Global supplier of world-class defence products and solutions
VISION
The credible State Owned South African strategic partner for innovative Defence, Security and related technology solutions

PURPOSE
As a values driven SOC, Denel’s purpose is to:
• Supply the RSA defence & security environment with strategic technology capability, products, services, and support.
• Leverage indigenous capability to access selected export markets
• Contribute to the socio economic imperatives of Government such as:
  - Job creation, Skills development and social investment
  - Enhancing the local technology and manufacturing base
  - Supplier development
  - Exploiting commercial use of technology
  - Foreign policy and regional security objectives
• Be a responsible corporate citizen to ensure:
  - Good governance, and sustainability
  - Transformation and employee well being
<table>
<thead>
<tr>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denel</td>
</tr>
<tr>
<td>Denel Group of South Africa</td>
</tr>
<tr>
<td>Denel Industrial Properties</td>
</tr>
<tr>
<td>Denel Aerostructures</td>
</tr>
<tr>
<td>Denel Aviation</td>
</tr>
<tr>
<td>Denel Technical Academy</td>
</tr>
<tr>
<td>Denel Dynamics</td>
</tr>
<tr>
<td>Spaceteq</td>
</tr>
<tr>
<td>Denel Integrated Systems and Maritime</td>
</tr>
<tr>
<td>Denel Land Systems</td>
</tr>
<tr>
<td>Denel Mechem</td>
</tr>
<tr>
<td>Denel Overberg Test Range</td>
</tr>
<tr>
<td>Denel PMP</td>
</tr>
<tr>
<td>Denel Vehicle Systems</td>
</tr>
<tr>
<td>Associated Companies</td>
</tr>
<tr>
<td>Airbus DS Optronics (Pty) Ltd</td>
</tr>
<tr>
<td>Rheinmetall Denel Munition (Pty) Ltd</td>
</tr>
<tr>
<td>Tawazun Dynamics LLC</td>
</tr>
<tr>
<td>Turbomeca Africa (Pty) Ltd</td>
</tr>
</tbody>
</table>
Denel SOC Ltd is a state-owned commercially-driven company and strategic partner for innovative defence, security, aerospace and related technology solutions. It groups together several defence and aerospace divisions and associated companies.

Denel provides turn-key solutions of defence equipment to its clients by designing, developing, integrating and supporting artillery, munitions, missiles, aerostructures, aircraft maintenance, unmanned aerial vehicle systems and optical payloads based on high-end technology.

Its defence capabilities date back more than 70 years when some of Denel’s first manufacturing plants were established. Between the Denel divisions there is a collective experience of over 200 years.

Denel’s purpose is to:

- Supply South Africa’s defence and security environment with strategic technology capability, products, services and support;
- Leverage indigenous capability to access selected export markets;
- Contribute to the socio-economic imperatives of Government such as: - Job creation, skills development and social investment;
- Enhancing the local technology and manufacturing base;
- Supplier development;
- Exploiting commercial use of technology; and
- Foreign policy and regional security objectives.

Denel is managed as one, integrated business, it has an executive management team responsible for daily operations, reporting to an independent Board of Directors appointed by the South African Government through the Minister of Public Enterprises.

Its operating divisions are located on the following sites:

**Irene Campus:**
- Denel Corporate Office – including Denel Industrial Properties and LMT Products (Pty) Ltd
- Denel Dynamics – including Spaceteq in Somerset West
- Denel Integrated Systems and Maritime

**Lyttelton Campus:**
- Denel Land Systems
- Denel Mechem

**Kempton Park Campus:**
- Denel Aviation – including Denel Technical Academy
- Denel Aerostructures

**Western Cape Campus:**
- Denel Overberg Test Range

**Pretoria West Campus:**
- Denel Pretoria Metal Pressings (PMP)

**Benoni Campus:**
- Denel Vehicle Systems
**Subsidiary companies:**

- LMT Holdings SOC Ltd – Denel 51%

**Associated companies:**

- Airbus DS Optronics (Pty) Ltd – Denel 30%
- Rheinmetall Denel Munition (Pty) Ltd – Denel 49%
- Tawazun Dynamics LLC – Denel 49%
- Turbomeca Africa (Pty) Ltd – Denel 49%

To serve its customers with cost-effective and quality solutions in the military aerospace, landward and maritime defence environments, Denel is constantly extending its global footprint through partnerships and collaborative ventures.

