

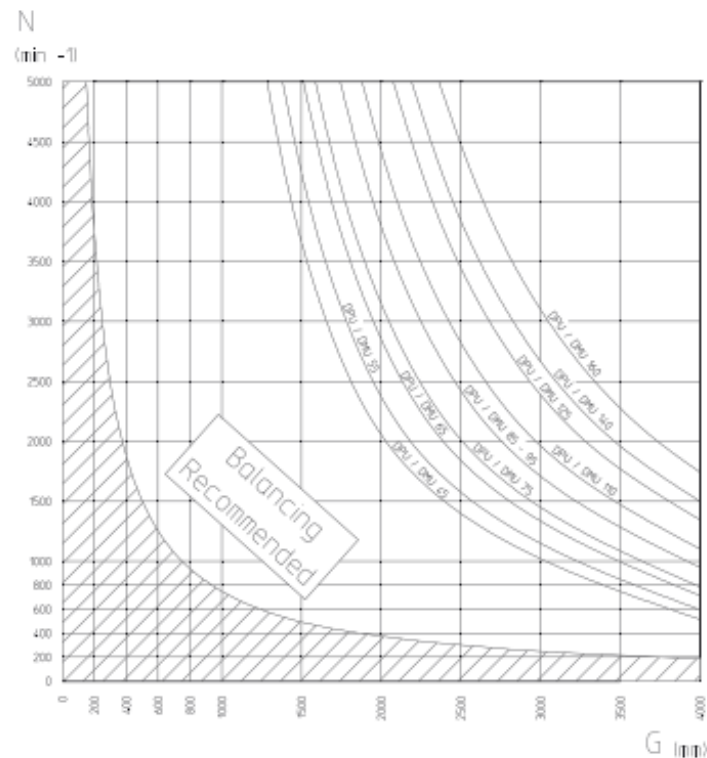
# Balancing of escodisc couplings

## 1. Balancing Requirements

The actual requirement for balancing of a coupling depends amongst other on:

- Manufacturing quality of the coupling (Natural Inherent Balance Quality)
- Application speed
- The mass of the coupling (relative to the masses of the machine rotors)
- Distance between shaft ends
- Sensitivity of the system

Thanks to their high manufacturing quality, escodisc couplings have a high degree of natural inherent balance and generally don't require additional balancing for normal speed applications. Up to size 95, escodisc DLC/DMU/DPU couplings have a minimum balance quality of Q6.3 at 1500 rpm. For larger sizes, Q6.3 is guaranteed without any additional balancing until 1000 rpm. In the below graph you can find when additional balancing is required based on application speed and DBSE. Also you can find the maximum limits for high speed/long DBSE applications based on the coupling size. Above these limits, please consult us. For applications requiring additional balancing, the use of DLC couplings is not recommended.



## 2. Esco Balancing Procedures

Based on the application data or specific customer requirements, Esco Transmissions will perform a component balancing to Q6.3 or Q2.5 (as specified - Q1 is obtainable yet not advisable for standard couplings) for standard couplings and a component balancing followed by an assembly balancing procedure for high speed applications. Esco transmissions will also perform balancing before the keyway, if any, is shaped in the coupling. Other balancing options are of course available upon request but must be clearly specified when ordering.

Remark: for DMU couplings, only component balancing is possible.