Integral Flanges for Gear Rotor Sets

Per API 613-5Pth edition para. 2.5.4.2: Unless otherwise specified, shafts shall be provided with integral flanges for couplings.



Justifications for incorporating integral flanges into API-613;

- 1. Eliminates the logistics required for the coordination, tracking and shipping of the ring gages to and from the gear manufacturer during the manufacturing process.
- 2. Reduces the potential for a manufacturing delay when the gages may not be readily available.
- 3. Reduces the overhung weight of the coupling providing a better rotor dynamic signature of the system. The flange can be brought in closer to the journal bearing allowing for less overhung weight.
- 4. Reduces the overall length of the coupling without sacrificing misalignment capability.
- 5. Can reduce the overall length of the main base skid as a result of the reduced coupling length with further cost savings.
- 6. The need to specify varying shaft end dimensions is eliminated since the flange end dimensions are defined by the coupling manufacturer.
- 7. Eliminates the need for additional hydraulic mounting equipment and fittings which may differ from the other hydraulic hubs in the system.
- 8. Integral flanges reduce shop and field labor time since the need to blue check and mount the hubs is eliminated.

