



& Client List.

/ OVERVIEW

AMG transmission and networking solutions have been successfully implemented in over 10,000 high profile projects worldwide, including Roads and Tunnels, Airports, Rail, Ports, Oil & Gas Refineries/Off-shore platforms, Renewable Energy Plants, Industrial and Commercial Sites, Sports and Leisure Facilities, Town and City Centres, Military, Universities and Hospitals.

[to name a few]

/ SECTORS

#01

Transport.



I Covering highways, rail, sea, airports and marine, AMG have a strong heritage of providing analogue, IP, Hybrid, fibre and wireless systems to countries around the world.

Longevity of supply, reliability and robust performance are typical requirements of these systems, which can be complex and span thousands of kilometres of infrastructure whilst demanding decades of reliable 24/7 operation. AMG's in-house design team are always on hand to offer free advice and design assistance to help overcome your design challenges on these solutions.

AMG have developed bespoke analogue and IP/Ethernet products that integrate with new and legacy equipment to enable multiple types of systems to share a common infrastructure without compromise.

Transport / Clients.

ITS/Road

UK

NRTS - All major UK motorways Hindhead, Hatfield, Blackwall Tunnels Belfast Westlink, Severn Bridge Crossing A20 Dover TAP project M25 VMS project

INDIA

Highways —

Greater Noida Expressway
Surat - Dahisar
Kadthal - Armur/NH7
Bangalore - Hosur/NH7
Bangalore Airport Road
Salem - Kumarapalyam/N47
Kumarapalyam - Chengapallly/N47
Bandra - Worli
Namkhyal Bypass
ITNL - Kothakata - Kurnool/NH7
Gomti-Beawar Stretch/NH8
L&T EBG - Surat-Dahisar/NH8
L&T EBG - Rohtak-Bahadurgarh/NH10
Gorakhpur
Ranchi Hazaribagh/NH33

Panipat Elevated Corridor KrishnaGiri - Thopur Ghat Jadcherla - Kothakatta Palanpur - Swaroopganj Vadodra - Bahruch Pune Sholapur

IRELAND

Dublin City Centre & Cycle Routes Dublin Port Tunnel, M1, M11, M50 Dublin Light Rail

SWEDEN

Södra Länken & Malmö Tunnels.

KOREA

Seoul, ITS National Road.

MIDDLE EAST

Palm Tunnel, Abu Dhabi.

VIETNAM

Hanoi, Traffic System.

Airports

UK

Heathrow
Stansted
Birmingham
London City
Liverpool
Cambridge
Glasgow
Aberdeen
East Midlands
Prestwick
Southampton

OMAN

Salalah Muscat

MALDIVES

Gan International Addu International

Ports

UK

All of the UK major ports of entry including Dover and Portsmouth Scalloway Lerwick

HONG KONG

Kak Tai Cruise terminal

JORDAN

Aqaba New Port

OMAN

Steinweg International Maritime

Rail

IIK

Channel Tunnel Rail Link Siemens Traincare, Manchester

IRELAND

Dublin Light Rail

SOUTH KOREA

TCV High Speed Rail Project

Transport / Case Study.

