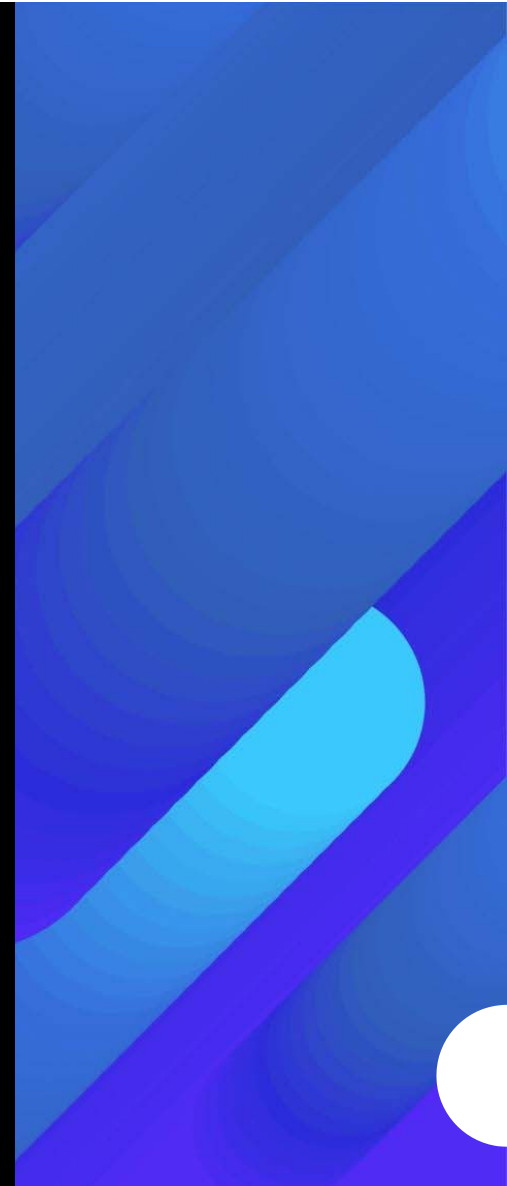


Blind Spots in Water Wastage & Solutions to Tackle them.

