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PRECISION ENGINEERED
TURBOCHARGERS & PARTS

SHAFT AND WHEEL DEVELOPMENT

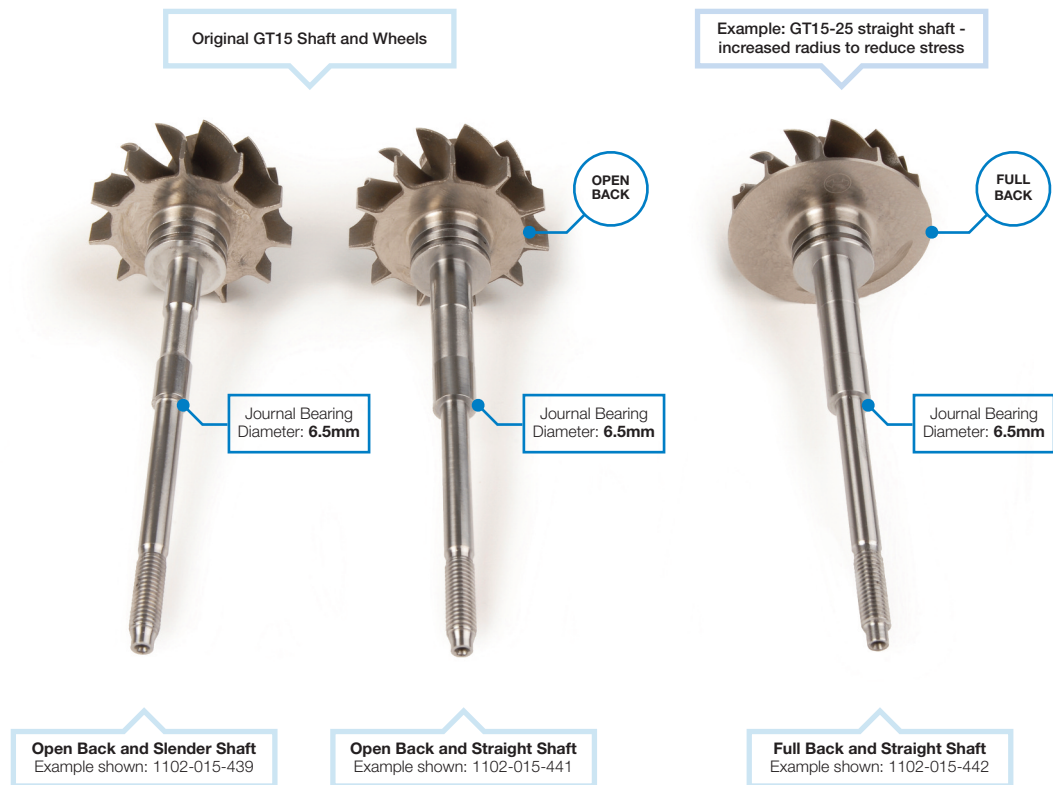
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Development introduction

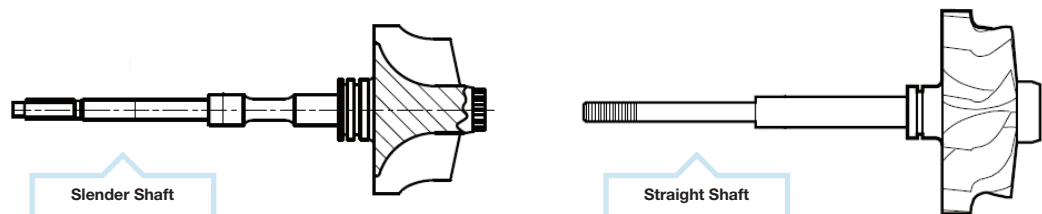
Common turbo failures such as overspeeding can cause severe fatigue to the shaft and wheel. Signs of fatigue include partial loss of blades caused by the constant flexing of blades beyond the designed parameters. *Fatigue is a mode of failure not the cause.*

Traditionally, a shaft and wheel has an open back with a slender or straight shaft. To strengthen the turbine wheel, Melett has developed a **full back** shaft and wheel solution that reduces the risk of fatigue on the inducer diameter.

Examples of original and improved parts



Shaft variations



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