

Capability Statement

Industrial Water Cooling | IWC

December 2023





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Industrial Water Cooling (IWC) was founded in 1986 and is a specialist South African based EPC company. IWC has been a member of the Cooling Technology Institute (CTI) for many years and our core offering includes cooling towers, heat exchangers, and chillers.

IWC offers thermal solutions to the following industries:

- Power Generation
- Mining
- Petrochemical
- Sugar
- Steel & Aluminium
- Food & Beverage
- HVAC and Refrigeration



Capabilities

IWC provides the following expertise:



Design and engineer to all internationally recognized standards, specifications and codes



Manufacture



Installation



Maintenance

Engineering and Project Management Services:

- Technical assistance to designers and engineers
- Detailed project engineering and project management
- Thermal design of cooling towers and air-cooled heat exchangers
- Mechanical design
- Electrical & Control
- Civil & Structural
- Hydraulic flow calculations and flow simulations/modelling
- Finite Element Analysis
- Stress Analysis (Piping)
- 3D modelling & detailing of plants, equipment and piping isometrics
- EPC Projects (up to US\$ 25 million)

Products and Services

Products:

- Package cooling towers under the IWC brand name (IWC EWK range, IWC FM range and IWC FGS range)
- Large field erected mechanical draught cooling towers of all types and materials of construction
- Air Cooled Condensers and Hybrid Coolers
- Water treatment equipment filters and dosing equipment
- Spares and accessories for all makes of cooling towers
- Heat Exchangers and spares
- Chillers
- Bulk Air Coolers

Services:

- Construction management and supervision
- Erection of plant and equipment
- Refurbishment and upgrading of cooling towers and cooling systems
- Concrete / Structural repairs
- Commissioning and acceptance testing
- Testing and thermal evaluations (Cooling Towers) and ACC's
- Waste disposal; including Asbestos Containing Materials (ACM's)
- Complete demolition and installation services
- Access and maintenance platforms to suit local standards and specifications.



Geographic Regions

IWC has delivered projects located in the following regions:

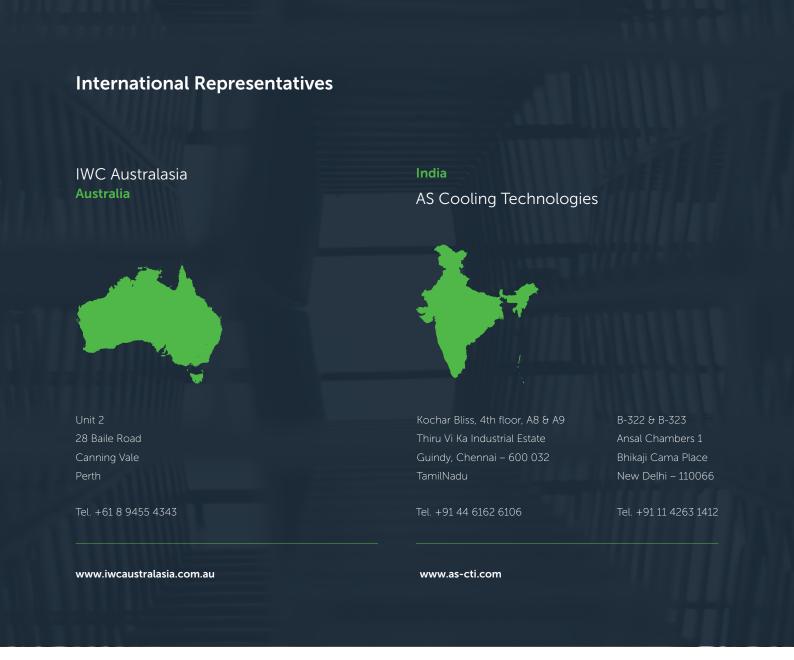


Some of our notable key clients

	ANGLO PLATINUM	sasol 🚜
Arcelor/Mittal	Howden	НДТСН
FOSKOR	RCL	Alteo
MOZAL OPERATED BY SOUTH32	SUGAR ILLOVO AFRICA	Roxgold
ADRA	TongaatHulett*	BOSCH
mondi	sappi	omnicane withograting Enviguex
○ VEOLIA	Energy Australia	÷ SENER

Some of our notable key clients (continued)

एनटीपीसी NTPC	adani Power	विद्युस्तान चेद्रोलियम HP
Innovate - Integrate - Deliver	thyssenkrupp	Bharat Petroleum
wood.	Gordon Brothers	GLENCORE
BECHTEL	IMPLATS EXCELLENCE IN PGMs	Chevron
AFROX A Member of The Linde Grou	TRONOX	HARMONY
EIII III E SOUTH32	synergy	BBE
energy	Newmont _™	BARRICK



