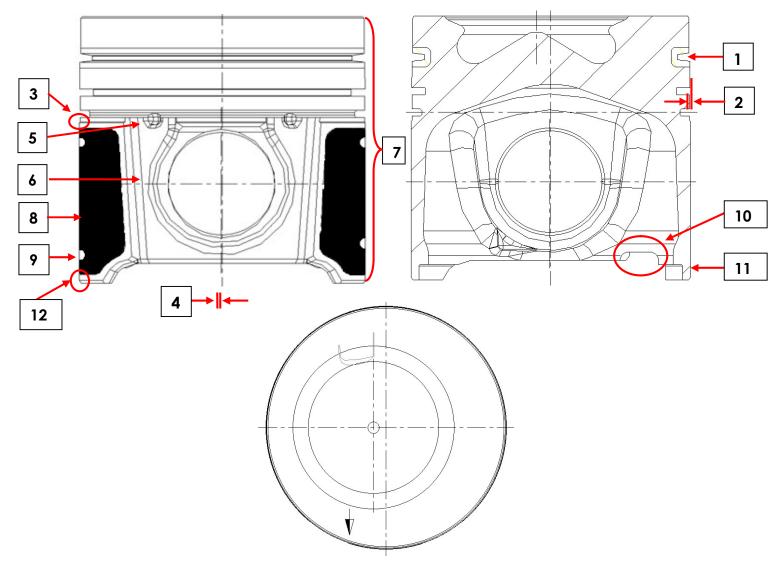


MD: TS: 05/2022 JUL'2021 *An update from SHRIRAM PISTONS & RINGS LTD.*

USHA is pleased to launch 'Tata Sumo Gold/ 407 Spacio BS-IV' piston set in its LCV/MUV product range.

This piston set has following special features:-

PISTON:-



Unique features of USHA 'Tata Sumo Gold/ 407 Spacio BS-IV' pistons are as follows:-

SL. NO.	SPECIAL FEATURE	BENEFITS TO CUSTOMER
1)	HIGH NICKEL WEAR RESISTANT RING CARRIER (RCP): Top groove of USHA Sumo Gold/ 407 Spacio BS-IV piston is made of high nickel wear resistant ring carrier insert which is manufactured using latest centrifugal casting technology.	 Longer life of piston due to negligible wear of top groove

2)	CUT BACK IN SECOND RING LAND: Cut back is	Helps in controlling blow-by &	
2)	provided in second ring land for better seating, stability & functioning of intermediate ring.	reducing oil consumption	
3)	'J' CUT: USHA Sumo Gold/ 407 Spacio BS-IV piston has been provided with a unique 'J' cut just below the oil ring groove area.	 'J' cut provides all time lubrication to piston skirt No piston seizure in extreme limits of normal working conditions 	
4)	PISTON - PIN BORE OFFSET:- This piston is 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, that prevents slapping with liner.	Reduced engine noise	
5)	QUICK OIL RETURN SLOTS (QORS):- USHA Sumo Gold/ 407 Spacio BS-IV piston has been provided with two nos. of Quick Oil Return Slots (QORS) on either side of the piston above pin bore, half in groove & half in window.	 Quick drainage of oil, hence low oil consumption 	
6)	AS CAST CONVERGENT WINDOW:- This not only gives more space for oil drainage but the unique convergent type design also provides more bearing area to the piston skirt. More bearing area on skirt helps in well guided movement of piston rings.	 Faster oil drainage, hence low oil consumption Seizure on minor axis is avoided, hence longer piston life 	
7)	PISTON SURFACE COMPLETELY BONDERISED:-	 Bonderising helps in preventing oxidation of piston Also provides porous surface for oil retention, thereby reducing piston wear 	
8)	SKIRT COATED WITH 'D-10' COATING:-	 Helps in initial lubrication & seizure free operation Better wear resistance Reduces engine noise 	
9)	MEASURING POINTS ON PISTON SKIRT:- Two points on both sides of piston skirt.	 Provided for easy diameter verification 	
10)	SLOT FOR PISTON COOLING NOZZLE (PCN) JET:- Provides room for oil cooling jet.	 Helps in directing oil flow underneath piston combustion cavity Additional reduction in piston weight 	
11)	SLIPPER DESIGN:- USHA Sumo Gold/ 407 Spacio BS-IV piston has been provided with Slipper design at piston skirt which helps in reducing piston weight & provides better guidance to piston movement.	 Improved fuel efficiency Better guidance to rings Low noise during engine working 	
12)	BOTTOM SCRAPPING CHAMFER:- A smooth chamfer is provided at the bottom end of the piston.	 Helps in regulating oil supply, reduces skirt wear & hence longer life 	

Technical data of this piston set is as under:-

TECHNICAL DATA – 'TATA SUMO GOLD/ 407 SPACIO BS-IV' PISTON					
USHA CODE→					
Nominal Bore Diameter	mm	97.00			
Piston Diameter	STD Size mm	96.90			
Recommended Piston-Liner Clearance	mm	00.10			
Compression Height	mm	58.80			
Total Height	mm	93.80			
Piston Pin Diameter X Length	mm	36.00 X 80.00			
Piston Pin- Pin Bore Clearance	mm	+0.003 to +0.015 (Clearance fit)			

USHA Sumo Gold/ 407 Spacio BS-IV piston sets are designed for an excellent performance when fitted with matching rings having pack axial thickness of 3.00, 2.50 & 2.50 mm.



Technical Product News is an exclusive update of product & information from Shriram Pistons & Rings Ltd., 3rd Floor, Himalaya House, 23, Kasturba Gandhi Marg, New Delhi-110001 Tel: 011-46451100, 23315941, Email: tss@shrirampistons.com, Website: www.shrirampistons.com