

Trencher-Type Bucket Wheel Reclaimer



 **KRUPP**

**KRUPP Rail-Mounted Bucket Wheel Reclaimer,
Special Trencher Design
for reclaiming material from trenches or
narrow stockpiles**

The trencher design basically differs from other bucket wheel reclaimers, because it has a different mode of operation. Its characteristic is the recovery of material from a narrow pile by travel movements (instead of the normal slew movements). The material is always reclaimed with the bottom part of the bucket wheel cutting periphery. After completing a travel pass, the bucket wheel penetrates further into the pile from the top by

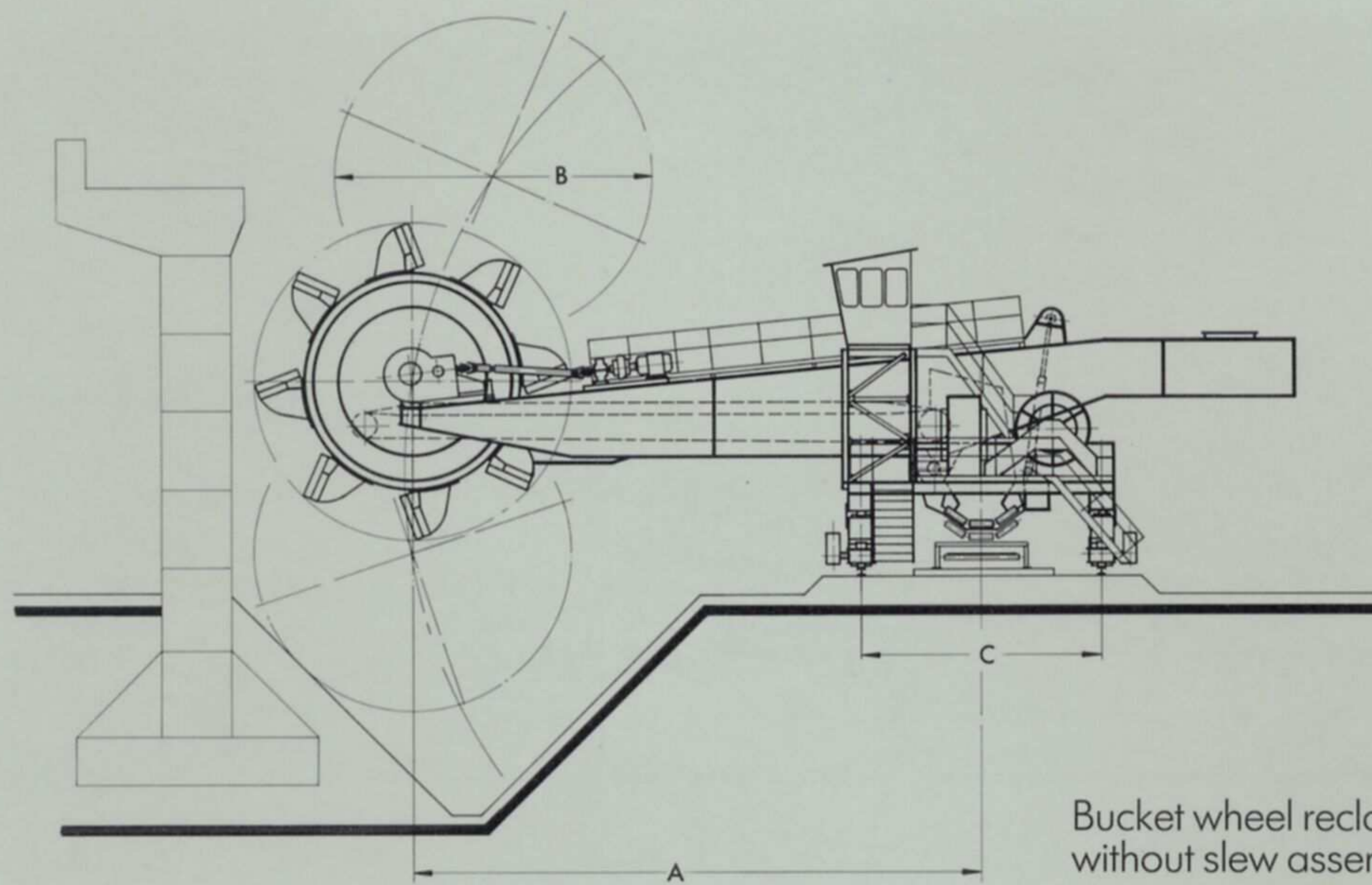
approximately one bucket depth. The boom can be short because of the narrow stockpile width, while the wheel diameter must be in a certain relation to the active stockpile width, i.e. able to cover that width.

