



AUSTRALASIA TURBOMACHINERY SERVICES

PART OF ATMSGROUP

Is a global service provider to owners and operators of turbomachinery in the Power Generation, Oil & Gas and Petrochemical industries. Our services include installation, operation, maintenance, repair and overhaul of turbomachinery equipment such as Gas Turbines, Steam Turbines, Generators, Compressors, Pumps, Gearboxes and associated electrical /instrumentation.

It is our goal to provide the best independent turbomachinery technical and management support available in the business to our valued clients.

Our highly skilful team, with decades of technical experience and diversity of talent, enable us to provide our clients leadership, technical expertise and product knowledge covering a wide range of rotating equipment.

We are committed to providing highly experienced and effective technical and management professionals, at a reasonable and competitive cost.

We are committed to both our clients and our employees to provide win-win, mutually agreeable and sustainable long-term relationships.

We would like to thank you for choosing ATMS and guaranty we will exceed your expectations.





The Company

"Australasia Turbomachinery Services (ATMS) has a combined industry experience of 40 years and its key management team is made up of very skilled and professional personnel..."

Our Field Services team offers complete turnkey support to make sure your plant is properly maintained and operating with minimal downtime.

We offer flexible solutions that are focused on maximizing your return on investment. From unexpected outages to scheduled maintenance, turbine major overhauls and plant relocation. Australasia Turbomachinery Services (ATMS) response and turnaround times are unmatched.

Our team has 24/7 access to engineering support to safely diagnose and complete repairs. From planned outages and project execution, to unplanned outages and post-outages reporting, Australasia Turbomachinery Services will maintain your equipment with limited downtime

As stated by our corporate slogan "Customer satisfaction is the measure of quality" we strive to always achieve the highest attainable levels of efficiency in providing timely solutions to our clients.



FIELD SERVICES

Field Support & Engineering Services

- Turnkey Turbine and Plant Overhauls
- Gas Turbine Packages Installation,
 Relocation and Commissioning
- Borescope Inspections and Reporting
- Scheduled and Breakdown Maintenance
- Technical Support
- Comprehensive Customer Reports
- Gearbox Inspection and Overhaul
- Generator Overhauls
- Total Machine Alignment
- Instrumentation Checks and Calibration
- Plant Start-Up and Commissioning
- Control System Upgrades
- Life Assessment Tests & Activities



COMPONENT

Repairs

Australasia Turbomachinery Services (ATMS) offers cutting-edge inspection, repair and coatings for a broad range of turbine equipment. Specializing in Heavy Industrial Turbines,

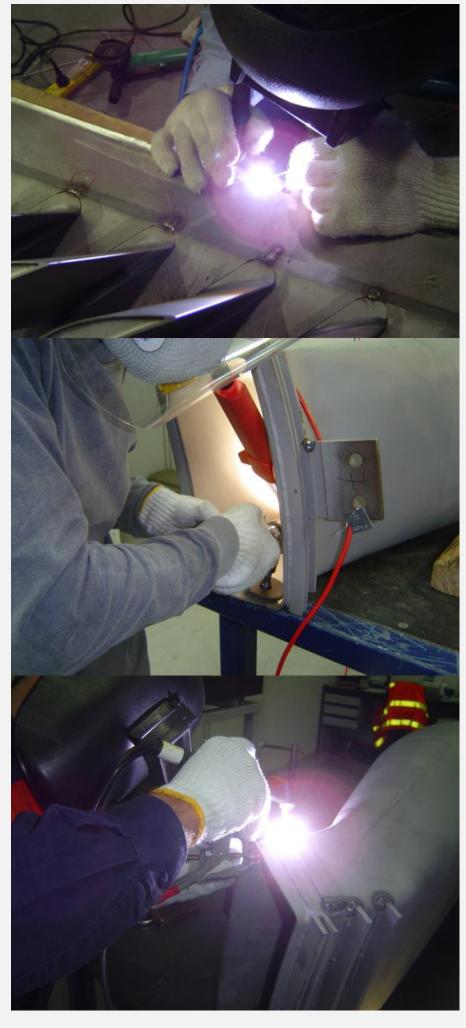
Our team can revitalize aging components, maximize turbine performance, and extend asset life through our innovative repair processes.