It is committed to ensuring that its divisions and associated companies grow to provide the best possible solutions to their customers, both locally and abroad.

**Contact details:**
Corporate Communications
Tel: +27 12 671 2662
Email: marketing@denel.co.za
Website: www.denel.co.za

<table>
<thead>
<tr>
<th>NAME</th>
<th>NAME DESCRIPTION</th>
<th>SHAREHOLDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denel Aerostructures</td>
<td>Metallic and composite aerostructure components, sub-assemblies and special processes</td>
<td>Denel 100%</td>
</tr>
<tr>
<td>Denel Aviation</td>
<td>Aircraft maintenance, repair and overhaul (MRO), upgrades, system integration, aircraft operation &amp; flight test</td>
<td>Denel 100%</td>
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<tr>
<td>Denel Dynamics</td>
<td>Missiles, guided weapons, UAVS and space technology</td>
<td>Denel 100%</td>
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<tr>
<td>Denel Integrated Systems and Maritime</td>
<td>Integrated systems and maritime solutions</td>
<td>Denel 100%</td>
</tr>
<tr>
<td>Denel Land Systems</td>
<td>Land systems equipment and systems integrator, including “Badger” new generation infantry combat vehicle project</td>
<td>Denel 100%</td>
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<tr>
<td>Denel Mechem</td>
<td>Mine action, contraband detection, specialised vehicles and field services</td>
<td>Denel 100%</td>
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<tr>
<td>Denel Overberg Test Range</td>
<td>Multi-purpose test range</td>
<td>Denel 100%</td>
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<tr>
<td>Denel PMP</td>
<td>Small and medium calibre ammunition, brass products, detonics, power cartridges and mining drill bits</td>
<td>Denel 100%</td>
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<tr>
<td>Denel Vehicle Systems</td>
<td>Vehicle systems, drive-trains, turret systems and subsystems</td>
<td>Denel 100%</td>
</tr>
<tr>
<td>LMT Holdings SOC Ltd</td>
<td>Specialised vehicle systems and engineering design services</td>
<td>Equity partnership with Denel 51%, Pamodzi 29% and minorities 20%</td>
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<tr>
<td>Rheinmetall Denel Munition (Pty) Ltd</td>
<td>Medium and large calibre munitions, rocket and missile subsystems, grenades and forging business</td>
<td>Equity partnership with Rheinmetall (Denel 49%).</td>
</tr>
<tr>
<td>Airbus DS Optronics (Pty) Ltd</td>
<td>Optronics</td>
<td>Equity partnership with Airbus DS Optronics (Denel 30%)</td>
</tr>
<tr>
<td>Tawazun Dynamics LLC</td>
<td>UAE-based precision guided munitions (PGM) manufacturer</td>
<td>Equity partnership with Tawazun Group 51% (Denel 49%)</td>
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<tr>
<td>Turbomeca Africa (Pty) Ltd</td>
<td>Manufacturing of aircraft gearboxes and maintenance and repair of aero engines</td>
<td>Denel 49%, remainder held by Turbomeca (France), part of Safran Group</td>
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</tbody>
</table>
Denel Industrial Properties (DeniProp) was established in 2004 for the centralised management of the real estate portfolio of Denel. Its main aims are to maintain and enhance the value of property-related assets and to optimise rental revenue for Denel.

DeniProp provides tailor-made infrastructure solutions to Denel’s operating divisions and associate companies, as well as to a broad range of external tenants. Services include corporate real estate management, property management and facility management (FM) services. An extended range of FM services including plant maintenance, estate management, security, catering, cleaning, waste management, industrial health and fire services are provided to, or managed on behalf of tenants.

DeniProp currently manages sites in the Gauteng, North West and Western Cape provinces with more than 600,000 square metres under roof and over 5,000 hectares of land with an asset value of in excess of R1bn. Our portfolio ranges from offices, warehouses, laboratories, aircraft hangars and light to heavy workshop areas to chemical production and testing areas.

