

## Global Engineering

Sector Review 2011



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# Report

## Introduction

### About the report

This sector report was coordinated by the Catalyst Corporate Finance research team on behalf of the international Mergers Alliance partnership. To compile our findings we conducted interviews with our sector experts in each member firm within the Mergers Alliance partnership.

We also surveyed owners and senior executives within engineered product sector organisations and private equity investors worldwide.

### **Deal Focus**

Within each country's Deal Focus we review merger and acquisition (M&A) activity, focusing on key deals and trends within the engineering sector defined as including those businesses with activities involved in the production of engineered products. Engineered products will typically require a high design input, ongoing product innovation and development and will be manufactured to a high level of precision. We also include a table of recent transactions where the target company is located in the country under review.

Additionally, we provide an overview of the engineered product sector as a whole, highlighting the market structure as well as commenting on the key trends and the factors influencing M&A. We end by providing predications for M&A in the sector over the course of the next 18 months.

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At the time of writing, economies around the world are emerging from the aftermath of the global recession and are on a fragile path to recovery. As you will see from the contributions by our sector experts across the world it is clear that this year and next will bring both opportunities and further challenges for those of us operating in the engineering sector.

In our own specialism of corporate mergers and acquisitions (M&A), engineering transaction levels during the first half of 2010 are showing signs of recovery following a torrid 2009. As trading visibility improves for the larger engineering firms we expect buyer confidence and, in due course, transaction levels to rise.

You will find in our report a great deal of market-leading insight into the key issues facing the sector in 2010 and beyond including: how engineering firms in developed economies have created positions of clear leadership in key sub-sectors, the demand challenges facing engineering firms in emerging economies and the wide ranging implications of recent government policy developments on the engineering sector.

Our work also highlights the key role of the BRIC nations in the globalisation of the engineering sector and in the shaping of M&A strategies of Western buyers.

We also examine how the ownership structure of engineering firms in continental Europe will provide ongoing M&A opportunities for strategic and private equity acquirers.

As the global recovery takes hold, we at Mergers Alliance are ideally placed to help you. Whether you seek growth through acquisition, wish to restructure or realize value in your business, our international advisors are in a unique position to help you – Local knowledge...Global reach. Our member firms have a prominent position in boardrooms across the world and are renowned for delivering award winning partner-led advisory service with seamless international cooperation.

We hope you enjoy reading our report and welcome any thoughts or additions you might like to contribute.

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# Report Highlights

We at Mergers Alliance believe the main factors to shape M&A in the engineering sector over the next five years will be:

#### **Engineering leadership**

Engineering firms, particularly those from developed economies, have created positions of leadership in specific engineering sub-sectors. This advantage has been borne out of decades of innovation through R&D, constant refinement of their global supply chains and robust trading track records. Countries which have developed clear engineering leadership include; Germany in industrial machinery, Japan and Spain in automotive, the US in defence and the UK in aerospace.

#### Globalisation

The globalisation of the engineering sector has resulted in a significant increase in cross-border M&A volumes over the past 20 years. During this period, US companies have been by far the most dominant acquirers of overseas engineering businesses. Acquisitions have been driven by US buyers wishing to access new products and technologies, geographical markets and to gain exposure to higher growth regions.

#### UK

Over half of all engineering deals have been in sectors where the UK has established significant comparative advantage; aerospace, oil & gas and automotive components

#### Russia

State-owned engineering firms will be important players in the M&A market as the government seeks further influence in strategically important sub-sectors

#### **USA**

US buyers are a dominant force in outbound M&A and are now focusing on emerging growth markets. However, when acquisition rationale is primarily IP driven, they still gravitate to engineering-rich developed countries

#### Cnonio

Spain

Spanish engineering firms are expanding overseas, particularly those involved in the traditionally strong power generation and automotive sectors

#### **Brazil**

As the economic engine of Latin America, Brazil is an attractive emerging market. Engineering M&A will be focused on those businesses which support the natural resources sector

#### Italy

The medical equipment engineering sub-sector has seen significant growth, attracting some \$2.5bn of M&A investment over the last five years

#### **Emerging economies**

The growth in the emerging BRIC economies has created a demand for engineering products which cannot be satisfied by local engineering companies alone. Massive public infrastructure investment, growth in the natural resources sector, rapid expansion in consumer spending and booming export markets are all driving demand. To fully capitalize on the opportunities, engineering firms are acquiring new technologies, establishing additional production capacity and partnering with global players.

#### Infrastructure development

The scale of global infrastructure investment is unprecedented and the engineering industry will be pivotal in the delivery of these projects. In emerging economies, new infrastructure is needed to support development and in developed economies countries there is a pressing need to replace existing, obsolete infrastructure. Around the world engineering expertise is increasingly in demand and is stimulating global M&A across the industry.

#### China

Evolving government regulation of the M&A market in China will lead to increased inbound and outbound M&A activity

#### **Government policy**

Following the recession, many countries have emerged with new or chastened governments in office. New policies have been developed to address budget deficits and debt repayment plans, predominantly through austerity measures. Some governments are reverting to protectionist policy in order to defend key sectors, including the use of subsidies, state sponsored consolidation and currency controls to ensure their exporters remain competitive. Policy has also contributed to supporting new markets, especially renewable energy, and almost all governments now have a 'green' policy. Whatever the policy direction taken, we see this having an important effect on M&A within the engineering sector.

#### Ownership structure

Beyond the large engineering conglomerates which serve a number of engineering sub-sectors, the market remains fragmented with a large number of SMEs. These firms are often family owned and focused on a specific engineering niche. This trend is particularly strong in continental European countries such as Germany and Italy, where there are a number of highly attractive M&A targets for domestic and overseas acquirers as well as private equity investors.

#### Japan

A contracting domestic market is forcing Japanese engineering firms to look overseas and acquire exposure to growing international markets

#### Germany

German Mittlestand companies will continue to be attractive mid-market M&A targets to domestic and overseas trade acquirers as well as private equity

#### India

Indian engineering firms will seek to acquire technology and engineering expertise to transfer into their home market

## Brazil



"Leading Brazilian engineering companies are seeking to expand their global footprints,

particularly in Latin American and emerging markets, so we expect to see an upward trend in outbound M&A over the next few years"

Leonardo Antunes, BroadSpan Capital

#### M&A activity on the rise

M&A activity across the whole of the Brazilian economy is at record levels with over 350 deals announced up to September 2010. M&A activity in the engineering sector has however been modest and is unlikely to reach the peak of 2008 but nevertheless is rising. Despite this lower activity level, valuations finally appear to be on the rise, which is a promising development and likely to impact positively on M&A in the sector over the next year.

Many Brazilian engineering companies have attracted interest from foreign buyers, especially from the US and Western Europe, and as a result almost half of all engineering deals over the last four years have involved overseas acquirers. The acquired companies supply products into a variety of end markets, often the automotive sector but increasingly the oil & gas market. Brazil is rich in resources such as iron ore, bauxite and petroleum and is therefore particularly appealing to international companies who are increasingly seeking investments in resource-rich countries.

## Brazilian engineering expands its geographic footprint

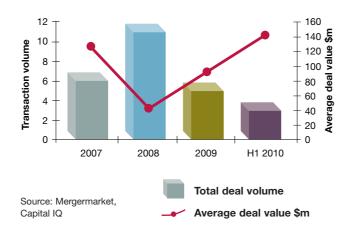
There continues to be interest in outbound M&A with a number of active Brazilian acquirers looking to buy foreign businesses to expand their geographical footprint. This year Brazilian machine tool maker Industrias Romi offered \$110m to acquire Hardinge Inc, a tool maker based in New York and owner of the renowned

Bridgeport marque. Whilst the approach was rebuffed, Romi CEO dos Santos argued at the time "that a combined company will have the scale to invest in strategic opportunities to expand in emerging markets".

Other buyers include Lupatech, a publically listed producer of industrial valves and micro casting parts for the oil & gas sector. The company has been seeking targets across Latin America to expand its product portfolio. In late 2007, Lupatech, together with French private equity firm Axxon Group, acquired Argentina based Aspro, a supplier of equipment for compressing natural gas for \$85m. WEG, another listed Brazilian multinational, producer of electromechanical and electronic systems, is currently looking for targets within the emerging markets and has acquired Instrutech (Brazil), Voltran (Mexico) and Zest Group (South Africa) within the last three months.

This trend for Brazilian outbound acquisitions is likely to continue due to the relative cash strength of Brazilian companies, a booming capital market and the relative strength of Brazilian banks which have opened credit lines for this type of deal.

#### M&A activity



#### Consumer inclusion driving growth

Brazil is the economic engine of Latin America and accounts for at least half of the M&A in the region. It has been amongst the most resilient of global economies during the downturn as a result of lower levels of corporate and consumer debt, which have allowed companies and individuals to deal better with the effects of the financial crisis.

Brazil's economy has continued to expand in 2010 and is expected to grow by 7% this year. This growth is being driven by domestic consumption and is benefiting from millions of people emerging from poverty to join the consumer classes. Brazil's process of consumer inclusion means that more than 40m people are either joining the consumer base or moving to a higher level of consumption.

### Automotive and oil & gas sectors key

Economic development is forcing the country to expand its production capacity especially in sub-sectors such as automotive manufacturing and oil & gas extraction/processing.

Brazil has received substantial investment from automotive manufacturers, particularly from Asia, who have installed production plants to capitalize on the Government's fiscal incentive schemes to increase car sales. This development has directly influenced the recent high growth rates in the autoparts segment.

Growth in the oil & gas sector has been underpinned by recent oil discoveries by Petrobras in the waters off the Brazilian coast. As the main player in the market, Petrobras dictates the shape of growth in the sector and is planning investments of c.\$174bn to 2013, representing an annual increase of 55% compared to their previous five year plan. This commitment by Petrobras will result in significant growth for suppliers of engineered products and should ultimately lead to increased M&A in the oil & gas engineering sub-sector.

#### **Recent transactions**

Date	Target	Description	Acquirer [	eal Value (US\$m)
Jun-10	MWL Brasil Rodas & Eixos	Wheels and axles	Goergsmarienhuette (Germany)	e n/d
Jun-10	CanberaPumps do Brasil	Pumps	ITT Corp (USA)	n/d
Apr-10	Eletrônica Selenium	Loudspeakers	Harman International (USA)	n/d
Dec-09	Hiter Industria e Comercio	Valves	Tyco Flow Control (USA)	n/d
Nov-09	Mueller Mineira	Plastic components	Magneti Marelli (Italy)	n/d
Aug-09	Certain operations of ArvinMeritor	Steel wheels	lochpe-Maxion	180
May-09	Romicron Products	Boring tools	Kennametal (USA)	n/d
Apr-09	Meridian Automotive Brazil	End modules and signal lighting	Citadel Plastics Holdings (USA)	n/d
Jan-09	Flywheel business of Sawem	Flywheels	Brembo (Italy)	4
Nov-08	Vanzin Industrial Auto Peças	Automotive parts	Tuper	n/d

#### **Predictions**

- The trend for foreign companies to acquire Brazilian engineering firms is set to continue in parallel with growth of the wider economy
- Overseas investment by Brazilian engineering firms is driven by a desire for geographic expansion, especially in Latin American and emerging markets
- The oil & gas and autoparts segments will remain the most active engineering sub-sectors for M&A in the next two years

Canada



"In the past, many Canadian engineering firms were considered only as targets for large,

international buyers. This trend is expected to reverse as the strength of the CDN\$, robust corporate balance sheets and the health of the Canadian credit markets enables domestic acquirers to competitively engage in outbound M&A"

Darren Williams, Solaris Capital Advisors

#### Consistent transaction volumes

M&A transaction volumes in the Canadian engineering sector have remained resolutely flat over the last three years with 20 to 25 transactions per annum. The average transaction value however has fallen significantly from \$50m to just \$12m during the first half of 2010 as the sector saw only a handful of very small transactions completed.