Company Information and Certification

B-BBEE	Level 3	Business Address	55 Lake road, Longmeadow
CIDB	8ME		Business Estate North,
Company Registration	1986/000115/07		Edenvale, 1609
Vat number	4210112092		South Africa
Certification	ISO 9001:2015 (ISOQAR)		
	OHSAS 18001:2007 (ISOQAR)		
		Postal Address	PO Box 1112, Isando, 1609
Software	AutoCAD, AutoCAD Plant 3d		South Africa
	AFT Phantom		
	MS Office		
	MS Projects		
	Primavera P6		
	Tekla	Contact	Tel. +27 11 466 0699
			www.iwc.co.za



Certificate of Registration

This is to certify that the Management System of:

Industrial Water Cooling and Tektower (Pty) Ltd

55 Lake Road Longmeadow, Business Estate North, Edenvale, South Africa.

has been approved by Alcumus ISOQAR and is compliant with the requirements of:

ISO 9001:2015



Certificate Number:8034-Q15-001Initial Registration Date:12 September 2011Previous Expiry Date:12 September 2023Recertification Date:14-16 August 2023Re-issue Date:31 August 2023Current Expiry Date:12 September 2026

Scope of Registration:

The Registration covers the Quality Management System for the design, manufacturing, construction, refurbishment, sub-contractor management, installation of cooling system, plant and ancillary items and GRP solutions.

Alyn Franklin, Chief Executive Officer (on behalf of Alcumus ISOQAR)



This certificate will remain current subject to the company maintaining its system to the required standard. This will be monitored regularly by Alcumus ISOQAR. Further clarification regarding the scope of this certificate and the applicability of the relevant standards' requirement may be obtained by consulting Alcumus ISOQAR.







Certificate of Registration

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Industrial Water Cooling and Tektower (Pty) Ltd

55 Lake Road Longmeadow, Business Estate North, Edenvale, South Africa.

has been approved by Alcumus ISOQAR and is compliant with the requirements of:

ISO 45001:2018



Certificate Number:8034-OHS-001Initial Registration Date:12 September 2011Previous Expiry Date:12 September 2023Recertification Date:14-16 August 2023Re-issue Date:31 August 2023Current Expiry Date:12 September 2026

Scope of Registration:

The Registration covers the Safety and Health Management System for the design, manufacturing, construction, refurbishment, sub-contractor management, installation of cooling system, plant and ancillary items and GRP solutions.

Alyn Franklin, Chief Executive Officer (on behalf of Alcumus ISOQAR)



This certificate will remain current subject to the company maintaining its system to the required standard. This will be monitored regularly by Alcumus ISOQAR. Further clarification regarding the scope of this certificate and the applicability of the relevant standards' requirement may be obtained by consulting Alcumus ISOQAR.





Alcumus ISOQAR Limited, Alcumus Certification, Cobra Court, 1 Blackmore Road, Stretford, Manchester M32 OQY.

T: 0161 865 3699 F: 0161 865 3685 E: isoqarenquiries@alcumusgroup.com W: www.alcumusgroup.com/isoqar

This certificate is the property of Alcumus ISOQAR and must be returned on request.



Field Erected Cooling Towers

Kagera Sugar

Location	Tanzania
Tower type	Fibreglass Induced draft Cell size 7.3m x 7.3m
Duty	45MW
Number of cells	4 Individual
Completed	2021

Sappi Saiccor

Location	South Africa
Tower type	Concrete Induced draft Counter flow Cell size 11.9m x 10.3m
Duty	12.4MW
Number of cells	1
Completed	2020

Sappi Ngodwana

Location	South Africa
Tower type	Fibreglass Induced draft Counter flow Cell size 8.1m x 7.4m
Duty	75.0MW
Number of cells	3
Completed	2019

Kagera Sugar

Location	Tanzania
Tower type	Fibreglass Induced draft Counter flow Cell size 6.3 x 6.15m
Duty	37.7MW
Number of cells	4
Completed	2019

Eskom (Kusile)

Location	South Africa
Tower type	Concrete Induced draft Counter flow Cell size 14.7m x 14.7m
Duty	183.4MW
Number of cells	2 x 4
Completed	2016

Sunbird formerly Addax Bioenergy

Location	Sierra Leone
Tower type	Fiberglass Induced draft Counter flow Cell size 14.6m x 14.6m
Duty	134.3MW
Number of cells	4
Completed	2016

Eskom (Medupi)

Location	South Africa
Tower type	Concrete Induced draft Counter flow Cell size 14.7m x 14.7m
Duty	183.4MW
Number of cells	2 x 4
Completed	2014

CTDS Sugar Refinery

Location	Mauritius
Tower type	Concrete Induced draft Counter flow Cell size 12.5m x 12.5m
Duty	59.75MW
Number of cells	2
Completed	2012