For more information visit [www.denelproperties.co.za](http://www.denelproperties.co.za)
Situated within the core of the Gauteng Aerotropolis, in South Africa, Denel Aerostructures’ (DAe) world-class facility specialises in advanced manufacturing of complex aerostructures, making them a recognised leader in the Africa aerospace field industry.

As the first company in Africa to be NADCAP-accredited across multiple technology disciplines in Africa, Denel Aerostructures’ reputation extends internationally to customers like Airbus.

Established in 1964 and then renamed in 2007, Denel Aerostructures has risen to prominence in a short period to the extent that it is now the largest aerostructures facility in Africa. It is not surprising that its capabilities include comprehensive design, industrialisation, advanced manufacturing and the assembling of ultra-light weight aerostructures for the global aerospace market. Denel Aerostructures’ team of dedicated and highly skilled employees has allowed it to be a design partner to Airbus and also participate in projects with, Agusta Westland, BAE Systems, Boeing, SAAB and other Tier 1/2 aerostructures manufactures.

Denel Aerostructures aims to surpass customers’ expectations with on-time delivery, innovation and On-quality standards with a full range of engineering capabilities - design, development, test and certification. As a strategic partner in global programmes, the company intends to build on its longstanding reputation for innovation, quality and specialised solutions in aerospace design and manufacturing. Our mastery of technology and depth of skills are forged through decades of experience in the aerospace sector. With the Aerotropolis attracting aerospace and advanced manufacturing companies, DAe is well positioned and strategically close to a number of partners within the industry. A primary contributor to the growth of Africa’s aerospace sector and high-tech manufacturing, Denel Aerostructures is ideally positioned to be a strategic aerospace design and manufacturing partner of choice to the global aerospace industry.

For more information visit www.denelaerostructures.com
As an aviation maintenance, repair and overhaul (MRO), upgrades and systems integration company, Denel Aviation has served the South African Air Force (SAAF) as a strategic partner for 50 years.

With its well-established capabilities in the upgrade, servicing and overhaul of aircraft, as well as aircraft systems and related equipment, Denel Aviation is a prominent participant in the local and international rotary and fixed-wing aircraft markets.

Its business units comprise MRO operation on fixed and rotary wing aircraft and component workshops, engineering and flight operation services. These business units provide total MRO, upgrade and related solutions to clients through worldwide partnerships.

Importantly, Denel Aviation has an on-site Training Academy with engineering courses certified by the, Transport Education and Training Authority and the South African Civil Aviation Authority (SA CAA).

It already holds a number of aviation certifications including those from the SA CAA and the European Aviation Safety Agency (EASA) as an Aircraft Maintenance Organisation (AMO) and several operational ISO standards.

With an eye on supporting the aircraft platforms in the SAAF and the greater Sub Saharan Africa, Denel Aviation works closely with original equipment manufacturers (OEM) such as Airbus Helicopters, Russian Helicopters, Lockheed Martin, as well as AgustaWestland, Saab and BAE Systems.

It has played a major role in the modification and upgrade programmes on the SAAF’s C130 and Oryx helicopter fleets and maintenance support for the South African Police Services, Airbus Helicopters, Bo105 and AS350 (Squirrel) helicopters.

Rooivalk

As the OEM and design authority on South Africa’s indigenously developed Rooivalk combat support helicopter, Denel Aviation has also completed the technical baseline for its deployment in peace support operations.

Having become a key partner in the SAAF’s Support Vision, Denel Aviation has expanded its maintenance support to undertake most of the SAAF’s maintenance functions.

For more information visit www.denelaviation.co.za
The Denel Technical Academy (DTA) has been involved in Aviation and Engineering training since 1965.

In the early 1990s, Denel Technical Academy diversified to include non-Aviation related trades such as Electrician, Turner and Machinist, Toolmaker and Jig Maker, Machine Tool Millwright and Welder. Since then, DTA has trained students from many different companies and countries in Africa.

