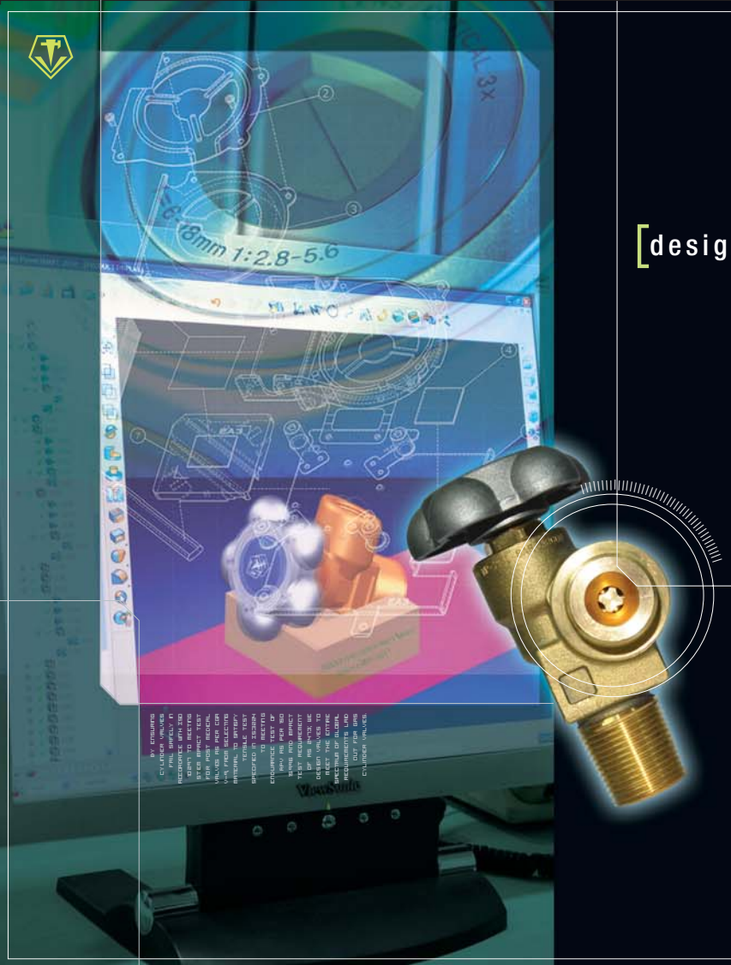
[EXCELLENCE EVOLVES]

[pathway to excellence]

Since 1971, we realised that excellence was the key ingredient in manufacture of gas cylinder valves. It began with an engineering graduate from IIT Chennai, Mr. Y K Behani who had a passion to follow his dream and five people to support his vision. This journey to excellence has continued ever since.

- ISO 9001:2008 certified by DNV
- Products exceed requirements of national and international standards
- First Indian Gas Cylinder Valve Manufacturer to be awarded the " π " mark by BAM Berlin in accordance with Transportable Pressure Equipment Directive
- Fully integrated state-of-the-art infrastructure with complementing support facilities
- Factory occupies total area of 2,00,00 square feet with covered area of over 1,10,000 square feet
- Capacity to produce 1 million valves per annum
- Customers include Leading Gas Cylinder Manufacturers, Gas Manufacturing plants, NGV Retrofitters, Chemical Plants, Fire Fighting and Life Saving Equipment Manufacturers

Mr. Y. K Behani
Founder and Managing Partner



[designed to perform]