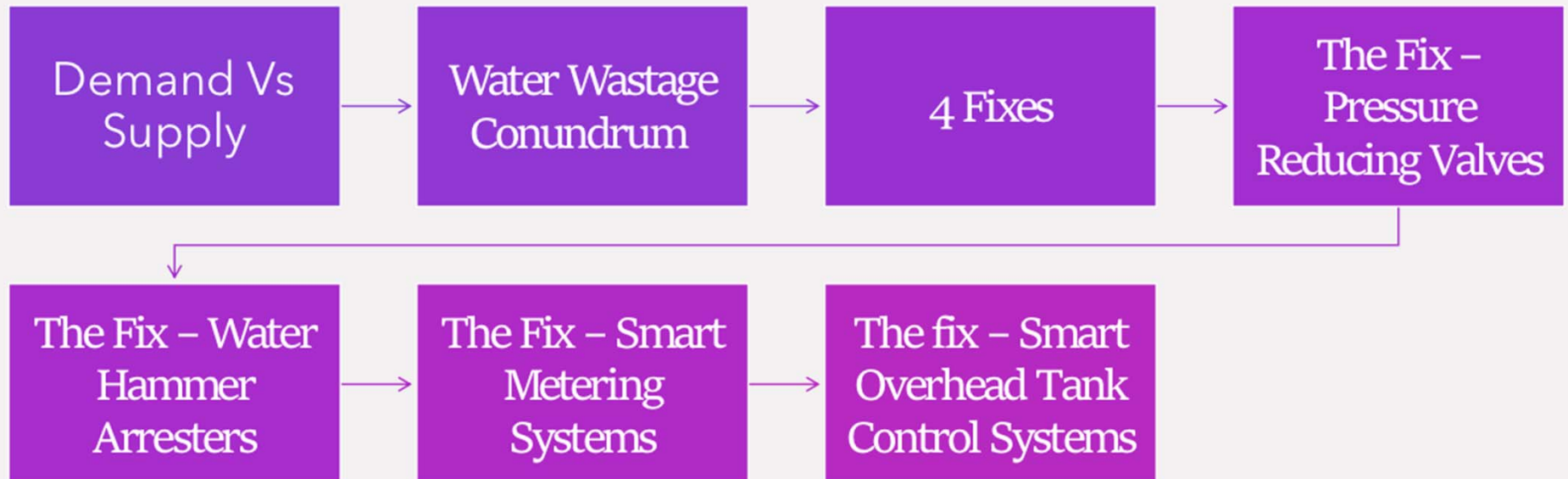
Dr. Lalit Anand

0 v n j # f i Q a h n f l

Anand ; f l # i ~ n j t a t e j a Y a ' n f l M " t A t l



Agenda



Demand Vs Supply

1 On~ a;l ø%; % "nfatn «nffl; fn> ·vhl , ~ta}és
» a nfi«nfilaa1

1 Q·«« þoEø' ~ta}és» a nfi«nfilaa1

1 Qv; vsja;jn øQ·«« þon> ·v'ah; i; t#E , s}·flunflés
a #Évht

1 Mfnlvj#E; øE "nfi tun ; n...#E %naffln~ a;l #
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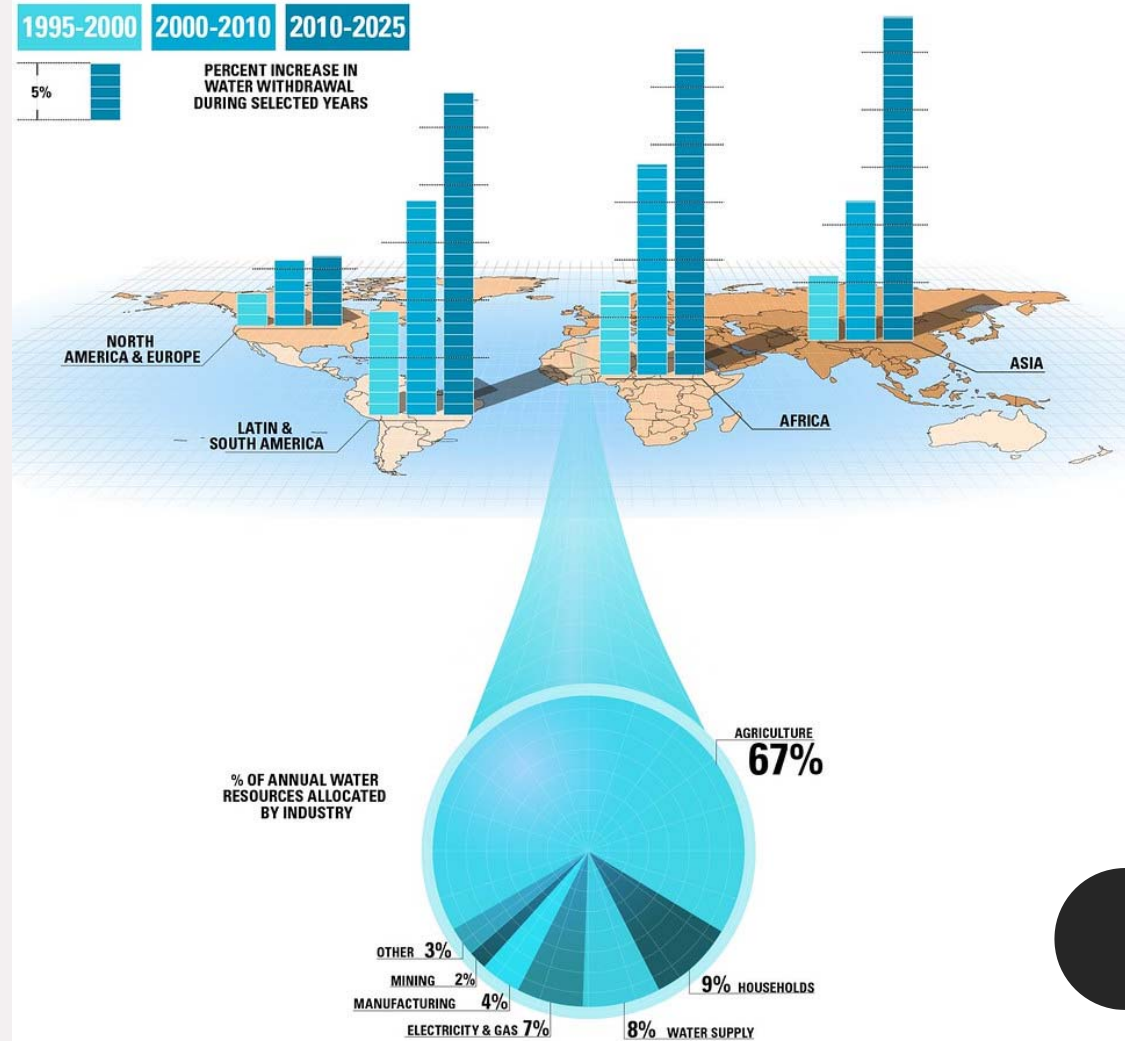
:ilvQ«n;il½