BBE (Subika Mine)

Location	Ghana
Tower type	Fibreglass Induced draft Counter flow Cell size 7.3m x 7.3m
Duty	9.1MW
Number of cells	3 x 2 tower units
Completed	2017, 2019, 2022

Pueblo Viejo / SENET / Barrick Gold

Location	Dominican Republic
Tower type	Fibreglass induced draft counter flow cooling tower Cell size 9.15m x 12.8m
Duty	73.64MW
Number of cells	4
Completed	2022

Pueblo Viejo / SENET / Barrick Gold

Location	Dominican Republic
Tower type	Duplex Stainless Steel Forced draft octagonal cooling tower Cell size 53m
Duty	Varied
Number of cells	8
Completed	2022

Howden Brazil No 1

Location	Brazil
Tower type	Fibreglass induced draft counter flow Bulk Air Cooler (BAC) Cell size 5.2m x 4.6m
Duty	6.2MW
Number of cells	2
Completed	2022

HATCH (Zimplats)

Location	Zimbabwe
Tower type	Concrete Induced draft, counter flow Cell size 2 off 12.2 x 13.6m & 3 off 8.6 x 8.6m
Duty	69.11 and 66.2 MW
Number of cells	2 and 3 total of 5
Expected completion	2024

Sibanye Stilwater (Gold)

Location	South Africa
Tower type	Pultruded GRP Induced draft Counter flow Cell size 11.1 x 11.1m
Duty	12.4MW
Number of cells	2
Completed	Expected completion date 2023

Howden Brazil No 2

Location	Brazil
Tower type	Fibreglass induced draft counter flow Bulk Air Cooler (BAC) Cell size 6.3m x 5.4m
Duty	9.3MW
Number of cells	2
Completed	2022

BBE Loula Mine

Location	Mali
Tower type	Mechanical draught, counterflow FRP tower
Duty	9.8 MW
Number of cells	2
Completed	2023

Kansanshi Mine FQML

Location	Zambia
Tower type	Mechanical draught, counterflow FRP tower
Duty	14.52 MW
Number of cells	1
Expected completion	2024

Kagera Sugar

Location	Tanzania
Tower type	Mechanical draught, counterflow FRP tower
Duty	60.52 MW
Number of cells	5
Expected completion	2024/25

Lycopodium

Location	Senegal
Tower type	Mechanical draught, counterflow FRP tower
Duty	15.75MW
Number of cells	4
Expected completion	2024

Natural Draft Cooling Towers

Sasol Secunda Unit 45, tower A

Location	South Africa
Project description	New splash grid fills New FRP wind baffle walls
Number of towers	1
Completed	2023

Sasol Secunda Unit 45, tower B

Location	South Africa
Project description	New splash grid fills New FRP wind baffle walls Basin cleaning
Number of towers	1
Completed	2020

Eskom (Tutuka Tower 5)

Location	South Africa
Project description	Cleaning & repairs
Number of towers	1
Completed	2014

Sasol (Secunda Utility CT)

Location	South Africa
Project description	Distribution Fill Walkways
Number of towers	4
Completed	2011 - 2013

Sasol Secunda Unit 245, tower B

Location	South Africa
Project description	New splash grid fills New FRP wind baffle walls Civil repairs
Number of towers	1
Completed	2022

Eskom (Arnot)

Location	South Africa
Project description	New splash grid fills Basin & internal cleaning FRP ladders & walkways Asbestos removal
Number of towers	1
Completed	2022

Eskom (Camden PS)

Location	South Africa
Project description	New PVC drift eliminators
Number of towers	6
Completed	2013/2014

Eskom **Matla PS**

Location	South Africa
Project description	New trickle grid fill New FRP fill supports Basin cleaning Ducts and distribution pipe cleaning Asbestos fill removal
Number of towers	3
Completed	2022 & 2023

Sasol Secunda Unit 245, tower A

Location	South Africa
Project description	New splash grid fills New FRP wind baffle walls Civil repairs
Number of towers	1
Completed	2021

Eskom Matla Twr 1/2/3)

epairs

Yallourn Power Station

Location	Australia
Project description	Fill Drift eliminators Distribution New FRP access walkways Asbestos removal
Number of towers	1
Completed	2011

Eskom **Kriel PS**

Location	South Africa
Project description	New trickle grid fill New FRP fill supports Basin cleaning Ducts and distribution pipe cleaning Asbestos fill removal
Number of towers	2
Completed	2023





Industrial Water Cooling (Pty) Ltd

55 Lake road

Longmeadow Business Estate North, Edenvale, 1609 T +27 (0) 11 466 0699 E mail@iwc.co.za W iwc.co.za