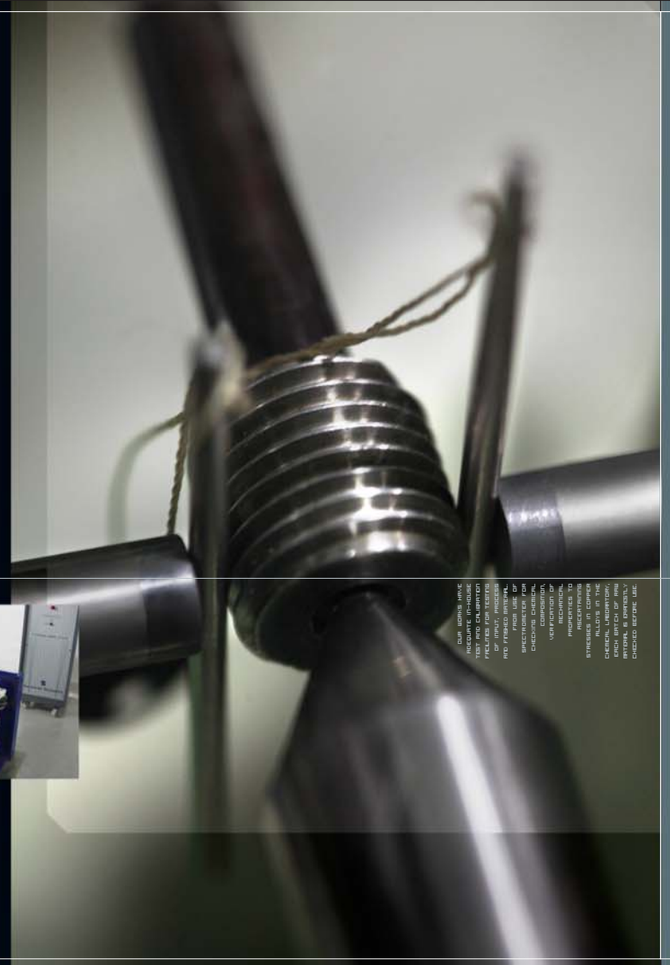
By ensuring cylinder valves fail safely in accordance with ISO 10297 to meeting stem impact test for post medical valves as per CGA V-9, from selecting material to satisfy tensile test specified in IS:3224 to meeting endurance test of RPV as per 1SO 15996 and impact test requirement of AS 2473; we design valves to meet the entire spectrum of global requirements laid out for gas cylinder valves.

- Design activities integrated by use of Auto Cad Mechanical, 3D Inventor, Powershape and Powermill 3D modeling CAD/CAM softwares
- Active participation in ISO working groups, CGA valve committee, Chlorine Institute task force and Indian Standard Committee dealing with high pressure gas cylinder valves
- Collaboration with BAM, Berlin for product testing and Module B certification in accordance with TPED

We encourage buyers to keep the feedback going. We are listening ...

[ensuring symmetry]

Our works have adequate in-house test and calibration facilities for testing of input, process and finished material. From use of spectrometer for checking chemical composition, verification of mechanical properties to ascertaining stresses in copper alloys in the chemical laboratory, each batch of raw material is earnestly checked before use.



OUR WORKS HAVE ADEQUATE IN-HOUSE TEST AND CALIBRATION FACILITIES FOR TESTING OF INPUT, PROCESS AND FINISHED MATERIAL. FROM USE OF SPECTROMETER FOR CHECKING CHEMICAL COMPOSITION, VERIFICATION OF MECHANICAL PROPERTIES TO ASCERTAINING STRESSES IN COPPER ALLOYS IN THE CHEMICAL LABORATORY, EACH BATCH OF RAW MATERIAL IS EARNESTLY CHECKED BEFORE USE.

Calibration facilities :

- Floating carriage micrometer
- Range of master wear check thread and plain gauges
- Comparison test pump
- Digital torque transducer

Batch testing facilities :

Spring tester, UV Black light inspection, Plating thickness tester, Hydraulic test bench, Extrusion test bench, Tensile testing machine, Izod Impact test machine

Design testing facilities:

Low and high temperature tightness set up, Cyclic testing and activation test bench, Endurance test set up, Vibration test machine, Rotameters, Valve impact test facility, Excessive torque test vice

[shaping excellence]

[shaping excellence]

We devote nearly half of our total production facility and engineering staff to run the tool room and forging shop, where the most demanding and defining activities are carried out during the valve manufacturing process.