EQ·«« þo la ta fknjvsj #E ia;ta}fnllata #E~

-Z QQ-½

Global Water Withdrawal & Current Water Use Distribution

Percentage | 1995-2025



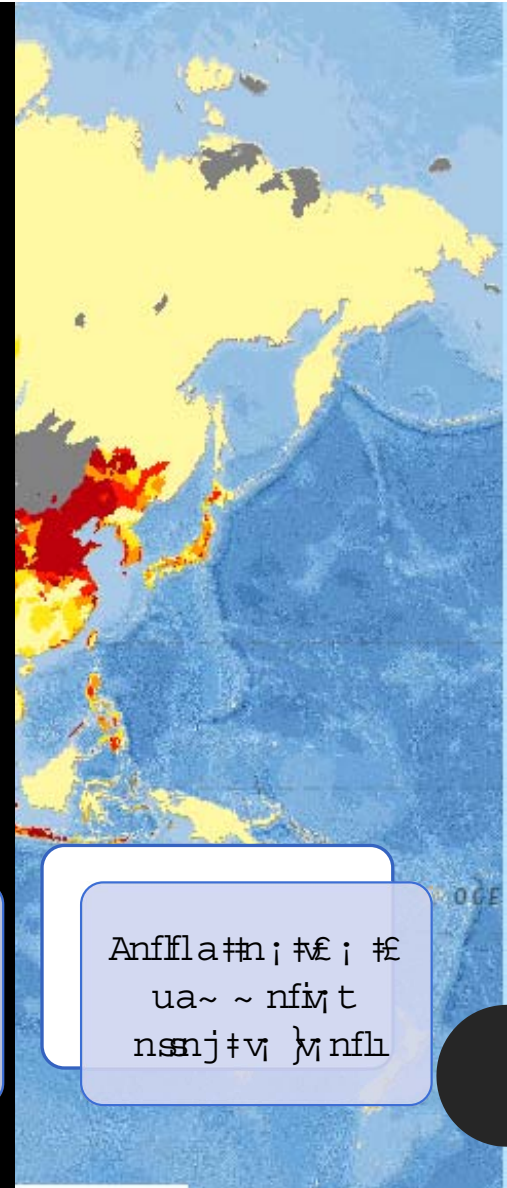
The Water Wastage Conundrum

Q·«« ƒ» a nfi
«fnfl·fn ²
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}n"n}j£ i #£ }

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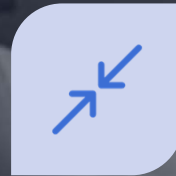
Suhvwxuh#Yv#Z dwdjh



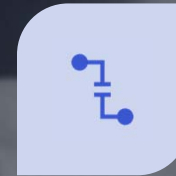
Q · « « }% Mfinfl · fin	Z afl#nl Z a#nfi	Z a#nfis}£ »
"~ «flv	Đ	°~ ta}
," «flv	, ta}	° , ta}
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' ~ ~ «flv	" , ta}	" , ta}

* 10 mins running time on a faucet

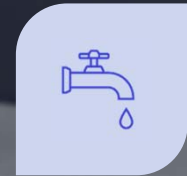
How do you solve the pressure problem?



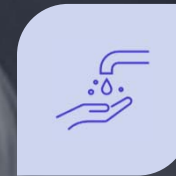
%AS2P.C8 S92
A.C2 Q:_21



%AS2P.C8 S92
QTMMA\MP2QQT P21



S9 PE SSAC8
QE A%SE C Y%AY21



TQ.C8 % MP2QQT P2
P28 TA%SE P1



The Fix - Pressure Reducing Valves



The Proper Fix? - Pressure Reducing Valves



- This is a pressure-reducing valve.
- It is used to reduce the pressure of a fluid.
- It is commonly used in industrial applications.