The sharp peak and trough in M&A volumes that has characterized the sector in many countries did not occur in Canada. This is partly due to the sector being relatively small in comparison to Canada's primary resources sectors but also due to Canadian corporate fiscal conservatism, which prevented the M&A market overheating as it did so spectacularly in other economies around the world. Canada's major banks emerged from the financial crisis of 2008-09 among the strongest in the world, owing to the country's tradition of conservative lending practices and strong capitalization.

#### Rich target for US buyers

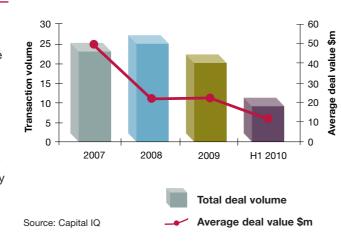
The majority of transactions were cross-border with international buyers acquiring 43 Canadian engineering businesses in the last three years accounting for 53% of volume and 77% of value. This is explained by the fact

that US buvers, despite having similar strategic M&A rationales to domestic Canadian acquirers, are classed as overseas buyers.

In the past, many Canadian engineering firms were considered as targets for large, international acquirers. This trend is expected to reverse as the strength of the CDN\$, robust corporate balance sheets and the health of the Canadian credit markets enables domestic acquirers to competitively engage in outbound M&A.

One such corporate is ATS Automation Tooling Systems, a manufacturer of automation products. In March ATS announced the proposed \$62m acquisition of German group Sortimat. Based in Stuttgart, Sortimat is a manufacturer of specialized assembly systems for medical products and pharmaceutical dosing devices, achieving revenues of c.\$80m in 2009. The acquisition supports ATS' strategy to expand its position in the global automation market and enhances growth opportunities in the key strategic segment of healthcare.

#### **M&A** activity



#### **Economy tied to natural resources**

The majority of Canada's GDP is tied to the resources sectors (oil & gas, mining, agriculture and forestry) as the country continues to exploit its enormous reserves of natural resources. Canada is the US's largest foreign supplier of energy, including oil, gas, uranium, and electric power. Given its great natural resources, skilled labour force, and modern capital plant, Canada enjoys a unique position as one of the US's most important trading

partners. However, the specialist equipment and machinery used in these end markets is predominately manufactured by overseas companies, with Italian and German manufacturers monopolizing supply.

The province of Ontario is Canada's leading manufacturing region, accounting for approximately half of total national manufacturing shipments and is also a major centre for the natural resources industry. In March 2010, The Government of Ontario proposed sweeping new legislation to attract investment in renewable energy technology and create new 'green economy' jobs. The proposed bill, the Green Energy Act (GEA), if passed, will provide significant revenue incentives for businesses establishing and growing renewable energy manufacturing capabilities in the province. Firms such as Canadian Solar, Arise Technologies and of course ATS are likely to be major benefactors from this new legislation.

#### Recent transactions

Date	Target	Description	Acquirer	Deal Value (US\$m)
Aug-10	Micro Thermo Technologies	Refrigeration controls	Parker Hannifin (USA)	n/d
Jul-10	G&B Specialities	Rail signal products	Wabtec (USA)	35
Jun-10	Macro Engineering	Components for plastic film industry	Dalian Rubber & Plastics (China)	9
May-10	Motor Business of Von Weise	DC electric motors	Bison Gear & Engineering (USA)	n/d
Apr-10	NSE- Automatech	Machinery and equipment	NSE Aero North America	n/d
Apr-10	Routes AstroEngineering	Aerospace instrumentation	COM DEV International	1.5
Mar-10	Celco Controls	Automated control systems	High Road Capital Partners (USA)	n/d
Feb-10	Arpeco Engineering	Printing machines	Mark Andy (USA)	n/d
Nov-09	Composotech Structures Inc	Composite structures	Oneworld Energy	n/d
Oct-09	Coretec	Printed circuit boards	DDI Corp (USA)	23.4

#### **Dominant global players**

Engineering sub-sectors in which Canada does possess world leading capabilities include automotive (Magna International), aerospace (Bombardier) and communications (Research In Motion).

Ontario based Magna International is one of the world's largest and most diversified Tier 1 automotive component suppliers, generating \$17bn revenues annually. Magna's success has been built on the diversity of its product offering and the ability to serve OEM clients on a global basis. This success has been supported by strategic international M&A activity. Recent deals include the acquisition of Karmann of Japan (manufacturer of convertible roofs) and Cadence Innovation of the Czech Republic (automotive interior and exterior plastic components and systems). With a net cash position of \$1.5bn, Magna clearly has the fire power to continue making acquisitions and has stated its intention to pursue deals in the emerging markets of India, Russia, South America and China over the coming years.

#### **Predictions**

- The combination of strong balance sheets, functioning credit markets and a relatively strong CDN\$ will enable major corporates to continue be competitive in acquiring overseas
- Many larger, global players have M&A strategies targeting the emerging BRIC economies
- The US will continue to be a major inward investor in Canada across a broad range of engineering sub-sectors







"Although the Mexican engineering market is relatively small at the moment, the development

of global industries such as automotive and aerospace within the country will ensure the sector scales up by 2020"

Luis Garcia, Sinergia Capital

#### Deal volumes recover in 2010

As a result of the global crisis and shortage of credit, Mexico like most other countries around the world suffered the effects of the global recession. Engineering transactions remained at a relatively constant level during 2007 and 2008, dipped in 2009 and have recovered in the first half of 2010. With more deals completed in H1 2010 than the whole of 2009, we are expecting a return to precrisis levels for the full year. So far however average deal values have remained fairly constant over the period.

#### Clear interest from Europe and the US

Around three guarters of all deals done in the Mexican engineering sector typically involve foreign buyers. These acquirers have tended to come from developed countries, particularly Western Europe and Mexico's neighbouring country the USA.

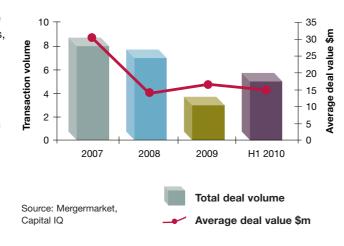
EMTE, a Spanish engineering company specialising in clean-room technology, acquired Eolis América Latina to further consolidate its position in Latin America. With this purchase, EMTE revenue base is now over \$60m and it employs a team of 300 people worldwide. Mexico, as well as other Spanish speaking countries in Latin America are clearly attractive markets to Spanish companies like EMTE and hence the high level of inbound M&A from Spain.

US companies are also routine investors in the Mexican market, both at a 'greenfield' level and through acquisition. Thanks to Mexico's membership of NAFTA it is allowed to trade freely with the US and Canada and also has free-trade agreements with more than 30 other countries including members of the European Union and Japan. A key reason underlying much of the foreign investment within Mexico has to do with the country's extensive network of these free trade agreements and double taxation treaties, with respect to corporation tax.

#### **Latin American expansion**

The MERCOSUR trade agreement also has a positive bearing on Mexican interaction with Latin America, WEG. a Brazilian engineering multinational, recently invested in Voltran, a Mexican transformer manufacturer, taking a controlling stake of 60% in the business. The partnership between the two companies began in 2006, when WEG acquired a 30% stake in Voltran from the controlling shareholders, the Jimenez family. Voltran manufactures power and distribution transformers and recorded revenues of around \$70m in 2009. WEG's CEO claimed "the acquisition brings synergy gains which will allow our progress in the local production of new lines, such as dry transformers and to supply more complex solutions, such as power substations."

#### M&A activity



#### Auto industry relocating to Mexico

Despite the tough trading conditions within the worldwide automotive industry, the sector remains attractive in Mexico. A number of international OEMs continue to relocate production facilities to Mexico to benefit from a lower cost base. Exports of vehicles from Mexico internationally have increased over the last five years and strategic and institutional investors continue to invest incrementally.

One of the most notable automotive deals was the \$75m acquisition of Nugar, a producer of autoparts, by a joint venture between DESC and Spanish firm CIE Automotive in 2007. The transaction allowed the DESC-CIE joint venture to strengthen its position within the industry and take advantage of the gradual relocation of automotive industry suppliers to Mexico. CIE Automotive then acquired the 50% it did not already own from joint venture-partner Grupo Kuo SAB de CV (formerly DESC) for \$90m in a deal which ultimately completed in early 2009. In the meantime CIE Automotive made the acquisition of Pintura y Ensamble for \$33m, securing its two production plants based in Saltillo and de Ramos Arizpe.

Many of the engineering sector's M&A transactions involve companies supplying into the automotive industry and we believe this will continue over the next two years.

#### Suppliers to aerospace OEMs

As a result of Mexico's membership of NAFTA and its increasing reputation for quality certified production and cost competitiveness, local aerospace manufactures are now suppliers to major OEMs including Boeing, Airbus and Bombardier. This development means that Mexico now ranks as one of the Top 10 largest suppliers of aerospace products to the US market, above many leading Asian suppliers such as China and South Korea.

Whilst M&A activity in this sector is low at present, it is inevitable that consolidation will occur at some point as firms seek to grow through acquisition or look to eliminate competition.

#### Recent transactions

Date	Target	Description	Acquirer	Deal Value (US\$m)
Jul-10	Eolis América Latinacontrols	Air treatment systems	COMSA EMTE (Spain)	n/d
May-10	Spirax-Sarco Mexico	Steam products and pumps	Spirax-Sarco (UK)	15
May-10	Voltran	Power transformers	WEG (Brazil)	n/d
May-09	CIE DESC Automotive	Automotive parts	CIE Automotive (Spain)	90
May-09	CarMex	Automotive parts	HP Pelzer (Germany)	n/d
Mar-09	Pintura y Ensamble	Automotive parts	CIE Automotive (Spain)	33
Sep-08	Alpe SA	Electric heating elements	NIBE Industrier (Sweden)	25
Jun-08	Clemex Mexico	Engine bearings	MAHLE GmbH (Germany)	n/d
Apr-08	Damy Cambios de Via	Railroad components	VAE Nortrak (USA	) n/d
Nov-07	Hermosillo Plant	Interior auto components	IAC North America (USA)	a 17

#### **Predictions**

- Given the low starting point, it is unlikely that the Mexican engineering sector will generate substantially more M&A transactions in the short term, however the trend is upwards
- We will continue to expect greater inbound M&A than outbound, especially by companies located in the US, the European Union and Brazil
- The growth in the Mexican aerospace and automotive industries will inevitably lead to increased investor interest in the sector, which will translate to some extent into M&A activity



"The global recession has helped US-centric engineering firms realize the importance of

diversifying their markets internationally, thus diminishing their exposure to a single geography"

Horacio Facca, Headwaters MB

#### A return to pre-crisis M&A volumes

First the good news: after overcoming the worst year for M&A in a long time, 148 engineering deals were announced during the first two quarters of 2010. On a pro-rata basis, 2010 is on track to achieve a similar number of transactions to 2007. It appears we have returned, to some degree, to pre-crisis levels of M&A activity.

However, valuations and average transaction size are entirely another story. The value of engineering M&A in 2010 stands at \$8.9bn so far, considerably below the \$30.8bn achieved in 2007. Average deal values have fallen by over a third to \$162m this year as buyer appetite for larger, riskier transactions has diminished and valuation multiples lowered. This new environment of attractive valuations for buyers and slowly adjusting expectations of sellers has created great opportunities for well-positioned strategic acquirers and opportunistic financial buyers.

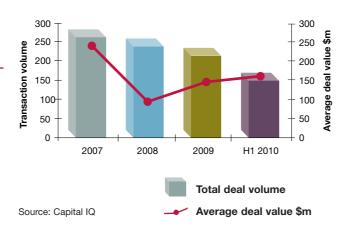
#### Appetite for aerospace deals

In March, Triumph Group bucked the trend for smaller deals by announcing 2010's first mega-deal, the \$1.6bn acquisition of Vought Aircraft from private equity investor The Carlyle Group. Vought is a leading global manufacturer of aero structures for commercial, military and business jet aircraft and generated revenues of \$1.9bn in 2009.