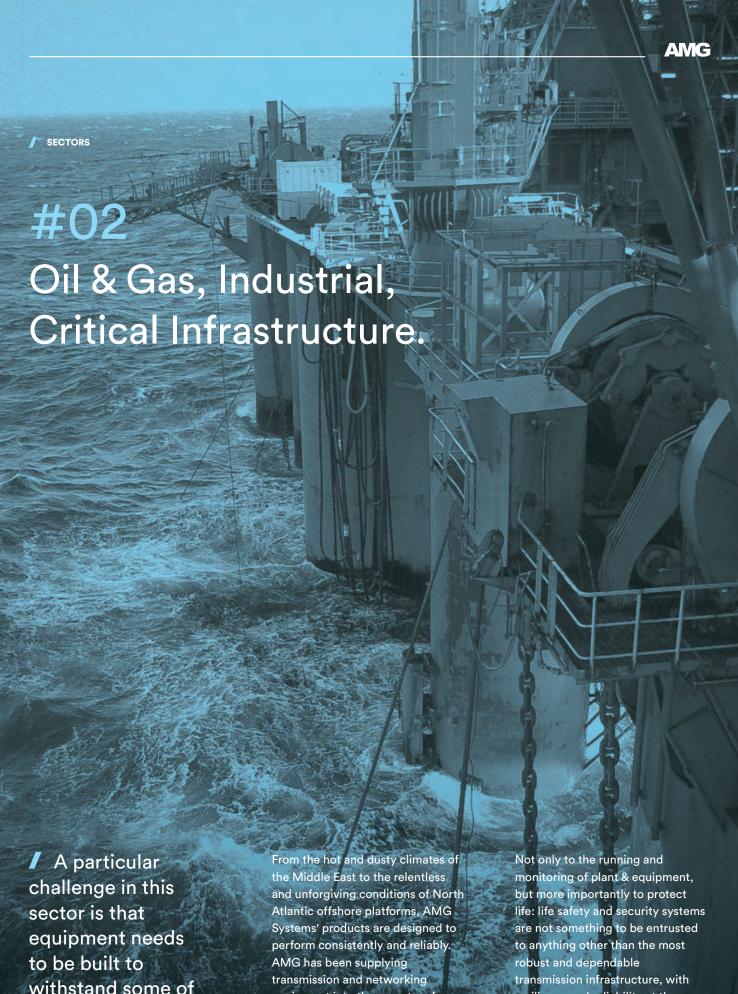


Kai Tak Cruise Terminal, Hong Kong.

Kai Tak Cruise
Terminal, Hong Kong
- State of the Art
Architecture with
State of the Art
Security.

AMG were commissioned to Design, Supply, Deliver, Install, Test, Commission, Warranty and supply on-going maintenance of an interconnected CCTV System at Kai Tak Cruise Terminal, for Hong Kong's Customs & Excise Department, Police Force, Immigration Department and Tourist Commission. The design needed to allow different organisations to access different aspects of the CCTV, independently of each other. Each had different credentials, which excludes each department from looking at certain information.

The 620 cameras requested meant that we had to deploy servers to each of the Governing Departments and set the right system privileges and install firewalls so that the right camera(s), and the right users, can access the cameras at any time by all approved departments. Using Fibre Optics for the back bone, allowed high quality, real-time transmission of all signals, whilst utilising minimum numbers of fibres and the ability to send video as well as data signals to the cameras for control of PTZ (Pan Tilt Zoom) to the control room.



withstand some of the most demanding environments on the planet.

equipment into these sectors for many years and continuous and reliable operation is essential.

resilience and reliability at the core of its design.

Oil & Gas, Utilities, Critical Infrastructure / Clients.

Petrochemicals/ Refineries/ Processing Plants

ALGERIA

Sonatrach

INDIA

Mangalore Petrochemicals Gas Authority National Hydro Power Corporation

IRAQ

Bedyal Petroleum BP - North Rumaila Shell, Majnoon SIBA Field Development Akaz Gas Power Plant

KUWAIT

MEW Power Plants Kuwait Oil Company

OMAN

Daleel Petroleum Jotun Paints Factory Oman LNG OMIFCO

NIGERIA

Indorama Petrochemicals

MALAYSIA

Petronas

QATAR

Qapco Petrochemicals

SAUDI ARABIA

Aramco SABIC HCIS Petro Rabigh

UNITED ARAB EMIRATES

Emirates Global Aluminium

Power & Natural Resources

UK

Scottish Gas Network - Granton, Linwood, Livinston Scottish Southern Electric Western Power Distribution - Talbot Green, Grangetown, Llanarth, Gowerton, Lampeter Centrica United Utilities

VIETNAM

Mong Duong Thermal Power Plant

OMAN

Oman Waste Water Co Services -Hayawater Sohar Water Treatment Plant

PAPUA NEW GUINEA

Barrick Gold Mine

Submersibles

Submersible ROV communications for various technology partners

Off-Shore Life Safety

SAUDI ARABIA

Khursaniyah Jubail

MALAYSIA

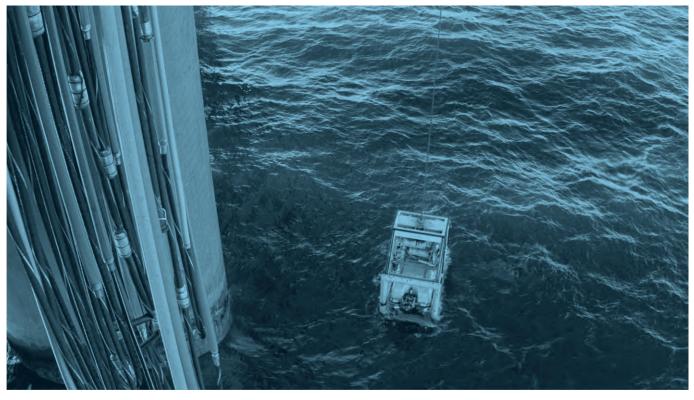
RAPID

UNITED ARAB EMIRATES

GASCO Habshan Ruwais Refinery Shah Gas / SECTORS

#02

Oil & Gas, Utilities, Critical Infrastructure / Case Study.



Transmission solutions for Submersibles

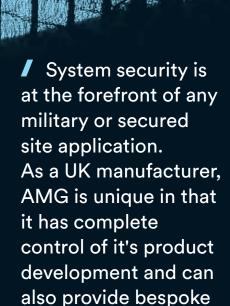
AMG has developed several bespoke solutions for submersibles.