The Fix - Water Hammer Arresters

Water Hammer Arrestors

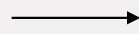
Definition

Á% j£ i j · flfk£ i £ fifl£ · i l £ s
j£ i j · flfk£ i £ s ~ £ "v_i t » a nfiat av_i fl#
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"nflfn } Ç Ð Z ni fl#fi

È% fl£ | i £ » i aflQ · ft n 2 "n i #l £ fi 7 } · v l Sfa i fkn i #l ½

Z a#fiua~ ~ nfflafn ja·fhl i% #un > ·vj | #fi· vja#£ i £ss}£» vj a «wvj t f#alfn~
i%«}· ~ ivj t v#n~ flfl· ju aflø

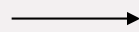
Q£ }n; £v| Ya}nfl



0 vlu» aflunffl

Z afluvj t B ajuvj nfl

7}·flu Ya}nfl

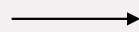


S£v}n#fl

Tfm}a}fl

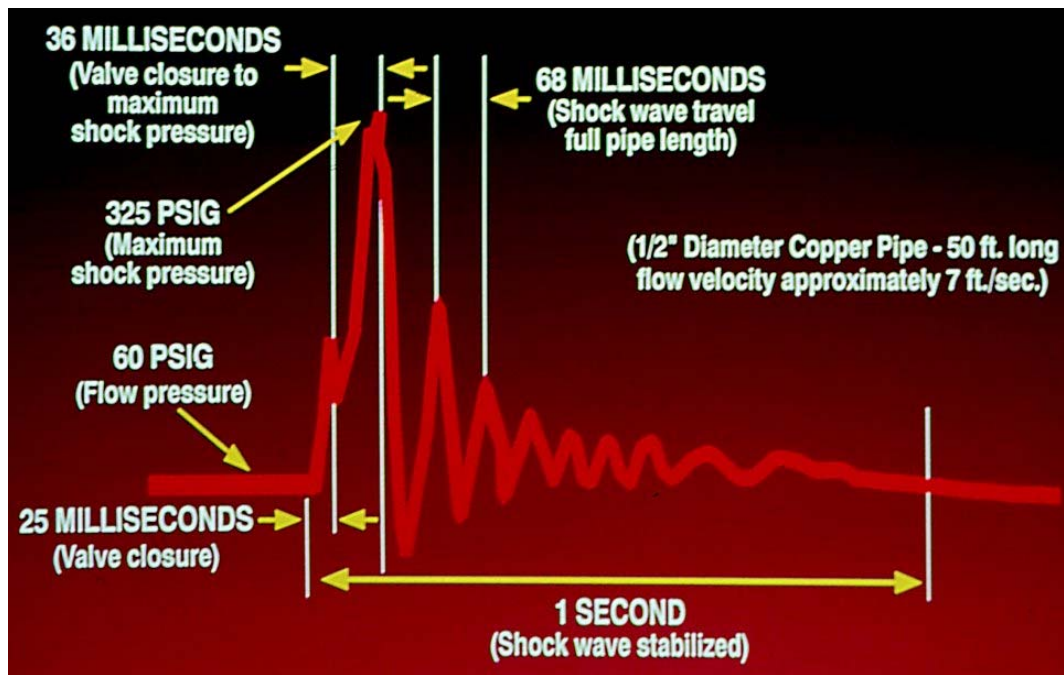
B ai·a}Ya}nfl

Ë·vj | j}£fm}t½



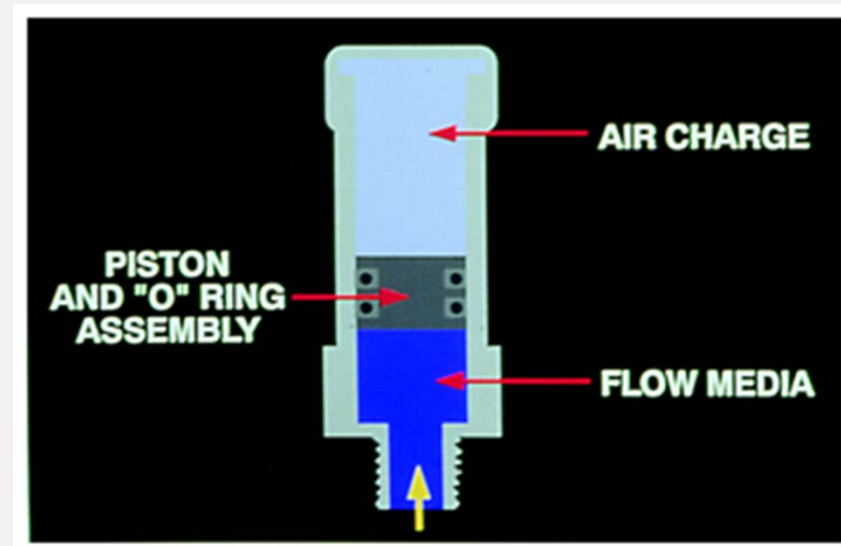