Advantages

Specialised Gas Turbine Component Repair

Specialised Welding Exotic and Super Alloy Materials

- Titanium Alloys
- Nickel Alloys
- Cobalt Alloys
- Stainless Steel
- Carbon & Low Alloy Steels
- Aluminium Alloys
- Magnesium Alloys
- Tungsten Inert Gas Welding
- Machining
- Coatings
- NDT
- Thermal Spray
- Heat Treatment
- Hard Chrome



FIELD SERVICES

Gas Turbine

Rotor Overhaul

- Pre-Stripdown Balance and Inspection
- Rotor Cleaning (Ice and Glass Bead Blasting)
- Complete Rotor NDT and NDE (Replications & Hardness Tests)

Compressor Stationary & Rotating Blades
Coating

- Rotor Reassembly
- Rotor Balance and Run-Outs
- Vibration Analysis





Corporate Responsibility

"We consider Environment Health & Safety our corporate responsibility and a necessity in order to excel in our business activities and services."



We, through our commitment to continued improvement in our Environmental Health and Safety programs, strive to:

- Be an environmentally responsible provider of high-quality services.
- Excel In preserving and protecting our natural resources.
- Be a responsible employer, adhering to health & safety regulations.

Our commitment to the safety of our employees is based on the following principles:

- · All injuries can be avoided and prevented
- Management is responsible for preventing injuries
- Employee involvement is essential
- Training employees to be responsible in maintaining a safe work environment is a must

ATMS management is responsible for this policy and its scope and for communicating it and ensuring its implementation. ATMS Management is responsible for integrating these core values and objectives into the day-to-day process and operational practices

BORESCOPIC INSPECTIONS

Borescope & Remote Visual Inspections of Steam, Gas, Aero-Derivative Turbines and Generators...

Australasia Turbomachinery Services (ATMS) deliver comprehensive, professional on-site inspections. We can give you the peace of mind of knowing the current condition of your gas turbine. The current condition can be determined inexpensively with a borescope inspection.

Let us borescope your gas turbine. Latest inspection service technology using 3D phase measurement, combined with experts and years of hands-on experience, our experts will report on metallurgical conditions of internal components. Digital photographs will be made available before leaving the site. Timely follow-up reports are delivered with representative photographs and analysis of defects and recommendations.

ATMS utilizes an experienced network of independent and OEM qualified specialists on behalf of its clients to facilitate any critical path.

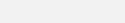
Technical Advisory of

Inspections of all types...

- Gas Turbines
- Steam Turbines
- Generators
- Bearings
- Compressors
- Combustion Systems
- Condenser Tubes
- Lube Oil Systems
- Heat Exchangers
- Hot Gas Path
- Pipe Drains
- Pumps Valves







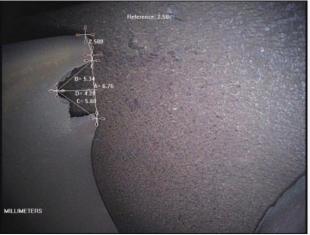
Accessory Base

Mechanical Inspections...

- Combustion
- Hot Gas Path
- Major Overhaul











PROJECT SERVICES

Outage Management Consultancy

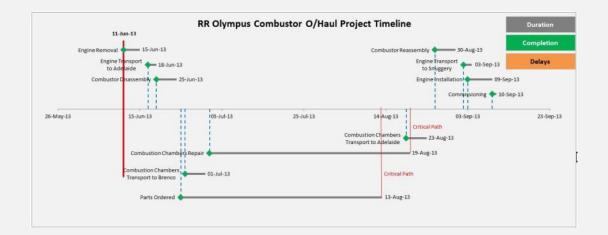
- Project Management
- Turnkey Outage Management and Planning
- Engineering Services
- Site Labour and Supervision
- Preparation and Reviews of critical
 JSAs/SWMS and ITPs
- Preparation and Reviews of critical Lift Plans
- QA Management
- HSE Management Plan

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- Owners return on investment
- Plant availability & Performance
- Life cycle & duration of assets
- Management of budgets & cost
- Plant, personnel & environmental safety
- Client & plant customised programmes
- Management of regulatory processes, permits & contracts
- Risk mitigation