Vought's customer base is comprised of the leading global aerospace OEMs and over 80% of revenue is from sole source, long-term contracts. The integration of Vought with Triumph will create a leading Tier 1 capable supplier with strong positions in commercial and military platforms.

From 1995 to 2010 aerospace sector multiples averaged 11.5x EBITDA, peaking in 2007 at 14.3x. Since then, valuations have come down substantially. The Vought transaction closed at 5.8x EBITDA, which is consistent with the trend for substantially lower multiples across the wider US engineering sector.

#### M&A activity



#### Private equity in exit mode

The number of transactions involving private equity as proportion of total US engineering transactions has diminished steadily since 2007. Around 24% of acquisitions in 2007 were completed by financial investors compared to 8% in the first half of 2010. Restricted conditions in the credit markets and continuing economic uncertainty have been the driving factors behind this sharp fall.

US private equity firms have hundreds of billions in committed but uncalled capital that needs to be invested in the next three years or returned to investors. General Partners are deeply incentivized to put this capital to work, so we expect private equity activity to pick up in the next year. However, as strategic buyer appetite returns, recent data suggests that the second guarter of 2010 was the most active three month period for US private equity exits in nearly two years.

One such private equity exit was DLJ Merchant Banking Partners sale to Goodrich of DeCrane Holdings (Cabin Management Assets) for \$280m. Goodrich paid just under 8x EBITDA. Going forward, we expect Goodrich to continue to be interested in M&A opportunities particularly as OEM production rates accelerate, Goodrich's out of warranty installed base grows and aftermarket demand rebounds.

#### Geographic diversification an imperative

Historically US acquirers have been the dominant force in outbound M&A. The global recession has helped US-centric engineering firms realize the importance of diversifying their markets internationally, thus diminishing their exposure to a single geography. Many are now also focusing on politically-stable, Western-friendly countries with compelling demographics, such as Eastern Europe, Brazil and India. When the M&A rationale is primarily driven by the need to access intellectual property, US firms tend to gravitate more towards engineering-rich countries such as the UK, Germany and Japan.

#### Government policy will impact engineering sector

Highly-engineered products and processes account for about 35% of the US GDP. Virtually all key engineering sub-sectors have dominant, large, well-known US players, ranging from Boeing in aerospace and Exxon Mobil in oil & gas to Raytheon in defense. Current government policy will have an impact in all these sectors.

In 2009, 30 Defense programs were cut yielding an estimated \$330bn in future budget savings. Despite these cuts, the US will remain the number one Defense spender in the world, accounting for 41% of the top 15 world defense spenders worldwide.

The American Recovery and Reinvestment Act of 2009 claims to be distributing \$787bn across multiple US geographies and industries with the twin objectives of generating employment and revamping decaying US infrastructure. The two sub-sectors that appear to benefit most from the legislation are construction and energy, including nuclear power. Finally, the ban on offshore drilling, which is due to expire at the end of November will inevitably have an effect on the oil & gas engineering sector.

#### **Recent transactions**

Date	Target	Description	Acquirer	Deal Value (US\$m)
Aug-10	Godwin Pumps of America	Pumps	ITT Corp	585
lun-10	Vought Aircraft Industries	Aerostructures	Triumph Group	1,600
un-10	K-TEK	Level detection devices	ABB (Switzerland)	n/d
May-10	Ralph A. Hiller	Nuclear actuators	Rotork (UK)	8
Mar-10	Equipment Technology	Produces aerial lifts	Palfinger AG (Austria)	25
/lar-10	Eagle Tool & Machine	Precision machined tools	Heroux-Devtek (Canada)	34
Dec-09	Quincy Compressor	Air compressors	Atlas Copco (China)	190
Sep-09	Hi-Shear Technology Corp	Pyrotechnic devices	Chemring Group (UK)	132
Sep-09	Axsys Technologies	Precision components	General Dynamics	643
Jul-09	Certain assets of Vought	Aerostructures	Boeing Co	1,002

#### **Predictions**

- Surplus cash on corporate balance sheets in the US, combined with compelling valuations point to rebounding domestic M&A activity especially if the US market turns more optimistic about the global economic outlook
- Inbound M&A is expected to continue, as favorable valuations give overseas acquirers extra motivation to establish or expand their North American footprints
- The volume of private equity acquisitions is expected to increase as committed capital is put to work over the coming year

## China



"Chinese companies will increasingly look aboard to acquire engineering technology and expertise

which can be transferred back into their domestic market"

Keith Pickering, Catalyst Corporate Finance

### Engineering M&A to reach record levels

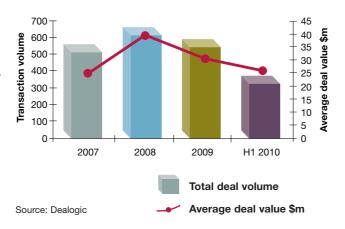
Transaction volumes in the Chinese industrials / engineering sector have rebounded strongly during the first half of 2010 following a fall of 10% in 2009. On the basis of H1 2010, engineering M&A on a pro-rata basis, is forecast to achieve record levels in 2010, representing approximately a third of all M&A activity in China. The moderate fall in M&A activity in 2009 and strong start to 2010 reflects how well the Chinese economy has navigated the global recession.

M&A activity in China has historically been driven by domestic acquirers given the regulatory challenges international buyers faced when entering the Chinese market. Domestic consolidation is particularly prevalent among engineering firms which provide equipment to support China's huge public infrastructure development programme. However, as the regulatory burden lessens, inbound M&A from overseas acquirers in the engineering sector has been on the rise, now accounting for a fifth of all transactions. Overseas buyers are primarily attracted by the opportunity to acquire exposure to China's staggering GDP growth which has grown at a compound annual growth rate of 10% over the past decade.

#### Investment in renewable energy

Transactions have occurred across all sub-sectors of the Chinese engineering sector. However, the long term growth potential in power engineering and renewable energy has attracted significant recent interest. The Chinese wind power sector is forecast to grow rapidly over the coming decade, in line with the government's plan to increase the total installed wind power base from 12 GW in 2008 to 150 GW by 2020. Recent deals include, Hong Kong based private equity firm Affinity Equity Partners' \$200m buy-out of Beijing Leader & Harvest Electric Technologies, and Galaxy Semiconductor's \$127m acquisition of Chengde Ruifeng Renewable Energy.

#### M&A activity



#### Acquisition of technology and brands

Outbound M&A activity by Chinese engineering firms is primarily focused on acquiring technology and engineering expertise which can be transferred back into their domestic market. Chongqing Machinery & Electric Co's acquisition of UK based Holroyd Precision, a manufacturer of precision tools, is a prime example of how mid-market companies are being acquired for their engineering know-how. Another interesting example was China International Marine Containers' (CIMC) acquisition of TGE Gas Engineering, a Luxembourg based specialist in bulk storage of refrigerated gasses for \$50m. A deal that was clearly beneficial to CIMC in terms of capturing intellectual property and expertise and also to TGE by gaining access to the valuable Far East commercial market of CIMC.

The acquisition of respected global brand names is another important driver of large, outbound M&A. A recent example was Chinese car maker Geely Auto's acquisition of Volvo from Ford for \$1.8bn.

#### Continuing economic growth

Following the implementation of a two year, \$586bn economic stimulus package in 2008, the Chinese economy sustained impressive growth during the global downturn. The stimulus package delivered tax cuts and vastly increased spending on public infrastructure projects including roads, railways, schools and hospitals. The stimulus package is widely expected to end in 2010 as planned. The Chinese government is now taking measures to limit bank lending and dampen a rapidly over heating property market in an effort to control inflation.

China's continued expansion through the recession has acted as a lifeline to many engineering exporting countries. China's demand for engineered goods to support the massive infrastructure build out and the continued growth in the country's natural resources sector has taken up the slack of reduced demand from developed economies. At a macro level, imports to China increased to \$1trn in 2009, giving a ten year compound annual growth rate of 20%.

#### Regulatory regime remains a hurdle

The regulatory environment for both inbound and outbound M&A in China is evolving. In years gone by, regulation had been designed to restrict, even block, international investors in favor of domestic acquirers / investors. The government has now implemented a number of initiatives to ease the regulation of the M&A market. Firms engaging in outbound M&A can now benefit from government subsidies and less restrictive regulations when trying to securing acquisition financing. However, the regulatory burden remains significant, large outbound deals still require Chinese government approval from five different government departments (six if the business is a state-owned enterprise).

One area in which the regulatory burden has eased is for foreign private equity firms. Regulations have evolved to encourage foreign private equity firms to operate yuandenominated investment funds. Funds representing domestic investors face fewer regulatory obstacles compared to overseas funds and this has translated into a sharp increase in fund commitments during the first half of 2010 which we expect to translate into deal flow in 2011.

#### **Recent transactions**

Date	Target	Description	Acquirer	Deal Value (US\$m)
Apr-10	Chengde Ruifeng Renewable Energy	Wind turbine blades	Galaxy Semiconductor	127
Apr-10	Hukai Electric	High voltage breakers	LS Industrial Systems (South K	n/d orea)
Feb-10	Tau Energy Products	Heat exchangers	Danfoss District Energy (Denmark)	n/d
Dec-09	Tieben Steel Co	Metal components	Jinsong Special Steel	104
Nov-09	Jiangsu Tieben Iron and Steel	Iron products	Changzhou Jiajiang Material	29
Nov-09	Shenzhen Anytone	Power supplies	New Energy Systems	24
Oct-09	Division of Best Solar	Crystal solar modules	LDK Solar Co	21
Oct-09	Beijing Leader & Harvest Electric	Motors and wind turbines	Affinity Equity (Hong-Kong)	200
Oct-09	Changzhou Marine Cable	Marine cables	Zhongli Science And Technology	22
Sep-09	High-Voltage Cable Factory	High-voltage cables	Nkt Cables (Denmark)	26

#### **Predictions**

- Chinese engineering M&A activity is expected to continue at a similar level, especially for businesses connected to the country's infrastructure build out
- As regulatory hurdles soften over time, we expect that inbound M&A will grow as a proportion of overall M&A
- Chinese companies will be selective over overseas acquisition focusing on companies with leading technologies or recognised brand names

## India



"With a GDP growth rate in excess of 8% in 2009 and 2010, we have seen the emergence of several

\$50-\$100m companies across the engineering, power and mining sectors. These companies present good consolidation platforms for global players and there is growing acceptance of the merits of such alliances by these domestic mid-sized businesses"

Sapna Seth - Singhi Advisors

#### High levels of M&A again in 2010

The Indian engineering sector continues to be buoyed by robust internal consumption, which has encouraged both inbound as well as outbound cross border M&A. Inbound acquisitions were generally made by European and US buyers, however there are a number of Indian engineering corporates such as Mahindra & Mahindra who continue to acquire both at home and abroad.

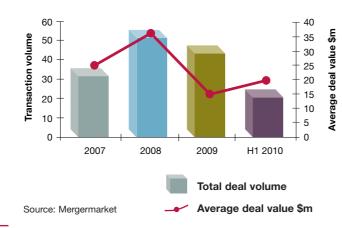
Deal volumes and values in 2010 are expected to be in line with 2009 levels, although it appears that the average transaction values are on the rise, currently around \$20m for disclosed deals.

### Accessing growth markets a priority for overseas buyers

One of the more notable transactions of early 2010, and the largest to date, was the acquisition by Prysmian SpA, an Italian firm and one of the world's leading cable producers, of a majority stake in Ravin Cables for \$37m. Based in Mumbai, Ravin is one of India's leading cable manufacturers and a key supplier to the power industry.

India is planning to add over 100 GW of capacity before 2017 and Prysmian was clearly positioning itself to capitalize on this infrastructure build-out. We expect further significant inward investment through acquisition (and JVs) across the power sector over the next three years especially of engineering businesses with interests in transmission equipment such as cables, switchgear and transformers.

