



## Dan Ungureanu

### Principal Risk Engineer

Dan Ungureanu joined the group as Principal Risk Engineer in early April 2013. Dan's career spans 37 years, mainly working at very large industrial plants for power, gas processing and mining sites. He brings a wealth of invaluable knowledge and experience to our risk engineering work.

Dan was born and raised in Romania. His engineering career began with a mechanical engineering position at the Rovinari Power Plant in Romania. He worked at the plant for 9 years before joining ABB as Deputy Maintenance Leader in Commissioning for their Al Taweelah B Power and Desalination Plant in UAE.

In 1996, Dan decided not to return to his home country. Romania was still in disarray and turbulence after the revolution of 1990/91. He decided to relocate and seek a better life in Australia and was successful in being granted Australian citizenship. Dan worked initially for Australian consultancies who service the mining industry (Monitek and CCI Pope). At Monitek, Dan was seconded on longer term assignments at coal mine sites. When he was with CCI Pope in 2002, he was on a shorter term assignment as CM site coordinator at the BHP Blackwater coal mine.

From 1996 - 2000, Dan also worked on three main 'longer term' site contracts (which included Blackwater Mine). The other two were Capcoal mine (owned by Shell at that time) and Kaltim Prima Coal (owned by Rio Tinto) in Indonesia. In 2000, Dan was employed as Maintenance Engineering and CM Team Leader at OK Tedi Mining Limited (a BHP Billiton managed operation), in Papua New Guinea. This was a demanding role and duties were very varied. Main aspects of the role included: analysis and addressing reliability issues for all utilities sections including diesel and hydro power plants (total of over 130MW), mobile equipment workshop, water treatment and sewage plants and actively contributing for improving maintenance planning practices for the logistics divisions, setup and running the condition monitoring programme for all Utilities sections, improving the efficiency of CM techniques including vibration analysis, thermography and other NTD.

From 2002 - 2004, Dan was employed directly by BHP Billiton to work as a Senior Field Engineer at their Boodarie Iron Ore Bricketing/Process plant at Port Hedland, WA. This plant used iron ore fines (50-60% iron) and was producing iron brickets with over 90% iron. He worked in the Gas Processing Plant Operations. Some of the duties included improving reliability and maintainability of all gas plant rotating and static equipment including high speed centrifugal compressors (process gas), reciprocating hydrogenation compressors, Benfield centrifugal pumps, reformers and furnaces, heaters and fans, high pressure vessels and piping. In addition he was also tasked with improving and supervising the condition monitoring programme for the gas plant, coordinating pressure vessels and piping, integrity maintenance and overall ensuring safe work practices.



In 2004, Dan took on the role of Reliability & Engineering Superintendent in Regional Maintenance at Placer Dome Kalgoorlie Mines, WA (owned by Placer Dome and later Barrick Gold Mining). Placer owned about 4 mines in the region, all managed by a regional management team. Dan's role covered all these mines (which included Kanowna Belle and Paddington, in total 2 x processing plants, 3 underground ops and one main open pit). Some of his duties included implementing targets, plans and measures to improve both fixed and mobile plants reliability, and cost performance. The fixed plant equipment included SAG and ball mills, apron feeders, primary and recycling crushers, Warman pumps, CIP/CIL tanks and agitator drives and screens, managing improvement and reinstatement projects up to USD 3.5M (e.g. CIP tanks refurbishment and cyanide system refurbishment).

In 2006, Dan started work as a Senior Engineer at Newcrest Mining's Lihir Gold Mine in Papua New Guinea. This mine was initially a Rio Tinto operation, it became an independent company and subsequently was taken over via a friendly merger by Newcrest in September 2010. Dan was promoted to Chief Engineer (Maintenance) and in 2010 became Chief Engineer (Construction). These were extremely demanding roles. Together with the technical and compliance responsibilities as Chief Engineer he was leading a site Engineering Projects team (up to 25 x Mechanical, Civil and Electrical engineers and supervisors). He managed improvement and refurbishment projects for the process plant and mine from design to construction and commissioning. The Lihir plant includes crushing, grinding, pressure oxidation (autoclave & oxygen plants) and cyanide leaching equipment.

#### **Awards & Qualifications**

- Bachelor of Engineering - Mechanical Engineering, Polytechnic Institute of Timisoara, Romania.
- 6 MBA Modules, University of Southern Queensland, Australia (Distance Education)  
Short Term courses: Maintenance, Engineering & Finance e.g. Preventing Major Assets Failure, Advanced Pumping and Piping Systems, Contracts Management, Financial Management and Project Investment Analysis, RCA, Siemens Centrifugal Compressors Training, ESD Control and Operation of Reciprocating and Centrifugal Gas Compressors, BHP Operating Excellence, ARMS Reliability Centered Maintenance, CSI Wear Debris Analysis.
- FPA Australia on AS1851-2012

#### **Professional Membership**

- The Institute of Engineers Australia

Dan is married and based in Melbourne, Australia. He is fascinated by all things technical. Being a typical engineer he just loves to see how things work so enjoys collecting IT gadgets and gizmos.