These typically concern the connection of control and monitoring signals from submersibles to their "mother ship" including multiple real-time analogue video channels, multiple serial data channels, multiple contact closure channels and multiple audio signals. In the products we have developed, we have also manufactured devices to operate at specific wavelengths within the ITU-T G.694 grid, allowing inter-operation with other third-party equipment within the same fibre cores.

Such applications require that the fibre cores needs to be built into the umbilical cable and they also need to be kept as small as possible. We have also developed a transmission solution for submersibles which amalgamates multiple signal types on to physical interfaces within a single unit. This includes analogue video, ethernet, data and audio over a high-integrity fibre link.

SECTORS





security features.

Putting the 'secure' back into Security.

Supporting some of the most varied environmental conditions, requiring extended temperature operating ranges up to +80oC, AMG provides secure transmission and networking systems to a number of high security organisations around the world. From CCTV infrastructure for prisons and detention facilities, with a need for systems to transmit combinations of IP camera signals alongside serial data and contacts, to wireless field based equipment supporting surveillance systems to protect military personnel.

AMG has solutions to cater for any transmission requirement in these sectors. And if we don't have it we make it! Bespoke product development is a key requirement in high security and military projects. Whether it's for ROV's used in bomb disposal or deployable battlefield data networks, AMG has a wealth of experience in designing and delivering 'unique' communications systems, to address the many individual challenges that exist in these specialist and often dangerous spaces.

Secured Sites, Military, Police, Government / Clients.

Prisons/ Secure Facilities

HMP Oakwood

HMP Woodhill

HMP Shrewsbury

HMP Cookham Wood

HMP Featherstone

HMP Parc

HMP Wandsworth

HMP Bristol

HMP Manchester

HMP Wormwood Scrubs

HMP Whitemoor

HMP Thameside

HMP Nottingham

HMP Rochester

HMP Stocken

HMP The Mount

Ashworth Hospital

Broadmoor Hospital Greater Manchester Police

Al Wathba Prison, Abu Dhabi

Stanley Prison, Hong Kong

Abu Dhabi Police

New Delhi Police

Military

UK

MOD Whitehall

RAF Lakenheath

BAE Filton

BAE Scotstoun

CTCRM Lympstone

Boscombe Down

INTERNATIONAL

Canadian Military

Battlefield Asset Protection, Afghanistan

Indian Space Research Organisation

Qatar Air Force

Qatar Navy

Nato Site, Turkey

Military Buildings, Saudi Arabia

DRDO, India

Padang Besar Perlis Malaysia, border

surveillance

Government projects, Vietnam

Secured Sites, Military, Police, Government / Case Study.



Gartree Prison, United Kingdom.

Prison CCTV is no different than any other organisation or company's needs when it comes to relying on CCTV. CCTV had been a feature of Gartree prison facility for a long time, however, to achieve adequate supervision over the whole of the increased complex, Gartree needed a much expanded solution. Uppermost in their minds was reliability, video picture quality, and making use of the current equipment and infrastructure, wherever possible. Working with ADT, the main contractor for the project, AMG selected their AMG2000 single channel transmission system to meet the increased operating demands.

This allowed many elements of the existing system to be incorporated into the new network, giving Gartree a significant investment benefit. A number of new PTZ and static cameras were installed around the facility. New optical fibre runs and terminations for the 48 existing cameras were laid and all the feeds brought into a new control room. From here, staff have an unrivalled view of the entire prison complex together with image capture and archiving capabilities.

/ SECTORS

#04 Public Space.

Spanning analogue CCTV, IP Video, Access Control and Intrusion, security systems can vary in size and complexity. Standalone or part of a fully integrated system, AMG Transforms your security networks.

The public space security sector encompasses many different and interesting project types and challenges. Many projects have requirements to combine legacy and new technologies on to the same network in a cost effective way and AMG has extensive experience in providing a large variety of different products into this space, both in the UK and overseas. Whether it is transmitting a single external PTZ camera across a town centre or

providing an Ethernet switch network that integrates access control, intruder and video across a highly resilient converged fibre network across a distribution facility, AMG recognises the importance of designing reliable, high bandwidth data backbones, using the latest and often unique, edge networking products. All this whilst still retaining the quality and security of technology, that underpins AMG as a UK manufacturer.

Public Space / Clients.