#### M&A activity



### Going abroad

Whilst the Indian engineering sector is clearly full of opportunities for growth, local firms face a number of challenges in capitalizing on them. Larger foreign multinationals operating in India are often better equipped to respond. Local firms may have little experience in executing large scale projects or may lack technological or process know-how. This has prompted several Indian companies to acquire overseas to address these weaknesses.

Equally, the larger Indian corporates are seeing opportunities for growth beyond India, often in the emerging markets of Asia, Africa and South America and to a lesser extent in the developed economies. Mahindra & Mahindra, Crompton Greaves and Ashok Minda are prominent Indian engineering companies which have made a number of acquisitions in the automotive, power and aerospace sectors in recent years. Depressed valuations due to the recent recession in the developed world have increased the attractiveness of an outbound acquisition strategy.

#### Engineering is a national focus

The Indian engineering sector accounts for c.12% of India's economy and it has been growing at a steady pace over the last decade. Long dominated by heavy engineering it is highly structured and technology driven.

An important feature of the engineering industry has been its ability to spring off a whole sector of small and medium enterprises, which become an important part of the supply chain due to their contribution to cost competitiveness and employment generation. Despite the global recession, the engineering sector continues to grow and the growth momentum is expected to continue for the next few years primarily on account of the government's increased emphasis on infrastructure and industrial development as well as engineering-led exports.

The Ministry of Commerce sponsored EEPC INDIA (Engineering Export Promotion Council) sets ambitious targets for the total level of Indian engineering exports, and helps Indian engineering businesses penetrate new or expand existing export markets. This emphasis on greater integration into the global marketplace has clear implications for overseas M&A in the years to come.

## Next decade of investments – energy, mining and ports

The planned infrastructure spending for the five year plan ending in 2012 has been targeted at \$500bn, which is likely to be doubled to \$1trn in the following planning period. This planned infrastructure spending is across all core sectors which directly influence the engineering sector.

In the previous decade substantial investments have been made in core infrastructure like roads, airports, oil & gas supply and telecom networks. Private equity investments alone in the past three years in infrastructure have amounted to over \$3bn.

The next decade however is expected to see substantial investment flowing into energy (generation, distribution and transmission), mining, water and waste treatment and ports infrastructure. We have begun to see this reflected in the recent trends in M&A and private equity investment in these sectors.

#### **Recent transactions**

Date	Target	Description	Acquirer	Deal Value (US\$m)
Jun-10	Parixit Industries	Agriculture irrigation systems	Emtelle Holdings (Netherlands)	n/d
Jun-10	Kartik Steels	Castings	Manoir Industries (France)	n/d
Jun-10	Valves division of Mazda	Vacuum pumps and valves	Circor Internation (USA)	al n/d
May-10	Reva Electric Car	Electric car manufacturer	Mahindra & Mahindra	n/d
May-10	Valeo Minda Electrical Systems	Automotive components	Valeo (France)	n/d
Mar-10	RPG Cables	Power and telecom cables	KEC International	25
Mar-10	Pump business of Larsen & Toubro	Petrol and LPG dispensing systems	Gilbarco Veeder-Root (USA	30 A)
Jan-10	Sanfield	Structural protection systems	Maurer Sohne (Germany)	n/d
Jan-10	Standard Electricals	Electrical distribution equipment	Havells India	26
Jan-10	Ravin Cables	Power cables	Prysmian Spa (Italy)	37

#### **Predictions**

- The next decade in Indian engineering sector belongs to power and energy, mining, water and sewage treatment and port infrastructure. These sub-sectors will witness an increase in both domestic and cross-border M&A activity
- Inbound transactions will continue to dominate the total M&A deal activity. There will also be significant joint venture opportunities for technical and operational collaboration for large global players from the developed nations
- Average deal values will continue to increase due to the incremental future opportunity. Companies with the ability to participate and deliver mega projects will attract higher valuation multiples

Area: 377,944 sq km



"A shrinking domestic market is forcing Japanese engineering businesses to consolidate

their position at home while seeking exposure to international growth markets"

Tetsuo Yamazaki, IBS Securities

#### Stable M&A volumes

Despite the effects of the global recession, the Japanese engineering sector has enjoyed stable levels of M&A in recent years, with full year 2010 transaction volumes expected to be similar to those of 2009. This sustained level of activity has been due, in part, to larger firms restructuring, and mid-market firms acquiring to gain additional scale to survive in Japan's highly competitive domestic market.

Average deal sizes have on the other hand been falling rapidly, with 2010's average value being nearly five times less than in 2009. This decline can be attributed to expedited consolidation by SMEs and larger groups making smaller infill acquisitions, rather than engaging in risky, larger transformational deals.

#### **Cultural differences limit** cross-border activity

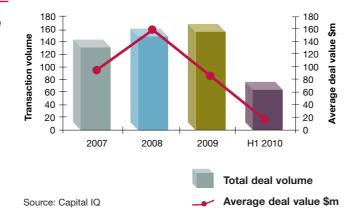
Japan has traditionally seen very low levels of inbound M&A from foreign trade buyers or financial investors – typically less than 10% of total volumes. This low level of activity is due to a number of issues, primarily the persistent economic malaise often referred to as 'Japan's lost decade', but also due to perceived differences in cultural and business practices. These issues can often lead to business integration and operational challenges for the acquirer, which ultimately erodes value.

A recent notable exception to this trend was the \$222m acquisition of Hoya Corporation's hard disk glass media manufacturing business by US firm Western Digital

Corporation in April. This deal was Western Digital's first acquisition outside the US and provides them with access to new R&D capabilities and exposure to key Asian markets.

Asian buyers, particularly from China and India, have been interested in Japanese engineering firms, typically looking to gain access to their product technology, which is often industry leading. Japan is considered more attractive than the US, as fears of a double-dip recession continue there, and more attractive than Europe, which is troubled by ongoing sovereign debt issues.

#### M&A activity



#### Private equity investment on the rise

Historically the engineering sector has seen a consistently low level of private equity involvement, however, so far in 2010, 10% of deals in the sector have been completed by private equity buyers. This increase is attributed to greater trading visibility for funders and improving credit conditions in Japan. There is also a lack of viable exit options for private owners and therefore they are prepared to sell stakes to private equity firms, releasing some equity immediately.

One private equity firm of particular interest is China based CITIC Capital Partners, who have been actively investing in Japanese companies for a while. CITIC are focused on mid-market investments in manufacturing companies which have strong brands and technology, and can benefit from greater access to the Chinese market. CITIC recently acquired a 67% stake in the Japanese container and packaging manufacturing company Tri-Wall K.K for an estimated \$66m.

#### Engineering has strong roots in Japan Recent transactions

Japan prides itself on being known as a "mono tsukuri" or "making things" culture and from a wider perspective, the engineering industry in Japan covers a broad range of sectors including automotive, machinery and electronics. Surprisingly, engineered products in Japan account for only 11% of the country's GDP, contrasting starkly with services which contribute to more than 75%.

Driven by the strong Yen and shrinking market due to the declining population, companies in the sector have continued to expand abroad. Domestically, lower tier companies have been consolidating in an attempt to counter the effects of the low cost competition from abroad, especially Asia.

Mid-sized Japanese engineering firms, particularly in certain niche sectors such as small electric motors, have been active in acquiring businesses globally. Such companies include Minebea and Nidec, whose acquisitions include Sole Motors, an Italian manufacturer of motors for household appliances.

#### Key sectors are transforming

There has already been significant consolidation in the Japanese automotive parts industry over the past twenty years. The Renault-Nissan alliance, which was established in 1999, started a review of automotive parts companies with several major mergers forming the first tier supplier companies of Calsonic-Kansei and Jatco. Much of the current M&A in this sector is among second and third tier suppliers, who are hoping to gain new business and cut costs.

Outside of Japan, the component manufacturers tend to follow the assemblers in setting up new overseas production facilities, either acquiring local part makers or in most cases making greenfield investments. Total sales of the 82 member firms in the Japan Auto Parts Industries Association declined 17% in 2008 with operating profit declining 92%.

The heavy machinery industry, which includes companies such as Mitsubishi Heavy Industry (MHI) and Kawasaki Heavy Industries have diversified into new areas such as aerospace, renewable energy technologies and transportation systems, while divesting non-core businesses. In 2008, MHI sold its paper manufacturing machinery business to Metso of Finland, and in 2007 sold its turbo molecular pump business to Shimadzu Corp for \$26m.

Date	Target	Description	Acquirer	Deal Value (US\$m)
May-10	Marktec Corp	Testing equipment	CCH5	47
May-10	RK Japan	Automotive parts	Kilang (Malaysia)	10
Apr-10	Hoya-Hard Disk Media	Hard disk manufacturing	Western Digital (USA)	233
Feb-10	EXCEL Inc	Solar batteries	Ishi Hyoki	19
Dec-10	Nikko Electric	Automotive parts	Ningbo Yunsheng (China	13
Nov-09	Sony Mfg Systems	Measuring instruments	Mori Seiki	66
Nov-09	Panasonic	Electric motors	Minebea	n/d
Oct-09	Sanyo Energy	Batteries	FDK Corp	70
Aug-09	Nippon Muki	Filters and equipment	Daikin Industries	53
Aug-09	EvatechCo	LCD manufacturing	A-Power Energy (China)	50

#### **Predictions**

- Globalization is still the key for large Japanese engineering groups. Those with significant surplus cash can be expected to be more aggressive in outbound M&A in 2011
- Mid-sized Japanese companies will seek new growth markets, especially in Asia and emerging markets
- Consolidation will continue in the Japanese domestic market amongst the second and third tier suppliers, for a long as the strong yen places them at a cost disadvantage compared to foreign competitors



"Higher risk, capital scarcity and investor caution has led to subdued M&A activity.

This scenario is forecast to persist through 2010 and post-recession trends suggest a shift away from an outward M&A focus towards maintaining strong balance sheets"

Pieter Venter, Bridge Capital Advisors

### Some encouraging signs from the sector

There have been relatively few engineering transactions in South Africa in recent years if compared to other western countries with simular populations, such as the UK. Engineering firms have remained conservative in their approach toward M&A investment. The poor record of economic stability over the last few years has not helped and this has had a negative effect on concluding deals.

Improved liquidity and easier access to funding was sustained through H1 2010 and has led to a slight growth in M&A activity across all sectors if compared to H1 2009. Whilst the overall level is still low, we are seeing some encouraging signs for engineering in 2010, with a number of smaller transactions having already been completed. Transactions have included Hudaco's acquisition of Filter & Hose for \$37m and Germany-based Becker Mining Systems acquisition of EMIS Sales, which are both mining engineering deals.

#### Interest from overseas in SA

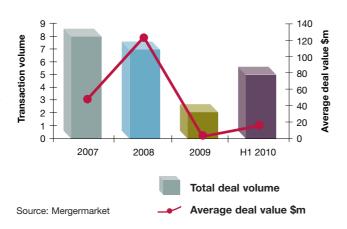
Since the start of 2007, more than a third of acquisitions have involved foreign buyers. A significant proportion of these deals occurred in 2007, where almost two thirds of the companies were acquired by buyers from countries such as the US, UK and Germany.

This interest in South Africa is due to the opportunities for growth which it presents to those firms from developed countries, which have already largely exhausted the market in their home countries. Emerging markets on the whole have seen higher levels of M&A in 2010, partly as these countries have rebounded quicker post-recession than their developed market counterparts, giving rise to greater investor confidence.

#### Private equity participation low

Despite South Africa being home to a number of large private equity firms, including Ethos Private Equity and Pamodzi Investments, there have only been three private equity transactions in the engineering sector over the last three years, all of which occurred in 2008. The largest of these deals was the \$698m buyout of the major electrical engineering group Actom SA, by a consortium led by UK private equity firm Actis Capital. Although Actis are UK based, they have been primarily focused on emerging market opportunities and have been investing in countries including Brazil, Egypt, Malaysia and India.

