



Correct determination of the piston combustion bowl depth

Piston with crown elevation

Situation

In order to allocate the correct pistons to an engine in the case of repair, the piston diameters must frequently be compared with the catalogue data. For pistons with crown elevation (BÜ, see fig. 2) it is often the case that there is a difference in the measurement given in the catalogue and the measurement that is actually taken. These deviations are the result of the varying measuring methods employed when calculating the bowl depth. This applies mainly to the piston data for DEUTZ engines.

In fig. 1 the two common measuring methods that are used to determine the bowl depth are shown.

The dimension M1 uses the older measuring method, where the bowl depth is determined in relation to the top of the piston. The measuring method M2 relates to the most elevated point of the edge of the bowl.

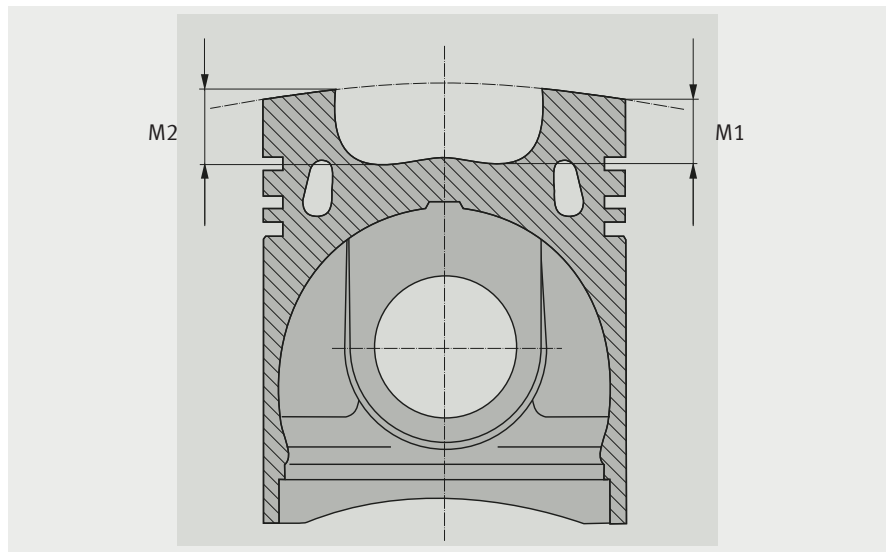


Fig. 1

Depending on the production date of a piston, this dimension can be calculated in the catalogue according to either the new or the old measuring method.

In future catalogues the dimension of the bowl depth will be gradually modified and only be given according to the new measuring method (M2).


20		102											
BF 4 L 913	01.1982 →	D	(A)	4	4086 cm ³	2V	55-81 kW	(75-111 PS)	15,5/17:1	125,00 mm			
BF 4 L 913 T	04.1989 →	D	(A)	4	4086 cm ³	2V	55-78 kW	(75-106 PS)	15,5:1	125,00 mm			
BF 6 L 913	09.1973 →	D	(A)	6	6128 cm ³	2V	70-140 kW	(95-191 PS)	15,5:1	125,00 mm			
BF 6 L 913 C	03.1987 →	D	(LA)	6	6128 cm ³	2V	118-164 kW	(160-223 PS)	15,5:1	125,00 mm			
BF 6 L 913 T	06.1986 →	D	(A)	6	6128 cm ³	2V	85-112 kW	(115-152 PS)	15,5:1	125,00 mm			
 102 058	4/6	KH 69,1	KKK	40	1 T15 2,94	MO G6	1,00	102,00	90 669 600				
		MT -17,6	RTK	80	1 T15 3	CR G3	1,20	102,50	90 669 610				
		M∅ 58,4			1 DSF 3,5	CR			90 669 610				
		BU +4,45							[1]				
		GL 123,6							[1]				
									(93 724)				

Fig. 2 Catalogue extract

All content including pictures and diagrams is subject to change. For assignment and replacement, refer to the current catalogues or systems based on TecAlliance.