DTA’s vision is to be a world-class technical training provider. Its mission is to provide value adding accredited technical training to its clients in Aerospace, Engineering and Advance capabilities. DTA is approved and accredited by the South African Civil Aviation Authority (SACAA) and the local education and training authorities. Quality is managed by a structured Quality Management System based on the AS9100 International Standard.

Training Offered

Advanced and type training: Various courses are presented and can be developed to the client’s needs on civil and military aircraft. Advanced courses based on part 66 to develop staff to a higher skill level are presented such as Foreign Objects Debris (FOD) and Corrosion Control etc.

Practitioner staff: Type training practitioner staff possesses critical experience in military and commercial aircraft, with vast product knowledge. Expertise has been accumulated through years of experience in maintenance, overhaul, test and performance environments. Training media incorporates computer-based-training (CBT) and computer-aided instruction.

Apprentice training: DTA courses are accredited by the Aerospace Chamber in accordance with the Competency Based Modular Training system. This ensures that apprentices are adequately trained both practically and theoretically to allow them to continue their experiential training to qualify as artisans.

For more information visit www.deneltechnicalacademy.co.za
DENEL DYNAMICS
Denel Dynamics has proved itself as an innovative leader in advanced systems technology. Its core business covers tactical missiles, precision guided weapons, Unmanned Aerial Vehicle Systems (UAVS) and Space solutions.

Known for its forward-thinking approach to providing solutions for clients – its track record reflects that most clients start and continue their business journey with Denel Dynamics as it continues to break new grounds to develop, upgrade and integrate world-class products.

A Unique Position

Past milestones, present trends and future battle space are the forces that shape the dynamic evolution of products and solutions from Denel Dynamics.

Today’s competitive products are developed from a foundation of more than 45 years’ worth of design, development and production experience in the South African guided missiles and UAV business. Yet it is our solid reputation as a highly creative company, delivering quality product solutions, that serve as the anchor for continued success into the future.

As proud Innovators of competitive South-African missiles, UAVS and Space Solutions, Denel Dynamics prides itself in:

- Maintaining long-term mutually satisfying relationships with all key customers through enhancing the special deep and long-term strategic relationship with RSA DOD, Armscor and SANDF, now supplemented by the new SANSA and DST strategic relationship
- An exceptional ability to respond to unique customer requirements
- Provide innovative and creative designs that deliver robust and reliable product solutions
Missiles

Denel Dynamics has its roots in missile research, design and development, starting in 1964 with the establishment of the Institute for Rocket Research, which later became the National Institute for Defence Research at the Council for Scientific and Industrial Research (CSIR).

Proudly innovative, Denel Dynamics is a competitive missiles solutions company which forms part of the Denel Group, South Africa’s largest manufacturer of defence equipment. The company’s flagship R1bn A-Darter joint development air-to-air missile project with Brazil, and its successful relationship with the Finnish Navy using the Umkhonto surface to air missile, are ways in which Denel Dynamics is making the South African missiles industry fly internationally.

UAVS

Denel Dynamics is also South Africa’s biggest supplier of Unmanned Aerial Vehicle (UAV) systems, respected for developing and producing some of the most rugged and reliable tactical UAV surveillance systems in the world. While first world nations dominate the global market, there is scope for South Africa to use local skills to create market leading UAVS for developing nations.

Spaceteq

Spaceteq, a business unit in Denel Dynamics, a division of Denel SOC Ltd became operational on the first of July 2013. It will use the IP from DST, the ex-Sunspace personnel, and the heritage from work previously done by Houwteq, as a solid foundation on which to build an organisation that will develop satellite systems for the South African Government and also for international clients.

Value Beyond Africa

The technological impact of the South African satellite’s engineering has been felt further afield. Two new young small-satellite engineers were able to make successful contributions to the 2011 Australian and Austrian chapters of the International Space University Summer School programmes based on the learnings gleaned from SumbandilaSat. The value extends far beyond the initial project itself.

