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CONCRETING TIMES

SOUTH EAST ASIA

Reach the Sky

with Schwing Stetter





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Dear Customer,

Greetings!!

I am very pleased to speak to you through this third issue of Concreting Times- SEA. More Stetter plants and pumps have reached the shores of Philippines, Indonesia, Myanmar, Sri Lanka and Bangladesh in recent months.

In this issue we have covered new Levis stadium in the project abroad and Schwing Stetter expertise in high-rise construction, as you read this issue Schwing engaged in fifty high-rise projects in different part of Asia.

Indonesia International Motor Show, going to be held during 18-28 September 2014 at Jakarta, Indonesia. Some of our Truck Mixers are expected to be exhibited during this event. Please visit the exhibition and let us know your feedback.

Happy reading!!!

With best regards,

V.G. Sakthi Kumar

and

Akmal Rahman. B

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Build SL 2014 – Construction and Re-generating Expo was held between 30th May to 1st June-2014 in Bandaranaike Memorial International Exhibition Centre at Colombo, Sri Lanka. The Exhibition was organized by Chamber of Construction Industry(CCI)-Sri Lanka. Schwing Stetter Exhibited CP-18 Batching Plant, SP-1800 Concrete pump and 6 Cu.m Truck Mixer during this event. The stall was visited and appreciated by our esteemed customers.

Schwing Stetter grabbed Apollo CV Award 2014

Schwing Stetter bagged the Best Commercial Vehicle Truck Application Builder of the year, at the “Apollo Commercial Vehicle awards 2014”. The award recognized Schwing Stetter for its excellence in truck application building in India and globally. The award was presented by Mr. Anirudh Bhuwalka, Managing Director & CEO, AMW and was received by Mr. Sakthikumar V.G., MD, SSSSPL.



The jury included domain experts and industry insiders, like Rajat Kataria, Divisional Head Marketing, CV Radials, Apollo Tyres, Dilip Chhabria, Founder DC Design, V Ramakrishnan, MD, Frost & Sullivan and Sridhar Chari, Editor, Commercial Vehicle magazine, carefully laid out their observations to ensure a fair judgment process. The fifth edition of the awards had 27 award categories recognizing the transformation of various sectors acknowledging OEMs, auto component makers, application builders, fleet operators and dealers among others.

240 meters vertical placement by 21 year old pump



Schwing Stetter BP4000 E a 21 year old [Year of Manufacture : 1996] pump recently did a concreting achievement by pumping concrete to 55th floor [240 meters] at Ahuja Tower Project in Mumbai. The pump which was deployed for concrete pouring at 52 floor did till the maximum tower height of 55 floors [240 meters]. The tower is constructed by L&T ECC and BP4000 pumped high grade concrete of M40 & M60 for this massive structure. The 21 year old BP4000 pumped a total of 3263 m³ of concrete with horizontal length of 51 meters, vertical height of 240 meters along with Separate Placing Boom.

Guinness world record by Schwing Boom Pumps



Conco broke the Guinness World Record for the largest continuous mat pour in 18 ½ hours (1 ½ hours under the projected time). To verify the event, there was an official Guinness World Records adjudicator on-site. The mat pour was for the new Wilshire Grand Center that is being constructed in downtown Los Angeles, and is slated to become the tallest building in the U.S. west of the Mississippi. A total of 16208 m³ of concrete was placed at a speed of 876m³/hr. during this world record. According to Conco Companies one of the stars of the show was Schwing KVM52 2525- 8 boom pumps which started the pour. Schwing S46 SX was also pumped in this site, each of these featured pumps approximately pumped 2,000 yards smoothly, safely and trouble free.



Schwing for High Rise

Schwing for High Rise

With the rapid increase in urbanisation, high-rises are the future. In cities, with no space to expand sideways, the only option for builders is to go up. Schwing, in line with our reputation of being the 'System House for Concreting', has the complete range of concreting solutions for all your high-rise construction needs.

Preparing the concrete

Super accurate Batching Plants to prepare fine grade concrete. High-rise structures are subjected to the elements in a far greater degree, there is the force of wind acting on it, its own weight and the load is increased manifold in case of storms, rains and heavy winds. So, to withstand these forces, the concrete used must be of a high strength and extremely durable. Stetter mixers guarantee Batching Plants of the highest consistencies, this enables greater strength and so the building is stronger.

