

heat treatment

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|-----|-----|---------------|-----|-----|-----|----------------|-----|-----|-----|-----------------------|------------------------------------|-----|-----|----------------|--------------------|------------|-------------|---------------|------------------|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | Format No:- | | | | | | | | | |
| MATERIAL LABORATORY REPORT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Report No:- CF1806060 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Part No/Part ID: | | | | 10083DL / 009 | | | | Part Name | | | | GEAR | | | | Date: | | 2018-06-29 | | | | | | | | | | |
| Qty | | | | 230 | | | | Customer: | | | | Daimler | | | | Batch Code: | | 8FNW650 | | | | | | | | | | |
| 1) Raw Material : | | | | 25MoCr4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2) Heat Treatment: Case carburised, hardened & tempered | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | 2.1 Hardness | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | Location | | | | Specification | | | | Observation | | | | | | | |
| | | | | | | | | | | | | | FACE | | | | 59-63 HRC | | | | 60-61 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | PCD | | | | 325-450 HBW | | | | 350 | | | | | | | |
| | | | | | | | | | | | | | 2.2 Effective Case Depth at 550HV1 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | Location | | | | Specification (mm) | | | | Observation (mm) | | | | | | | |
| | | | | | | | | | | | | | M2 PCD | | | | 0.80-1.20 | | | | 0.90 | | | | | | | |
| | | | | | | | | | | | | | M3BORE | | | | 0.80 | | | | 0.92 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.3 Hardness traverse report | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Distance from surface in mm | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | | | | | | | | |
| PCD | 710 | 700 | 690 | | | | | | 550 | 530 | 500 | | | | | | | | | | | | | | | | | |
| RCD | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B/G ID | 715 | 710 | | | | | | | 570 | 510 | 480 | | | | | | | | | | | | | | | | | |
| 2.4 Microstructure: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Location | | | | | | | | Specification | | | | | | | | Observation | | | | | | | | | | | | |
| CASE | | | | | | | | T,M,RA-15%MAX. | | | | | | | | T.M+R.A.5-10% | | | | | | | | | | | | |
| CORE | | | | | | | | LCM+BAINITE | | | | | | | | L.C.M+Bainite | | | | | | | | | | | | |
| IGO- | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disposition:- ACCEPTED | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remarks :- OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Checked by :- | | | | Anshul Sharma | | | | Verified by :- | | | | Vishw deepak Tripathi | | | | Approved by :- | | | | Ravindra kale | | | | | | | | |