Sharing And Partnering

Denel Dynamics has capability and sustainability as a one-stop missiles, UAVS and integrated systems powerhouse. International partnering is an investment that goes far beyond funding, and we have successfully proven our willingness to work together with nations. By adopting a partnering approach, Denel Dynamics spreads the workload and capabilities to the widest possible group of private and public South African companies while still maintaining its relationship with the Department of Defence. It makes good economic sense and is of real benefit to the partnering countries.
People Development

With South Africa’s top engineering minds working for Denel Dynamics, we are in the privileged position of creating exciting opportunities in the fields of maths and science; engineering and technology. Quality skills transfer; engineering opportunity; mentoring and bursaries are of key importance. It enables us to retain South Africa’s pool of talent while transforming our business and its people. The bottom line is to keep passing on our intellectual property and build upon our world class expertise.

Innovation Evolution

The true character of the business is advanced technology prowess and the evolution of innovative ideas into quality, reliable, robust products and systems for end users. As a key supplier of defence requirements, one of Denel Dynamics’ reputed core competencies locally and internationally, is the fast turnaround of design and development.

Advanced technology is our business trademark; thoroughly satisfied customers - our ultimate goal.

For more information visit
www.deneldynamics.co.za
Denel Integrated Systems and Maritime (Denel ISM) was established in December 2014 as a division of Denel SOC Ltd. The purpose for its establishment was to give immediate effect to calls made in the Defence Review 2014 for the Denel Group to establish a Maritime and Defence Sovereign capability.

Denel ISM is a fully fledged business division of Denel, focussing on three key markets: Defence Sovereign, Maritime, as well as National and Civil Security. Denel ISM has established sovereign capability in areas such as System Integration, Air Defence, Command & Control, Electronic Warfare and Secured Communication. Denel ISM supports the South African Navy with Systems Integration capability and will work to improve the SA Navy’s operational availability through its depth of maintenance and upkeep experience. Denel ISM is the Trusted Sovereign Technology Partner to the SANDF and to the National Security Agencies. Denel ISM contributes to Operation Phakisa’s objective of growing the ocean economy by supporting peace and security in the region.

For more information visit www.denelism.co.za
Denel Land Systems (DLS) is a landward defence systems business and is also positioning itself to participate in the vehicle business.

It primarily serves the South African National Defence Force (SANDF) and international customers as a system designer and integrator, as well as subsystem supplier for artillery, rapid-fire medium-calibre weapons and combat vehicle systems.

The division’s main activities, including the supply of key products and services, are as follows:

• Utilising its high-end technology and engineering capabilities to take complex systems and/or products through their entire life-cycle, from conceptualisation to production.

• Providing product and logistic support, including qualification, maintenance, upgrades and eventual decommissioning, as required.

A prime example is the development of the “Badger” family of new generation Infantry Combat Vehicles (ICV), under ‘Project Hoefyster’.

The Hoefyster project is utilising Denel’s five state-of-the-art modular combat turret variants, equipped with home-grown GI-30 rapid fire cannons (30mm CamGun), 60mm breech loading long-range mortar systems and Denel Dynamic’s Ingwe anti-tank missile systems.

The aim of this project is to replace some of the SANDF’s ageing fleet of Ratel Infantry Combat Vehicles in a phased approach and create specific export potential.

Other products and systems include several artillery systems, combat turrets and rapid-fire small- and medium-calibre weapons, for which a wide range of highly competitive, unparalleled world-class products are available.

Denel has a majority stake in a local vehicle engineering manufacturing company – LMT Products (Pty) Ltd supported by DLS. LMT is significantly strengthening its position as a leading systems supplier and manufacturer in the landward defence and armoured vehicle market.

For more information visit www.denellandsystems.co.za
Mechem, a global leader in creating a safer world by providing continuous quality explosive remnants of war clearance solutions, specialised canine products and services, mine protected vehicles, ancillary equipment, related skills development and field services.

Established in 1960, Mechem specialised in the development of mechanical and chemical solutions for defence-related problems. In 1991 Mechem changed its focus and began its commercial demining efforts.