#### M&A activity



#### 'Companies Act' to facilitate M&A

The new South Africa Companies Act, which is due to come into effect by the end of 2010, will alter the current Scheme of Arrangement clauses. These clauses are a popular method of implementing takeover transactions through a court approval process, when 75% of shareholder approval is reached.

Under the new act, court approval will only be required in limited instances thus simplifying the approval process and making takeover transactions much easier to complete where there are no objections. This change should promote increased deal flow in all sectors, despite increasing the personal liability of the directors.

#### **Economic conditions remain subdued**

A slow-down in engineering activity post-World Cup is expected in H2 of 2010, although to some extent the effects have been mitigated by the recent interest rate cuts (to a 30-year low) alongside improved consumer fundamentals. Additionally, easing inflationary pressures have reduced debt servicing costs.

The general decline in economic activity shows signs of having bottomed out now, although it is expected that private sector investment will remained slightly depressed for the next 12 months.

### Government infrastructure spending is key

The resumption in government infrastructure spend will continue to remain a key factor for the South African engineering industry. Reduced industrial and mining activity; limited private sector commercial investment; delays to the Eskom power program; delays and disruption to the Gautrain Project; trading conditions in the steel reinforcing sector; as well as the ongoing strength in the SA Rand and higher costs of financing have all impacted on the industry and intensified competition.

Opportunities will in all likelihood emanate from public infrastructure contracts, private and renewable power projects and concessions as well as recovery in traditional mining, real estate and civil works markets.

#### **Recent transactions**

Date	Target	Description	Acquirer	Deal Value (US\$m)
Jun-10	Filter & Hose	Mining machinery	Hudaco	37
Apr-10	Braybar Pumps	Pumps	Kirloskar Brothers (Netherlands)	2
Mar-10	Wegezi Power	Transformers and switch gear	Invicta	n/d
Mar-10	Cryoshield	Cryogenic process equipment	PSV Holdings	n/d
Feb-10	Emis Sales 2002	Electrical mining equipment	Becker Mining Systems (German	n/d y)
Dec-09	Phoenix Power Cables	Wire and cable manufacturer	General Cable (US)	n/d
Aug-08	ACTOM	Power generation parts	Actis Capital (UK) and Old Mutual	698
Mar-08	Aard Mining Equipment	Mining machinery	Nedbank Capital Matasis Investme	
Jan-08	Astore	Specialised pipe fittings	Hudaco	16
Dec-07	CH Warman Pump	Slurry pumps	The Weir Group (UK)	233

#### **Predictions**

- Based on historical trends, the engineering sector is likely to maintain relatively low levels of M&A activity given the limited number of players
- M&A activity is however expected to gain some traction in 2011, as companies which have built up strong balance sheets and cash flows start to target acquisitive growth companies in niche sectors
- Growth in public sector infrastructure spending and a recovery in the traditional mining and real estate markets will help the engineering sector as a whole



"German engineering firms are at the forefront of innovation, especially in the industrial equipment and

machinery sub-sector. The effect of the sharp increase in order intakes following the recession will feed through to the M&A market in 2011 seeing the return of both international and domestic strategic acquirers and private equity investors"

Philipp von Hochberg, CH Reynolds Corporate Finance

#### Overseas buyers active

M&A activity in the German engineering sector has not been immune to the effects of the global slowdown. The total transaction value peaked at \$6.1bn in 2007 before falling by 90% during 2008 and 2009 registering just \$600m. Based on the first half of 2010, transaction volumes are on track to be broadly similar to those achieved in 2009. Sentiment in the market suggests that the worst of the M&A malaise is over and that activity levels will begin to rise steadily from 2011 onwards when the steadily increasing order intakes will begin to be reflected in the order books and P&L accounts of engineering firms. This applies especially to those businesses operating in the machinery and equipment sector.

Since 2007 overseas buyers have been the major force completing 40% of deals, with a third sold to private equity buyers and the remainder sold to domestic acquirers. In gerneral, interest from abroad in the German engineering sector is not surprising given its worldwide reputation for high quality, innovative products and highly efficient production processes. Over the last three years, global giants such as Honeywell, Moog and Aker Solutions have all made substantial acquisitions of German engineering businesses. Private equity investors were very active until Q4 2008, especially in the industrial machinery and equipments sector on both the buy-side and sell-side.

#### M&A in 2009

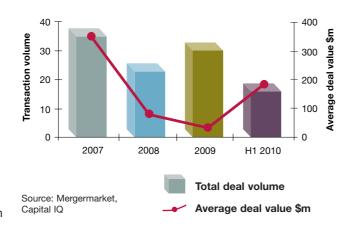
In 2009 there were only a few large transactions (reflected by an average deal value of below \$10m), also the expected wave of distressed sales did not materialise as domestic banks decided to hold their engineering assets through the downturn aided in part by the extension of the government's short term allowance which assists businesses with their personnel costs.

During the economic crisis there were many opportunities for strategic M&A to consolidate specific niches and to position businesses for the economic recovery. For example, the acquisition of Kiefel Extrusion by plastic processing equipment manufacturer Reifenhauser.

The acquisition of Kiefel improves Reifenhauser's market position in a specific technical niche and the combined business will be able to leverage the ability to deliver a fully integrated offering as the demand for capital equipment recovers.

In the automotive sector a remarkable number of well known automotive suppliers went into administration or were acquired by private equity turnaround funds, for example the acquisition of TMD Friction by Pamplona Capital.

#### **M&A** activity



#### **Growth from international markets**

After a protracted decline in the German engineering sector, there are now strong signs of life returning to the market as 2010 order intakes are reported to be 30-60% higher than 2009. This is primarily driven by strong export demand for German engineered products. More than 70% of capital goods produced by German companies are exported to international markets and therefore the future growth path of the sector is intertwined with the health of the global economy. Growth in recent years has been primarily driven by demand from emerging markets in Asia, particularly China.

#### **Industry structure**

Beyond the dominant global engineering giants (e.g. Siemens, GEA, Robert Bosche and Voith) the German engineering market remains highly fragmented, consisting mainly of mid-sized family owned, highly innovative, niche players. These businesses are referred to as Mittelstand companies. Some of these businesses are hampered by succession issues and funding needs which make them attractive targets for larger strategic acquirers of mid-markets orientated private equity firms.

However, we should also note that certain Mittelstand companies are now aggressively seeking international acquisition opportunities to strengthen their product portfolios on a global basis.

### The backbone of German Engineering

The largest engineering sub-sector and backbone of the German economy is the industrial machinery and equipment sub-sector. The worldwide reputation of high quality, 'made in Germany' products is unparalleled. Industry players continue to invest in R&D to ensure they are at the forefront of innovation, current areas of R&D focus include energy efficiency and further automation of industrial processes.

During the economic crisis, this sub-sector suffered severely from postponed and cancelled orders as clients delayed making significant capital investments in plant and machinery. However, as the economy emerges from the worst of the recession, for those buyers who have come through with their balance sheets intact, strategic acquisitions are now back on the agenda and deals are being completed for example, the sale of Automatik Plastics Machinery to Maag Pumps Systems and TIG Automation's acquisition of Wulff Energy Technologies.

#### **Recent transactions**

Date	Target	Description	Acquirer [	Deal Value (US\$m)
Sep-10	BOA Group	Automotive components	AEA Investors (USA)	120
Sep-10	Bowe Systec	Mailroom systems	Axentum Capital (Switzerland)	n/d
Jul-10	STRACK & Phoenix Armaturen-Werke	Valves	AXA Private Equity	n/d
Jul-10	Ilmvac GmbH	Laboratory equipment	Gardner Denver (USA)	n/d
Jun-10	Automatik Plastics Machinery	Pelletizing equipment	Maag Pumps Systems (Switzerlar	186 nd)
Mar-10	Gautschi Engineering	Casting machines	Ebner (Austria)	n/d
Jan-10	Dunkermotoren	Precision motors	Triton Partners	208
Dec-09	3S Industries AG	Solar module equipment	Meyer & Burger (Switzerland)	294
Aug-09	MASO and SINE Pump business	Pumps	Watson-Marlow (USA)	36
Aug-09	Kiefel Extrusion	Film extrusion equipment	Reifenhauser GmbH & Co	H n/d

#### **Predictions**

- German engineering firms will be sought after by international acquirers for their technical know-how and high quality product portfolios
- German Mittelstand engineering companies will look for domestic and international acquisition opportunities to strengthen their product portfolios
- M&A activity will increase in 2011 as the certainty of recovery increases buyer confidence and the upturn in valuations enables private equity to exit legacy engineering investments

23

Automation's acquisition of Wulff Energy Technologies.





"We predict the M&A trends which will dominate the Italian engineering sector over the next few

years are domestic consolidation among small, family owned businesses and inbound M&A from international buyers seeking world-class, niche engineering expertise"

Piero Manaresi, Ethica Corporate Finance

#### Cross border M&A remains key

M&A transaction volumes in the Italian engineering sector fell in 2009 to almost half of the M&A boom years of 2007 and 2008. The combination of the global recession and the resulting cautiousness among large engineering corporates to engage in M&A as well as the stubbornly high price expectations of private owners has contributed to the fall in volumes. The first half of 2010 has seen volumes on track to achieve a similar level to 2009, however the average transaction value has rebounded strongly to \$66m, highlighting investor appetite for larger transactions.

Cross border M&A has historically been a significant feature of the Italian engineering sector. In 2009 for example, over half of businesses were sold to overseas buyers. Italian businesses are attractive to international acquirers for their specialist expertise. Businesses recently acquired by overseas buyers including Comem, a manufacturer of advanced transformer components by ABB (Switzerland) and Turboden, a manufacturer of high efficiency turbo generators for clean energy production by Pratt & Whitney (USA). Overseas M&A interest has also been sparked by the opportunity to take advantage of semi-distressed transactions, particularly by US acquirers.

#### Private equity appetite for large deals

In November 2009 a consortium of investors, led by Ares Life Sciences, backed the \$340m secondary buy-out of Esaote, a leading manufacturer of medical diagnostic equipment. The deal highlights the growing interest in the Italian medical equipment sector, specifically the diagnostic segment which has recently exhibited double digit growth rates as healthcare providers seek to reduce long term costs through early diagnosis and preventive treatments.

In June 2010, Charme Investments acquired a majority stake in Octo Telematics SpA, a provider of vehicle tracking systems to the auto and auto insurance markets. The deal valued Octo at an enterprise value of \$197m, representing a multiple of 5 times historic EBITDA. The rising cost of auto insurance in Italy and elsewhere in Europe is forcing consumers to look for ways to lower their premiums through vehicle tracking systems.

In the absence of engineering mega deals, Fiat's acquisition of a 20% stake in US automotive group Chrysler, grabbed the headlines. The transaction was in line with Chrysler's strategy to restructure as a condition set by the US government for receiving \$4bn in federal bailout funds. The deal gives Fiat an entrance to the US automotive market following a 30 year absence and also gives Chrysler the opportunity to leverage Fiat's environmentally friendly vehicle technologies in the US market.

#### M&A activity



#### Family owned businesses dominate landscape

The Italian engineering industry is dominated by small, family-owned niche businesses, a structure which is similar to a number of Italy's continental neighbours such as Germany and Spain. The approach and ethos of these family owned businesses has long been credited as a particular strength of the industry, ensuring high product quality and inspiring loyalty among customers. However, as the engineering market increasingly operates on a global basis, this loyalty will be tested as larger players, with the ability to serve clients internationally, compete aggressively with 'traditional' Italian engineering firms. In response to aggressive price competition from the Far East, Italian engineering businesses have specialised in providing higher added-value engineering in order to retain a competitive advantage.

