



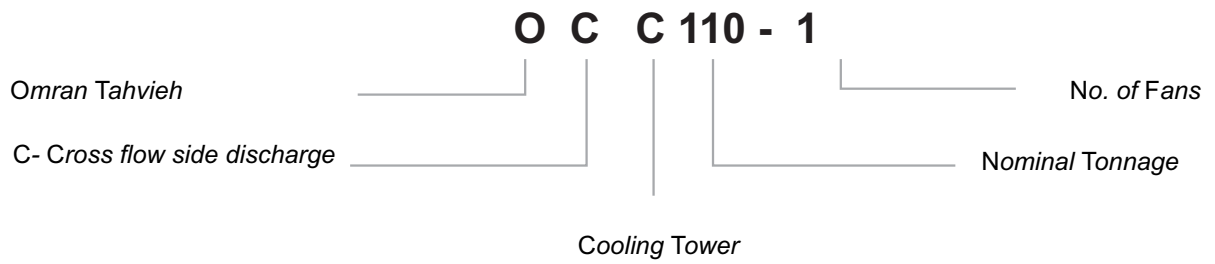
OCC SERIES (15-300 TR)

CROSS FLOW SIDE DISCHARGE (CUBIC) COOLING TOWERS





COOLING TOWER
OMRAN TAHVIEH



GENERAL SPECIFICATION OF CROSS FLOW COOLING TOWERS

STRUCTURE : The structure is designed to withstand wind load of 30 psf .
Cubic cooling towers consists of modular welded subassemblies cross - braced with tension rods . Unwelded structural joints are bolted .

CASING :Casing of galvanized steel sheets give full protection against corrosion .

BASINS :Heavy gauge galvanized steel sheets are used to fabricate basins . Tower basins are completed with make up water float control valve as well as over flow, drain and suction fitting .

FILLING : Preservative - treated Russian or Finn timber are used . Design assures permanent fill alignment and configuration .

WATER DISTRIBUTION

Gravity water distribution system for uniform distribution of hot water over the entire fill area is considered , using flange and collector .

FAN :Low speed, noiseless, multi -blade pressed galvanized steel or aluminum induced- draft propeller fans are standard equipment on some **OMRAN TAHVIEH** cross flow cooling towers . Fans are designed to grantte adequate air flow between suction and discharge ports for the provision of maximum heat transfer and tower performance requirements .

DRIVE : Cubic cooling tower fans are beltdriveOption of double speed fan for belt drive cooling towers on request is possible .

SERIES COOLING TOWER SELECTION PROCEDURE

1. CALCULATE "K" factor

Design hot water temperature = HWT °F

Design cold water temperature = CWT °F

Environment wet bulb temperature = WBT °F

$$K = \frac{HWT - CWT}{HWT - WBT}$$

- Add 8 to 10 percent to "K." for usage efficiency reduction.

2. Enter the "OCC" or chart at "K" factor

and draw horizontal line to intersection with environment wet bulb temperature " WBT " .