During the above mentioned period, Mechem has developed a range of creative technologies and equipment including Mine Protected Vehicles. Mechem has been at the leading edge of Explosive Remnants of War clearance, Canine solutions and MPV technology for many years and is internationally acknowledged as one of the most technologically advanced companies in this field. Mechem has been actively involved in Explosive Remnants of war clearance solutions in numerous countries and regions around the world including Afghanistan, Angola, Azerbaijan, Bosnia, Croatia, the Democratic Republic of the Congo, Eritrea, Mozambique, Northern Iraq, Senegal, Somalia, South Africa, South Sudan, Sudan, Taiwan, Uganda and Western Sahara.

Mechem does not only specialise in Explosive Remnants of War clearance solutions but also in the sale of ballistic and mine-protected vehicles (MPV’s), known as CASSPIRs and ancillary equipment, which includes Vehicle-Mounted Mine Detection Systems (VMMDS), personal protective clothing, manual demining kits, deflagration systems and other related equipment.

The canine business has grown vastly over the past few years and the company has expanded its capabilities to specialise in the breeding and the sale of trained dogs. The Mechem Explosives and Drug Detection System (MEDDS), is used for area reduction by taking odour to the dog than taking the dog to the odour. Air samples of a defined area are collected and specialised trained dogs are used to analyse those air samples in a controlled environment. Odour can be analysed for the presence of explosives; narcotics; weapons and ammunition or any other contraband substances. Contraband Detection primarily focuses on complementing law enforcement and security applications and employs both MEDDS and free running detection. Mechem is actively involved in screening cargo at major ports of entry.

Mechem offers the following training: Basic Demining, EOD Levels 1 to 4, Dog Handlers (all disciplines), SASSETA Modules, Demining Management and Specialist Mechem equipment and systems. Training modules can be customised to cater for a range of requirements within Mechem’s core capabilities.

Mine Protected Vehicle

Mechem is the original designer of the CASSPIR, the trusted name in Mine Protected Vehicles. Mechem successfully a large quantity of CASSPIR’s in different variants. Due to the high demand of the CASSPIR’s MPV’s, Production is re-opened to supply new CASSPIR vehicles. Mechem recently launched the CASSPIR NG2000A and CASSPIR NG2000B Models.

Camp Management and Security Services

Mechem has extended capabilities in Camp Management and Security Services. Through the vast experience and knowledge in this field during demining operations, Mechem provides comprehensive, professional services to organisations that are conducting operations in remote or hostile environments where life support services are not readily available. Our broad spectrum of services include protection, management, catering and facility services as well as medical support services to organisations that require these functions to operate in a challenging environment.

For more information visit [www.mechemdemining.com](http://www.mechemdemining.com)
Located near the southernmost point of Africa, Denel Overberg Test Range is a versatile Test Range specialising in in-flight systems performance measurements for the local and international aerospace industries.

Denel Overberg Test Range’s spectrum of services range from tests of short-range guided munitions for land, sea and air combat, to evaluation of modern stand-off weapons and aviation systems. In addition, the Test Range can provide mobile telemetry launch support services at remote sites almost anywhere around the world. Whilst its primary business goal is to meet the strategic flight test requirements of South Africa’s military industrial users, the Test Range has built an enviable reputation with numerous international clients.

The Test Range was established in the mid-eighties as an integrated test facility with the flexibility to allow multipurpose applications. Since final qualification in 1991, it has proved its ability to manage and execute any combination of air, ground and sea flight tests, with quality assurance and performance verification services of the highest order.

Apart from providing extensive in-flight test services to the South African Department of Defence on development programmes such as the A-Darter and Umkhonto missiles, the Test Range’s international business is steadily growing.

In recent years the Test Range successfully executed tests for stand-off weapons and missiles for the German, Italian, Spanish and Singapore Air Forces, with further test series planned for various international clients.

Following past successes of the Test Range’s mobile telemetry support provided for various NASA launch missions, it was contracted by CNES to support various satellite launches, for example the launch of the Automatic Transfer Vehicles (ATV) that was launched from Kourou on an Ariane 5 Launch vehicle. For these missions the Test Range’s mobile telemetry station was deployed at Invercargill in New Zealand.

In order to keep track with advances in technology and changing market needs, the Test Range’s instrumentation systems, facilities and business processes are enhanced on a continuous basis.

