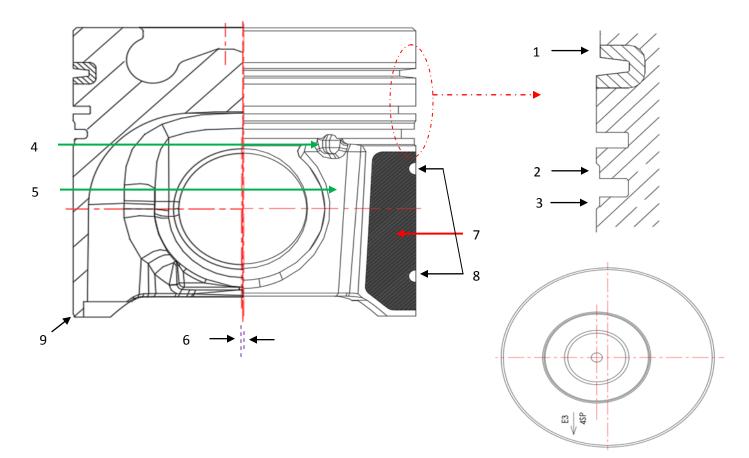
TECHNICAL PRODUCT NEWS- TATA 407 SPACIO BS-III

USHA is pleased to introduce TATA 407 Spacio BS-III piston set in our LCV product range.

PISTON:

Unique features of the piston are as follows:



SI.	Special Features	Benefits to Customer	
no.			
1	HIGH NICKEL WEAR RESISTANT RING CARRIER	• Longer life of piston due to	
	(RCP): Top groove of this piston is made of high wear	negligible wear of top groove.	
	resistant ring carrier insert, which is manufactured as		
	per latest centrifugal casting process.		
2	STEP CUT IN 2nd RING LAND: Provides perfect	• Helps in reducing oil consumption.	
	seating of the top ring on the bottom surface.	Helps in reducing blow-by.	
3	"J" CUT: This piston has been provided with a unique	• 'J' cut provides all time lubrication	
	'J' cut below the oil ring groove area.	to piston skirt.	
		• No piston seizure in extreme limits	
		of normal working conditions.	

4	QUICK OIL RETURN SLOTS (QORS): Two nos. of	Quick drainage of oil and hence
	Quick Oil Return Slots (QORS) are provided on each	lower oil consumption.
	side of the piston above the pin bore, half in groove	
	& half in window.	
5	AS CAST CONVERGENT TYPE PIN BORE RECESS: This	• Faster oil drainage due to more
	not only provides more space for oil drainage but the	space helps in reducing of
	unique convergent type design also provides more	consumption.
	bearing area to the piston skirt.	Longer life of piston.
	More bearing area on skirt helps in well guided	(Seizure on minor axis is avoided.)
	movement of piston rings.	
6	PISTON- PIN BORE OFFSET: These pistons are	Reduced engine noise.
	provided with a piston pin bore offset to avoid piston	
	slap. Piston pin bore offset means that the centre line	
	of piston is slightly offset from the centre line of pin	
	bore. Due to this offset, piston tilts at TDC & BDC	
	smoothly & prevents slapping with liner.	
7	SKIRT COATED WITH NEW "D-10" COATING	• D-10 permanent coating provide
		better wear resistance & helps in
		initial lubrication to avoid pistor
		scuffing/ seizure etc.
8	MEASURING POINTS ON THE SKIRT: Two points on	Provided for easy diamete
	both sides of the skirt.	verification.
9	BOTTOM CHAMFER: A smooth chamfer is provided at	Helps in regulating oil supply
	the bottom end of piston which provides better	reduced skirt wear and hence
	hydrodynamic oil film.	longer life.

TECHNICAL DATA- TATA 407 SPACIO BS-III PISTON				
		USHA CODE→ L28		
Nominal Bore Diameter	mm	97.00		
Piston Diameter	STD Size mm	96.88		
Recommended Piston-Liner Clearance	mm	0.120		
Compression Height	mm	58.80		
Total Height	mm	93.80		
Piston Pin- Pin Bore Clearance	mm	+0.003 to +0.015		
		(Clearance Fit)		

<u>PISTON RINGS</u>: This piston is designed to match with our existing **USHA TATA 497 BS-III L12 "MOLY PLATINUM SSM"** ring set for low oil consumption and superior performance.