ART 1000 - GEN II: TECHNOLOGICAL EXPANSION AND ADVANCED ELECTRONIC FUNCTIONS

SIMEX

ART | ASPHALT REPAIR TECHNOLOGY

ART 1000 - GEN II



LED INDICATOR IN ERGONOMIC POSITION ABOVE EQUIPMENT, FOR A VISUAL INDICATION OF CORRECT FORWARD SPEED FOR THE OPERATOR.

DOWNLOAD THE TECHNICAL BROCHURE

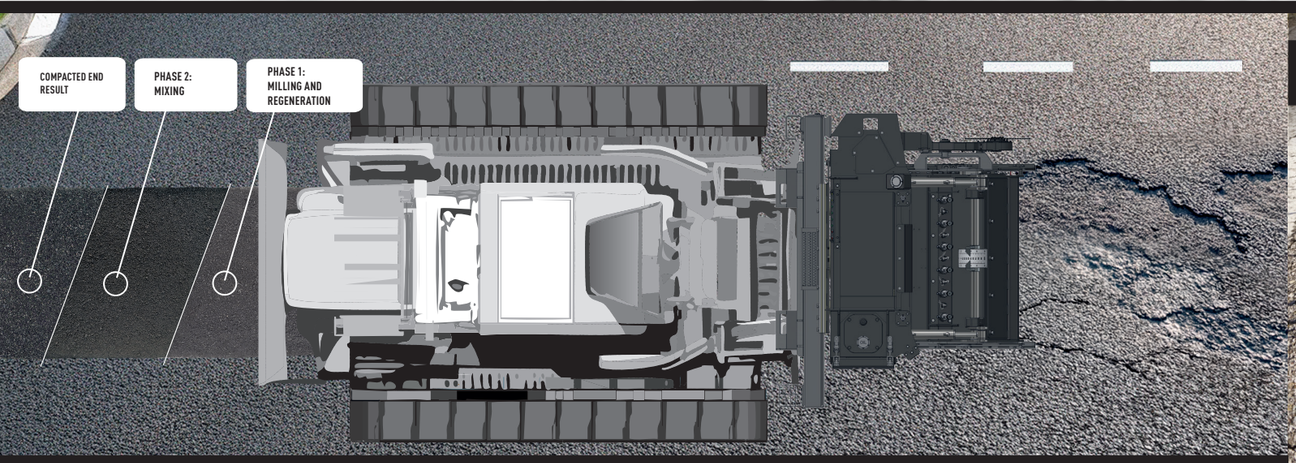
WATCH THE VIDEO

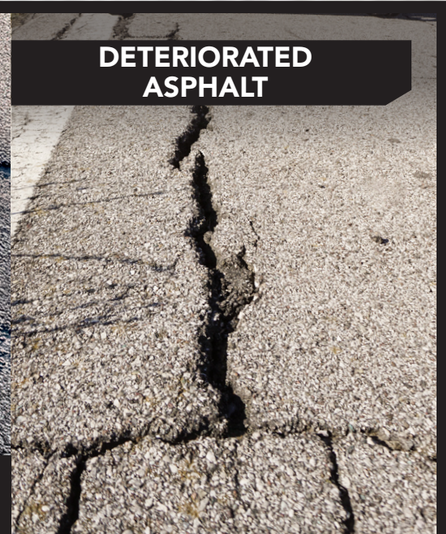


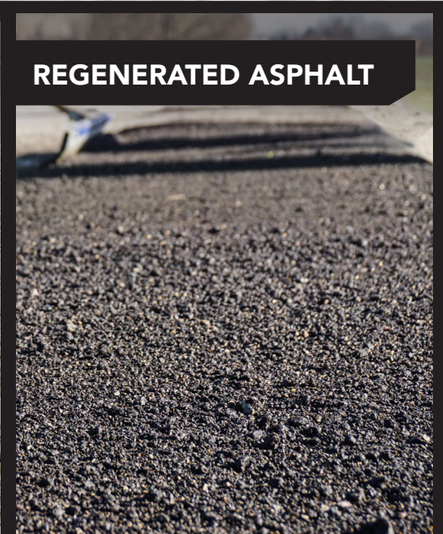
ON-BOARD ELECTRONICS WITH VIDEO INTERFACE FOR THE BEST CONNECTIVITY EXPERIENCE BETWEEN OPERATOR AND ART 1000 TECHNOLOGY.



