

Prinzing Pfeiffer, 65552 Limburg an der Lahn, Germany

New Radial Press for manufacturing concrete pipes at Viet Cuong Concrete in Vietnam

■ Vanessa Hibert, Jan Nemitz, Topwerk Group, Germany

Vietnam's economy is growing rapidly, especially in and around Hanoi. This growth brings increasing demand for efficient infrastructure. A central component is the supply of high-quality concrete pipes - essential for roads, sewage systems, industrial areas and many other major infrastructure projects. To meet this challenge, Viet Cuong Concrete has invested in a new, state-of-the-art Radial Press RP 1225-4 concrete pipe machine from Prinzing Pfeiffer, an internationally recognized German company. The fully automated production system enables premium concrete pipes with excellent technical properties and internal diameters of 300mm up to 1200 mm to be manufactured efficiently and economically.

Viet Cuong Concrete - a reliable partner with a vision for the future

The history of Viet Cuong Concrete began in 2003 with a focus on transport services. In the years that followed, the company gradually expanded its portfolio - initially to include



Exterior view of the Viet Cuong Concrete production hall



Variant 2500D (double station), year of construction 2018



Radial Press RP 1225-4 after installation process

pipeline construction and later the production of concrete pipes and ready-mix concrete. From 2006, the company also entered the commercial concrete and mining sector. The decisive breakthrough came in 2013, when it supplied concrete for a major project at the Samsung production facility in Thái Nguyên province. Viet Cuong began manufacturing precast concrete elements and decided to order its first concrete pipe production line in 2017.

Even back then, the choice fell on a Prinzing Pfeiffer system – the Variant 2500D (double station) machine for manufacturing concrete pipes and box culverts. The powerful central vibrator, which ensures very high, uniform concrete compaction and product quality, was particularly impressive at the time due to its reliability, low operating costs and customized machine-and-form concept, supported by excellent technical service. The Variant 2500D is still in successful operation today. In addition to concrete pipes, this machine is also used to produce box culverts.

Technology at a particularly high level – the RP 1225-4 Radial Press

Viet Cuong is sending a clear signal by acquiring a new Radial Press RP. The company is gearing up for future large-scale infrastructure projects and increasing its production capacity significantly. The fully automatic RP 1225-4 system is designed to produce concrete pipes in the DN 300 to DN 1200 diameter range – both versions with and without a bell end, in accordance with the Vietnamese standard. The RP is also compatible with many other national and international stand-



Beginning with commissioning

ards (e.g. EN, ASTM, BS). Special products such as manholes, simple manhole bases, Rocker pipes, jacking- and slotted drainpipes can also be manufactured.

A highlight of the RP 1225-4 is its innovative concrete compaction process, consisting of two counter-rotating pressing tools and a fully automated compaction control system. These enable homogeneous, dense pipe structures with outstanding surface quality. Employing two outer moulds permits parallel production cycles, resulting in reduced cycle times.

Additional system highlights are:

- Decoupling of the production- and the demoulding process. High dimensional accuracy of the end products by transporting the fresh product in the outer mould to the demoulding area
- Low foundation depth
- Modular design and compact frame construction
- High drive power to produce thick-walled and/or double-reinforced pipes
- Precise Centering of reinforcement cages using pneumatic cage centering devices on the outer moulds
- Height-adjustable working table for varying pipe lengths
- Many additional options can be selected, such as data analysis and reporting to provide all relevant production data and statistics, Smart Check for regular and professional system inspections, QCS quick-change system for semi-automated nominal size change, Skip hoist with concrete hopper, e.g. for production with low concrete transfer height.



Concrete pipe production with the worldwide proven radial pressing process



First concrete pipe produced with the new RP 1225-4. Quality directly from the beginning

This sophisticated machine construction not only delivers very high product quality; it also ensures a trouble-free production process with low maintenance requirements.

Frictionless commissioning with close cooperation

Although the global Covid-19 pandemic caused significant delays and shutdowns in 2022 and 2023, the project was ultimately completed successfully. Once planning resumed, the installation of the RP 1225-4 Radial Press near Hanoi began in May 2023, and by July, the first DN 600 concrete pipes has been produced.

Throughout the commissioning phase, the supervisors from Prinzing Pfeiffer provided both mechanical and electrical support. Close coordination with Nguyen Tri Tuyen, Production Manager at Viet Cuong, and his assembly team proved to be a key success factor. Every step – from unloading the containers to producing the first series of concrete pipes – was jointly coordinated and professionally executed.

Reliable Performance for the Future

With the new Radial Press RP, Viet Cuong is now able to produce over 200 concrete pipes in one shift per day – a significant increase compared to previous capacities.

Its combination of high output, lower energy consumption and reduced production costs makes the RP 1225-4 a particularly ideal solution for large vietnamese infrastructure projects. Thanks to its long-standing partnership with Prinzing Pfeiffer, Viet Cuong has the advantage of both state-of-the-art

technology and continuous technical support. This ensures long-term operational reliability and economic security for the Vietnamese company.

Future projects in the pipeline

The RP 1225-4 will play a central role in the realization of several upcoming infrastructure projects, including:

- An interprovincial link road
- A 4,500-hectare industrial estate
- Multiple golf courses



Efficient concrete pipe production



Transport of cured pipes to the storage area



Storage area for cured concrete pipes.
Produced with the radial pressing method

- A new high-speed motorway
- A new stadium in the province of Thai Nguyen

With this capacity and flexibility, Viet Cuong is ideally equipped to support Vietnam's ambitious national development plans.

Conclusion

The successful installation and commissioning of the Radial Press RP 1225-4 mark another important milestone in the partnership between Viet Cuong and Prinzing Pfeiffer. The new system impresses with its excellent product quality, reliable performance and economic efficiency.

For Viet Cuong, this investment means a targeted strengthening of its competitive position – and the technological capability to meet the demands of Vietnam's dynamic infrastructure sector. ■

FURTHER INFORMATION



Viet Cuong Construction Concrete Company Limited
Khuon Ngan Intersection, Phu Xuyen Commune
Dai Tu District, Thai Nguyen Province, Vietnam



Prinzing Pfeiffer
Vinzenz-Pallotti-Straße 3
65552 Limburg an der Lahn, Germany
T +49 2736 497611
info@prinzing-pfeiffer.com
www.prinzing-pfeiffer.com



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Group photo after the successful project completion:
from left to right.: Tuyen Nguyen Tri – Plant Manager;
Andreas Bartuli – Head of Sales Prinzing Pfeiffer;
Tung Doan Van – Company Director