

SOLUTION ABOUT JADOR

1)

One load is 10 bags

Time of turn and back 4 mm (3+1 mm) so 15 movements of crane per hour

Working time : 11 hours per shift i.e. 82.5 t per shift et per hold

Work in 2 shifts and 3 holds means = $x 6 = 495$ t per day

Time of loading is so $4,950 \text{ t} / 495 \text{ t} = 10$ days

With a starting date on Friday 13th December at 8 am : 8 working days and 2 holidays means ending of operations on 23rd December at 8 am

Ship speed : 14 knots, i.e. 14 miles per hour with total distance 3,725 miles

$3,725 \text{ miles} / 14 \text{ miles} = 266$ hours, means slightly more than 11 sailing days

So 23 december + 11 sailing days : ETA 3 january between 8 am and 10 am at Marseilles

2)

Cost is

Average cost of a stevedore

$6750 \text{ CFA (working days)} \times 8 \text{ days} \times 2 \text{ shifts} \times 14 \text{ stevedores} \times 3 \text{ holds} = 4,536,000 \text{ CFA}$

$8500 \text{ CFA (holidays)} \times 2 \text{ days} \times 2 \text{ shifts} \times 14 \text{ stevedores} \times 3 \text{ holds} = 1,428,000 \text{ CFA}$

Crane rent of 6 t capacity

$6900 \text{ CFA} \times 24 \text{ hours} \times 10 \text{ days} \times 3 \text{ holds} = 4,968,000 \text{ CFA}$

Crane driver cost

$17,000 \text{ CFA (working days)} \times 8 \text{ days} \times 2 \text{ shifts} \times 3 \text{ cranes} = 816,000 \text{ CFA}$

$22,500 \text{ CFA (holidays)} \times 2 \text{ days} \times 2 \text{ shifts} \times 3 \text{ cranes} = 270,000 \text{ CFA}$

Unloading within the port

$475 \text{ CFA per t} \times 4,950 \text{ t} = 2,970,000 \text{ CFA}$

Port Handling cost : $600 \times 4,950 = 2\,970\,000 \text{ CFA}$

Total amount is 17,339,250 CFA

3)

The crane break in hold no 3 means loss of 2 full shifts, i.e. 24 hours delay amount of :

$6,750 \text{ CFA (working days)} \times 1 \text{ day} \times 2 \text{ shifts} \times 14 \text{ stevedores} = 189,000 \text{ CFA}$

$17,000 \text{ CFA} \times 1 \text{ day} \times 2 \text{ shifts} = 34,000 \text{ CFA}$

Total amount is 388,600 CFA

Handling port

4)

Loading cost at the end is 10 days + 1 unforeseeable day = 11 days

Surestaries cost are (11 days – 4 days) x 17000 US \$ = 119,000 US \$ in CFA is 59,500,000

And margin of 20% x 17,339,250 CFA = 3,467,850 CFA

So meaning that contract conditions are not suitable for breakbulk load and have to be negotiate **first**