Qu£» nfi

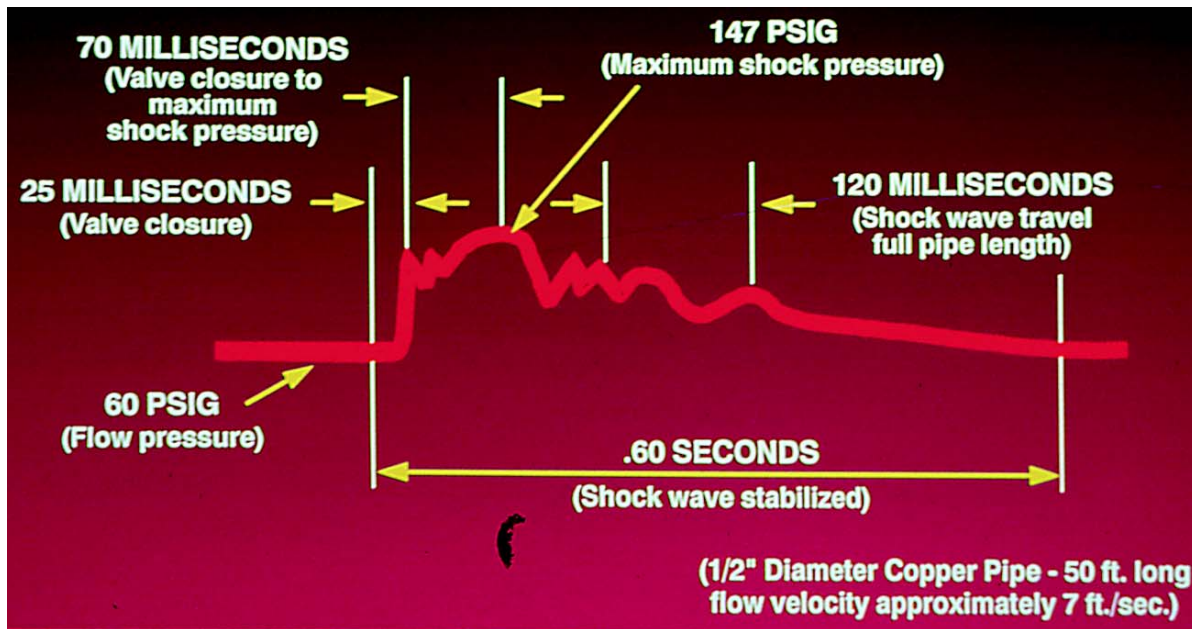
8 afl n; 9 £fn



*Hammering
Effect without
shock arrester*

Piston Type Arrester





Hammering Effect with a shock arrester

Overview



' 1 Z a n f i 9 a ~ ~ n f i t v l a l n f l f i . j t v n s f i j n 1

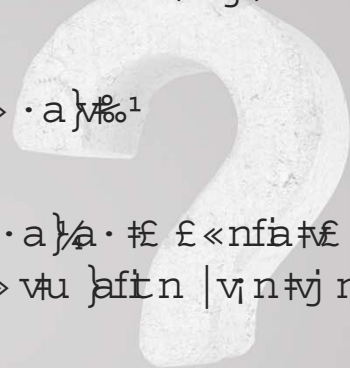
" 1 : t o l ; e t % e . f i « v n » . a } v % 1

° 1 Q v « n » . v j | ~ a ; . a } a . e e « n f a t e ; f l j e ; f i m . n
e e « f n f l . f n f l « v n f l » v u } a f t n | v n t v j n ; n f t % 1

, 1 S u n i a j | « f n f l . f n ~ a % ; e t f n n ~ } a f t n k i . t v f l
l n f l f i . j t v n s f i j n v l ; t e e i n t a | n ; } t u t % 1

" 1 E ; } a Z a n f i 9 a ~ ~ n f i % f f n f l n f i j a ; f l e } n t u v l
« f e i } n ~ 1

