

Urea Manufacturing Plant — Karratha, WA



A Major International Engineering Contractor

CLIENT

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LOCATION

Karratha, Western Australia

INDUSTRIAL

THE CHALLENGE

A major international engineering contractor engaged Windssocks Australia to design, manufacture and supply a complete illuminated Wind Direction Indicator (IWDI) system for a urea manufacturing plant under construction in Karratha, Western Australia.

The project demanded solutions capable of withstanding extreme Pilbara coast conditions — cyclonic winds, intense UV radiation, salt-laden marine air, and operation within classified hazardous zones. This project required extensive international engineering coordination, rigorous documentation and inspection protocols, and specialist materials and coatings throughout every component.

KEY REQUIREMENTS

- CASA MOS 139 compliant Windssock specification
- Wind Region D (Cyclonic) — structures engineered for sustained wind speeds exceeding 70 m/s
- Plascoat PPA 571 anti-corrosion coating — marine-industrial environments
- Electrical continuity in hazardous zones — 300-amp copper earth straps
- Anti-static Windssock fabric — Zone 2 hazardous area rated
- Rigorous inspection and documentation — NDT, PMI, material certificates, ITP sign-offs

WHAT WE SUPPLIED

- 14× 3650mm Heavy Duty Anti-Static Windssocks
- 7× 900mm Stainless Steel Dual Windssock Frames
- 7× 6m Mid-Hinging Heavy Duty Poles
- 56× LED Obstruction Luminaires
- 14× LED Obstacle Beacons
- 7× Complete Electrical Systems (pre-wired)
- 7× Foundation bolt cage assemblies
- 1× Full Engineering Certification Package

OUTCOME

All 7 complete IWDI assemblies were manufactured, fully pre-wired, and delivered within a 17-week build programme. Every component — from the 6-metre Poles to the Stainless Steel Frames and LED obstruction lighting — was designed, engineered and manufactured at our Perth facility.

PROJECT AT A GLANCE

14

Windssocks supplied

7

Complete IWDI assemblies

Zone 2

Hazardous area rated

Wind Region D

Cyclonic

Anti-Static

Zone 2 rated

17wk

Build programme

WHY WINDSOCKS AUSTRALIA?

- Australian Made & Owned — specialist manufacturer since 2003
- Anti-static, CASA, marine & hazardous area compliant product range
- Custom manufacture capability — non-standard dimensions accommodated
- Responsive technical support & national logistics capability
- Proven track record with Tier 1 operators across all major industries

ABOUT WINDSOCKS AUSTRALIA

Australia's leading manufacturer of industrial Windssock systems. Designed, engineered and assembled in Australia for the harshest environments.

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