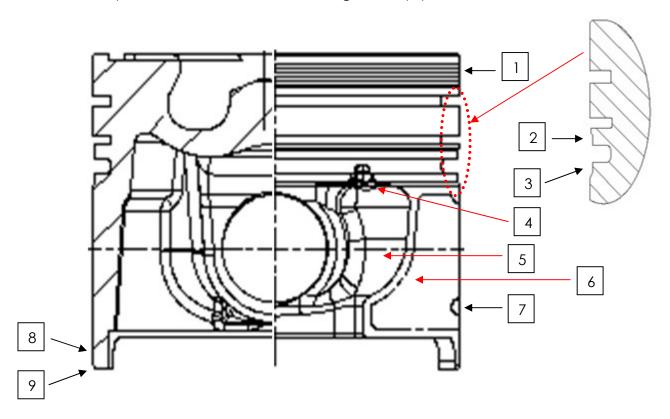
TECHNICAL BULLETIN- TATA ACE ZIP/MAGIC IRIS PISTON SET

USHA is pleased to introduce TATA Ace Zip/Magic Iris piston set in our SCV product range.

Unique features of USHA Tata Magic Iris/Zip piston are as follows:



SI. no.	Special Features	Benefits to Customer
1	SERRATIONS: These are shallow grooves which act as heat dam to reduce heat at the top groove.	 Serrations help in preventing blow-by, thereby reducing chances of top land scuffing.
2	STEP CUT IN SECOND RING LAND: Provides perfect seating of the top ring on the bottom surface.	Helps in reducing blow-by.Helps in reducing oil consumption.
3	"J" CUT: This Piston has been provided with a unique 'J' cut below the oil ring groove area.	 'J' Cut provides all time lubrication on skirt. No piston seizure in extreme limits of normal working conditions.

4	QUICK OIL RETURN SLOTS (QORS): Two nos. of Quick Oil Return Slots (QORS) are provided on each side of the piston above the pin bore, half in groove & half in window.	 Quick drainage of oil and hence lower oil consumption.
5	AS CAST HYDRODYNAMIC WINDOW: New hydrodynamic 'As Cast' window designed by our collaborator, not only provides more space for oil drainage, but also provides more skirt area for piston ring guidance.	 Faster oil drainage due to more space helps in reducing oil consumption. Better guidance to rings also helps in reducing oil consumption.
6	SKIRT COATED WITH "NANOFRIKS" COATING	 Nanofriks is a permanent coating which provides better wear resistance & helps in initial lubrication to avoid piston scuffing/seizure etc.
7	MEASURING POINTS ON THE SKIRT: Two points on both sides of the skirt.	 Provided for easy diameter verification.
8	SLIPPER DESIGN: Slipper design skirt provides better guidance during piston movement.	 Low noise during engine working. Better guidance to rings. Better fuel and engine oil economy.
9	BOTTOM CHAMFER: A smooth chamfer is provided at the bottom end of piston which provides better hydrodynamic oil film.	 Helps in reducing skirt wear & regulates oil supply. Longer life.

TECHNICAL DATA- TATA ACE MAGIC IRIS/ZIP PISTON					
		USHA Code → C09			
Nominal Bore Diameter	mm	92.00			
Piston Diameter	STD Size mm	91.90			
Recommended	mm	0.100			
Piston-Liner Clearance					
Compression Height	mm	47.00			
Total Height	mm	76.00			
Piston Pin-Pin Bore Clearance	mm	+0.006 to +0.017 (Clearance Fit)			

For better performance and low oil consumption we recommend customers to use our Tata Ace Zip/Magic Iris piston set with 'SSTR' ring set already introduced by us.