

### CALCULATION OF THE GRANULAR ICE MACHINES NEED ON THE FISH COUNTER OF SUPERMARKETS



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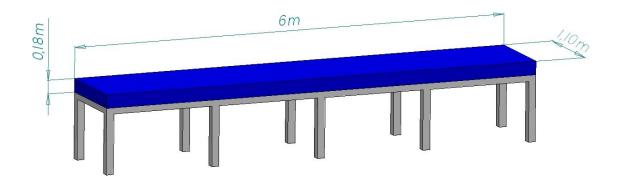


### 1. PURPOSE

Establish the calculation method to apply to determine the necessary combination of ice makers, according to the volumetric requirement of the ice bed on the fish counter of supermarkets.

### 2. CALCULATION METHOD

For a counter which is 6 m long x 1.10 m wide and with an estimated ice height of 18 cm:



The volume of ice required is  $6 \text{ m} \times 1.1 \text{ m} \times 0.18 \text{ m} = 1.19 \text{ m} 3 \text{ of ice}$ 

### Data to be considered:

• Ice density:

917 Kg/m3

• Air holes in granular ice mass:

50% (coefficient 0.5)

• Estimated % of ice lost during handling:

10% (coefficient 0.9)

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The necessary kilos of ice to fill this volume are calculated according to the following formula:

Ice Kg need= (Vol m3 x Ice density Kg/m3 x our Air holes coefficient)/Lost ice coefficient during handling

### 3. CONCLUSION

Since each ice maker manufacturer publishes nominal productions in their catalogue measured in different conditions, to make a correct comparison and sizing of the equipment necessary it is <u>vital</u> to check their data sheets with the productions at the usual ambient temperature and water input temperature in premises where the ice maker is to be installed.

ITV Ice Makers' policy defends transparent communication to the market of real productions of machines in each ambient and water temperature condition, advising its customers on the correct sizing of their installation and the necessary ice makers to meet the amount of ice required.