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			_	MHI 701B NDT Schedule										
Component		Harman	Type of RDT							Date	Details	Bewels		
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Blade Expopulated Gradest Floor \$4	1	49	- â	- 2							As share	An above		
Other Engineers General Rose #5	1	55	2	- 1							Action	At shore		
Blods Exemplation Grooms floor \$5.	1	95	X	×							An shares	As whose		
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Blade Engagement Greener Flore \$71 Blade Factorisated Greener Born \$12		21	X	×							As shows As shows	As above		
Blody Engagement Grounts Flore #12 Blody Engagement Grounce Flore #13	1	12	- ÷	× ×							As share	As shore		
Blists Expansion Granese Fore \$13 Blists Factorises Contract Fore \$14	5	10	2	- 2					×		Actions	As shore. As discharges (RV) should be between 000 and so greater than 072 - Deciman GTB-0001		
Blade Executation Granes Flow 271		801	- X	- 2					x		Ar shore	As shows, the disc has decre (RV) should be between 228 and no product than 272 - December UTB-6807		
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Blods Exendement Grooner Floor #17	5	20	×	x					×	,	Ar shore	An above, the discharge (FF) should be between 128 and so greater than 172 - Decembe GTB 0000		
Rev El	5	100			×	×		×		17/16/201	Check Made conto session, residing & believes.	Studes concerned from disc. There blook is NEST to be close off site at ASS. Replication of \$2 entry appearing		
Row #2	100	106	1		X	×		X		13	Az sbevs	Bloduc removed from disc. Olerny block is NET to be done off after at AVI. Replication of \$2 only) opposite		
How ED	1	64	×		×	×					Assistan	As done		
Roy 84	1				×	*				'	At shore	As show		
Box 11	-	103			-					22/06/201				
Roy F2	1	105	ž		Š					continue	Cliech crosine, crucking & inclusions	NOT to be done on rite Minters		
Row #0	1	66	× ×		×						As above	MOT to be dear as site Misters		
Rev E4	12	56	- X	_	- 2							MUT IN SIX SAME IN THE MANAGE		
max 44	1	- "	1 2								At shore As shore	MOT to be done on site Mintero MOT to be done on site Mintero		
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Blads Engagnment Gracines Rein #2		105	×	X							Acabers	Al district		
Blads Engagement Grooner Row #3	1	56		×							Azsbers	Arabono		
Blude Enquerment Gravers Flore \$4	1	98	×	- 8	_		_				As show	At ships		
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na Hitani siava										400000	Committee of the commit	Printed Indiana and Mile State & Mile Law State St. Sec. at Mile State		
Flore B1 Flore Emphasis Flore B2 Flore Expenses	3	14	3		X					22/06/201	Check resolve, resolving 8 inclusions As More	MOT to be done on site Mintero MOT to be done on site Mintero		
Row E3 Flore Cognisate	1	54 36	- x		×						As above	MOT to be done on rite Minters		
Row 84 Ring Sugments	1	26	- x		x						Acthers	MOT to be done on cits Mintaro		
		355			33						10000			
Rary Mit Solition Sugments:	1	54	X		X						Chuck crosion, cracking 6 includions	MDT to be done on cits Mintaro		
Flore #2 Irolation Segments		14	X		X						As shows	HOT to be dear on site Mintero		
Row #5 trotation Sugments	1	36	- Š		ŏ						At there	HDT to be done on cite Mintaro		
Now #4 Inclution Teamonts	1	30	×		×						As shere	MOT to be done on rite Mintero		
Bluts Fing Cooks Flore 21 - 19 5 10 DF	1	!	ŏ											
Stody Ring Coding Pow 82 - UP 5 18 DP Blady Ring Coding Ring \$2/\$4 - UP 5 18 DP	1		- X											
Stade Fing Cooking First \$2/\$4 - 27 6 38 CF Descriptor Virgal Inspection Only	100					1								
SPRING DE la Soni Fintus à Diesad Blacks Des Pari 4.														
Fact Magazine	100	10	- 1		×					251061201	CONTROL OF THE PARTY OF THE PAR	Garage and Company of the Company of		
Bushes - Ar DCFS					×					-	Chiefe for crisibil, dicharties, bank out	Grit blact & NOT to be done off site at Dry Creek		
Cross Flate Telesc - At OCPS		10	2		- X						As shere	MOT to be done on rite Mintero - Grit Mart & MOT to be done off rite at Dru Cro-		
TP College - Art DCPS		10			×						Acubern	Grit blast & MOT to be done off site at Dry Creek		
			×								Atthen	Grit black & HOT to be done off cits at Dry Creek		
TF Chings - At DOPS		10	×		×						Arsbers	Grit blazt & MOT to be dose off pits at Dra Creek		
TP Supports - ALAES		10	×		×						Clask for study	MIT to be dear off site at AIZ		
Top & Sumon Halver	100	4	×		×						Clinik for erseler	HOT to be done on site Minters		
Cooling Directs - Enhance M18ry Departm		4	I		X						Chack for cracks	NDT to be done on cits Mintaro		

