

## The Company

PARS SHIR MFG.CO. is a Manufacturing Company in the field of “gas household appliances” and has been operated for over 30 years in history. The Company produces mainly gas cooker valves including thermocouple, thermostatic, gas taps, and burners.

PARS SHIR MFG.CO. gas taps are used in free-standing cookers or built-in hobs to control the flow of gas and the power generated by the burners. These valves are offered in the types with or without thermoelectric safety device (magnet units) and can be produced in brass or extruded aluminum alloys. All the required equipment such the heater, the forging press, transfer machines, and finally the CNC lathes for smaller valve pieces are all used by PARS SHIR MFG.CO. to produce our products.

Since 1988, we have built our status and achievements on our greatest strength: the generations of employees who are part of our history and our future. People are the foundation of our Company. Our people are valued as individuals and treated with respect, dignity and fairness. We expect the highest level of performance and honesty from our people and we attempt to generate opportunities for them to improve and reach their full potential.

A key aspect to the constancy and durability of PARS SHIR MFG.CO. is the commitment by management to deliver a safe and supportive work environment. Employees are cared for as family members through the Company supported wellness programs, continuing education opportunities and honoring awards for anniversary milestones.



## Philosophy

### Mission:

- To design and manufacture reliable and durable components for gas household appliances at the most cost-effective way for, and together with, different customers worldwide.

### Vision:

- PARS SHIR MFG.CO. counts on every personnel as a real value of the organization.
- To be the preferred source in the market that we serve by supplying products and services of superior value that exceed customer expectations.
- To continually improve our performance.

### Objectives:

- To strengthen our technological and market leadership
- To strengthen our design and manufacture of our products
- To value our internal resource, e.g. human resources

### Values:

- We value quality in all we do. Quality is seen in our products, our processes, in how we communicate, and in our relationships with each other, our business partners and our families. Quality is the personal responsibility of each employee.
- Our word is our bond. We honor our commitments to customers, employees, suppliers and the communities in which we live and work. The key ingredient in all of our commitments is integrity.
- We are in business forever. We all have the responsibility to leave the business stronger than when we started. Continuous improvement is necessary for growth and continued future success.
- Our strength is in our people.

## Safety and Quality Policy

Safety is one of the core concerns in PARS SHIR MFG.Co. Safety within the Company is guaranteed through constant innovation and upgrades made to the process and machineries used in operations and implementation of the quality standards.

The safety of end users is obtained by suggesting products with superior quality and safety characteristics. PARS SHIR MFG.Co., products are assigned to strict safety and tests controls, in agreement with the market standards, to certify that they are free from defects. The quality control on 100% of the production is backed up by further sampling tests and by life testing that requires the successful conclusion of opening and closing cycles at variable temperature, equivalent to 20 years' intense domestic use.

At PARS SHIR MFG.Co., we try to use and apply the concept of Business Quality as: Understanding and then satisfying customer requirements in order to improve our business results. Hence, we are on the road of Continuously Improving of our behavior and attitudes as well as our process, products and services in order to ensure that a customer focus is visible in all that we do.



## Manufacturing Process

Based on the customer's requirements or technical specifications (draft drawings, CAD 2D drawings, CAD 3D models or samples) and if the design is judged as feasible, our technical department relies on its experience and latest-generation CAD 3D design technology to carry out a three-dimensional model of the product, the dies and tools, simulating the whole manufacturing process so as to immediately find and remove any faults that might come to the fore during the manufacturing process, thereby avoiding any waste. Our staff provide cooperation and assistance in the design and industrialisation of the products with a view to optimising costs, while adhering to and retaining the required technical and functional features.

Once the design developed by our technical department has been approved, the dies and tools for the production process are manufactured. Dies and tools are made using CNC machine tools assisted by CAD/CAM software for a proper transfer of information from the design stage to the manufacturing stage.

All the essential equipment such as the induction heater, the forging press, the flash trimming press, the shot blasting machine, transfer machines to manufacture valve body pieces, the CNC lathes for smaller valve pieces and the washing machine are supplied by PARS SHIR MFG.CO. We supply turnkey production line machines with the engineering for the tooling and die sets precisely designed for particular valves. The valve pieces are assembled on the assembly and testing line where operational turn on turn off pressure levels and safety release pressure levels are adjusted, set and tested as per applicable international standards.