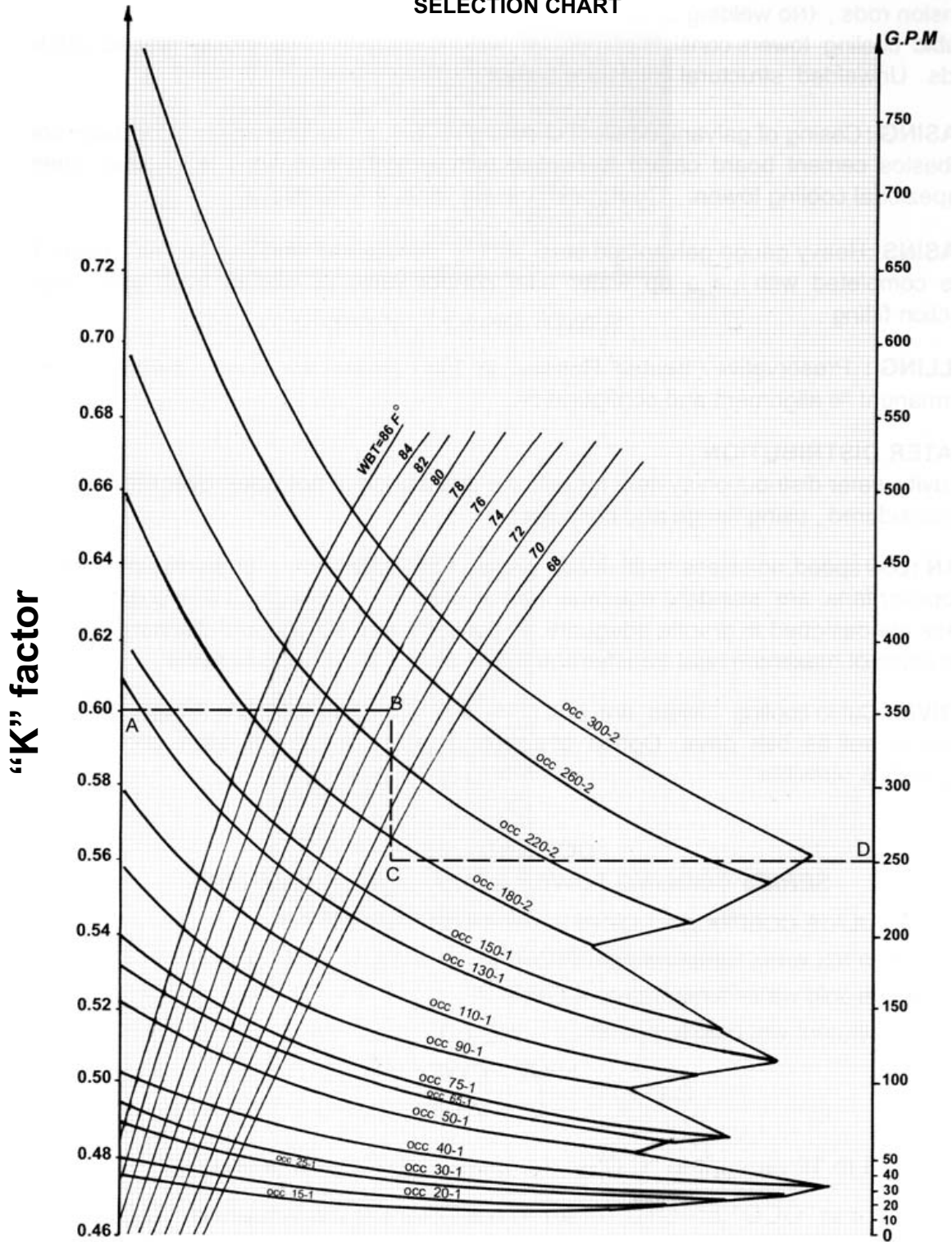
. Proceed vertically to intersection with a line horizontally drawn from design flow rate "G.P.M."

. Select model at intersection of these lines, (IF INTERSECTION POINT FALLS BETWEEN MODELS, SELECT MODEL TO THE RIGHT).

