



SHRIRAM PISTONS & RINGS LTD.

New
Launch

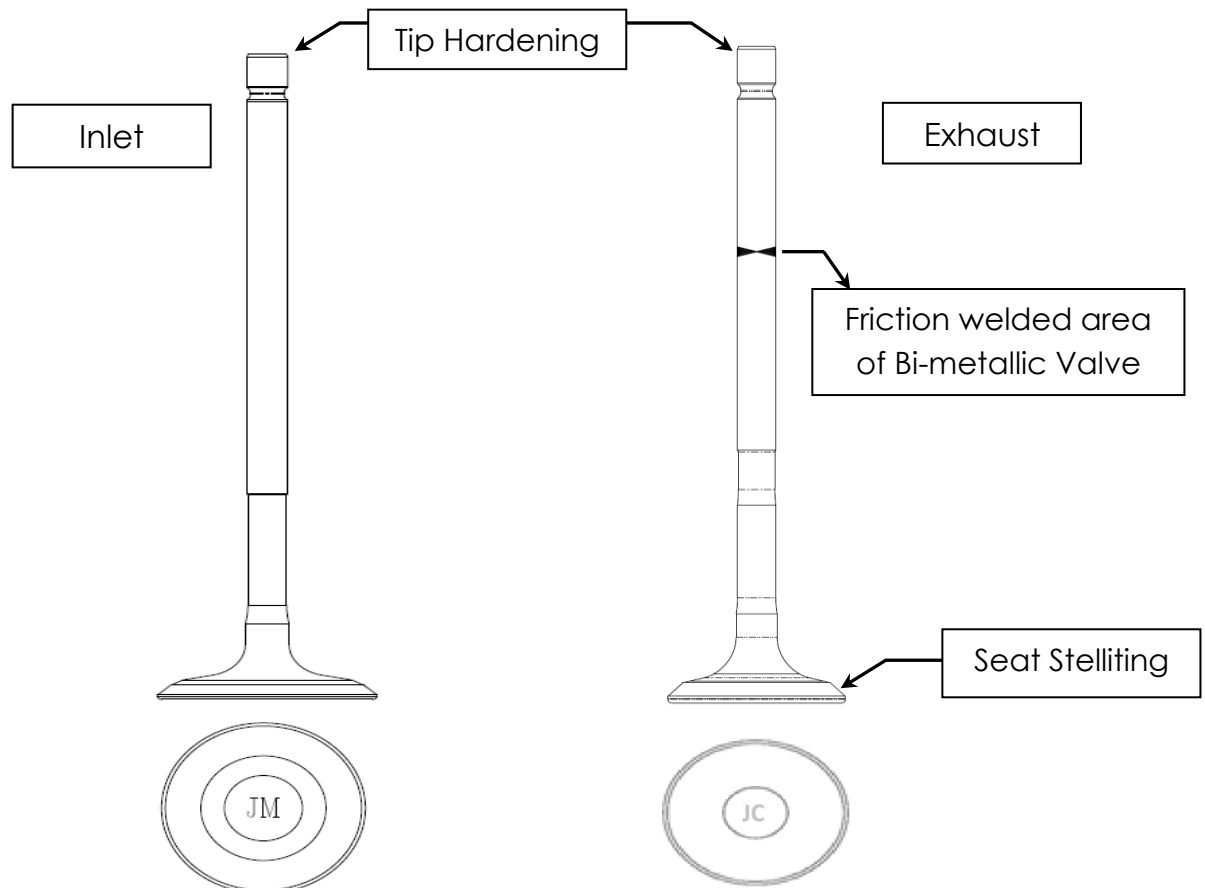
MD: TS:06/JULY'25 INTRODUCTION CIRCULAR - **GRAND VITARA CNG/ BREZZA NEW CNG-ENGINE VALVES**

USHA is pleased to launch '**MARUTI GRAND VITARA CNG/ BREZZA NEW CNG / SWIFT (2020) CNG/ WAGON R/ CELERIO/ ALTO K10C CNG**' engine valves in its aftermarket Car/ PV product range.



The technical details of these engine valves are as under:

Model	Valve	USHA Code	D X d X L (mm)	Material	Surface Treatment	Special Process	Identification marks @ Head
MARUTI GRAND VITARA CNG/ BREZZA NEW CNG/ SWIFT (2020) CNG/ ALTO K10C CNG	Inlet	3313	26.50 X 5.00 X 103.97	Martensitic	Tufftriding	Tip Hardening	JM
	Exhaust	3332	22.90 X 5.00 X 93.72	Bi-metallic	Tufftriding	Tip Hardening/ Seat Stelling	JC



These valves have following features: -

Sl. No.	Particulars	Benefits to Customer
1)	Both inlet & exhaust valves are Tufftrided.	• Lesser wear, hence longer life
2)	Both inlet & exhaust valves are Tip Hardened	• High tip wear resistance
3)	Inlet valves are made of 'Mono' one-piece Martensitic (magnetic) material.	• High temperature resistivity
4)	Exhaust valve is 'Bi-metallic' having head portion made from austenitic (non- magnetic) material known to have high temperature strength and stem is made of Martensitic (magnetic) material which has high wear resistance.	• Longer life
5)	Exhaust valves are Seat Stellited.	• Lesser wear @ valve seat, hence longer life

Tuff

Tuff is the common name for Tufftriding process. In this process, the entire surface of the valve is given a special heat treatment which enhances its hardness and strength. This improves wear resistance of the valve even at higher engine temperatures.

Tip Hardening

Tip of the valves are hardened using flame hardening process. The process involves heating tip of the valve to higher temperature & then quenching in a special oil/ water to achieve desired hardness.

Seat Stelliting

Stellite is a very hard material (Nickel Cobalt alloy) deposited through a process called Plasma Powder Welding (PPW). It is done on the valve 'Face seat' which increases wear resistance & also provides strength to withstand at elevated engine temperature.

These features make USHA '**MARUTI GRAND VITARA CNG/ BREZZA NEW CNG / SWIFT (2020) CNG/ WAGON R/ CELERIO/ ALTO K10C CNG**' valves unique, produced to give better performance & longer life.



Technical Product News is an exclusive update of product & information from
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