To ensure that concrete mixed has all the mentioned qualities, we have designed the Stetter mixing plants equipped with twin-shaft mixers and pan mixers. The angle and orientation of the blades in the mixer ensure the highest mixing accuracy and consistencies. Also high-rises require a lot of concrete, so we have designed our mobile series of plants. For these plants, no civil foundation is required, just put some PCC and the plant is



supported on the skid. Stetter plants are well designed to accommodate all its accessory system in a minimum foot print. The presence of this plant in-site reduces down times and helps your building come up at rapid speed.

Pumping



Heavy-duty pumps to pump at higher placing speeds with lowest fuel consumption. After preparing, comes the pumping, high-rise pumping generates a lot of pressure on the pump, especially on the valve and pumping cylinder. For this you need heavy-duty equipment that can pump concrete to the highest heights without burning excessive fuel. Also the pumps must work at maximum output in minimum working hours since such projects are in densely populated areas. The valve system should be designed to handle high strength concrete which are very stiff to pump.



For pumps that fit all these criteria and more, look no further than the range of pumps offered by SSI. Schwing offers concrete pumps to fit all kinds of high-rise projects. The pumps in our range include the Turbo series of the SP2800, SP3000, SP3500 that are ideal for pumping concrete heights starting 200+ meters and the world-famous heavy duty range, pumps like the SP4800 and the SP8800 that are the first choice of contractors worldwide whenever concrete has to be pumped to record breaking heights.



All our pumps come equipped with our patented rock valve technology. This valve is the only concrete-pumping valve that can be hard-faced completely internally. The design is also such that concrete naturally flows along the path of least resistance. This means that concrete rubs against concrete and not against the valve so, not only does the wear on the valve reduce, you get a smoother concrete placed guaranteeing greater strength to the structure. The only valve which allows the entire concrete to be taken to the placing area after completion of every pour, thanks to the unique SCHWING water cleaning system.

Placing



Highrise construction has special demands on the placement of concrete. While smaller structures can make do with ordinary distribution methods, high-rises cannot. The design and height of the buildings along with the challenging pour cycle targets, makes it very difficult for concrete to be placed by conventional methods. Schwing Separate Placing Boom series are the natural choice because of its lighter weight and boom configuration which suits the job because of its faster setting times.



The Separate Placing Boom or SPBs are distributors that can be mounted on columns or platforms that rise along with the building as construction work progresses. The SPBs are fed concrete via pipelines from ground-based pumps and they in

turn place the concrete accurately wherever required. The SPBs can swivel about their axis and cover a 360 degree area. Schwing manufactures SPBs that can cover areas from a radius of 25m to 42m. All our SPBs have a specially designed combination fold and can be mounted on columns, external formworks, lift shafts or a number of specially designed self-climbing platforms, eg:- the Doka, GROCON formwork.

A unique feature of Schwing SPBs is the split-boom feature. This feature allows the SPB to be split into two parts for reduced weight of easier lifting. This splitting enables the contractor to easily lift the boom into position using an ordinary tower crane.

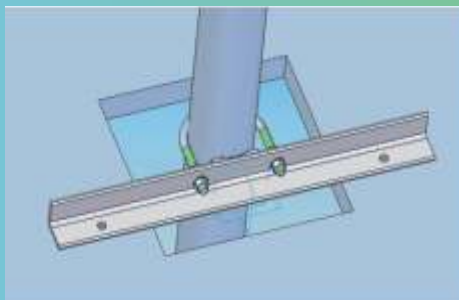
Pipeline Supports



Long-radius riser bend secured in concrete.



Inclined clamping

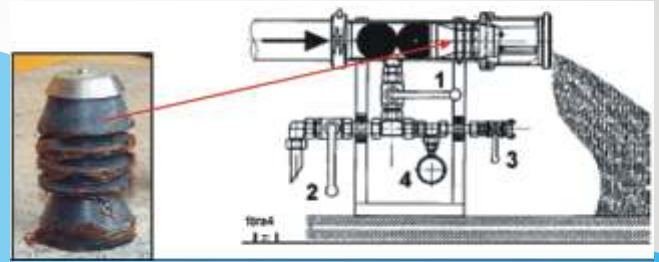


Vertical pipeline support

One of the critical requirements for placing concrete in skyscrapers is the pipeline routing and its supports. The taller the building, the greater the concrete in the pipelines and so, the greater the weight and force. Every 100 meters of pipe along with concrete weighs as much as 4.5 tons. So, proper supports are imperative. SCHWING provides tailor made solutions for every building profile.