** FOR CONDITIONS NOT AVAILABLE ON CHARTS CONSULT OMRAN SALES OFFICE.*

SELECTION CHART

**OCC SERIES COOLING TOWER
SELECTION CHART**



PLEASE WHEN RELATIVE HUMIDITY IS HIGH CONSULT OMRAN SALES OFFICE



COOLING TOWER OMRAN TAHVIEH

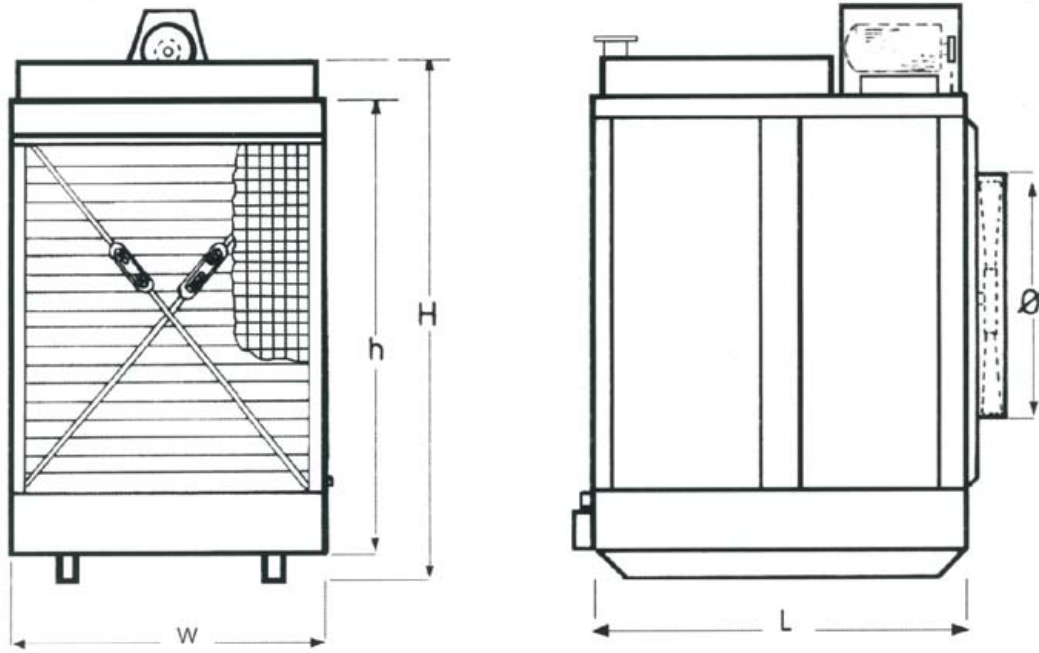


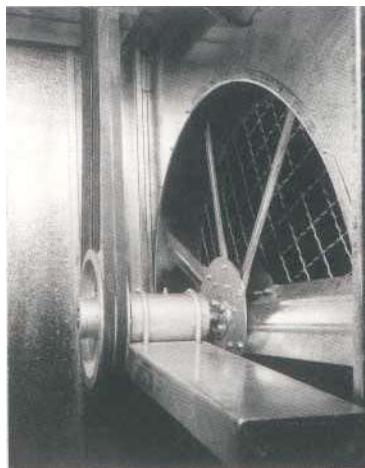
Table:1

OMRAN TAHVIEH Cubic Cooling Tower Approximate Dimensional Data:

