# Concrete Recycling Plant RA 12 / RA 20





## Schwing Stetter Moves Concrete - World wide

Wherever concrete is produced and moved, where you will find Schwing Stetter Machinery. With Plants in India, Germany, Austria, USA, Brazil, Russia, China as well more than 100 sales and service facilities, this group of companies are always close to the customer. Our wide range of products with something for every application is what makes Schwing-Stetter the No.1 system supplied for concrete machinery worldwide.

### **Stetter Concrete Recycling Plant**

#### **Ecological Obligation - Economical Solution**

Concern for our environment, guidelines from legal authorities and above all, an increased awareness of costs are the main reasons for worldwide efforts to solve the concrete industry's disposal and recycling problems. Profiting from extensive experience gained with sieve / Cyclone separation system, Stetter had already developed and implemented the concrete recycling plant by 1976. Since then, our systems have proved to be unusually reliable, economical and highly wear-resistant. Our permanent development efforts have made the Stetter concrete recycling plant, an exceptionally strong product.

### Washing Procedure According to the Reverse Flow Process:

The washing drum principle used by Stetter provides you with numerous benefits:

The design concept (spirals connected directly to the drum) guarantees the least possible wear. Slurry water is used for recycling of concrete Separation of the surplus materials into mixed gravel from 0.2 to 63 mm and waste water, containing cement, fine sand and washable elements up to 0.2 mm The washing process in the drum works according to the reverse flow principle. Solids from 0.2 mm to 63 mm are transported against the flow of water using continuous spirals. Materials from 0.2 to 63 mm are extracted using a scoop on the vibrating chute, while the finer particles up to 0.2 mm are transported with the



water through the drum overflow. Flushing water for the washing drum can be drawn directly from the slurry tank using a centrifugal water pump. The overfill warning for the washing drum is released by measuring the power consumption of the drive motors and automatic switch on/off control of the feed hopper vibrators. This safety feature is possible with the free feed system used in the Stetter washing drum.

### **Benefits of Our Concrete Recycling Plant**

- Environmental concern.
- Satisfying Legal authorities guidelines. (PCB)
- No waste concrete disposal costs.
- Fresh aggregates and Recycled sand & water. Minimum payback period of capital investments from RA12.
- Low operational costs thanks to automatic operation
- According to site limited space condition, RA-12 plant can be positioned
- Low replacement part costs
- Low-noise operation
- Water conservation due to closed water circulation during washing operation
- Protection against overflow and automatic drum-feed cut off

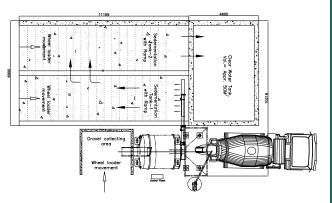


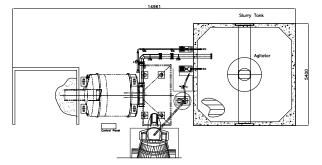
### **Installation Methods**

### Settling Tank System

#### Benefits of Our Concrete Recycling Plant:

In this method, Slurry tank with Agitator system is eliminated. There will be 3 tanks, in which 1st tank will receive slurry water from RA-12 plant. High density water will settle in tank 1st and 2nd tank will get slight Slurry water. In this 2nd tank, 95% of slurry will get settled and finally we will get clear water in clear water tank. Slurry pump is not required, standard motor can be used for handling clear water. In this method, settlement of slurry in the pipe line can be avoided.





### **Agitator Tank System**

In this method, Slurry tank and agitator is used to recycle the slurry water as shown in picture. In this method, settlement of sludge will be less, since the Agitator keeps slurry water always in motion. Same slurry water is used for cleaning of aggregates in the drum.