In very narrow piles, the trencher operates with boom positioned at right angles to the direction of travel. Sometimes no slew assembly is needed at all. Slew movements are required, however, if stockpiles are arranged on both sides of the reclaimer path.

The same method is also applicable for reclaiming slightly wider piles; in that case the stockpile cross-section is removed by bites, with two or maximum three changes of the wheel boom slew position.

In principle, trencher type units can also be supplied as dual-purpose (stacker-reclaimer) machines, with different trailer alternatives.



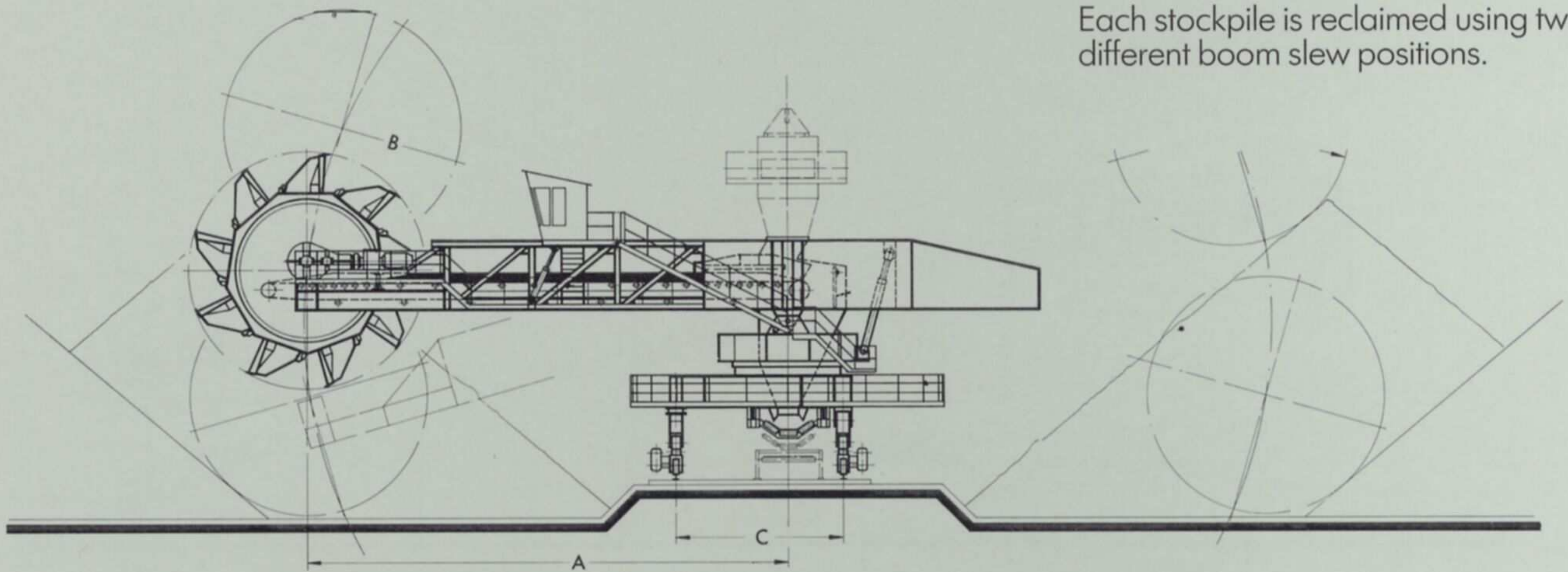


Bucket wheel reclaimer, trencher design, without slew assembly

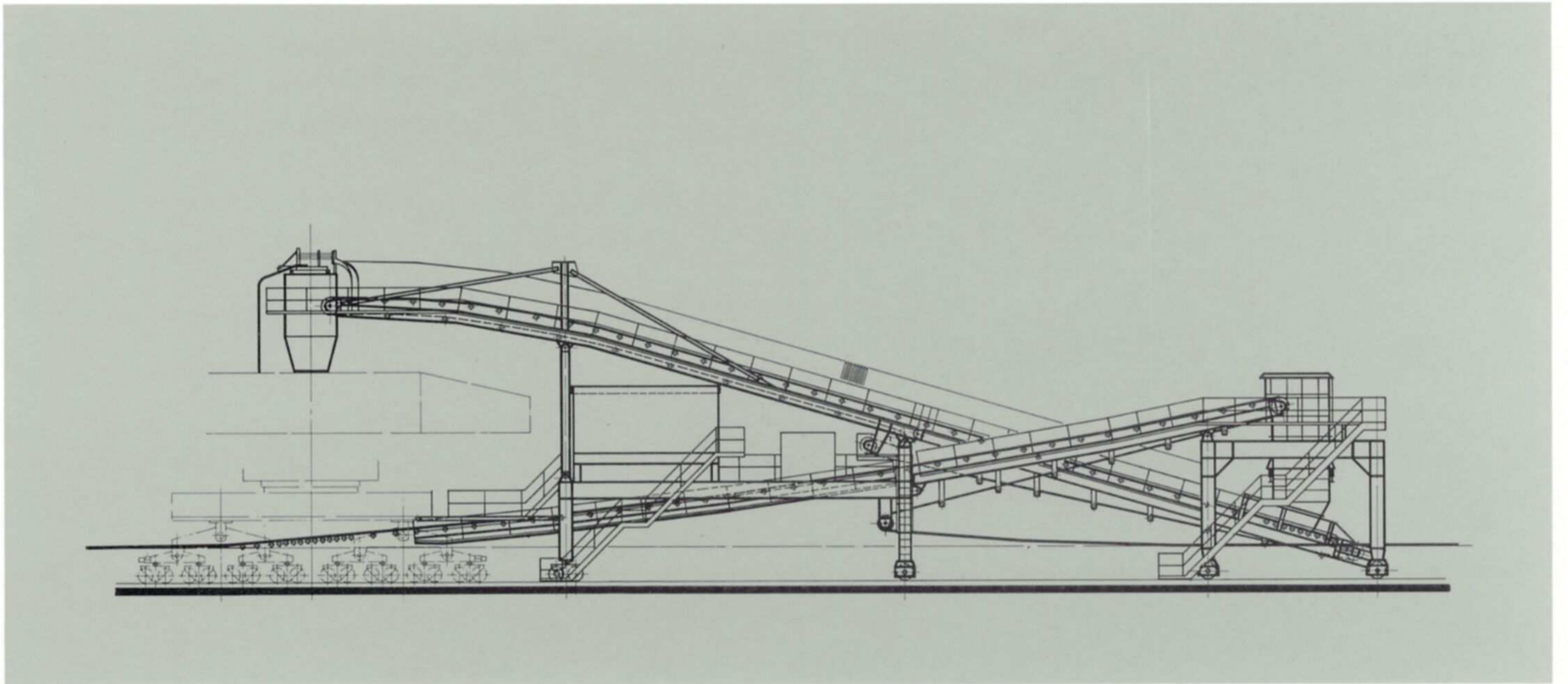
Type		Ld	$\frac{1000 \times 1800}{14}$		
Code			Alabama		
Number built			1		
Country of operation			USA		
Material handled			coal		
Bulk weight	t/m ³		0.8		
Reclaiming rate					
average	t/h		2230		
maximum	t/h		2730		
Reclaiming equipment					
Boom length	A m		14		
Bucket wheel type			cell less		
Bucket wheel dia.	B m		8		
Bucket discharges	1/min		56		
Rated bucket capacity	l		1000		
Number of buckets on wheel			8		
Boom conveyor					
Belt width	mm		1829		
Belt speed	m/s		3.0		
Troughing	°		35		
Boom hoist					
Type			hydraulic		
Travel assembly			rail-mounted		
