

# HISTORY

Wilhelm L. Degen, son of Johann Degen, co-owner of Johann Keller since 1920 and Managing Director and Chief Engineer of Keller until his death in 1970. He owned numerous patents, including the depth vibrator for Vibro Compaction (together with Sergej Steuermann), and various pioneering Stone Column related patents.



1901-1970

W. L. Degen invented the Stone Column method.



1958

Wilhelm F. Degen and Franz Elchhorn developed the first range of high performance electrical Vibroflots, utilizing revolutionary internal design, facilitating a unique penetration capacity, which will enable this generation of machines to reach numerous world-depths record in the future.



1978

Expansion of the Vibroflotation companies into Germany and Far East.

Together with their father, Wilhelm F. Degen, Alexander M. Degen and Wilhelm S. Degen set up Vibroflotation AG, an equipment manufacturing facility in Switzerland. They developed the Gravel Pump, the Vibro Stitcher and the Marine Gravel Pump together with designers Franz Eichhorn and Beda Kälin.



1986

Vibroflotation equipment dominated the Vibro Compaction market in Germany for lignite mining slope stability projects of over 70m in depth, with a total volume of over 1 billion cubic meters.



1994-2001

Betterground Ltd. (Switzerland) was founded in early 2009 and was immediately joined by the most experienced technical experts in the world.



2009

One of the first projects of Betterground equipment was the Palm Deira in Dubai, the largest Vibro Compaction project in history

Betterground has license and JV agreements in place with geotechnical specialty contractors in Australia, Austria, Canada, Chile, Croatia, Germany, Greece, Spain, UAE and other GCC countries, Hong Kong, Indonesia, Malaysia, Peru, Philippines, Singapore, Thailand, USA, Vietnam and New Zealand.



2009 - 2013

1900



Johann Degen bought the Johann Keller Company in Germany in 1900 and managed its rise from a local well drilling company to a regional market leader, largely expanding into the surrounding countries. After his early death in 1903, his wife, old Mr. Keller and Johann Degen's brother Wilhelm managed the company through hard times until its transition to sons Johannes and Wilhelm in 1920.

1938

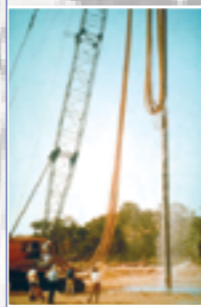


Mr. Sergej Steuermann, co-inventor of the Vibroflot, left Germany and set up the Vibroflotation Foundation Company, Pittsburgh, PA, pioneering in Vibro Compaction in the USA.

1974

Johannes Degen and the children of Wilhelm L. Degen sold their shares in the Keller Group of companies after continuous years of expansion. Wilhelm. F. Degen (son of Wilhelm L. Degen) bought the Vibroflotation Foundation Company, Pittsburgh, PA, from Sergej Steuermann.

1980



World record on deep vibro compaction by Vibroflotation at Jebba Dam, Nigeria

1990 - 1996



Licence agreements between Soletanche S.A., in France and Vibroflotation AG and a Joint venture between Vibroflotation AG and Bachy-Soletanche were established in Hong Kong.

2001 - 2009



Soletanche Bachy took a 70% share in The Vibroflotation Group and eventually took over the company in 2006 entirely. The relationship ended in a three year non competition undertaking by Wilhelm and Alexander Degen during which both brothers were consulting The Vibroflotation Group on numerous international key projects.

2012 - 2013



Betterground supports China Harbour Engineering Co. with low headroom offshore stone column equipment, site supervision and engineering support on the Hong Kong Boundary Crossing Facility project. With over one million linear meters of marine Stone Columns, it is the largest project of its kind in history.