Sports & Leisure

UK

Olympic Velodrome Queen Elizabeth Olympic Park The O2 Chelsea FC Wembley Old Trafford Balnagowan Castle British Museum Imperial War Museum Maclaren Formula 1

INDIA

Formula 1, Gautam

JORDAN

Royal Court Kempinski Resort Ayla Aqaba

OMAN

Al Mouj Complex

QATAR

Museum of Islamic Arts Ministry of Culture Princes Palace Alfardan Gardens

UNITED ARAB EMIRATES

Louvre, Abu Dhabi Marriott Hotel, Abu Dhabi Burj Residences, Dubai Yas Mall, Dubai

Universities & Schools

UK

Oxford University Birmingham University Loughborough University Bexley Academy Swindon Academy

BAHRAIN

St Christopher's School

KUWAIT

Sabah Al Salem University

UNITED ARAB EMIRATES

Australian Schools

General / Commercial Security

Aviva British Sky Broadcasting Jaguar Land Rover - Fen End Slough Trading Estate Stockley Park Royal Mint

Local Authority / Smart City

UK

Westminster Council - London's West End Hertfordshire County Council Leicester City Council

IRELAND

Dublin City Council

WALES

City of Cardiff Council

AUSTRALIA

City of Perth

UNITED ARAB EMIRATES

Deira City Centre

QATAR

Lusail City

LEBANON

Beirut City Centre Saida Municipality

Public Space / Case Study.

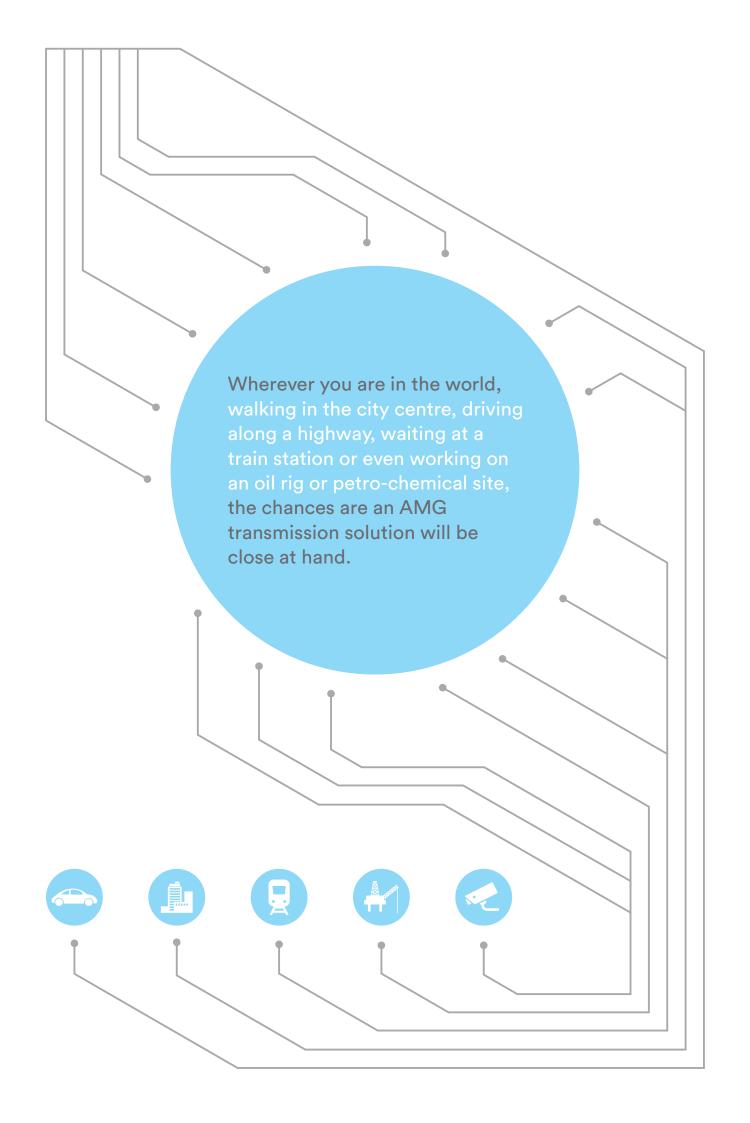


Museum of Islamic Art, Doha.

The exceptional quality of the building design, the location and the position of the new Museum of Islamic Art in Doha, Qatar makes it one of the most inspiring projects of its kind in the world.

AMG products were utilised to create a multi-core fibre Backbone Infrastructure to carry multiple disciplines from local floor control cabinets to the Security Equipment Room where the AMG receivers convert the images back to coax terminations on a real time uncompressed video basis. The Synectics Modular Digital Recording System is installed as the "Front End" Integrated Control System and records the images on a "Time Lapse Later" basis thus providing the requirements of the Real Time Pre-Alarm.

The result is a highly resilient, managed, low cost, transmission system for both compressed and uncompressed video signals, and is available for 4 and 8 channel point-to-point video transmission with data/audio and Ethernet in dual redundant applications. A total of 420 cameras are installed of which 21 are Pan Tilt Zoom (PTZ). Most of these are installed inside the museum although a certain number of cameras cover the perimeter and the surrounding parkland.





amgsystems.com

Designed and made with pride in Great Britain.