## Product Range

Gas valves are used on free-standing cookers or built-in hobs to control the flow of gas and the power produced by the burners. These valves are available in types with or without thermoelectric safety device and can be formed in brass or extruded aluminum alloy.

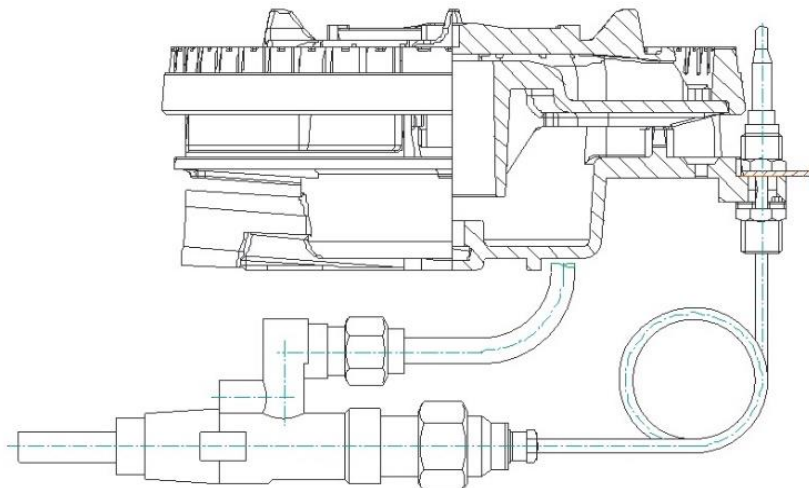
The valve pieces are assembled on the assembly and testing line where turn on turn off pressure levels and safety release pressure operational levels are adjusted, set and tested as per applicable international standards.

Robustness and smooth action of the valves are the key two features that continue unchanged over time, using correct preparation of the single parts that compose them. This is particularly correct because the finishing with a diamond tool of the inner surfaces of the body and outer surfaces of the tapered plug assures a perfect cover and at the same time an exceptionally smooth movement.

Our product range includes:

- Gas Valves
- Gas Flame Failure Devices
- Gas Thermostats Valves
- Gas Thermocouples
- Gas Burners

## Combination of our products:



## Gas Taps

The gas tap is opened by combined pushing and anti-clockwise rotational movement of the control spindle. This releases the spindle from the retaining latch in the 'off' position and permits rotation and hence the passage of gas to the burner. Rotation to 90° gives the maximum flow, continuing towards full rotation, there is a constant reduction in flow rate down to the 'minimum' (the turn down rate determined by the by-pass). The minimum flow rate can be drilled and pre-set at the customer's request for a particular type of gas.



## Gas Flame Failure Device

In the safety gas taps, electromagnet plus thermocouple is used to prevent the flow of gas in the event of accidental extinction of the flame. When the control spindle fully pushed in and turned clockwise, a few seconds after the ignition of the burner, the thermocouple tip heated by the flame generates sufficient electrical current to activate the electromagnet unit and allows the gas through the gas tap. At this point, the control spindle of the gas tap can be released.

In the event of accidental extinction of the flame, the thermocouple cools with a consequent reduction in the current generated. After a few seconds, the electromagnet closes and blocks the flow of gas.

We produce valves for other factories with their name and brand according to European standards.

		
310	315	320
		
343		

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351	352	353
		
354	355	









## Thermostat Valves

PARS SHIR MFG.Co. thermostats are used to maintain the pre-set level at the desired temperature in the ovens in which the temperature sensor (thermostatic bulb) modulates to reach the desired temperature.