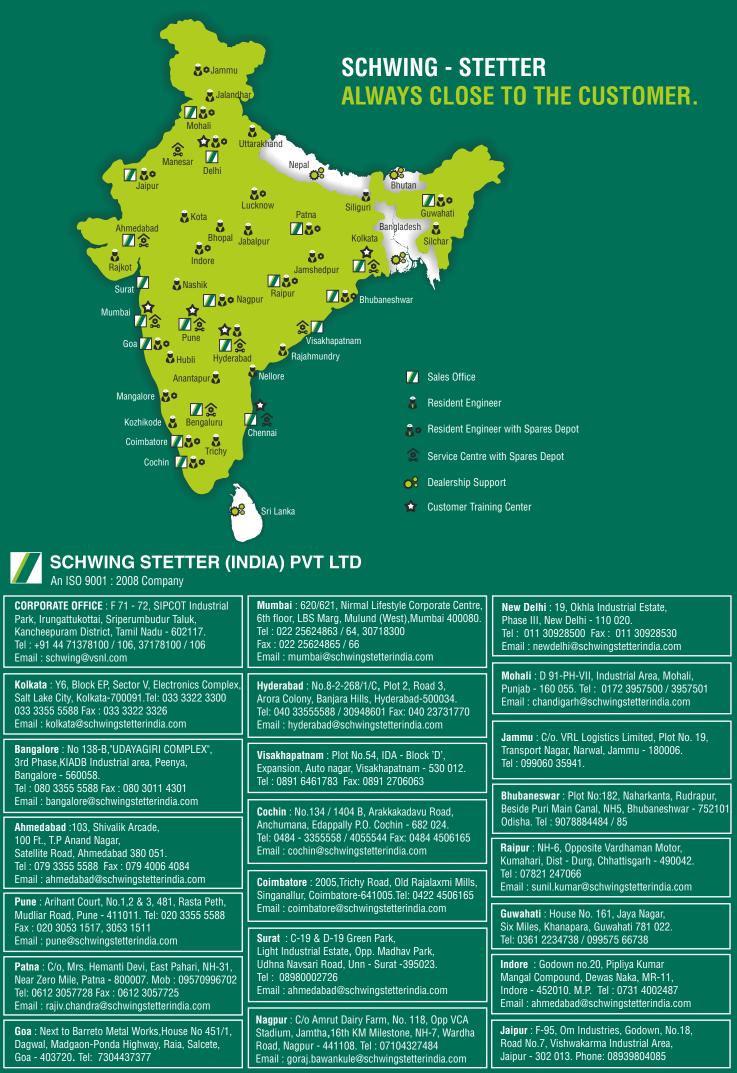
### **Return On Investment:**

Investment in installing a RA -12 could be taken back in a couple of years through direct saving by way of

- 1. Aggregates / Water recycling.
- 2. Slurry water could be used in production of concrete.
- 3. TM Washing extends the life of spirals and minimizing the replacement costs.
- 4. Labour cost for chipping the settled concrete from TM drum will be eliminated.

### **TECHNICAL DATA**

SYSTEM TYPE	Unit	RA 12	RA 20
Washing Capacity for normal concrete	m³/h	12	20
Screen cut	mm	0.2	0.2
Flushing water quantity (adjustable)	m³/h	7 - 12	8 - 15
Rinsing water connections for washing drum	DN	50	50
Flushing water connection for water boom	DN	80	80
Slurry water drain line	DN	200	200
Water capacity in drum	m³	2	4
Quality of flushing water for water boom	m³/h	18	18
Motor rating washing drum	KW	2 x 2.2	2 x 3
Charging hopper vibrator	KW	2 x 0.34	2 x 0.34
Discharge chute vibrator	KW	2 x 0.34	2 x 0.34
Rinsing water pump to drum	KW	2.2	2.2
Flushing water pump to boom	KW	2.2	2.2
Connected load of base system approx.	KW	10.16	11.76
AGITATOR BASINS:			
Drive power of agitator motor	KW	5.5	5.5
Dimensions of agitator basin	m	5 x 5 x 3.5	5 x 5 x 3.5
Agitating interval approx. (adjustable)	min	3 min runtime, 15 min pause	3 min runtime, 15 min pause



The Data given in this brochure are subject to change without notice.