- The tool room is well provided with Vertical machining centre to carve forging dies and trimming tools by directly importing 3D models of the component. Recondition of forging dies is carried out by Z-NC EDM machines
- Raw material is precision-cut by automatic band/slitting saw
- LPG powered, temperature controlled forging furnaces heat work pieces with uniform soaking time
- Temperature of the slug before forging is observed by a laser pyrometer, ensuring correct forging temperature and uniform grain flow and hardness of the forged piece
- Forged valve bodies after trimming are shot blasted and batch marked before being sent to the machine shop

[precision working]

[precision working]

The quality of machining, degree of automation, flexibility and machining of complex components in a single set up, differentiates us from competition. Single point cutting with high pressure coolant avoid stresses from developing during machining. The diverse range of CNC machines and process automation allow setting machines for small batch sizes as well as provide capability to mass produce components.

The Machine shop includes a range of :

- 2-axis CNC Turning machines with Robotic cell for unmanned loading and unloading
- 2-axis CNC Turning machines with indexing chucks
- Vertical Machining Centers with ATC and pallet changer
- Twin Spindle Turn Mill machines with Y- axis
- Twin Spindle, Twin Turret Turn Mill Centers for enhanced productivity
- Multi tasking new generation CNC machines with 120 degree B axis for unparalleled accuracy

[bright and clear]

For team at Tekno Valves, 'Cleaning' of the valves and components before assembly is one of the most critical operations in the entire manufacturing process. The degreasing of metal parts, carried out in a closed circuit uses best available technology in environment protection and health safety of the operators. Programmable cleaning equipment has a capacity to clean 600 valves per hour and in compliance with disposition of air pollution as per European Directive 1999/13/EC.

The cleaning cycle involves:

- Pre-cleaning
- Vapour Degreasing
- Drying
- Adsorption
- Regeneration

[built for tightness]

As we come closer to the finish line we ensure careful assembly and meticulous testing is carried out in a clean environment during the final stage of the valve manufacturing process. The assembly and testing torques are imparted by DC nut runners, ensuring complete accuracy of the tightening procedure.

- Lubrication of assembly parts is delivered by precise control needle valve with PLC control, ensuring the exact amount of lubrication is dispensed in each area as specified in design
- High pressure testing room provides fourteen independent work stations for pneumatic testing up to Working pressure of 400 Bar
- Every valve is checked for external and internal tightness at full service pressure by a team of specialists

[delivering excellence]

Our export packaging reflects the meticulous approach followed throughout the manufacturing process towrads striving for excellence and sensitivity towards the environment.

- Instapack® packaging foam trays are created on demand depending upon the shape of the item for void free cushioning and protection
- Instapack® foam is produced without the use of CFC's or HCFC's. The eco friendly foam can be re-used as carton fillers
- The foam is easy to dispose, bio stable and non degradable
- The moulded trays are placed inside corrugated boxes, eliminating any form of wood packaging

[trusted worldwide]

Tekno Valves is delighted to be a supplier of choice for reputable companies operating from Canada to New Zealand and Germany to Venezuela.

A diversified range of products meeting International standards, use of modern technology, flexible manufacturing and quick response time has allowed us to build lasting relationship with over hundred customers in more than 35 countries around the globe.

With gas companies globally looking for reliable gas equipment manufacturers in Asia to cater to their growing needs in order to be increasingly cost competitive, we are well positioned to service new markets and exciting opportunities in the gas industry.

- Australia
- Bangladesh
- Bhutan
- Bolivia
- Bulgaria
- Canada
- Chile
- China
- Ethiopia
- Germany
- Iran
- Jordan
- Kenya
- Kingdom of Bahrain
- Kuwait
- Malaysia
- Mexico
- Nepal
- New Zealand
- Poland
- Qatar
- Dominicana Republica
- Romania
- Saudi Arabia
- Singapore
- South Africa
- Spain
- Sri Lanka
- Sudan
- Sultanate of Oman
- Uganda
- Tanzania
- Thailand
- U.A.E
- U.K
- U.S.A
- Venezuela
- Yemen

[integrated assurance]

We follow a focused policy to ensure protection of health & safety at work. This creates a positive influence on performance at shop floor leading to continual improvement in work and prevention of injuries. Adoption of best practices in good health and workshop safety measures has been given the top priority.