, 1 S u n f n v l ; e n f l j a « n 1



Smart Water Metering System

Z a nfi . £ j f n f i ' a t £ j t u f £ · t u D % · t £ ~ a t £ j

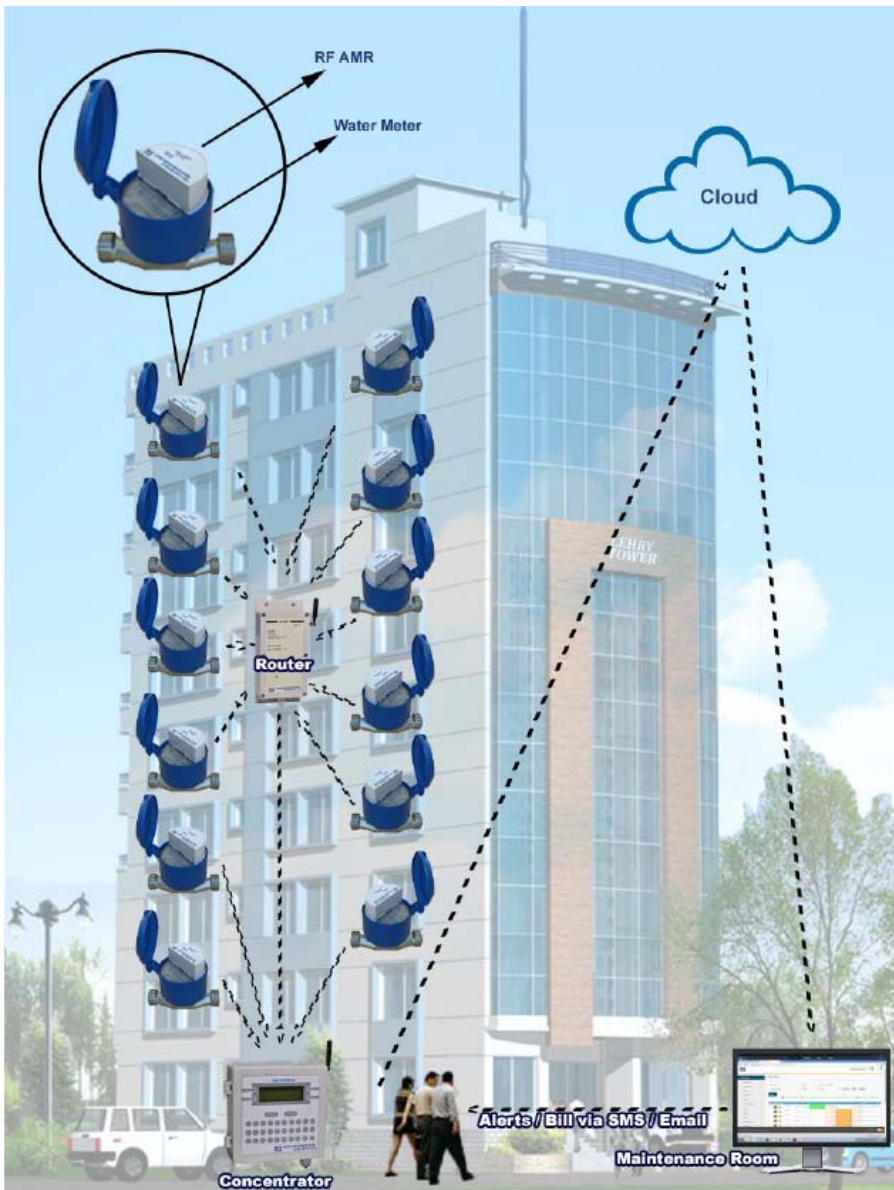
WHY IS WATER METERING RECOMMENDED??

- Z un; t un » a nfi · flat n vl ; ε † « fε « nfi » ~ ε ; v ε fhl l n v t un fi t un j · fl † ~ nfi vl · ; l nfi ju a ft nl ε fi ε " nfi ju a ft nl 1
- Su · fl k v j ε ; { · ; j † ε ; » v u " ε } · ~ n f i j « f i j v t v « f ε " v l n f l a ; v j n ; t n ε fi » a nfi j ε ; f n f " a † ε ;
- % } ε l v t un } k fl † l n n j † » a nfi h a | fl v t un l v l f i m · † ε ; ; n † » ε fi | l t u · fl « f ε " v l v t a i a f l v l ε fi f n l · j v t t un a ~ ε · ; † ε s ; ε ; ε i n " n ; · n » a nfi
- : † v l a « f n j ε ; l v † ε ; ε fi » · a ; t v ε d a f t n v t ε s » a nfi
- % } ε » fl † f a j | l ~ ε ; v ε f l a ; a † n a i l j ε ; † ε } t un » a nfi · flat n 1
- ~ « f ε " n l a j j · f a j % ε f i i v } v t a f l » n } a f l n ; u a ; j n l j a f l u s } ε » 1
- 7 t · f n ε · † l « n j v j t v v t f l ε fi » a nfi · flat n a i l l n ~ a i l 1
- % } ε † ε s » a nfi j ε · } l i n f a " n l i n j a · f n » u n ; n " nfi » a nfi i n v t · f n l vl j ε ; t v · ε · fl † ~ n a f l · f n l a i l a ; a j j · f a n } j u a f t n l a f l « nfi t un · flat n