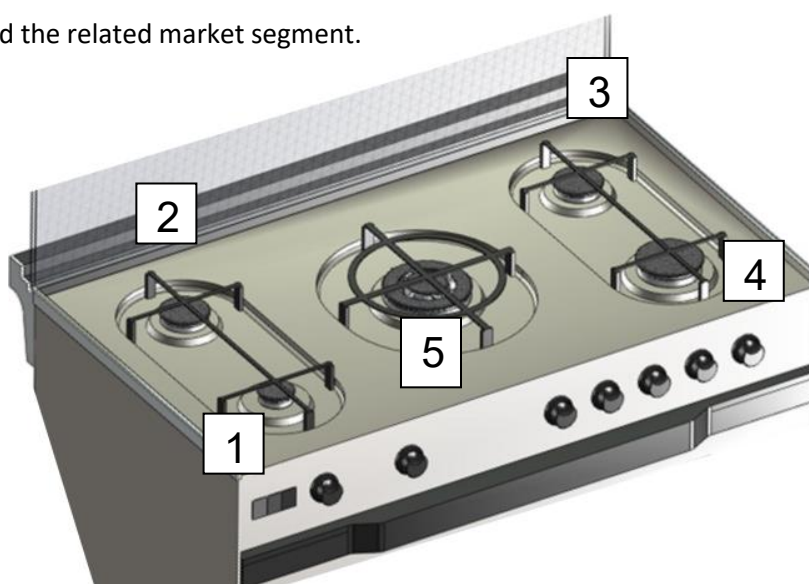
Different types of thermostats are available with or without thermoelectric safety device and with one outlet or two (one of which always thermo-regulated). They can therefore control an oven burner, a grill burner or, using suitable microswitch with the heating element of an electric grill.

The thermostat is operated by keeping the control spindle pressed after rotation of 52°, the minimum temperature, which is determined by the by-pass. Continuing the rotation of spindle as far as the stop, there is a progressive increase in temperature up to the pre-established maximum.

		
401 C	401 CM	402 TM
		
402 T	402 OW	411 TW

## Burners

PARS SHIR MFG.Co. is capable to provide burners in order to complete majority of a gas cooker components to gas cooker manufacturers. With series II burners, it is possible to satisfy customers' requests as well as those of the end users. Series II burners has the feature of a modular system which means it is possible to mount different types of a flame spreader or lid to compose different models of burner. Another advantage of series II burners is that the appliance manufacturer is able to reduce the investments needed to develop a complete range of products by mounting the various burner models to match the design of the cooker or hob and the related market segment.



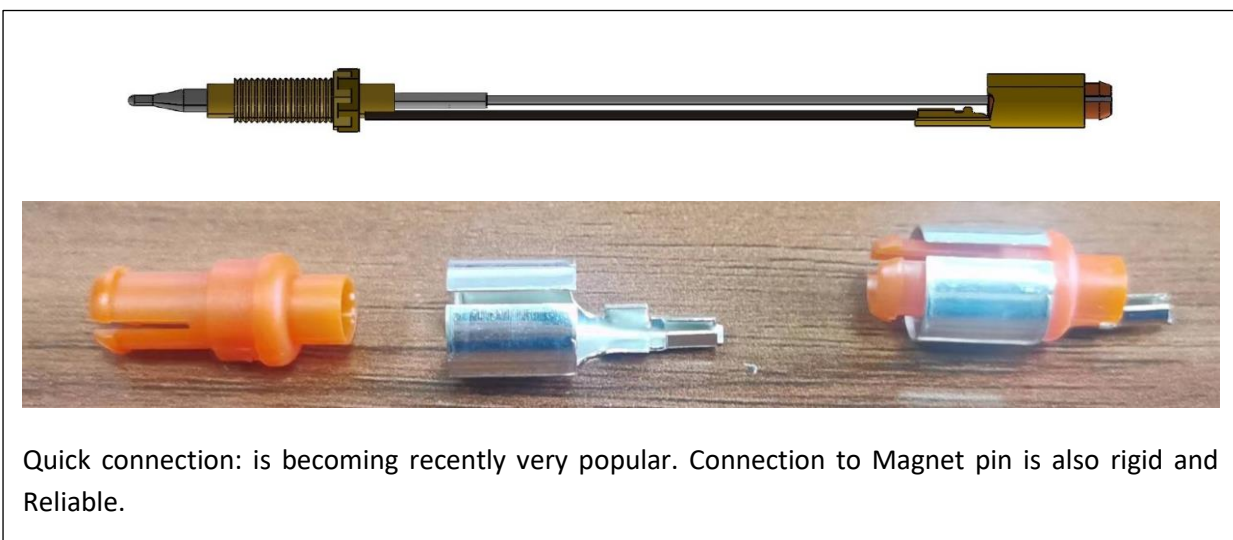
Flame No.	Name	Capacity G31=C3H <sub>8</sub> 100%		Heat Power	
		Min.	Max.	Min.	Max.
1	Auxiliary	21.358 lit/h	45.677 lit/h	0.6 Kw	1.3 Kw
2	Semi Rapid	43.430 lit/h	78.745 lit/h	1.23 Kw	2.2 Kw
3	Semi Rapid	43.430 lit/h	78.745 lit/h	1.23 Kw	2.2 Kw
4	Rapid	49.830 lit/h	86.855 lit/h	1.4 Kw	2.5 Kw
5	Triple	64.076 lit/h	128.153 lit/h	1.8 Kw	3.6 Kw

