Student Worksheet 1

Speaking B

Name:

Discussing Performance Specifications

Role Play: Industrial Consultant

You are an Industrial Consultant specializing in heavy-duty engines at PES. You are meeting with a client who needs to choose an industrial engine to power an offshore drilling rig. This rig must drill through the seabed, so it must have a lot of power, and minimum maintenance to minimize the drilling downtime. The client also wants the engine to have good fuel economy.

Here are your recommendations:

Recommendation	Reasons
V-16 diesel engine	Heavy duty engine, lots of power. Better fuel efficiency, less maintenance (which means less drilling downtime).
Compliant with EPA marine standards and IMO standards	Can be used in U.S. and international waters.
Displacement: 85 liters	A larger displacement means more air / fuel mixture per cycle. More air / fuel mixture means more power.
Horsepower 2600 bhp	Needs a lot of power.
Turbocharged aspiration system	Turbocharging allows bursts of high power.
Aftercooled: aspiration system	Increases fuel efficiency.
Large cooling system capacity: 305 liters	Keeps the engine cool while drilling through the sea bed.
Long oil change interval: 1000 hours	Reducing the necessity for oil changes minimizes the drilling downtime.

Helpful phrases

I suggest ...

In my opinion, you should get ...

We should choose ...

I believe that ... will best serve your needs.

We should consider ...

I advise you to select ...

ENGINEERING ENGLISH

Module 9 - Quality Management

Student Worksheet 2

Speaking B

Name:

Discussing Performance Specifications

Role-Play: Client

You are a client who needs to choose an industrial engine to power an offshore drilling rig. The rig must be able to drill through the seabed, so it must have a lot of power, and minimum maintenance to minimize the drilling downtime. You also want the engine to have good fuel economy.

Here are some questions that you might ask during the meeting:

- What type of engine do you recommend? Why?
- Which is better, a diesel engine or a gasoline engine?
- How can we get the power we need to drill through the seabed?
- How much displacement do we need?
- How much horsepower do we need to drill through the seabed?
- How can I get high bursts of power when I need them?
- How can we maximize our fuel efficiency?
- What other features do you recommend and why?
- How can we cool the engine while drilling through the seabed?
- How can we minimize the drilling downtime?

Thank the consultant for his help.