Slide 18

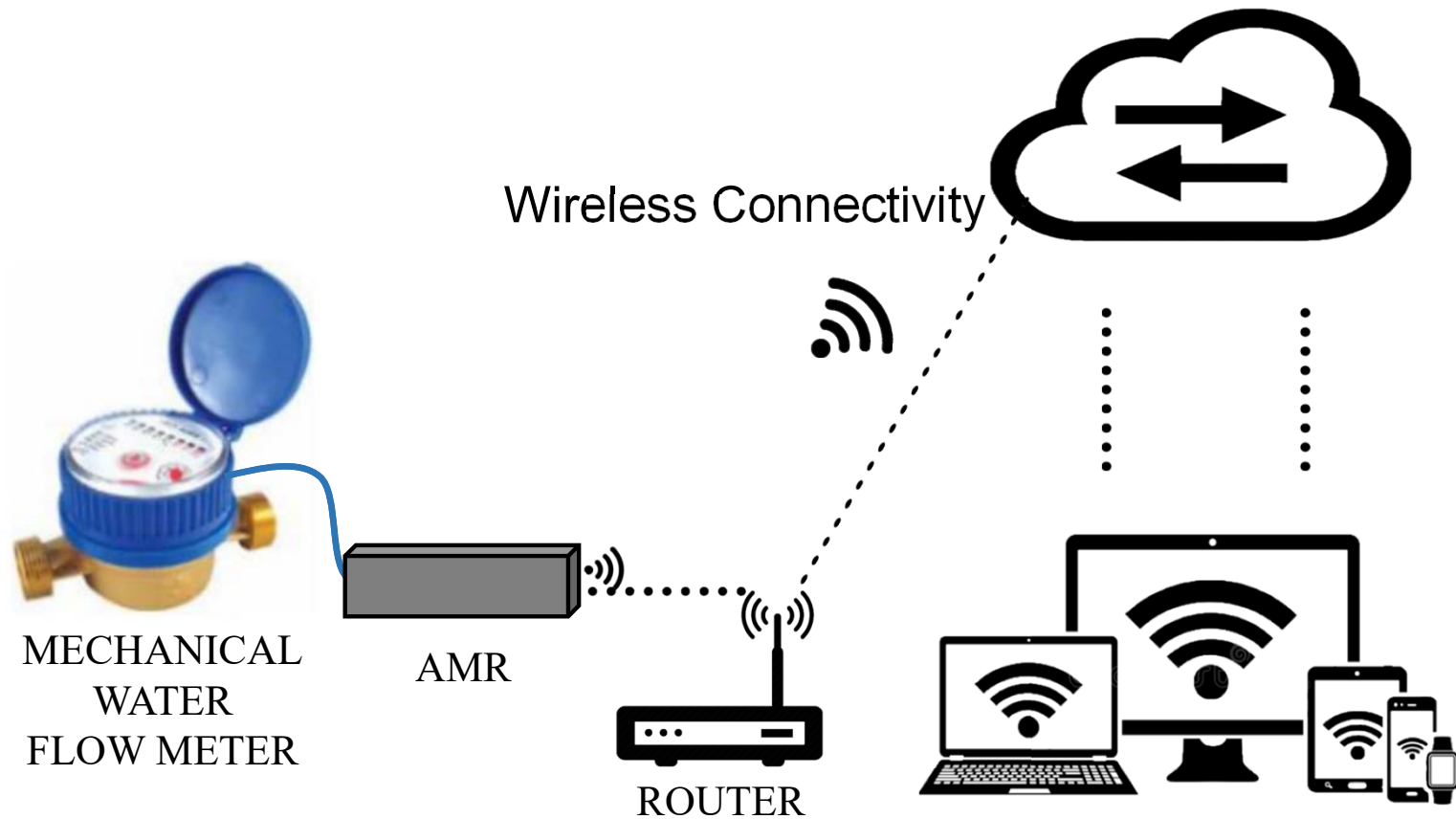
GU1 Suggest splitting into 2 slides. 4 points each. Right now it's difficult to read
Guest User, 6/4/2021