	0	Task Name	% Complete	Duration	Start	Finish
1	9	- SUPPORTING CONTRACTS & SERVICES	14%	148.05 days	Thu 17/02/11	Sat 30/07/11
2	C.	+ Contracts	0%	0 days	Mon 16/05/11	Mon 16/05/11
24	Ġ.	+ Establish Site	0%	146.65 days	Thu 17/02/11	Thu 28/07/1
30	0	+ Components Offsite	23%	60.4 days	Tue 31/05/11	Sat 30/07/11
43	0	COMMENCE OVERHAUL-DISASSEMBLY (TSA ON SITE)	0%	0 days	Mon 16/05/11	Mon 16/05/1
44	CL.	- TURBINE	59%	134.7 days	Mon 9/05/11	Thu 22/09/11
45	G.	+ PRELIMINARIES	99%	10 days	Mon 9/05/11	Wed 18/05/1
61	VA.	TOP CASINGS & SUNDRY EQUIPMENT	100%	15 days	Thu 19/05/11	Thu 2/06/11
89	V @	+ COMPRESSOR/TURBINE ROTOR REMOVAL	100%	11.1 days	Fri 27/05/11	Tue 7/06/11
118	Va	+ COMPRESSOR/TURBINE ROTOR DE-BLADING	100%	12.2 days	Tue 7/06/11	Sun 19/06/11
146	0	+ TRANSPORTATION	66%	66.4 days	Fri 27/05/11	Mon 1/08/11
177	(2)	+ COMPRESSOR/TURBINE ROTOR RE-BLADING	86%	33.1 days	Sun 19/06/11	Fri 22/07/1
201	VE	CARRIER DE-BLADING	100%	2.2 days	Tue 31/05/11	Thu 2/06/11
214	VA	- COMPRESSOR DIAPHRAGM REMOVAL	100%	14 days	Sun 29/05/11	Sun 12/06/11
215	VA	Bottom Diaphragm Removal	100%	4.1 days	Wed 8/06/11	Sun 12/06/11
233	VA	Top Diaghragm Removal	100%	4.4 days	Sun 29/05/11	Thu 2/06/11
252	0	+ SUNDRY ITEMS	92%	54.2 days	Sun 29/05/11	Fri 22/07/11
290	0	= INSTALL COMPRESSOR DIAPHRAGMS	0%	7.9 days	Mon 18/07/11	Tue 26/07/1
291	0		0%	1.7 days	Mon 18/07/11	Wed 20/07/11
310	CL,	* Install Top Compressor Diaphragms	0%	1.9 days	Sun 24/07/11	Tue 26/07/11
329	0	= RE-INSTATEMENT	27%	50.3 days	Mon 13/06/11	Tue 2/08/11
330	0	+ Install Blade Carriers	27%	50.3 days	Mon 13/06/11	Tue 2/08/11
371	CL.	+ TURBINE REBUILD	0%	2.3 days	Tue 2/08/11	Fri 5/08/1
384	0	+ COMPRESSOR REBUILD	0%	3.6 days	Fri 5/08/11	Tue 9/08/11
392	0	+ COMBUSTION CHAMBER REBUILD	0%	43.1 days	Tue 9/08/11	Thu 22/09/11
428	4	- GENERATOR & EXCITER	64%	86.9 days	Thu 12/05/11	Sun 7/08/11
429	VE	+ Exciter Removal	100%	19.4 days	Thu 12/05/11	Tue 31/05/11
445	VA	+ Dismantle Generator	100%	49.8 days	Sun 15/05/11	Sun 3/07/11
519		+ Rebuild Generator	0%	8.9 days	Fri 22/07/11	Sat 30/07/1
580	4	+ Exciter Replacement	0%	16 days	Fri 22/07/11	Sun 7/08/11
601	(2	- START DIESEL & GEARBOX	37%	90.15 days	Thu 12/05/11	Thu 11/08/1
602	10	+ Remove Start Diesel	100%	12.7 days	Thu 12/05/11	Tue 24/05/11
630	B	+ Reinstate Start Diesel	0%	16.2 days	Mon 25/07/11	Thu 11/08/11
665	0	OTHER SUNDRY PLANT ITEMS	0%	60.2 days	Fri 6/05/11	Tue 5/07/11
746	0	* COMMISSIONING	0%	59.31 days	Sat 30/07/11	Fri 30/09/11



