

## **Self Assessment Guide**

### **Beam loading, spacing**

Estimating loads on oil drilling maintenance facility lifting equipment

Examine equipment used in similar oil drilling maintenance facilities. Use reverse engineering to determine the design loads and examine wear and damage to the components to estimate the in-service actual loadings. Check the manufacturers' data sheets for components used in the equipment to determine the design loads for which those components were selected. Remember to ask the people using the equipment about the length of time the equipment has been in service.

[Award yourself up to 8 points]

Refer to technical engineering standards (company, national, international) for lifting equipment.

[Award yourself up to 8 points]

Ask technicians using similar equipment about the times that the equipment has been damaged due to misuse or abuse. Estimate the loadings applied to the equipment to determine "worst case" loading scenarios.

[Award yourself up to 8 points]

Examine equipment used in other industries to lift and move loads comparable to those to be moved in the oil drilling maintenance facility. Obtain data sheets, and reverse engineer the equipment as far as is practical.

[Award yourself up to 8 points]