



PRODUCT SPECIFICATIONS

SOUND SUPPRESSION FOR KOMATSU 830E-AC (QSK60)



SOUND SUPPRESSION FOR KOMATSU 830E

Aletek's sound suppression package for Komatsu 830E trucks replaces the 'box everything up' approach with a strategic focus on dominant noise sources through a proactive and multi-staged attenuation approach.

- **Dual-Stage Exhaust** Rear exit exhaust system, acoustic dual-skinned pipes, MDG 15⁽¹⁾
- **Grid Box Attenuator** Innovative bolt-on/off modular package
- **Acoustic Engine Bay Panels** Quick-fit engine doors bolt directly to OEM chassis mounts
- **Acoustic Engine Fan** Removes the need for radiator attenuation (no chassis extension, less weight)



Superior noise suppression



Ideal weight distribution



Acoustic engineered



Direct-fit with minimal mods



Australian made



Sound Power Level tested



Multi-staged attenuation

UNATTENUATED SOUND POWER RESULTS^(A) (Before)

Test Condition	L _W ⁽²⁾	L _{WA} ⁽³⁾	Site Limit (L _W) ⁽²⁾
Stationary	⊕ 125 dBL	117 dBA	123 dBL
Dynamic (uphill loaded)	⊕ 133 dBL	123 dBA	123 dBL
Dynamic (downhill unloaded)	⊕ 128 dBL	119 dBA	123 dBL

ATTENUATED SOUND POWER RESULTS^(A/B) (After)

Test Condition	L _W ⁽²⁾	L _{WA} ⁽³⁾	Site Limit (L _W) ⁽²⁾
Stationary	⊕ 121 dBL	113 dBA	123 dBL
Dynamic (uphill loaded)	⊕ 122 dBL	114 dBA	123 dBL
Dynamic (downhill unloaded)	⊕ 118 dBL	113 dBA	123 dBL

^(A)Independent test report available

^(B)Attenuated results with Aletek exhaust, grid box, e/bay panels & acoustic fan

⁽¹⁾ MDG 15 Guideline for NSW ⁽²⁾ L_W (Linear Sound Power Level)

⁽³⁾ L_{WA} (Linear Sound Power Level, A-weighted scale)