The sector accounts for c.40% of Italy's total industrial production, with strength in the key sub-sectors of industrial, construction and automotive. The effects of the global recession on the construction market have significantly reduced orders books in the construction and industrial equipment segments. However, those businesses operating in the medical and clean technology niches have faired better through a combination of robust investment levels, lower competition and higher profit margins.

#### Medical sub-sector growing

The Medical equipment engineering sub-sector has grown rapidly over the last five years, emerging as one of Italy's new, world leading specialisms. The sector has attracted over \$2.5bn of M&A investment in the last five years with 35 transactions, the majority of which were completed by overseas buyers acquiring state-of-the-art technology to sell into their domestic markets. Buyers have focused on the medical equipment and surgical tools segments, the latter seeing landmark deals such as US firm Medtronic's \$434m acquisition of Invatec, a manufacturer of cardiovascular surgery equipment. In the medical sub-sector we expect to see continued M&A given the opportunity to acquire proven technologies which, in the long run, can be cheaper than developing them through in-house R&D divisions.

#### **Recent transactions**

Date	Target	Description	Acquirer D	eal Value (US\$m)
ul-10	Valbart	Ball valves	Flowserve (USA)	192
ul-10	OMVL	Fuelling systems for gas-propelled cars	Westport Innovation (Canada)	s 24
pr-10	Octo Telematics	Telematic systems for cars	Charme Investments Private Equity	118
Mar-10	Società Esplosivi Industriali (SEI)	Defence products	Rheinmetall Defence (Germany)	e n/d
an-10	Invatec	Cardiovascular equipment	Medtronic (USA)	434
Nov-09	Esaote	Medical equipment	Ares Life Sciences	403
Oct-09	Sole	Home appliance motors	Nidec (Japan)	64
lul-09	Fantuzzi Industries (port equipment)	Cranes and lifting equipment	Terex (USA)	223
lul-09	Turboden	Turbogenerators	Pratt & Whitney (USA)	n/d
Jan-09	Vertical Spa	Steel pumps	Franklin Electric (USA)	n/d

#### **Predictions**

- Overseas acquirers will continue to be attracted to the niche expertise of Italian engineering businesses
- Consolidation will increase among small to medium sized engineering firms as they seek scale to compete on an international basis
- Domestic firms operating in lower margin engineering sub-sectors will diversify into higher margin sub-sectors through the acquisition of medical, clean technology and electronics engineering businesses

## The Netherlands



"As global leaders in higher added-value engineering, Dutch industrial markets will

continue to attract the interest of international buyers"

Bart Jonkman, BlueMind Corporate Finance

#### **Restructuring pushes M&A** volumes higher

Somewhat surprisingly, transaction volumes in the Dutch engineering sector peaked in 2009 during which 64 deals were completed. Deeper analysis of the nature of the deals shows that this pronounced peak in activity can be attributed to corporate restructuring programmes which led to the disposal of a number of non-core engineering assets.

The trend for disposals appears to be dissipating during 2010 as transaction volumes have slowed on a pro rata basis to just a third of 2009 levels. Domestic buyer appetite remains low, as corporates who have completed recent restructurings take stock before engaging in acquisitions to support their new, refocused strategy. The engineering M&A market is relatively inactive and is likely to remain so until businesses have clear visibility on earnings which will in turn give them confidence to acquire again.

#### US is a major investor

Overseas interest in the Dutch engineering sector is clearly evident from the statistic that over a third of all M&A has been completed by overseas acquirers. The USA has been the dominant international acquirer completing 25% of all inbound cross-border M&A. US based buyers have also been the dominant acquirer in many of the countries analysed in this report. A favourable exchange rate between the US Dollar and the Euro has enabled US acquirers to compete strongly for overseas assets.

#### Private equity attracted to Dutch industrial markets

Over the period, the average transaction value has been heavily skewed by two international mega-deals. The \$1.5bn buy-out of Stork NV by UK based private equity investor Candover in 2007 and the acquisition of Numonyx by US based Micron Technology in 2010.

The acquisition of semiconductor engineering company Numonyx by Micron creates a global giant spanning several key semiconductor sub-sectors. The deal further strengthens Micron's market leading position in memory semiconductors, provides increased global manufacturing scale and most importantly, gives access to Numonyx's customer base into which they can cross-sell a multi-chip offering. The deal was structured as an all-stock transaction which valued Numonyx at \$1.3bn which represented a historic Enterprise Value / EBITDA multiple

In the mid-market, European private equity house Bencis Capital made two acquisitions in November 2009 as part of a buy-and-build strategy in the engineered building products segment. It acquired Daalderop Group and Itho Group (now Tree House Group) in secondary buy-out transactions from 3i and Rabo Private Equity respectively. Daalderop Group is a manufacturer of gas fired boilers and Itho Group provides ventilation and air conditioning systems. Bencis followed these deals up with the acquisition of Smulders Groep.

#### M&A activity



#### Focus on higher added-value products

The Dutch engineering market is relatively small in the context of the global industry, valued at \$39bn in 2009. The domestic industry has shrunk significantly over the past 25 years as engineering businesses have chosen to move production facilities to low-cost countries such as Turkey, India and China. As a result, those remaining businesses tend to focus on innovation, flexibility and knowledge-based production techniques to distinguish themselves from larger foreign competitors.

Today, The Netherlands is a world class centre for high-added-value engineering which requires a highly educated and technical work force. This expertise and access to white-collar engineers is encouraging engineering businesses to relocate the most complex parts of their production process back to The Netherlands. We expect the high added-value businesses to continue to be attractive acquisition targets for the lower margin, traditional engineered product groups who are seeking new, higher margin growth markets.

#### **Key sub-sectors**

An example of a high added-value sub-sector in which The Netherlands is a leading international player is electronics engineering. Dutch based companies such as Phillips and ASML, in conjunction with their domestic supply chain partners, are at the forefront of product innovation and development.

Other important sub-sectors include medical devices and food processing. Despite being a mature market, the medical devices sector is forecast to grow at 5.8% per annum over the coming two years. Growth is attributed to an increase in demand for healthcare services following the introduction of new healthcare insurance system in 2006.

#### **Recent transactions**

Date	Target	Description	Acquirer	Deal Value (US\$m)
Apr-10	Hydrospex	Heavy lifting equipment	Actuant (USA)	20
Feb-10	Numonyx	Flash memory	Micron Technology (USA)	/ 1,270
Feb-10	NRF	Heating and cooling equipment	Banco Products (India)	29
Feb-10	Division of Stork Food Systems	Processing systems food & dairy	Nimbus	n/d
Jan-10	Smulders Groep	Steel constructions and wind turbines	Bencis Capital Partners	n/d
Nov-09	Tree House Group	Air conditioning unit manufacturer	Bencis Capital Partners	n/d
Nov-09	Princess Holding	Electric household appliances supplier	WMF AG (Germany)	8
Oct-09	Dutch Opthalmic Research Center	Ophthalmic products	Friesland Bank Investments	n/d
Jun-09	Ligtvoet Products	Wheelchairs and stair lifts	Handicare (Norway	y) 37
Mar-09	Vanderlande Industries	Baggage handling systems	NPM Capital	n/d

#### **Predictions**

- High added-value Dutch engineering groups will be the target of international acquirers
- Private equity firms will continue to target distressed engineering groups for non-core disposals
- M&A activity in the medical devices market will continue to grow with interest from trade and private equity acquirers

## Poland



"Private equity and international trade buyers have been cherry picking niche Polish engineering

firms for the last 12 months. We expect M&A activity to focus on the automotive and energy sub-sectors during 2011"

Piotr Olejniczak, IPOPEMA Securities

#### **Abundant mid-market deals**

Transaction volumes in the Polish engineering sector have been very low over the past three years. However, on a pro-rata basis, transaction volumes in 2010 are forecast to be four times higher than those achieved in 2009. This growth in deal volume is being driven by a combination strategic international trade buyers and private equity investors who are focusing their attentions on the high growth markets of the Polish and Central and Eastern European (CEE) engineering sectors.

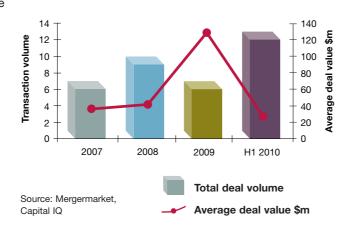
The average transaction value, when adjusted for one large transaction in 2009, has remained resolutely in the \$30m to \$40m range indicating that the sector is highly active for lower and mid-market deal opportunities.

#### Foreign buyers jump in

Two thirds of all transactions were sold to overseas buyers highlighting the appetite for Polish engineering assets. Furthermore, the average transaction value for cross border acquisitions was \$70m, showing that overseas acquirers have a clear preference for acquiring larger, more substantial operations in Poland to give them a significant market position from day one. The majority of overseas bidders were from Western Europe, acquiring exposure to tangential geographic markets, examples include UK based Caparo Group and Swedish engineering company ABB who have both recently acquired in Poland.

The largest transaction in the Polish engineering sector over the last three years was the \$360m public to private acquisition of HTL-Strefa by private equity group EQT, completed in December 2009. HTL-Strefa is a world leading developer and manufacture of blood sampling equipment. EQT paid an eye watering 22 times historic EBITDA for the business, showing their confidence in both the growth prospects for the medical devices market and HTL-Strefa's position as a global leader in blood sampling technology. EQT will provide both financial and managerial resource to assist the company in its next stage of development which may include bolt-on acquisitions. Another notable transaction was the \$44m acquisition of Optopol, a supplier of advanced ophthalmic diagnostic equipment, by Japanese technology firm Canon.

#### **M&A** activity



### Mining equipment M&A activity

During recent years, there has been a clear trend for consolidation among engineering businesses in the Polish mining equipment sector. Much of this M&A activity has been led by Famur and Kopex who have completed a number of small domestic transactions and also several deals in CEE countries. One notable transaction was Kopex's acquisition of Ryfama for \$22m. Ryfama extends Kopex's product portfolio into the scraper conveyor market and strengthens their ability to provide integrated solutions in the European market.

We expect to see major players such as Famur and Kopex engage in outbound M&A as they seek exposure to the mining sector in high growth countries such as India and Vietnam. Given the nature of the equipment and machinery, proximity to your client is a key consideration in the mining sector and one of the reasons why acquisition, as opposed to organic start-up, is the preferred route into new geographic markets.

#### Changing ownership structure

The engineering sector in Poland is vital to the health of the economy. Its expertise has been shaped by the country's reliance on core industries of energy, mining and heavy equipment. The top five companies listed on the Warsaw stock exchange, measured by market capitalization, are all manufacturers of engineered products.

The top five companies, also all happen to be formerly state-owned companies that have been privatized following the overthrow of the communist government in Poland in 1989. The Government has retained significant stakes in a number of companies and we expect further disposals over the coming year which will represent unique opportunities for overseas acquirers to buy into large, stable Polish engineering businesses.

#### Power engineering catch up

The Polish power sector has suffered from decades of under investment, sector experts estimate than more than \$35bn is needed to be spent over the next five years to upgrade plant and equipment in order to be able to meet Poland's energy requirements for the next decade. This huge capital investment should benefit participants across the length of the supply chain from specialist niche suppliers to OEMs.

Despite the prominence of heavy industry, other subsectors have also grown significantly in recent years. The boom in construction (both infrastructure and commercial) has rapidly increased demand for engineered building products including HVAC and communications equipment. Tier 1 and Tier 2 automotive suppliers have benefited from a number of automotive assembly lines being relocated to Poland.

