

ART

SSL High Power
SIMEX
patented

ASPHALT REPAIR TECHNOLOGY

ART 1000

SIMEX
HEAVY MADE EASY

"ALLIGATOR CRACKING, ROAD DETERIORATIONS

REGENERATED ASPHALT MIXED WITH AN ADDITIVE

THE ROAD CAN BE DRIVEN ON IMMEDIATELY
AFTER THE CONGLOMERATE IS COMPACTED

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ASPHALT REPAIR TECHNOLOGY

ART 1000

Simex ART is a patented technology specifically designed for the regeneration of bituminous conglomerate (asphalt) which reuses 100% of the material present on site without removing the milled material or adding other materials. It is used in functional road surface maintenance, at a depth varying between 30 and 100 mm.

It does not disrupt traffic flow and ensures immediate road drivability. It also ensures that maintenance lasts for a reasonable amount of time, which allows local authorities to plan road maintenance, with significant benefits in terms of road user safety.

APPLICATION FIELDS

Simex ART is specifically designed for the functional restoration of deteriorated road surfaces, such as:

- Branch or alligator cracking
- Bumps, dips, ripples
- Potholes and gaps
- Localized pavement alterations, such as: loss of adhesion and smoothing of the aggregates
- Temporary patching

GOALS

Simex ART has a triple goal:

- 1) To repair road surface distress quickly and effectively, without totally disrupting traffic flow and, especially, without repeatedly having to carry out emergency maintenance.
- 2) To reduce the costs of purchasing and handling new mixes by using only the HMA (Hot Mix Asphalt) available on site.
- 3) Environmental sustainability: 100% of the materials present on site are recovered and regenerated, while reducing construction site traffic resulting from procuring new materials and removing waste.

OPERATIONAL ADVANTAGES

- Restoration of road surface distress, quickly and with long-lasting results, which allows for adequate road maintenance planning.
- A dynamic and smaller construction site: no large machines are required, which significantly reduces traffic disruption. A reduced number of workers and a single vehicle containing the necessary equipment.
- Money savings: zero costs for the procurement and transport of new mixes and virgin aggregates.

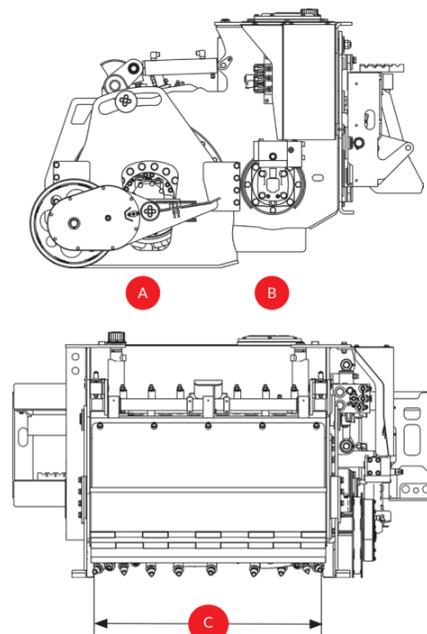
ENVIROMENTAL ADVANTAGES

- No impact: pre-existing materials are reused, recycling and rehabilitating worn HMA (Hot Mix Asphalt). Technically, this operation can also be repeated in subsequent maintenance operations.
- Use of eco-friendly materials.
- No handling or management of special materials or waste.

TECHNICAL DATA

ART 1000

| MILLING DRUM A | | | |
|---|--------------|--|--|
| Width C | mm inch | 1000 40 | |
| CRUSHER DRUM B | | | |
| Width C | mm inch | 1000 40 | |
| Depth | mm inch | 0 - 100 0 - 4 | |
| Depth adjustment | | independent right and left - hydraulic | |
| Side shift | | hydraulic | |
| Tilt | | 12° | |
| Additive tank capacity | l gal | 85 22 | |
| Weight (1) | kg lbs | 1400 3086 | |
| Required oil flow | l/min gpm | 115 - 152 30 - 40 | |
| Maximum oil pressure | BAR psi | 300 4350 | |



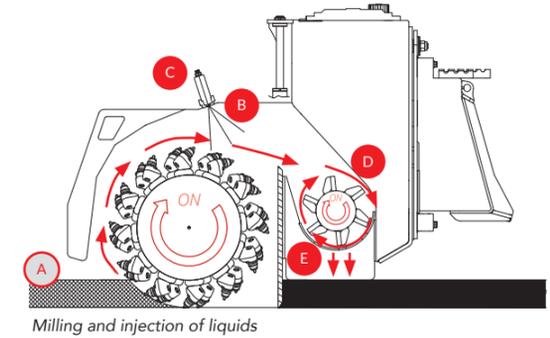
(1) The installer is responsible for ensuring that the equipment meets the prime mover's specifications and weight requirement. Simex does not accept responsibility or liability for the information provided. Technical modifications may vary without prior notice.

OPERATION OF ART 1000 AND OPERATING METHODS

1 MILLING AND REGENERATION FIRST PASS

Milling (A) from 30 to 100 mm depth (hydraulic adjustment), depending on extent of deterioration. Milled material is mixed with regeneration additive (B) and nebulized (C) at high pressure using special pump. Mixed milled material goes into second chamber where crushing drum (D) reduces to correct particle size and further mixes it. Output grille (E) checks size obtained (0-15 mm).

Nebulization is checked by a Simex system that ensures maintaining correct additive percentage depending on ground speed detected.

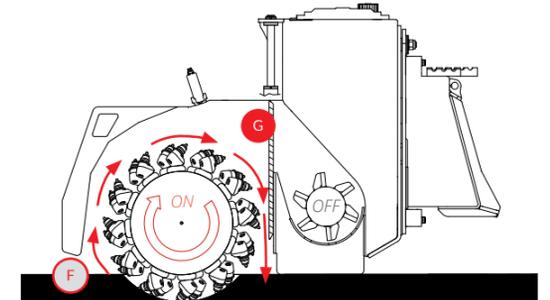


Milling and injection of liquids

Note: it may be necessary to spray water using the integrated nebulization system (depending on type of additive used and conditions and type of asphalt to be resurfaced).

2 MIXING SECOND PASS

Mixing (F) milled material obtained using milling drum. The chamber of the crushing drum is closed with special scraper (G). This phase may come after laying possible binder (e.g.: cement). Depending on type of additive used in phase 1).



Final mixing

3 COMPACTION

Once regeneration is completed using ART 1000, compaction comes next (plate or roller). The end result is a 100% regenerated bituminous conglomerate which, once compacted, can be driven on immediately.

- A Milling
- B Regeneration additive
- C Injectors
- D Crusher drum
- E Grille to check output size 0-15 mm
- F Final mixing
- G Bulkhead to separate chambers