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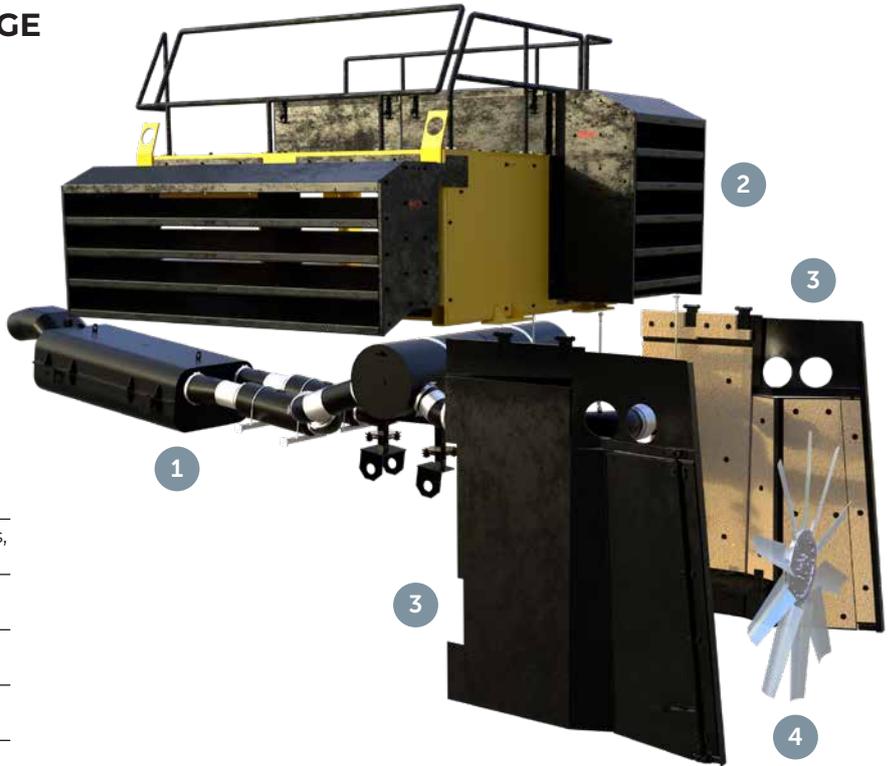
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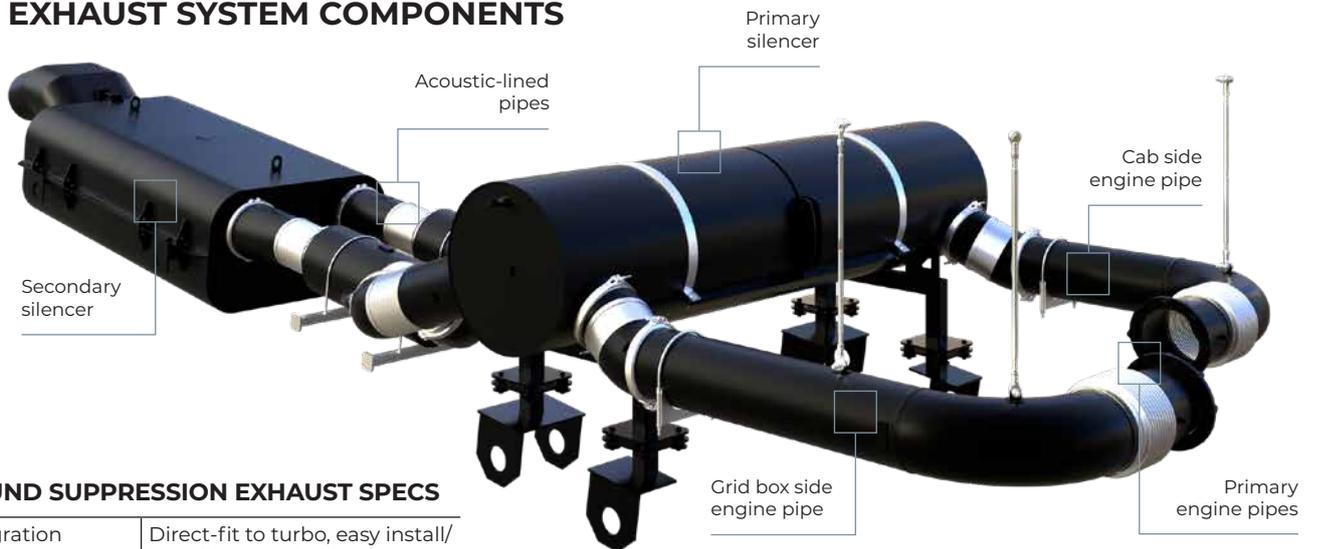
SOUND SUPPRESSION PACKAGE



830E PACKAGE COMPONENTS

1 Dual-Stage Exhaust	Primary and secondary silencers, sound suppression pipes
2 Grid Box Attenuator	Bolt-on/bolt-off, front and side attenuators, handrail and ladder
3 Engine Bay Panels	Quick-fit, acoustic insulation interior, fire suppression access
4 Acoustic Engine Fan	Direct-fit replacement, light-weight, adjustable blade pitch

1 EXHAUST SYSTEM COMPONENTS



SOUND SUPPRESSION EXHAUST SPECS

Integration	Direct-fit to turbo, easy install/retrofit, no major hot works
Engine Pipe Specifications	steel dual-skin, acoustic-lined pipes, blankets for MDG 15 ⁽¹⁾
Performance	10 dB reduction on overall SWL ⁽⁴⁾
Attenuated Sound Power	SWL ⁽⁴⁾ 121 dB stationary rated power RPM ^(A/B) , non-tonal
Fire Mitigation	MDG 15 ⁽¹⁾ (150°C surface temp)
Warranty	12-months*