- Centralized compressor room
- Underground trenches for electrical wiring, coolant piping and compressed air line
- Overhead crane for maintenance
- Designated pathways for people and material movement
- Viewing gallery for visitors

The Tekno commitment towards health and safety is total.

[organization, ethics and vision.]

Mr N K Behani

Mrs Renu Behani

Mr Y K Behani

Mr Rohit Behani

Tekno Valves is a closely held organisation, led by Mr. Y.K. Behani, Managing Partner and Mr. N.K. Behani, Director- Commercial. Their passion and enthusiasm to manufacture high quality gas cylinder valves is shared by the next generation. Mr. Rohit Behani and Mrs. Renu Behani head the Manufacturing and Sales department respectively and have been instrumental in elevating "Tekno Valves" image of excellence within the gas industry. The family's active role in executive and operational activities, acts as a fulcrum for growth and a morale booster for team members.

The team consists of 150 full time employees and dedicated professionals with diverse range of competence and experience in the industry, and share the vision of giving Indian products its rightful place in the world market.

Think and act for the long-term has guided our choice of technology. With investments of over 5 Million USD and doubling of product range in the last five years, our engagement to the gas equipment business is integral to our mission of being one of the most preferred source for gas cylinder valves in the world.

Well accepted for our products, ethical business dealings and partnership approach with customers, suppliers and other stake holders, we are committed to raise the *'bar'* in the industry with our products and services.

Our products are ready to handle your pressure ...

[product range]

Name : Key operated valves in packed design
Model No. : IHO-06 and IVO-06
Service : Oxygen, Hydrogen and Acetylene
Working Pressure : WP-200 Bar
Specification : IS 3224:2002

Name : Key operated valves in O-ring seal design
Model No. : KHO-10 and KVO-10
Service : Technical and Medical gases
Working Pressure : WP-250 Bar
Specification : ISO 10297:2006 and IS 3224:2002

Name : Wheel operated valves in O-ring seal design
Model No. : CWH-10/O,C,D and CWV-10/O
Service : Technical and Medical gases
Working Pressure : WP-300 Bar
Specification : ISO 10297:2006 and IS 3224:2002

Name : Wheel operated valves with Residual pressure unit
Model No. : CRPV-10/O and CRPV-10/C
Service : Technical and Medical gases
Working Pressure : WP-300 Bar
Specification : ISO 10297:2006 and ISO 15996:2008

Name : Key operated valves in packed design
Model No. : CAV-06
Service : Chlorine and other liquifiable gases
Test Pressure: TP-50 Bar
Specification : ISO 10297:2006 and IS 3224:2002

Name : Twin phase valves in diaphragm design
Model No. : RDP-03
Service : Refrigerant gases
Test Pressure: TP-50 Bar
Specification : ISO 10297:2006 and IS 3224:2002

[product range]

Name : Pin index valves in Post, knob and toggle design
Model No. : MYC-10C
Service : Medical gases
Test Pressure: WP-200 Bar/3000 psig
Specification : ISO 10297:2006, V-9-05 and IS 3224:2002

Name : Wheel and Knob operated valves for CNG
Model No. : ALV-11 and AHV-02
Services : CNG
Working Pressure : WP-260 kgf/cm2
Specification : IS:3224:2002

Name : Valves for fire extinguishers
Model No. : FWT-11, FSV-01 and FSV-08
Service : Carbondioxide
Working Pressure : WP-160 Bar
Specification : IS 3224:2002

Name : Valves for Breathable air
Model No. : HBA-10 and MBA-10
Service : Breathable air
Working Pressure : WP-300 Bar
Specification : ISO 10297:2006, EN 144-1-2005 and IS:7302

Name : Key operated valves in Steel Body
Model No. : CST-06
Service : Ammonia
Working Pressure : WP-40 kgf/cm2
Specification : IS:3224:2002

Name : Fusible and bling plug for cylinders and tonne containers
Service : Chlorine, Acetylene and others
Working Pressure : 500 psig
Specification : As applicable

[affiliations and certifications]