ENGINEERED TO DELIVER VALUE

TURBINE SPARES

- Along with our turbomachinery consulting and overhaul sections we also provide extremely informed and accurate locating and manufacturing services for all turbo machinery components.
- In most cases we can provide the parts needed post and pre
 overhaul and well into the future with supply to meet the
 demands of any preventative maintenance schedule that your
 turbine and rotating equipment requires.
- ATMS will assist you in locating a quality component to satisfy your requirements. ATMS Group work closely with our customers to source their future needs for replacement parts. We offer all gas turbine operators an alternative source for parts that were previously only available through the OEM.
- We work together with reputable suppliers of OEM parts as well as non OEM parts.

ATMS Gas Turbine Spare Parts Supply Scope

- HOT GAS PATH/COMBUSTION/MAJOR PARTS
- TURBINE HARDWARE/CONSUMABLE PARTS/TOOL KITS
- TURBINE FUEL DELIVERY SYSTEMS
- TURBINE AUXILIARY SYSTEMS
- TURBINE ELECTRICAL & INSTRUMENTATION SYSTEMS

ASSOCIATES & AGENCIES



















For more information call +61 (0) 41111 1224 or visit us at atmsgroup.com.au



Operation and Maintenance Services Contracts

"...as total solutions for a more productive work flow."



ATMS offers long term Operation and Maintenance
Service Agreements as a means of helping operators of
rotating equipment realise significant productivity
gains, cost reductions and increases in the availability
and reliability of their equipment. We can provide the
following:

- Performance Contracts
- Maintenance Contracts
- Reliability Improvements
- Machine Condition Monitoring
- Failure Root Cause Analysis
- Manpower Supply



Our Work Experience

Heavy Industrial Gas Turbines

- GE MS9001
- GE MS6001
- GE MS5001P
- GE MS5002
- GE MS3002
- Mitsubishi 701B
- Siemens V93.0, V93.1
- Alstom 13E2 (B Inspections)

Aero-Derivative Gas Turbines

- Rolls Royce Olympus 2022 'C' Rated
- Curtis Wright Power Turbine Mod Pod 25
- Ruston TB5000
- Solar Saturn CS1200
- Dresser-Rand DJ50

Steam Turbines

- Allen 1200HP to 5500HP
- Westinghouse 3500HP to 8000HP
- GE, Siemens, Parsons, ABB, Worthington

Electrical Generators

- Alstom
- Brush
- Mitsubishi
- Siemens/KraftWerk Union
- GE CL-55

High Speed Rotating Equipment

- Mafi Trench Turbo-Expanders
- Thomassen Multi-Stage Centrifugal Compressors
- Sulzer Multi-Stage Centrifugal Compressors
- Dresser-Rand Multi-Stage Centrifugal Compressors
- Indeng Multi-Stage Centrifugal Pumps

Balance of Plant

- Graffenstaden Load & Accessory Gearboxes
- Lube Oil and Seal Oil Systems
- Exhaust Systems
- Fuel gas and fuel oil systems
- Air Inlet Systems
- Inlet Fogging Systems



AUSTRALASIA TURBOMACHINERY SERVICES (ATMSGROUP)

37 Warwick Ave Toorak Gardens

South Australia 5065

Tel: +61 8 8332 4161 Mob: +61 (0) 41111 1224

Email: john.bretones@atmsgroup.com.au

ATMSGROUP Customer satisfaction is the measure of quality