#### **Recent transactions**

Date	Target	Description	Acquirer	Deal Value (US\$m)
Jun-10	Maflow Polska	Auto components	Boryszew	21
Mar-10	Amica Wronki	Consumer appliances	Samsung (South Korea)	71
Mar-10	Zamet	Industrial equipment	Pioma Industry	30
Feb-10	Ryfama	Mining equipment	Kopex	22
Dec-09	Optopol Technology	Diagnostic equipment	Canon (Japan)	44
Aug-09	HTL-Strefa	Blood sampling equipment	EQT Private Equit	y 360
May-09	Fabryka Lin i Drutu Drumet	Wires, ropes and staple bands	Penta Investments	s 37
Feb-09	PZL Swidnik	Helicopter manufacturer	Finmeccanica (Italy)	78

#### **Predictions**

- Modernization of the Polish power sector will ignite
   M&A demand for Polish power engineering firms
- Tier 1 and Tier 2 supplier to the automotive sector will be attractive acquisition targets for private equity and international buyers
- Polish engineering companies in the mining sector will engage in outbound M&A to access high growth markets

## Russia



"The engineering sector in Russia is affected by two forces: the need for innovation and new

technology and the desire of the Russian authorities to gain control over the strategically important companies. The balance between these two forces will govern the future development of M&A activity in this sector"

David Wolfe, Northstar Corporate Finance

#### Recovery after economic crisis

The economic crisis has affected all of Russia's industries, including the engineering sector. The slump in production, rollback of investment programs and a plunge in sales were the major signs of trouble within the sector and have resulted in the recent low M&A activity levels.

Even with this softening, there have been some notable transactions during 2009 and 2010. UK based Technix Maritime Investment acquired a 90% stake in SpetsMontazhStroy, a Russian company specialising in hydraulic engineering, excavation and drilling equipment. The state-owned industrial corporation "Oboronprom" continued to acquire, providing evidence of its consolidation strategy in the Russian helicopter and aircraft engines market. As with many transactions in Russia, the considerations of these deals were not disclosed.

### Growing domestic private equity investment

The number of private equity investments in the engineering sector increased in 2009 and H1 2010 to seven deals compared to only one in 2008. Gazprombank acquired an 85% stake in Forpost-Management, a Russia based investment company of manufacturing service

equipment companies for the nuclear, oil and gas industry. There were also acquisitions of mining companies by Gazprombank Asset Management and of Volgograd manufacturing assets by Russian Financial Corporation.

Western private equity houses have not been active of late in the engineering sector principally as sub-sectors such as aerospace, defence and power equipment are considered to be strategic industries by the Russian Government. There are therefore numerous barriers and restrictions on foreign ownership of such businesses.

#### M&A activity



## Need for innovation and increased capacity

The engineering sector is in great need of up-to-date manufacturing equipment. At least 70% of the existing capital assets are outdated. Domestic demand for new metal-machining equipment is over 50,000 units annually and the Russian machine tool manufacturers meet less than 1% of this internal demand.

This is also true for other engineering sub-sectors such as power engineering, which meets only 30% of the domestic demand. By 2015, the Russian railway equipment market is estimated to have a shortfall of over 200,000 units of rolling stock.

## Power engineering is of strategic importance

The Russian authorities have tried to gain influence in the power engineering sector by buying (directly or indirectly through state owned enterprises) stakes in companies. In the nuclear sector, several companies were consolidated within OAO Atomenergomash, including the acquisition of the nuclear equipment manufacturer Petrozavodskmash, from Leonid Beluga, a private investor, for an estimated consideration between \$24m - \$33m.

Along with the energy reform and the growing demand of power generation companies, the equipment producers are trying to modernize their production processes. This is being partly achieved through cooperation with foreign companies, for example Pratt & Whitney / Iskra and Alstom / Atomenergomash. The growing demand for power equipment should stimulate M&A in this sector which is likely to increase over the next year, initiated by domestic industrial holdings along with some of the asset management arms of Russian banks.

#### Automotive sector should strengthen

The Russian automobile market is expected to become the third largest in the world by 2012 after the US and China. Given this backdrop there are signs that 2011 could bring substantial M&A growth, with a number of deals already in the pipeline. Germany's Daimler has recently expressed an interest in increasing its 10% stake in heavy trucks maker Kamaz.

Over the past six years, 24 Russian automotive assets have changed hands for a total of over \$2bn. The most significant deal of this period was French manufacturer Renault's acquisition of a 25% stake in AvtoVAZ, its Russian counterpart for \$1bn. This investment has proved problematic and in November 2009, the Russian government and Renault announced a \$1.7bn rescue package, with Renault contributing c.\$369m.

While foreign corporates have seemingly taken a bullish view of the sector, the same cannot be said for financial investors. Just two private equity-related transactions have occurred in this particular space since 2004.

#### **Recent transactions**

Date	Target	Description	Acquirer	Deal Value (US\$m)
Jul-10	Quartz Group	Engineering in energy sector	Inter RAO UES ORD SH	n/d
May-10	OOO Ural Locomotives	Locomotive manufacturer	Siemens (Germany through JV	n/d
Mar-10	United Aircraft Corp	Aircraft manufacturer	Vnesheconombank	1,566
Feb-10	Petrozavodskmash Corp	Nuclear equipment	Atomenergomash OJSC	46
Aug-09	Plants of Volgograd	Drilling equipment	Russian Financial Corp (RFC)	n/d
Apr-09	SpetsMontazhStroy	Hydraulic engineering	Technix Maritime Investment (UK)	n/d
Mar-09	Forpost- Management Zao	Heavy industrial machinery	Gazprombank OJSC	n/d
Mar-09	Sibir Technik; S7 Engineering	Aircraft engineering	Alfa Group Consortium	n/d
Jan-09	Aviadvigatel OJSC	Aero-engines	Oboronprom Unite Industrial Corp	d n/d

#### **Predictions**

- The level of M&A activity in the engineering sector is expected to grow, especially in the power, oil & gas and automotive sub-sectors
- State owned holdings will continue to gain control over the engineering equipment manufacturers in the strategically important engineering sub-sectors
- Private equity activity in the engineering sector is likely to pick up over the second half of 2010 and 2011, initiated by domestic private equity firms with some of the state-backed Russian banks providing funds for investment

**Area:** 12,166,85 sq km

Time zones: GMT +1 to +2

## Scandinavia



"We can clearly see that the dramatically improved profitability in the sector has enabled many

Scandinavian engineering companies to renew their efforts in building international competitiveness through cross-border acquisitions. We expect this behaviour to continue into the years ahead"

Hakan Persson, Experia Corporate Finance

#### Relatively subdued M&A activity

Deal activity in 2009 was depressed in terms of volume and even more strikingly in terms of value. The first half of 2010 has still experienced low activity levels, however the average deal size has markedly risen.

There have been a small number of more substantial transactions this year, such as Nordic Capital's acquisition of Norwegian wheel-chair maker Handicare, a consolidator in the assisted living products market, but in reality the interest for Nordic targets from local or international buyers has remained relatively subdued.

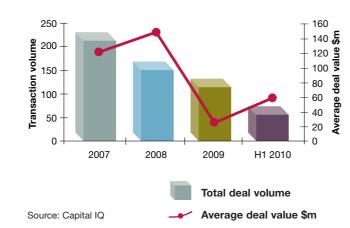
#### Interest from the East

In August, Geely, a young Chinese company (founded in 2003) acquired Volvo from Ford for a total consideration of \$1.8bn. Through this acquisition, Geely will gain an international, well-recognized brand as well as access to sophisticated technology and know-how. These are all important factors for the development of Geely to become a major player in its rapidly growing domestic auto market.

This deal is particularly attractive when we consider that Ford paid \$6.5bn for Volvo 11 years ago. Geely clearly benefited from Ford's financial difficulties and the precarious situation in the auto sector during the two years the deal was being discussed. Geely has already

announced plans to produce 300,000 Volvo cars in a new plant in China, and by 2015 it's intention is to reach a total output of 2 million cars under the Geely and Volvo brand names.

#### M&A activity



#### **Export driven economies**

The Nordic countries are small, open economies, and whilst they were all hit hard at the beginning of the downturn, they were amongst the first to rebound. The region is characterized by big international companies with a high export share and global market presence.

Despite Norway not being part of the EU, the legal harmonization between the four Nordic countries has come far, which naturally facilitates regional M&A. Norway's strong economy was not as severely affected by the recession partly due to its strength in the offshore oil & gas sector.

In Sweden, the manufacturing and automotive sectors dominate and although hit hard by the crisis, they have recovered and business confidence is back.

In Denmark there are some increasingly strong export led businesses including Vestas Wind, which has grown strongly on the back of increasing demand for their wind turbines.

In Finland, forestry, mineral extraction, heavy industry such as ship building and manufacturing all drive engineering demand. With industrial output soaring (up 14% yoy in June 2010) particularly boosted by gains in the forestry and paper sector, we expect a strengthening of the overall engineering sector.

#### Offshore industry rebounding

The growth in demand for energy, the perceived decline in new large scale hydrocarbon reserves and the race to secure rights over existing sources are shaping the M&A landscape of the global oil & gas industry.

The sharp increase in oil prices proved to be a significant driver of engineering led M&A during 2007 and 2008 within the Nordic region. As the price dropped from the peak of \$150 per barrel to the low of \$35 so did the level of M&A. Now that crude prices have recovered and are rising again, more transactions are being completed. Last year for example, US based FMC Technologies, a global provider of technology solutions for the energy industry, acquired Multi Phase Meters AS (MPM) for c.\$45m in order to secure new technologies for the growing international offshore sector.

#### Power shift in the automotive sector

Many automotive transactions in 2009 were as a result of distressed situations in the very difficult market conditions that prevailed in the wake of the financial crisis. Globally, the collapse of vehicle sales in the Western world culminated in the restructuring of the whole industry, and to some extent, the balance in power shifted from West to East.

The two main Swedish automakers changed owners. SAAB was acquired by Dutch Spyker in a transaction that was finalized only days before the potential liquidation of the company by GM, and as previously mentioned Chinese carmaker Geely picked up Volvo from Ford. Both these transactions were unusual to the extent that the buyers were both considerably smaller than the targets, in financial terms.

In 2010, the operating environment is showing signs, primarily vehicle sales statistics, that the stress is easing and we have embarked on the path to recovery. This potential recovery presents an opportunity for industry players to deliver profitability and growth through a continued restructuring of the industry map. In this process, M&A will be one very important element.

#### **Recent transactions**

Date	Target	Description	Acquirer	Deal Value (US\$m)
Jun-10	Handicare (Norway)	Assisted living products	Nordic Capital	n/d
Jun-10	Daros Piston Rings (Sweden)	Piston rings	Federal-Mogul Corp (USA)	n/d
Jun-10	Selantic (Norway)	Lifting equipment	Actuant Corporation (USA)	n/d
May-10	Simrad Optronics (Norway)	Remote-controlled weapons	Rheinmetall (Germany)	105
Apr-10	Reological (Sweden)	Research instruments	Malvern Instrumen (UK)	ts n/d
Mar-10	Finnveden Powertrain (Sweder	Connecting rods	Mape (Italy)	n/d
Feb-10	Dantec Dynamics (Denmark)	Measurement Systems	Nova Instruments (USA)	22
Jan-10	Carnitech (Denmark)	Processing equipment	American Industria Acquisition (USA)	l n/d
Jan-10	Techno Skruv in Värnamo (Sweden)	Fasteners and components	Indutrade	n/d
Sep-09	Multi Phase Meters (Norway)	High performance flowmeter	FMC Technologies (USA)	45

#### **Predictions**

- We will see growth in cross-border M&A activity for the engineering sector in the region. Nordic companies have had a faster recovery from the global economic downturn and will aim to grow internationally
- Export sales will continue to grow rapidly which will make the export-oriented Nordic companies more attractive to foreign investments
- Fundamentally low valuations will attract and favour cash-rich international strategic acquirers as the access to bank funding is still limited for local investors

# Spain



"Spanish engineering companies, especially those involved in the energy and power

generation markets, will be obliged to grow, mainly overseas, in order to support their current client's needs and the future development of their markets"

Igor Gorostiaga, Norgestion

### Overseas buyers account for half of all deals

During the last 18 months, the number of engineering deals in Spain has decreased slightly in comparison with previous years, as has the average deal value, although this appears to have stabilised. Interestingly, there has not been one engineering mega-deal completed in Spain during the last two years and the majority have been small or mid-market deals between \$10m and \$50m.