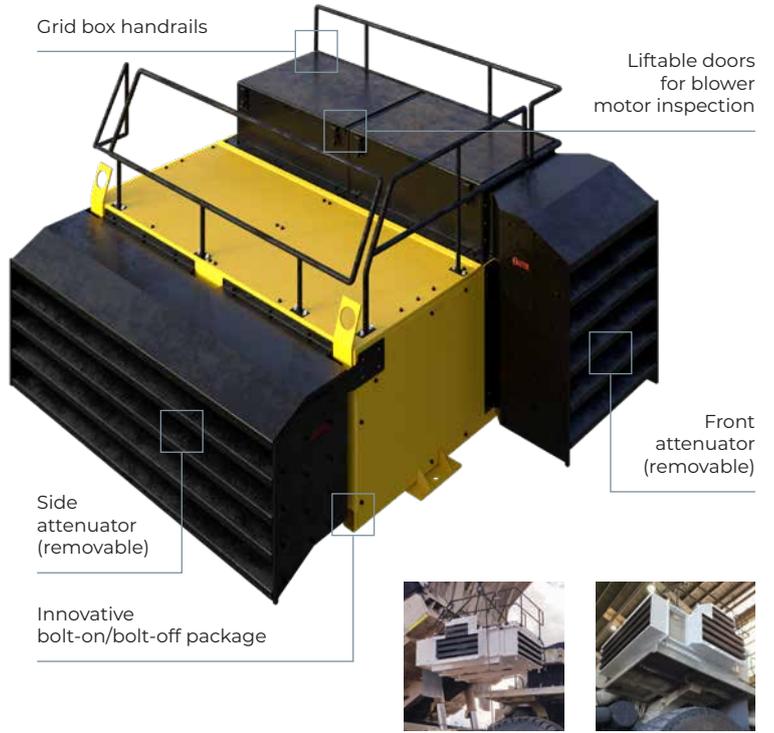
⁽¹⁾ MDG 15 Guideline for NSW ⁽⁴⁾ SWL (Sound Power Level)
^(A) Independent test report available ^(B)Attenuated results with Aletek exhaust, grid box, e/bay panels & acoustic fan



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2 GRID BOX COMPONENTS

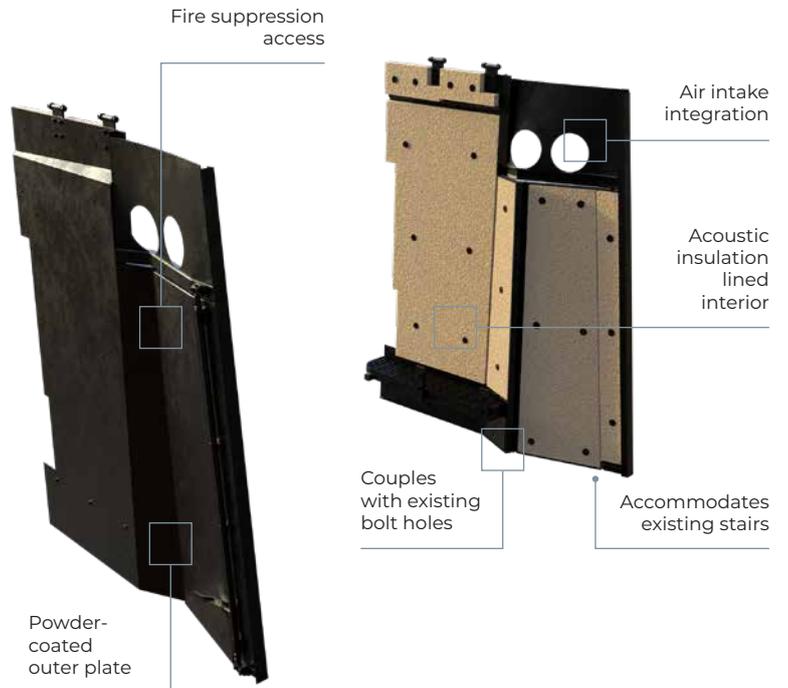


Note: Grid box photos for reference only, replaced by improved modular design

GRID BOX ATTENUATOR SPECS

Integration	Bolt-on/bolt-off package for reduced install time
Acoustic Performance	Broadband noise attenuation, absorbs high frequency noise, low & mid freq. noise attenuation
Modular Design	Removable attenuators for improved maintenance access and reduced replacement cost
Accessibility	Lightweight liftable doors on top for easy blower motor inspection

