

RO Design Guidelines

Requisite for a proper system proposal, please complete as much as possible.

FEED WATER CONDITIONS

A. Is the complete feed water analysis attached? Yes ____, No ____.

B. What is the source of the feed water?
Surface ____, or Well ____.

C. Is the source Municipal ____, Private ____, Other _____.

D. Is there a history of seasonal fluctuations in the water source or water quality?
Describe: _____

_____.

E. Is there Chlorine present in the feed water supply? Yes ____, No ____.
If yes, what is the concentration, _____ mg/l.

F. What is the feed water temperature? _____ ° C.

G. Does the feed water temperature vary? Yes ____, No ____.
If yes, what is the range? _____ ° C.
to _____ ° C.

H. Is the raw water feed volume

limited? _____. If yes, to what flow? _____.

I. Is Hydrogen Sulfide (H₂S) present, and if so in what concentration level? _____.

J. Does the feed water have any color? Yes ____, No ____.

K. What is the feed water pressure? _____ PSI, _____ Bar
Minimum ____, Max _____.

SYSTEM SIZING

A. What is the daily volume of product water required per day? _____ M³/day, _____ GPD.

B. What is the volume of product required per hour? _____ M³/HR, _____ GPH.

C. If possible, project future product water requirements 1-3 years from now. _____ M³/HR, _____ GPH.

D. How many hours per day is product water required? _____.
How many days per week? _____.

E. What are the product water quality (level of purity) requirements? Please describe in as much detail as possible. _____

_____.

F. Does the product water quality need to meet any specific standard like US EPA, WHO, ASTM, USP, WFI, Etc.,? Please describe in detail.

_____.

G. What is maximum number of days the R.O. system will not be in operation? _____.

INSTRUMENTATION

A. Are there any special control or instrumentation requirements?

Yes ____, No ____.

B. Does this application require digital outputs for data transmission to a remote computer or monitor?

Yes ____, No ____ . If yes, please describe in detail.

G. What environment will the system be located?

Indoor ____, Outdoor ____.

H. What are the atmospheric conditions to which the system will be exposed. (Example: corrosive, damp, dusty, hazardous/explosive fumes or dust, extreme heat, etc.) Please describe.

N. Is this a constant or intermittent duty application? _____.

O. What is the anticipated product water PSI requirement? _____.

P. Describe the overall application.

SITE CONDITIONS

A. Where will the reject water from the R.O. system go?

B. How much space is available for this system?

Length ____, Width ____, Height ____.

C. What is the maximum door size opening? Width ____, Height ____.

D. What is the available electrical power? Volts _____, Phase _____, Hertz _____, Amps., _____.

E. What is the electrical cost per KWH? US dollars _____, Other _____.

F. What is the cost of the water to be treated? _____ per _____ M³.

I. What is range of the ambient air temperature variations?

____ ° C to ____ ° C.

J. What is the approximate date that this system is required to be in operation? ____/____/____.

K. If engineering specifications and/or drawings are available, please provide a copy.

L. Are there storage facilities for the product water? Yes ____, No ____.
If yes, what is the capacity? _____ M³, _____ Gallons.
Material type? _____.

M. How many hours per day is the facility staffed? _____.

SKETCH

Please provide a sketch of the site where the system will be located. Show approximate locations of the feed water source, product water storage, reject water drain, and electrical connections. Show approximate dimensions, location of doorways and existing equipment or structures.