THE ART 1000 TECHNOLOGY AIMS TO RESTORE SURFACE ROAD DISTRESS, ON SITE, BY MEANS OF COLD REGENERATION OF BITUMINOUS CONGLOMERATE, REUSING 100% OF THE MATERIAL PRESENT ON SITE WITHOUT PRODUCING WASTE.









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SIMEX HEAVY MADE EASY

ART | ASPHALT REPAIR TECHNOLOGY

ART 1000 - GEN II

SSL High Power HP

SIMEX • patented •

ART is a Simex-patented technology for the regeneration of bituminous conglomerate which reuses 100% of the material present on site without removing the milled material or adding other aggregates.
It is used in functional road surface maintenance, up to 100 mm depth. 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 FIELD

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

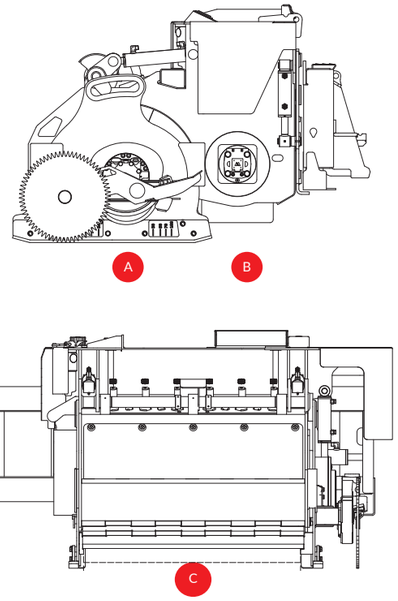
- Restoration of road surface distress, quickly and with long-lasting results, which allows for adequate road maintenance planning.
- A dynamic and smaller construction site: no large machines are required, which significantly reduces traffic disruption. A reduced number of workers and a single vehicle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

ENVIRONMENTAL ADVANTAGES

- No impact: pre-existing materials are reused, recycling and rehabilitating worn HMA (Hot Mix Asphalt). Does not produce waste and regeneration can be technically repeated in later maintenance.
- 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*	100 *26*
Weight *(1)*	kg *lbs*	1860 *4100*
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.

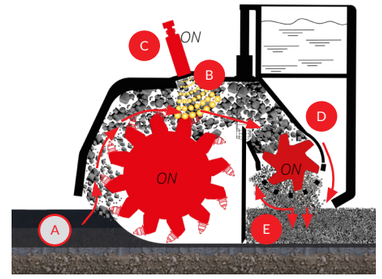


OPERATION OF ART 1000 AND OPERATING METHODS

1 MILLING AND REGENERATION

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

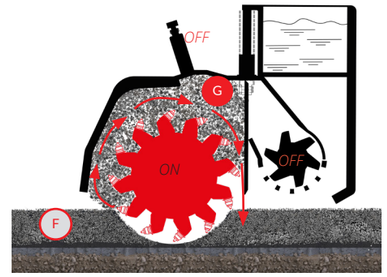
Spraying is managed by a built-in electronic system that automatically maintains the percentage of additive as the forward speed changes, based on the initial parameters set by the operator.



Milling, volumetric reduction and injection of liquids

2 MIXING

Mixing (F) milled material obtained using milling drum. The chamber of the crusher 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 *Rejuvenator*
- C *Injectors*
- D *Crusher drum*
- E *Grille to check output size 0-15 mm*
- F *Final mixing*
- G *Bulkhead to separate chambers*