Whilst the number of cross border deals has also decreased slightly in absolute terms, as a proportion of overall M&A activity they continue to grow. In relative terms cross border engineering deals now represent half of all transactions compared to a third in 2007.

The US has been the most active individual country since 2007, completing 11 deals and investing mainly in industrial and energy related engineering companies. Other international corporate acquirers have predominantly come from EU countries, especially the UK (7 deals) and Germany (10 deals). The rationale for these buyers in particular has tended to be to gain scale to compete against US and Asian multi-nationals, and they have taken advantage of the relatively fragmented state of the Spanish engineering sector to buy mid-market companies.

By contrast, the number of deals involving private equity firms has decreased sharply since 2007 due to the lack of credit in the Spanish banking market.

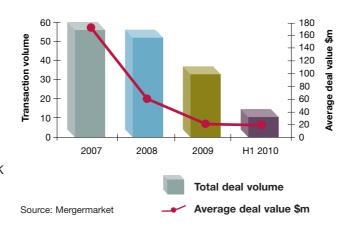
### Renewable energy centre of excellence

Spain has developed into one of the most progressive countries with regards to renewable energy development and engineering as a consequence of targeted legislation.

A notable recent transaction in the sector was the acquisition of Isofoton by a consortium of Affirma, a Spanish energy engineering business and TopTec, a listed South Korean business specialising in photovoltaic products. Isofoton is one of Europe's leading manufacturers of solar photovoltaics, the acquisition will allow Isofoton to expand its production capacity threefold to 500 MW annually on the back of a strengthened group balance sheet.

Spanish firms are also increasingly looking to acquire overseas. Gamesa, one of the world's leading wind turbine manufacturers is focused on international expansion. They plan to triple their investment in China through to 2012 and develop their manufacturing centres to cement their position as one of the top five wind turbine suppliers in that country. They have expressed an interest in growing through acquisition.

#### M&A activity



#### **Opportunities beyond Spain**

Overseas expansion is however not limited to renewables. Automotive engineering has become very important as well, since numerous OEM plants are now located in Spain. CIE Automotive, the Spanish Tier 1 automotive supplier based in the north of Spain is presently looking to invest in the US, South America and Russia. ITP, the aircraft-engine manufacturer has also shown interest in growing internationally as their recent acquisition of Alstom Aerospace in the UK demonstrates.

## Expect more M&A in power equipment engineering

The engineering sector in Spain is very fragmented with over 17,000 companies and most of them small and medium sized. Historically engineering development has been prioritized towards the communication and power distribution industries. A large number of domestic companies were funded specifically to provide technologies and services to the large power and communication corporates like lberdrola or Telefonica.

A number of the medium and larger power equipment companies (most of them still family owned) are now competing on the world stage. These companies have recognised the need to continue growing through (overseas) acquisitions in order to complete their product portfolios and reinforce their presence in key geographical markets; mainly the US, India and Eastern Europe. Some of them have been very acquisitive during the last decade, so much so that they are now of a scale to be targets of the larger multinational corporations such as Areva, Siemens and Schneider.

#### **Recent transactions**

Date	Target	Description	Acquirer	Deal Value (US\$m)
Jun-10	Isofoton	Solar panels	Affirma/TopTec (Spain, South Kore	45 a)
Jun-10	Dytech ENSA	Exhaust gas devices	BorgWarner (USA)	n/d
Mar-10	SEMI	Power distribution equipment	Rooftops of Spain	13
Mar-10	M Torres Olvega Industrial	Wind turbines	El Sewedy Cables (Egypt)	n/d
Feb-10	Microeletronica Espanola	Smart Cards	American Banknoto (Brazil)	e 13
Dec-09	Grupo Jema	Electronic Equipment	Irizar Sociedad Cooperativa	16
Oct-09	Telde SL	Energy projects	Energia Pura	35
Oct-09	Hispano Carrocera	Coach bodyworks	Tata Motors (India)	n/d
Sep-09	Grupo Simes	Fastening systems	Anclaje	7
Jul-09	Grupo Alcor (9 subsidiaries)	Aerospace	Alestis Aerospace	62

#### **Predictions**

- Spanish power equipment manufacturers will need to increase their presence overseas through cross border acquisitions
- There are a great number of small engineering companies, mostly industrial and focused in highly specialized niche activities, which are willing to enter into a consolidation process
- South America, US and India will be main target regions for Spanish engineering companies in the coming years

# United Kingdom



"UK assets are looking like good targets for those US acquirers who have come through the recession with

strong balance sheets. The exchange rate helps make UK assets feel more affordable compared to similar US assets"

Mark Humphries, Catalyst Corporate Finance

#### M&A volumes and values on the rise

During the first half of 2010 over 60 transactions have been completed in the UK engineering sector, which on a pro-rata basis suggests volumes will be above 2009, which clearly represented a low point in the engineering sector M&A cycle. As the global recovery hardens and trading visibility improves, acquirers are gaining confidence to acquire larger businesses and pay higher valuation multiples. We have seen a marked increase in deal flow across the sector this year and average transaction values have increased to \$70m during the first half of 2010 from \$50m in 2009.

#### Leverage buy-outs are back

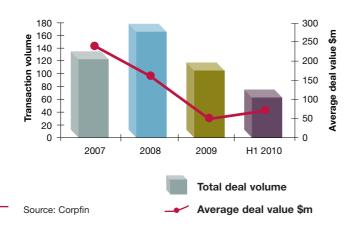
The stand out deal of the year is the acquisition of Tomkins plc by a club of Canadian private equity investors including Onex Corp and Canada Pension Plan Investment Board (CPPIB). The deal was funded with c.\$3bn of debt financing and \$2.2bn of equity. Tomkins is seen as one of the last of the great UK industrial conglomerates although in truth 93% of its products are made outside of the UK and the US represents 52% of its end user markets.

Undoubtedly Tomkins will not be the last UK engineering business to be a target from North America – pricing is relatively cheaper than similar US assets, there is more liquidity in the US debt market at the moment giving North American private equity funds more fire power and making them more deliverable than their UK counter parts.

#### Interest from emerging markets

Notable other deals include acquisitions by businesses based in the emerging markets of India and China. In March 2010 the Chinese firm Chongqing Machinery & Electric Co acquired Holroyd Precision, a manufacturer of precision tools for \$30m. Chongqing stated that the acquisition was part of a strategic move to reinforce the company's technical capabilities and gain access to the European market. DavyMarkham, a manufacturer of heavy and complex engineering components and assemblies was sold to Indian buyer Hindustan Dorr Oliver (HDO) in a \$15m deal. HDO acquired DavyMarkham to access their product expertise in the nuclear market, which they intend to sell back into the Indian power market.

#### **M&A** activity



#### An industry transformed

The UK engineering sector has transformed itself over the last two decades from a sector with turbulent labour relations, a poor reputation for productivity and quality and a lack of investment into one which is globally competitive and is maintaining its position as the sixth largest in the world in terms of output.

Over this period, UK engineering has been shaken to its core having had to eliminate low added value operations and focus on what it is good at. The sector is now firmly focused on high added value niches, creating strong and defendable intellectual property underpinned by high design-to-build capability.

Led by world class management teams, British engineering companies navigated the recession by demonstrating their operational flexibility, strong position in complex global value chains, ability to exploit new technologies and the value of investment in design, branding and R&D.

#### UK has comparative advantage

Over half of all M&A investment has been in engineering sectors where the UK has established significant comparative advantage; aerospace, oil & gas and automotive. British success in these sectors has evolved over decades, benefiting from the existence of home grown world-class OEM multinationals, which source from clusters of local suppliers. Long term relationships with Rolls-Royce, BAE Systems and Shell amongst others have helped British engineering firms gain advantage in product innovation.

Many overseas parties recognise these strengths and consequently almost 75% of all funds invested in UK engineering over the last four years, through M&A or buyouts, originated from overseas buyers. US companies have been by far the most dominant acquirers spending £10bn on over 100 businesses. Similarly, the US has attracted most UK acquisition investment over the decades as British firms have sought to access a large and relatively homogeneous market, especially in industries such as defence and aerospace. It is however clear that firms need to shift some focus to emerging economies such as India or they will miss out on a significant growth opportunity.

#### **Expect more aerospace deals**

The UK aerospace industry is second only to the US in terms of market size and has attracted £4bn of M&A investment since 2005. The long term outlook for the aviation industry is healthy. The strong relationships with OEMs and major Tier 1 suppliers such as Airbus, BAE Systems, GKN and Rolls-Royce should favour UK suppliers.

UK aerospace is at the forefront of innovation in engine and wing technology, as well as instrumentation and composite materials. Niche UK mid-market companies hold important positions across all stages of the supply chain and are attractive M&A targets for both trade and private equity buyers.

#### **Recent transactions**

Date	Target	Description	Acquirer I	Deal Value (US\$m)
Jul-10	H&F Drilling Supplies	Drilling equipment	Atlas Copco (Sweden)	n/d
Jun-10	Broady Flow Control	Flow control systems	Valvitalia (Italy)	n/d
Jun-10	AIM Aviation	Aerospace interiors	Lloyds Development Cap	n/d ital
Jun-10	Crompton Technology Group	Advanced composites	Goodrich Corp (USA)	n/d
Apr-10	Guralp Systems	Seismological instruments	Primary Capital	30
Jun-10	Delta Plc	Support structures	Valmont Industries (USA)	287
Mar-10	Holroyd Precision	Precision tools	Chongqing Machinery (China)	20
Mar-10	DavyMarkham	Complex engineering structures	Hindustan Dorr Oliver (India)	10
Feb-10	Gardner Group	Aerospace components	BECAP Fund	67
Feb-10	Minivator	Assisted living products	Handicare (Norway)	44

#### **Predictions**

- M&A activity will continue to gravitate to the UK engineering sectors of comparative strength including aerospace, oil & gas and automotive
- US buyers will continue to dominate M&A inflows into the UK over the next decade. There is undoubtedly a pent up demand for M&A and the exchange rate is helping make UK assets feel more affordable
- UK Engineering companies will feel compelled to access emerging growth markets such as Indian through JV's and M&A

## Contacts



## International corporate finance

Australia	Denmark	Luxembourg	South Africa
Austria	Finland	Mexico	Sweden
Belgium	France	The Netherlands	Switzerland
Brazil	Germany	Norway	Spain
Canada	India	Poland	Turkey
China	Italy	Russia	UK
Columbia	Japan	Singapore	USA

Mergers Alliance is a group of award winning corporate finance specialists focusing on middlemarket M&A. The group comprises of 150 transaction professionals located in 25 offices around the world. So far in 2010 Mergers Alliance have completed over 100 deals worldwide valued in excess of \$4bn.

For further information on Mergers Alliance and its member firms, please contact Stas Michael, Mergers Alliance Business Manager:

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## Transactions

### Mergers Alliance engineering transactions

Sale of
Ravin Cables
to Prysmian Cables

India / Italy

Sale of TGE Gas Engineering to CIMC

UK / China

Sale of
Gautschi
Engineering
to EBNER Group

Germany

Sale of **G&B Specialities**to **Wabtec Corp** 

Canada / USA

Advisor on
Refinancing of
Aladdin Oil Gas
Company

Norway / Russia

Acquisition by

Dunedin Capital

Partners

of WFEL

UK / USA

Acquisition by CIE Automotive of Pintura

Spain / Mexico

Sale of

Dennis Eagle
to Ros Roca

UK / Spain

Sale of
Kiefel Extrusion
to Reifenhauser

Germany

Acquisition by **Geveke** of **CompAir** 

The Netherlands / Belgium

Sale of
Becorit
to Wabtec Corp

**Germany / USA** 

Sale of
Coherent
Technologies
to Lockheed Martin

USA





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