The unique ecological location of the Test Range implies that quality services must be delivered within the boundaries of sound environmental management. This philosophy has contributed to the Test Range being awarded ISO14001: 2004 certification. Before every test campaign, all environmental risks are assessed to ensure no irreparable damage is done to the environment.

For more information visit www.denelotr.co.za
Denel Pretoria Metal Pressings, popularly known as PMP, is an integrated manufacturer of small- and medium-calibre ammunition, brass products, detonics, power cartridges and mining drill-bits. Based in Pretoria West, Denel PMP employs around 1 000 people.

PMP is a proud holder of the ISO 9001 certification for quality, ISO 14001 for high environmental standards and OHSAS 18001 for occupational health and safety.

A major portion of PMP’s turnover is through exports, making the company a valuable earner of foreign exchange. The company has been supplying quality products to military and police forces, and to the hunting and sporting fraternities around the world, for more than 70 years. During World War II, PMP produced around 45% of the 303 rounds used by the World Allied Forces – a total of 768 million rounds.

Brass Products

PMP’s non-ferrous foundry and rolling plant produces up to 80 tons of brass daily. A major portion is used for the manufacture of ammunition by PMP itself, with the remainder supplied as brass strip, cups and discs to local and international clients. PMP has been a strategic supplier of brass cups for the manufacture of ammunition to BAE Systems since 2001.

Military Ammunition – Small- and Medium-Calibre

The SANDF considers Denel PMP’s product lines to be of sovereign importance to its requirements. Besides PMP’s full range of small-calibre (5.56mm to 12.7mm) and medium-calibre ammunition (20mm to 35mm) used on navy vessels, helicopters, fighter aircraft and anti-aircraft cannons, as well as infantry fighting vehicles, PMP also produces high quality percussion caps of all types, as well as links for various small- and medium-calibre rounds.

PMP has completed the development of a family of 30mm x 173 medium-calibre rounds for use in new generation infantry fighting vehicles, specifically for the Hoefyster project of the SANDF.

Sporting Ammunition

PMP’s Pro-Amm, Standard and Super ranges of hunting ammunition have established a reputation for quality, accuracy and reliability in South Africa, as well as in the European and USA markets.

Power Cartridges

Its product range includes power cartridges, rocket motors and canopy-fragilisation systems for the safe ejection of pilots from aircraft. UK firm, Martin Baker, also licensed PMP to produce escape systems for fighter aircraft and helicopters.

Mining Products

The company also manufactures rock drill bits for the mining industry, and primary explosive products.

For more information visit www.pmp.co.za
With this recent acquisition by the Denel Group, we forge ahead in growing and transforming into a high technology company with a strong presence in all aspects of defence.

Denel Vehicle Systems (DVS) started operating under the name Olifant Manufacturing Company (OMC) in 1977 when the Olifant Main Battle Tank (MBT) was produced.

The company has developed close relationships with the South African National Defence Force (SANDF), the South African Army, the South African Police Service (SAPS), Armscor, the United Nations and a number of national and international customers and suppliers.

Within Denel Vehicle Systems, there are three different business units, each with its own capabilities and level of expertise:

**OMC**

OMC is a global leader in the design, development and manufacture of mine and Improvised Explosive Device (IED) protected vehicles and wheeled armoured vehicles. It covers all disciplines of the military vehicle spectrum, including conceptualization, design and development, manufacture and production, and in-service support.

OMC is currently responsible for the in-service support of more than 7,000 of the armoured vehicles and military trucks in service with the South African Army and the South African Police Service. This support includes upgrades and re-manufacture, and the supply of spares and support facilities through a nationwide network of dealers. Similarly, OMC, through its own facilities and partnerships worldwide, also supports more than 3,500 vehicles around the world.

The company also provides technical support, spares, training, vehicle upgrades and other services to its local and international customers, directly or through partnerships, teaming agreements and through approved dealers.

**Gear Ratio**

Gear Ratio’s product portfolio ranges from in-house custom-designed and manufactured solutions to standard drive-train options developed in partnership with strategically selected world-class partners.

Products include power shift transmissions, axles, transaxles, torque converters, transfer gearboxes, wheel stations and traction gears, which are used in special on-and off-road vehicles, mining and earthmoving equipment, military vehicles, traction locomotives and industrial machinery.