## Thermocouples

A thermocouple fitted to a magnet unit within a gas control valve which acts as a flame failure safety device. When the tip (head) of a thermocouple is heated by the flame, it produces an electrical current which activates the electromagnetic unit by e.m.f. By following current to the coil of the magnet unit, the contact pole piece of the magnet unit is pressed against the magnet by the push rod and it absorbs the magnet by magnetism. Even if the push rod is released, the gas passage will keep opening. Once the flame is extinguished, the current is reduced which allows the electromotive force to be interrupted and the valve doesn't absorb contact pole piece by magnet, and the gas passage is intercepted by valve returned with the elasticity of spring.

It is essential to correctly position the thermocouple's tip and the distance to the burner. If the flame moves far from the hot junction and placed to the cold junction, it would create less temperature difference between the two points resulting less effective e.m.f. and lowering efficiency of the system.

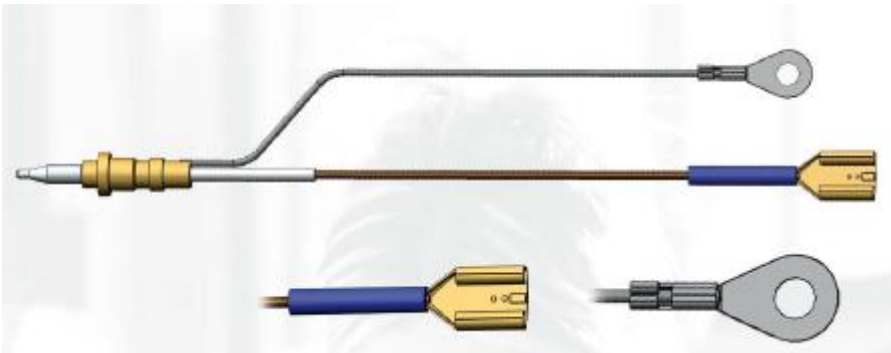
**Hob Thermocouples:** PARS SHIR MFG.Co. supplies range of thermocouples to the market which are able to equip different types of burner and to combine with different types of magnet. Some of the types of thermocouples are illustrated below:



Quick connection: is becoming recently very popular. Connection to Magnet pin is also rigid and Reliable.



Single wire: an advantage of this type is there is no need to ground wire. Also, conductivity is carried out using the metal surface of the hob. The guarantee of a suitable contact between body and hob is obtained with thread and nut block to the burner or the cooking hob itself.



Fast-on connection: this is suitable for valves with fast-on connection. This model is equipped with a ground model wire thus allowing for an easy and safe fastening of the burner body with a clip. The ground wire can be fixed with a screw in a single point, preferably close to the tap.

### Thread Connection



The tubular thermocouple can be used for both gas ovens and gas burners with a pilot flame, or in ovens in which a connection thread to the thermostat is forecasted.



**OVEN thermocouples:**

Thread connection, copper tube totally. Sizes from 80 Cm till 120 Cm as customers require.



**THE END**