

# CAM

## The Hot Forging Analysis of CAM Shaft to the Drum Brake System

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Key words :Forging, Drum brake, S-Cam shaft, Commercial vehicle, Effective plastic strain

1.

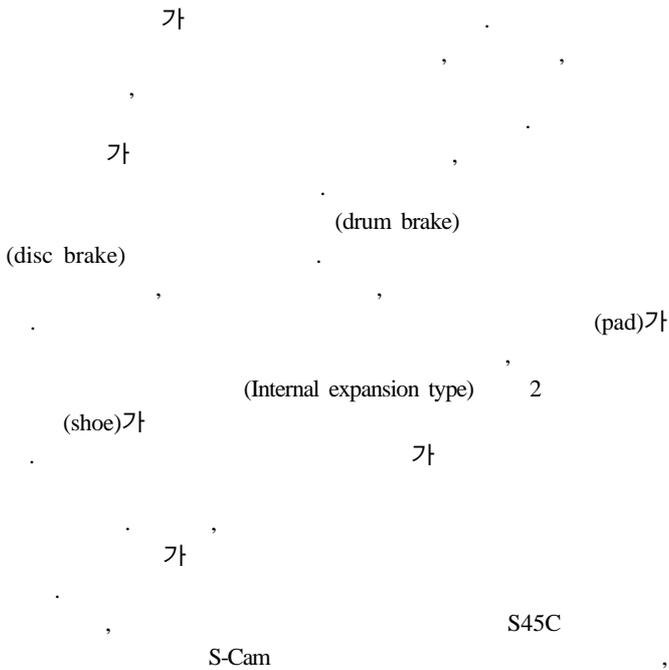


Table 1 Chemical composition of S45C steel used (wt. %)

C	Si	Mn	Cu	S	P
0.43	0.21	0.71	0.16	0.009	0.025

Fig. 2 S-CAM

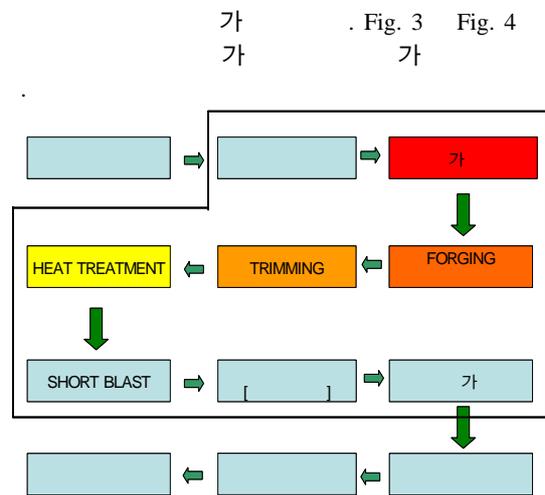


Fig. 2 Flow of forging process

2. S/CAM

2.1

S45C S-CAM  
 Table 1 Fig. 1  
 S-Cam  
 S-Cam  
 (lining) (chamber)  
 S-Cam,  
 (slack adjuster)

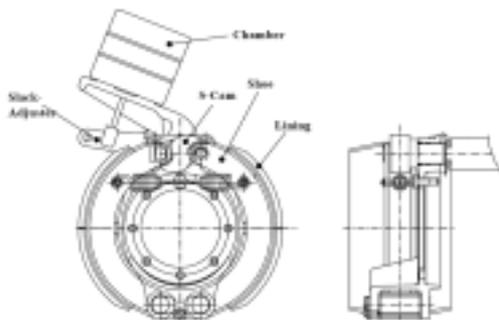


Fig. 1 Drum brake structure of internal expansion type



Fig. 3 Billet heating machine



Fig. 4 Output of heating billet

2.2 S-Cam

가 가 가 ,  
가 가 ,  
가

Superforge  
가 3

5 3 S-Cam , Fig.

3 S-CAM  
3

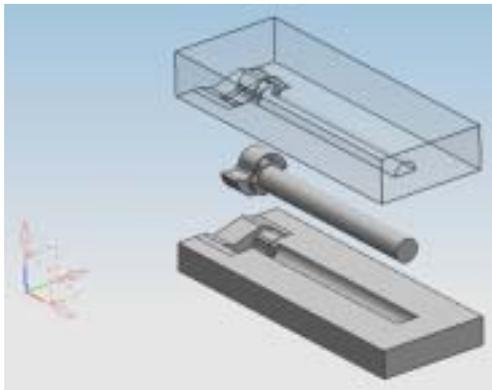


Fig. 5 S/CAM shaft forging setting

3.

Fig. 6  
S/CAM 20%가

Fig. 7 60%가 1.847E-001 ,  
가 가

Fig. 8

3.619E+00

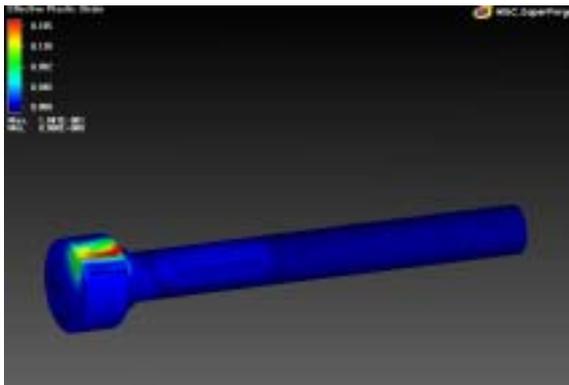


Fig. 6 Effective plastic strain of S/CAM shaft 20%

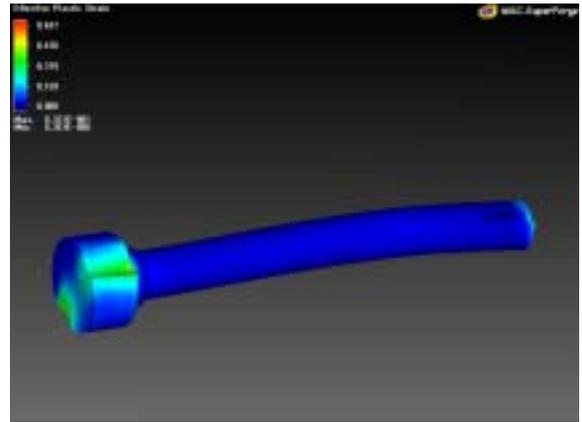


Fig. 7 Effective plastic strain of S/CAM shaft 60%

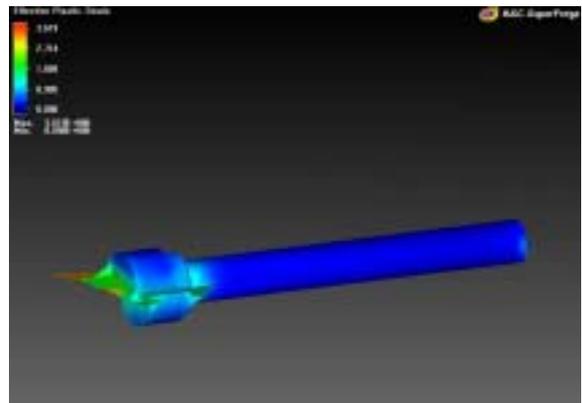


Fig. 8 Effective plastic strain of S/CAM shaft 100%

4.

S-CAM

S/CAM  
가

60%가 가  
가 100%

S45C 1100 ~1300 가  
가

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