3 ENGINE BAY PANEL DESIGN



ACOUSTIC ENGINE BAY PANEL SPECS

Integration	Replaces existing doors, bolts on to existing bolt holes
Acoustic Performance	Interrupts propagation path of engine bay mechanical noise
Design Features	Revolutionary design with minimal hot works, acoustic insulation interior, plate exterior
Stairs Integration	Fit with existing Komatsu foldable engine access stairs
Fire Safety	Fire suppression access

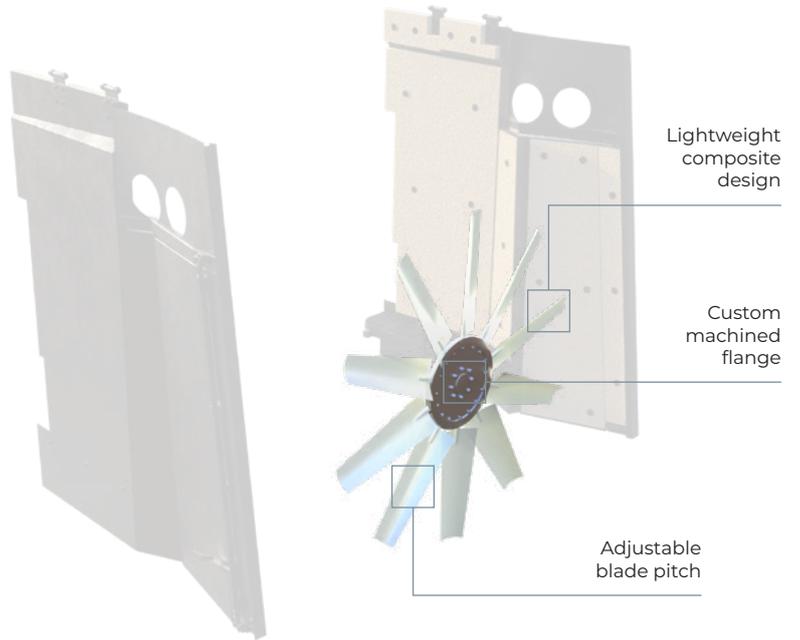
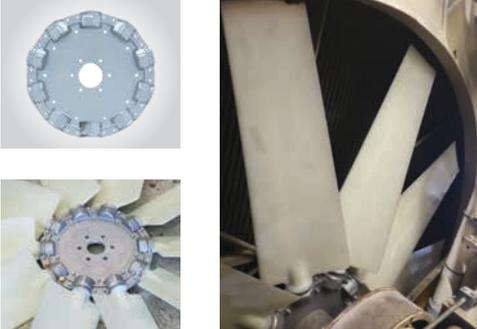
Note: Photos for reference only, design has been revised



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4 ENGINE FAN DESIGN



ACOUSTIC ENGINE FAN SPECS

Integration	Direct-fit, custom machined flange for easy installation
Acoustic Performance	Reduced broadband noise, benefits A-weight SWL ⁽⁴⁾ (linear)
Design Features	Lightweight, tough composite design, 35m ³ per second airflow, adjustable blade pitch for airflow and acoustic improvement
Benefits	Removes the need for radiator attenuation (weight savings, no chassis extension required)

⁽⁴⁾ SWL (Sound Power Level)

THERMAL DUAL-SKIN PIPE



PRODUCT INTEGRATION



SOUND SUPPRESSION EXPERTISE

✔ Exhaust systems and silencers

- Direct-fit OEM replacement solutions
- Exhaust systems – single and dual-stage systems
- Exhaust silencers – machine-specific solutions
- Dual-walled pipes – thermal (MDG 15 compliance) and acoustic-lined options

✔ Noise attenuation solutions

- Grid box and radiator attenuators

- Acoustic panels – engine bay doors, underbelly, enclosures for drivetrains and transmission
- Acoustic engine enclosures and radiator fans
- Acoustic foam refurbishment (NSW)

✔ Multi-staged attenuation

- Staged attenuation – modular and cost benefits
- Multi-staging improves weight distribution with superior noise suppression and optimal backpressure