**Mechatronics**

Mechatronics is a highly capable defence systems business with particular expertise in turret systems and subsystems. Products include Fire Directing Systems (FDS), Remotely Controlled Turrets, Weapon Stations, Fire Control Subsystems (FCS), Shooting Training Systems and related products.

Mechatronics has an excellent track record in developing and providing ballistic FDS and FCS systems for ground and air platforms, including Main Battle Tanks such as the South African Olifant Main Battle Tank and the Rooivalk Helicopter Cannon Turret. The company also designs light turrets and has extensive experience in systems integration, and both land and air turret systems.

Mechatronics is an existing supplier to the South African Armed forces.

For more information visit [www.denelvehiclesystems.co.za](http://www.denelvehiclesystems.co.za)
ASSOCIATED COMPANIES

AIRBUS DS OPTRONICS (PTY) LTD

Airbus DS Optronics (30% shareholding) is a global supplier involved in the development and production of optronics, optical and precision-engineered products for military and security applications. The company’s main activities include the supply of optical sensors, optical head-trackers, laser range-finders, as well as targeting surveillance and sighting systems, to a spectrum of domestic and international defence and security customers.

For more information visit www.defenceandsecurity-airbusds.com/en_US/web/guest/optronics

RHEINMETALL DENEL MUNITION (PTY) LTD

RDM (49% shareholding) specialises in the design, development and manufacture of large- and medium-calibre ammunition, and is a world leader in the field of artillery, mortar and infantry systems and plant engineering. Its business focus is on Asia, the Middle East, South America, South Africa, other African countries and Europe via Rheinmetall AG. Its product portfolio includes large-calibre ammunition (76mm to 155mm), artillery projectiles, propellant, charges, pyrotechnic carriers, mortar bombs, 40mm grenades and various missile subsystems. Plant engineering for various filling and lapping facilities is also part of the product portfolio.

For more information visit www.rheinmetall-defence.com

TAWAZUN DYNAMICS LLC

Tawazun Dynamics (49% shareholding) is a supplier of precision-guided munitions based in the UAE. Tawazun Dynamics is an associated company of Denel as of 1 April 2013 and is in the start-up phase of the business, with a strategic intent to contribute to the industrial capacity of the UAE. The company’s main activities are to install, sub-assemble, manufacture, as well as maintain and provide spare parts for precision-guided munitions for a spectrum of domestic and international defence and security customers, from its modern facilities in the Tawazun Industrial Park outside Abu Dhabi.

For more information visit www.tawazundynamics.ae

TURBOMECA AFRICA (PTY) LTD

TMA (49% shareholding) is the world leader in design, manufacturing and sale of gas turbines for small- and medium- powered helicopters, and has more than 50 years’ experience of cooperation in SA since the first Artouste II engine for an Alouette II was delivered in 1960. In civil aviation, 34% of SA’s turbine helicopters are fitted with TMA turbine-shaft engines. In military aviation, 75% of SA’s turbine helicopters are fitted with TMA turbo-shaft engines. Manufacturing of gears, shafts and five-axis high-speed machining of gearbox casings for the Safran group and Rolls-Royce; Aerospace gearbox assembly; MRO, engine test facilities, parts repair and accessories of Makila, Turmo and Arrius engines; In-house heat and surface treatment facility, including shot peening; and TMA maintenance centre renders a 24-hour customer service over Sub-Saharan Africa.

For more information visit www.turbomeca.co.za
DENEL GROUP VALUES

**PERFORMANCE**
WE EMBRACE OPERATIONAL EXCELLENCE.

**INTEGRITY**
WE ARE HONEST, TRUTHFUL AND ETHICAL.

**INNOVATION**
WE CREATE SUSTAINABLE INVESTMENT SOLUTIONS.

**CARING**
WE CARE FOR OUR PEOPLE, CUSTOMERS, COMMUNITIES, NATIONS AND THE ENVIRONMENT.

**ACCOUNTABILITY**
WE TAKE RESPONSIBILITY FOR ALL OUR ACTIONS.