Subject to modification

| MODEL | TONS NOMINAL TR | LENGTH L | WIDTH W | BODY HEIGHT h | TOTAL HEIGHT H | FAN NO.x DIA ϕ | MOTOR NO. x HP | PIPING CONNECTIONS | | | | | APPROXIMATE WEIGHT kg | |
|------------|-----------------------|-------------|------------|---------------------|----------------------|---------------------------|-------------------|--------------------|--------|-----------|---------|--------|--------------------------|-----------|
| | | | | | | | | INLET | OUTLET | OVER FLOW | MAKE UP | DRAIN | SHIPPING | OPERATING |
| OCC 15 -1 | 15 | 1300 | 1000 | 1500 | 1720 | 1x850 | 1x 1/2 | 2 1/2" | 2 1/2" | 1/2" | 1/2" | 1 1/2" | 370 | 800 |
| OCC 20 -1 | 20 | 1300 | 1000 | 1600 | 1820 | 1x850 | 1x 3/4 | 2 1/2" | 2 1/2" | 1/2" | 1/2" | 1 1/2" | 400 | 900 |
| OCC 25 -1 | 25 | 1300 | 1000 | 1700 | 1920 | 1x 850 | 1x 3/4 | 2 1/2" | 2 1/2" | 1/2" | 1/2" | 1 1/2" | 500 | 1050 |
| OCC 30 -1 | 30 | 1300 | 1000 | 1800 | 2020 | 1x850 | 1x 1 | 2 1/2" | 2 1/2" | 1/2" | 1/2" | 1 1/2" | 580 | 1300 |
| OCC 40 -1 | 40 | 2350 | 1450 | 1750 | 1970 | 1x 1200 | 1 x 1 | 3" | 3" | 3/4" | 1/2" | 2" | 810 | 1500 |
| OCC 50 -1 | 50 | 2350 | 1450 | 1850 | 2070 | 1x 1200 | 1 x 1.5 | 3" | 3" | 3/4" | 1/2" | 2" | 1200 | 2300 |
| OCC 65 -1 | 65 | 2350 | 1450 | 1950 | 2170 | 1x 1200 | 1 x 1.5 | 3" | 3" | 3/4" | 1/2" | 2" | 1300 | 2550 |
| OCC 75 -1 | 75 | 2350 | 1450 | 2050 | 2270 | 1x 1200 | 1 x 2 | 3" | 3" | 3/4" | 1/2" | 2" | 1400 | 2700 |
| OCC 90 -1 | 90 | 2500 | 1700 | 1950 | 2170 | 1x 1350 | 1 x 2 | 4" | 4" | 1" | 3/4" | 2 1/2" | 1700 | 300 |
| OCC 110 -1 | 110 | 2500 | 1700 | 2050 | 2270 | 1x 1350 | 1 x 3 | 4" | 4" | 1" | 3/4" | 2 1/2" | 2100 | 3300 |
| OCC 130 -1 | 130 | 2500 | 1700 | 2150 | 2370 | 1x 1350 | 1 X 4 | 4" | 4" | 1" | 3/4" | 2 1/2" | 2400 | 3800 |
| OCC 150 -1 | 150 | 2600 | 1700 | 2250 | 2470 | 1x 1400 | 1 x 5.5 | 4" | 4" | 1" | 3/4" | 2 1/2" | 2600 | 4000 |
| OCC 180 -2 | 180 | 2500 | 3380 | 1950 | 2170 | 2 x 1350 | 2 x 2 | 2 x 4" | 6" | 1" | 3/4" | 3" | 3200 | 5800 |
| OCC 220 -2 | 220 | 2500 | 3380 | 2050 | 2270 | 2 x 1350 | 2 x 3 | 2 x 4" | 6" | 1" | 3/4" | 3" | 3900 | 6500 |
| OCC 260 -2 | 260 | 2500 | 3380 | 2150 | 2370 | 2 x 1350 | 2 x 4 | 2 x 4" | 6" | 1" | 3/4" | 3" | 4400 | 7500 |
| OCC 300 -2 | 300 | 2600 | 3380 | 2250 | 2470 | 2 x 1400 | 2 x 5.5 | 2 x 4" | 6" | 1" | 3/4" | 3" | 5000 | 9000 |

All Dimensions are in mm .



Belt drive



Shaft and Bearing



PROJECT INFORMATION

SERVICE LOG

| DATE | COMMENTS |
|------|----------|
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PROJECT INFORMATION

| | |
|-------------------|--------------------|
| System | |
| Model Number | Date of Start-Up |
| Serial Number | Service Contractor |
| Refrigerant | Phone |
| Electrical Supply | Fax |



OMRAN TAHVIEH

Heating , Ventilation And Air Conditioning

Central Office : # 1.2 , 1st floor , No . 108 , Iranshahr Ave., Tehran - Iran , Tel : (98 - 21) 8847372 - 3 , 8318850 - 2Tel & Fax : (98 - 21) 8318852.

Due to National Refrigeration is policy of continuous product improvement, we reserve the right to make changes without notice.