Pipeline Cleaning

The vast volumes of concrete continuously pumped to such buildings creates another problem. Once the pumping job is over, there is a large amount of concrete inside the pipelines. This concrete needs to be taken to the pour area eliminating wastage and saving money. For a 200 meter building there will be a minimum saving of Rs 8 lac within a year. So it makes sense to clean the pipelines with SCHWING water cleaning system.



A Go devil and its position in the pipeline during cleaning operation.

Also concrete accumulation on the inside of pipes reduces the life of the pipe and creates a smaller path for the next pumping operation. All these reasons and concern for the environment led us to develop the most efficient methods for the cleaning of pipelines.

1. Go-devil- This is a rubber bonded steel float that is inserted into the pipes. Water is used to propel it and it travels the length of the pipeline flushing out the concrete.
2. Cleaning balls:- Cleaning balls can be used either alone or in pairs. They are also used to flush out the residual concrete in the pipelines.

Other Accessories:



Another arrangement to switch concrete flow between pipelines is with an "S bend". Concrete flow from one "in" pipe can be switched to either of two parallel "out" pipes as shown in the adjoining figure.



High Pressure shut off valve

Technical Support

SCHWING has forecast this demand area very early, thanks to the experienced High rise project team which is present in all major metros. With our vast experience in pumping concrete in India and worldwide, you can rest assured that you have the best expertise guiding you throughout your project. We support you right from the selection of pumps and the pipeline arrangement to the actual pumping and placement of concrete. So, if you have a high-rise to construct, contact us on the number/mail-ids given at the end of the newsletter or contact your Schwing representative.



New Stadium Races Toward Super Bowl 50

The new Levis Stadium , a \$1.2 billion structure , is under construction in Santa Clara California after the ground breaking ceremony in April 2012. This will be the home for Super Bowl 2016 , the 50th Anniversary of the NFL's biggest game. The Design/Build team of Turner Construction and Devcon Construction (Turner/Devcon, A Joint Venture), Santa Clara, chose ACPA member CONCO of Concord, California to help meet the ambitious schedule with their fleet of concrete pumps.



The construction , supposed to be ready by 2014, was divided into four separate projects the two midfield sections and the two end zone sections as opposed to the traditional method of building stadiums in a "wedding cake", circling the stadium one section at a time. The foundation for all four segments had to be built simultaneously. "We had to excavate 60,000 yards of dirt, reinforce and pump 18,000 cubic yards of concrete, backfill and build a half-mile of perimeter wall," according to Dan Fink, CONCO project manager, "in 40 calendar days." The



project specification simplifies that this is the largest structural steel building under construction in the United States. "Twenty-three semi truckloads of anchor bolts were needed for the foundation," according to Fink, "and the tolerance was one-eighth of an inch." "Throughout the foundation's construction the majority of the pumping was accomplished by our Schwing S 58 SX," according to Gary Brandt, CONCO pump superintendent VP of marketing for the Bay Area. "We also used our Schwing KVM 52 and S 47 SX throughout the project." The S 58 SX's Overhead Roll and Fold boom with 188-feet of reach provided the most coverage from a single set-up, but it was the ability to move to other locations quickly that was the most valuable.

"There were just a lot of smaller pours , we pumped about 500 yards per day," Fink noted, "Most of the concrete was a standard 4,000 psi mix, with 8,000 psi at shear lugs" The S 58 SX utilizes Super X outriggers, which were particularly valuable on the crowded site. Mr.Brandt said, "Pumping set-ups are both inside and outside the structure, so the narrow 29' 2" front



outrigger spread, and the ability to shoot the curved outriggers out and around other equipment and obstacles, are a big help.” The ability to provide smooth concrete output for the precision pours was aided by the Schwing 2525H-6 twin cylinder, all-hydraulic concrete pump with variable output to 213 cubic yards per hour at just 22 strokes per minute. “We also appreciate the fuel efficiency of the Schwing pumps,” Brandt noted.

