ROCKWOOL OR NFT?

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To stay competitive in long-season tomato production, there seems little doubt that growers must start thinking of growing on a soilless medium. Rockwool and NFT are the two main contenders. In 1984, NFT accounted for about 80 acres of the UK total and rockwool 85; in 1985, NFT accounted for 77.5 acres and rockwool 212.5, according to ADAS.

The costs involved with each medium are laid out here, to help growers make an informed choice. Fuel, labour and pesticide costs do not, on the whole, influence the decision directly.

The figures used are close approximates of prices which leading suppliers offered in 1985. Fertilizer and water usages have been arrived at by interviewing three comparable growers on each system located in hard water areas on the South Coast. All figures are presented as simply as possible, and it should be understood that there is a lot of variation between nurseries.

The costings are based per acre in a Venlo-type glasshouse with a plant population of 10,500 sown in October/November. Prices exclude freight.

ROCKWOOL

Installation costs

Monitoring Equipment	
pH/CF dosing units/acid injector	$ 3,744
pH guard	432
Tank/heat exchanger/mixing valve and pump/electrical control of heating	3,459
Sand filters & backwash pipework	684
Irrigation feed harness (10,500 drips)	3,168
Manifold and main run line + 3kW pump	1,836
*Polystyrene 10ft by 12in by 1in.	1,547
Total	$14,870

Running costs for rockwool renewed each year

Sleeved slabs		
5,250 (900 by 150 by 75) @ 0.78	$5,897	
Propagation cubes		
12,075 (36 by 36 by 40)	172	
10,800 (75 by 75 by 100)	1,142	
	$7,211	
	-15%	$6,129
Black/white ground sheet 100 micron $46/roll		641
Fertilizer & acid		3,888
Water 130 gallons/plant/season 1,365,000 galls (6,204.5m³) 20p/m³ (Imperial gal)		1,787
Electricity for pump usage (over 40 weeks)		
3kW pump average 160 minutes/day @ 5.0p/unit		181
Solution analysis (over 40 weeks)		
Once every two weeks @ $18		360
Total		$9,098

Running costs for rockwool renewed every other year

Sleeved slabs		
Re-sleeve and steam sterilize 5,250 @ 0.11		$832
Propagation cubes		
12,075 (36 by 36 by 40)	$172	
10,800 (75 by 75 by 100)	1,142	
	$1,314	
	** -5%	$1,248
Ground sheet		641
Fertilizer & acid		3,888
Water		1,787
Electricity		181
Solution analysis		360
Total		$8,105

NFT

Installation costs with trays & stands

Monitoring Equipment	
pH/pH guard/CF/dosing units/temperature sensor	$ 3,149
600 gallon tank/stainless steel loop/ solenoid valve and pump	1,252
Pump and tank and manifold pipework	1,368
Feed line irrigation pipework	1,235
Return pipework	1,254
Trays and stands	16,589
Total	$24,847

Installation costs without trays & stands

As above	$24,847	
Plus polystyrene 10ft by 12in by 1in	1,547	
Minus trays and stands	16,589	
Total		$ 9,805

Running costs with trays & stands

Rockwool propagation cubes		
12,075 (36 by 36 by 40)	$ 172	
10,800 (75 by 75 by 100)	1,142	
	$1,314	
	-5%	$1,248
Black/white polythene 150 micron 700mm by 150m 38 rolls @ $24		906
Capillary strip 100m by 29mm		180
Fertilizer & acid		2,232
Water (these systems do not have a deliberate "bleed-off") 620,000 gallons (2,818m³) 20p/m³		812
Electricity		
For pump usage (over 40 weeks) 1.5kW motor		

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Day rate 5.0p/unit	
Night rate 2.75p/unit	420
Solution analysis (over 40 weeks)	
Every 3 weeks @ $18	234
Total	$5,232

Running costs without trays & stands

Same as for trays and stands	$5,232
Plus black/white ground sheet 100 micron	641
Total	$5,873

**Polystyrene will probably have to be renewed every second or third year depending on damage from drainage water and disease outbreak so could become a running cost.*

***Reduced discount due to smaller rockwool order.*

Editor's Note: Use of rockwool and nutrient film technique (NFT) in Europe has sparked strong interest. There are a few in this country who may be trying it, so we thought these costs presented in the *British Grower* might be of interest. What is not included is the strong commitment a grower must have to the best available technology and the best available water supply.