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Success Story – Mainland China-based Magnesium Alloy Company

Quay Magnesium Due Diligence & Turnaround Planning

Situation - the client, an international investor, had invested significant (over $10 million) money in the company and was considering additional millions to buy control – in the range of $3 to 6 million, as they believed it was not being managed well. I had previously done research studies for them on the magnesium alloy global market and the use of scrap metal.

- **My assignment** – in depth diligence, report findings, recommendations as to invest/don't invest, and a detailed go forward turnaround plan. For this, I was flown to Nanjing with a stay-until-you-are-done time-frame, and Chinese-speaking investment banker support from the client's in-country team.
- **Insolvency impending -** The operation had gone through about $35 million in investor capital, with profitability nowhere in sight, and a $500K AUD per month burn rate (US$450,000). It would run out of cash within 4 months without changer or more capital.
- **Company –** It is public, listed on the Australian Stock Exchange (ASX), with headquarters in Sydney. Its plant is a Wholly Owned Foreign Entity (WOFE) plant in Nanjing, China. WOFE status allows unrestricted money movement in/out of China.
- **Market –** Magnesium alloy is a global commodity, with only a small market at the time in mainland China. So exchange rates and transportation costs are vital. A Chinese producer has several advantages: 1) cheaper pure magnesium due to the lack of regulations (a coal-fired process is commonly used), 2) artificially low export prices due to the manipulated, artificially low exchange rate, 3) lower alloying costs because more dangerous, but cheaper methods can be used (open crucible method). Global market at the time was about $300 million/yr USD. The Chinese supplier had put alloy producers in Norway, France, Canada, Australia, and the US out of business.

Diligence Plan – I completed the following action plan:

- **Obtained full access to financial records** – after some wrestling with Sydney headquarters, I got access to all accounting data, enabling assessment of the Sydney office as well as just the plant in Nanjing.
- **Re-constructed a GL** – the on site Chinese financial records lacked clarity as to what expenses were for, so I did a check-by-check review of the "cash book" and built my own categories and totals so I could estimate go-forward expenses reliably. This required numerous Q&A meetings with various department staff people to understand, in detail, what the expenses were for.
- **Detailed factory analysis** – I studied the operation, how the electric melt and furnaces worked, their power consumption (electric melt furnaces are a new technology), how the ingot pouring line worked, inert gas & safety controls (magnesium is an explosive when liquid) metal quality issues, manning, facility maintenance & condition, acquisition of pure metals used in the alloying process, and others.
- **Supply chain** – extensive analysis of how pure magnesium especially was purchased; we considered acquiring a pure magnesium supplier at one point, imported ingredients and products used in production, purchase agreements within China, the commercial code, role of corruption, and other ability to manage purchased items and their costs.
- **Currency exchange factors** – since magnesium alloy is a global commodity, with only a small market in China, the manipulated exchange rates figure heavily in to the delivered cost and so had to be well understood.
- **Global Transportation costs** – Used data developed in a previous study, updated for the from-China perspective, especially cost of shipments to Europe, the largest market for the alloy.
- **Electric power** – because the operation required about $120,000 AUD/month in electricity, and had an on-site 3 Megawatt backup power plant, I did an in-depth analysis of the electric power business in China, how it is distributed, reliability, how it is priced, volatility, and how these compared to Australia, UK and the US.
- **Selling process** – I did an in-depth analysis of how the global sales team functioned, including in-China sales; pricing, selling costs, and other factors.
- **Market analysis** – volatility, demand assessment, pricing factors, and especially assessment of the primary competitor, Nanjing Welbow Metals, Co., Ltd. (www.rsm.com.cn)
- **Competitive analysis** – we obtained confidential information about the primary competitor, Nanjing Welbow which confirmed our hunches that this was not an entirely level playing field. Welbow paid lower salaries, housed peasant-like employees in dormitories, and used a dangerous, but cheap, open-crucible process that is not used outside of China because it leads to

occasional explosions, killing several workers in the process, and coal-fired furnaces which pollute heavily.

- **HR** – reviewed hiring and management issues to determine impact on productivity and cost. Much of the management was ex-pats, paid huge salaries by Chinese standard, plus living expenses for working in China. Assessed suitability of the organization structure, role responsibilities, processes each person performed, and capability of people in each key role. I got to know most of the key people, as most spoke passable English, or "Chinglish" as it is also called humorously.
- **Corporate headquarters functions** – assess cost and value of Sydney-based HQ.
- **Capital Expenditures** – review capital project process; initiation, justification, and budgeting.

During my work, my client also brought in local Chinese professionals to complete additional diligence in legal and financial areas, where I was not qualified. I collaborated with these two teams and benefited from their assessments, especially in Chinese-specific areas.

Findings & Recommendations – I wrote a 72 page report that detailed my findings and recommendations. Area:

- **Executive Summary & Go-Forward Action Plan** – I recommended that my client. Recommendations:
  - **Make no additional investment** – no visible return could be identified.
  - **Work with other shareholders to gain control** anyway – the Chairman of the company had kept shareholders separated, but this would be easy to circumvent to obtain a voting majority and take over the board.
  - **Implement the turnaround plan** – an 8 page set of detailed steps to salvage the $10 Million investment already made and get the operation close to breakeven within several months. This would allow for future options such as acquiring a pure magnesium supplier on more favorable terms than were available at that time.

Finding and analysis results:

- **Production process** – how the company actually works:
  - How their alloying process actually works, plus comparison to other alloy plant operations.
  - Disadvantages/advantages & comparative risks.
  - Management requirements for success
  - Assessments of the production process
- **Organization** – people, structure, individuals; suitability for their specific roles, including corporate leaders in Sydney, sales team members and others.
- **Cost structure and characteristics** – variable, fixed cost, margin key factors; indirect cost issues.
- **Business processes** – detailed analysis & assessment.
- **Gap analysis** – issues & opportunities between what we found, compared to what could/should be the case.
- **Facility design deficiencies** & issues and potential correction / mitigation actions; included photos and equipment assessments, electrical power analysis, and health, safety and environmental factors.

Paul Deis, Agoura Hills, CA is a operational turnaround and crisis resolution leader. He leads large, complex projects at manufacturing, and other types of companies that enable the company to survive a crisis and return to stable, profitable operation. This work involves re-organizing, re-designing how the factory operates, streamlining processes, sometimes recruiting new leaders, changing software and procedures, changing suppliers, which products are sold and other activities to achieve quick, lasting overall productivity gains and positive cash flow. He is a published text-book author in the field of production & inventory management and has done this type of work with over 60 companies in his career of over 25 years. Visit his web site at www.pauldeis.com. Email: paul@pauldeis.com – **(818-706-0160.**