Fink said, “In the case of our operators, with a 12 hour limit in work that California requires, the pump ran continuously like this for nearly twenty four hours.” Pump maintenance is performed on site and, “there have been very few issues,” according to Brandt. “These pumps are real workhorses.” “We worked as close to 24 hours per day as we could and nobody balked at it,” commented Fink. “I don’t think there was any other team that could have done a better job.” This sentiment was shared by Dave Masel, Turner/Devcon’s general superintendent. “They did an absolutely fantastic job considering the challenging schedule and simultaneously servicing four adjacent building sites.”



Pre-cast sections make up the tiers supporting the 68,500 seats. In order to reach to the upper deck stairways, crews have placed as much as 300-feet of line connected to the fully extended boom of the S 58 SX. The concrete work is expected to be completed in October and will total approximately 60,000 cubic yards.

“This is one of the fastest I have ever built, and I understand it is the 6th fastest ever.” Dan Fink summed it up best, “It’s amazing what you can accomplish when no one cares who gets the credit.”

Tips to keep your Transit Mixer efficient



If you have invested in a Transit Mixer, you should ensure that your machine is well maintained in order to get the most value out of your investment. This means performing regular checks on your mixer, following maintenance schedule, trouble-shooting any problems that may arise and operating as per the best practices in the industry, which are most important. Most likely, it is the drivers of transit mixers who are tasked with the extra responsibilities of taking care of these machines.

Some tips for your Transit Mixer Drivers

1. Make sure you clean the mixer on a regular basis, including the mixing paddles and drum. You can clean your mixer using a water hose to wash away the fresh concrete before it starts setting, which is harder to get rid of at a later stage.

2. If you see concrete build-up in the drum, use a high pressure water pump to remove it. If a high pressure water pump is unable to remove the build-up, you can get rid of it by carefully chipping it away with a chisel.



3. Do not overload the Mixer.

4. Ensure that the headlights, tail lights, stop lights, turn signals, clearance lights, and reflectors are in working condition.

5. Ensure that the brakes are in good working condition.

6. Ensure the reverse alarm is in working condition.

7. Ensure that the truck is equipped with a safety kit, including flares, fire extinguisher, spare fuses and light bulbs, first aid kit, and accident report forms.



8. Ensure all tyres are inflated to their rated pressures.





9. Ensure that all controls and their location are understood before operating the mixer.
10. Keep the drum rotating in mixing direction at agitating speed (3-4 rpm) during transport.
11. Be exceptionally cautious while making turns.
12. Before driving into the discharge area, ensure the ground is adequately firm and dry.
13. Ensure the pathway to the discharge area is free on any steel rebar, timbers with nails, wire, and other objects that may damage tires.
14. Slower speeds are to be maintained (10 Km/h) while approaching the discharge area.
15. Ensure that the discharge area has sufficient head room for the mixer.
16. Always station the truck on stable ground before operating the mixer.
17. Remove the ignition keys to ensure that nobody can start the truck during maintenance.
18. Properly secure the ladder and chutes with the locks.
19. Wear hard hats, safety glasses, proper-fitting gloves, and safety shoes while operating the mixer.



20. Block the wheels of the truck before operating the mixer.

21. Ensure all personnel stand clear of the moving parts.



22. Do not climb ladder or platform or stand on chutes while drum is rotating. Serious injury may result.

When you buy your Transit Mixer from Schwing Stetter India, you benefit from Schwing Stetter's years of expertise in concrete equipment, making sure you get a good return on your investment.



Designing Truck Mixers for Evolving New Trends

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S 36 X BOOM PUMP



Made in
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- Long Stroke Pumping Cylinders.
- High Return on Investment.
- Slewing Ring provides 720° Rotation of the Boom.
- Open Hydraulic Circuit increases the Reliability.
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- Lowest Wear and Tear Cost.
- Long service life.

Schwing Stetter is the pioneer in manufacturing of concreting equipment for the past 78 years. Quality products, strong design capabilities and the experience from developed countries during its growth phase make Schwing Stetter the preferred choice world over.

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