

**SERVICING AND MAINTENANCE OF TECH RAMP EQUIPMENT  
FOR THE PERIOD 1 NOVEMBER 2019 TO 30 OCTOBER 2022  
[WITH OPTION FOR EXTENSION OF UP TO 3 YEARS]**

**Provision of Labour**

CONTRACT PERIOD	YEAR	LABOUR CHARGES (FOR 1 ELECTRICIAN & 1 TECHNICIAN) (\$/month)	MANHOURLY RATE (\$/man-hour)
1 NOV 2019 – 30 OCT 2022	1 Nov 2019 – 30 Oct 2020		
	1 Nov 2020 – 30 Oct 2021		
	1 Nov 2021 – 30 Oct 2022		
<u>OPTION:</u> 1 NOV 2022 – 30 OCT 2025	1 Nov 2022 – 30 Oct 2023		
	1 Nov 2023 – 30 Oct 2024		
	1 Nov 2024 – 30 Oct 2025		

Labour rate for additional experienced technician: \$ \_\_\_\_\_ / month

**Lump Sum Rates for Overhaul Works for Ground Power Unit**

<b>S/No</b>	<b>Description</b>	<b>Lump Sum Rate (S\$)</b>
<b>1</b>	<b><u>Overhaul of Engine</u></b>	
1.1	Provide labour and material for:	\$
a.	Replacement of cylinder head gasket	
b.	Replacement of valve seal, if necessary	
c.	De-carbonization of cylinder head and piston head	
d.	Lap valve seat, if necessary	
e.	Replacement of flywheel coupling plate (mandatory)	
f.	Conduct bench test upon completion of overhaul works	
	<b>Note:</b> Exclude the replacement of crankshaft, engine block and cylinder head	
<b>2</b>	<b><u>Overhaul of AC Generator</u></b>	<b>Lump Sum Rate (S\$)</b>
2.1	Provide labour and material for:	\$
a.	Replacement of AC generator bearing	
b.	Replacement of rotating diode	
c.	Check and re-varnish of insulation of all windings	
d.	Conduct both functional and operational tests upon completion of overhaul works	
<b>5</b>	<b><u>Repair / Refurbishment of Power Cables</u></b>	<b>Lump Sum Rate (S\$)</b>
a.	Replacement of defective cable	
b.	Refurbishment or replacement of cable head alone	

**Turnaround Time for Overhaul Works Ground Power Unit**

<b>S/No</b>	<b>Description</b>	<b>Turnaround Time (In Hours or Days)</b>
1	Overhaul of Engine	
3	Overhaul of AC Generator	
4	Repair / Refurbishment of power cable	

**Lump Sum Rates for Overhaul Works for Air Condition Unit**

<b>1</b>	<b><u>Overhaul of Engine</u></b>	<b>Lump Sum Rate (\$\$)</b>
1.1	Provide labour and material for:	\$
a.	Replacement of cylinder head gasket	
b.	Replacement of valve seal, if necessary	
c.	De-carbonization of cylinder head and piston head	
d.	Lap valve seat, if necessary	
e.	Replacement of flywheel coupling plate (mandatory)	
f.	Conduct bench test upon completion of overhaul works	
	<u>Note:</u> Exclude the replacement of crankshaft, engine block and cylinder head	
<b>2</b>	<b><u>Overhaul/Repair of Air Condition Compressor System</u></b>	<b>Lump Sum Rate (\$\$)</b>
2.1	Provide labour and material for:	\$
a.	Replacement of all necessary seals or gaskets	
b.	Check and repair/replace of condensing coil	
c.	Check and repair/replace of evaporating coil	
d.	Check and repair/replace of expansion valve	
	<b>Inclusive of topping up of the R134 gas</b>	

**Turnaround Time for Overhaul Works Air Condition Unit**

<b>S/No</b>	<b>Description</b>	<b>Turnaround Time (In Hours or Days)</b>
1	Overhaul of Engine	
2	Overhaul of Air Condition Compressor System	

**Lump Sum Rates for Overhaul Works for Air Starter Unit**

<b>1</b>	<b><u>Overhaul of Turbine Engine</u></b>	<b>Lump Sum Rate (\$\$)</b>
1.1	Provide labour and material for:	\$
a.	Complete overhaul of Gas Turbine Engine	

**Turnaround Time for Overhaul Works Air Starter Unit**

<b>S/No</b>	<b>Description</b>	<b>Turnaround Time (In Hours or Days)</b>
1	Overhaul of Gas Turbine Engine	