Support system			3-point		
Travelling speed	m/min		5-20		
Number of track wheels/driven wheels			12/6		
Track wheel dia.	mm		630		
Track gauge	C m		6.096		

Bucket wheel stacker-reclaimer,
trencher design.

Each stockpile is reclaimed using two
different boom slew positions.



Type		Ldc	1400x1800 17,5		
Code			IMT		
Number built			2		
Country of operation			USA		
Material handled			coal		
Bulk weight	t/m ³		1.05		
Reclaiming rate					
average	t/h		3600		
maximum	t/h		4150		
Stacking rate					
maximum	t/h		5400		
Reclaiming equipment					
Boom length	A m		17.5		
Bucket wheel type			cell less		
Bucket wheel dia.	B m		8.6		
Bucket discharges	1/min		62		
Rated bucket capacity	l		1400		
Number of buckets on wheel			9		
Boom conveyor					
Belt width	mm		1829		
Belt speed	m/s		5.1		
Troughing	°		35		
Slew assembly					
Number of slew drives			1		
Slewing range	°		± 90		
Slewing speed	m/min		12.2		
Boom hoist					
Type			hydraulic		
Travel assembly			rail-mounted		
Support system			3-point		
Travelling speed	m/min		28		
Number of track wheels/driven wheels			24/12		
Track wheel dia.	mm		630		
Track gauge	C m		6.1		
Trailer design			counter-directional tripper (F)		
Overall length	m		44		
Number of track wheels			10		
Elevator conveyor			+		



Trailer for IMT machine, Design F