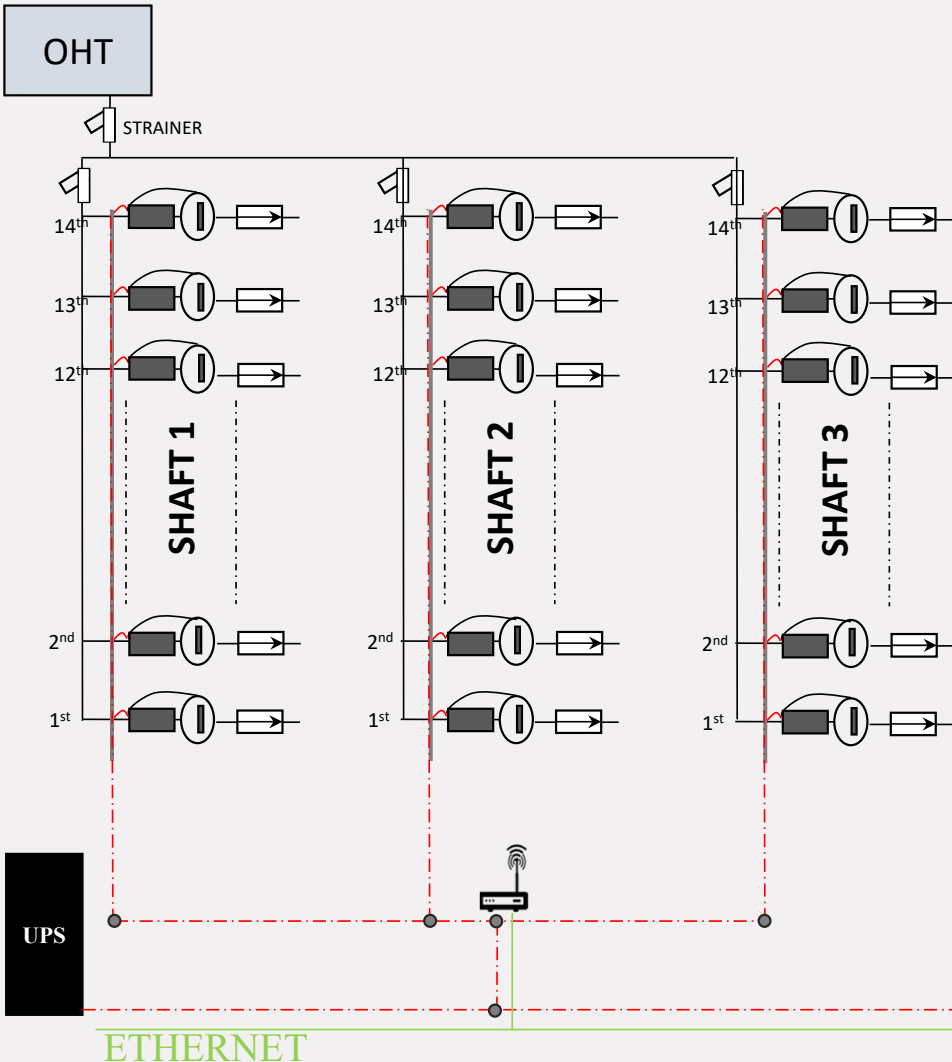
Smart Water Metering solutions

- :ijn; #n £ » a#fij£ ;fnf'a#£ ; 1
- Ana | ln#j#£ ; a;l v£ }a#£ ; 1
- ~ «f£"nl iv}}M t 1
- Pnl · jnl · ;Eajj£ · ; #nl £fi» a#fi
- Pnl · jnl £ ; Eln ~ n#fifnal v; t j£fl#h
- Mfnj£ ; l v£ ; £ > · a; #% #aft n#v; t 1

Functional Working

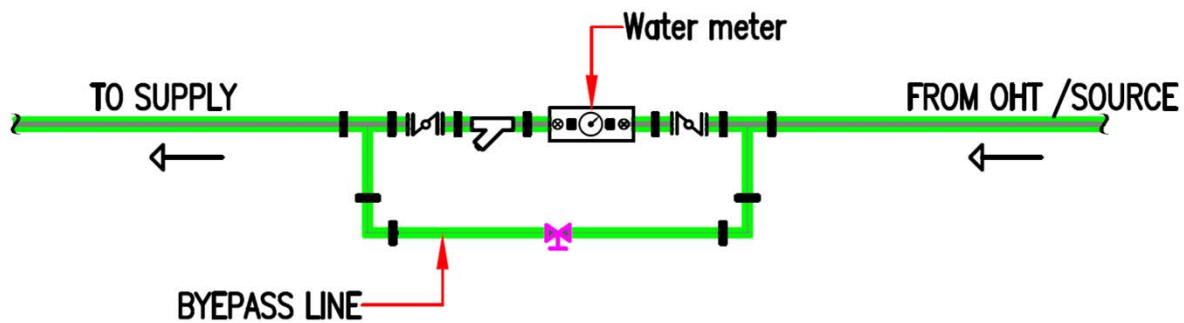


TYPICAL BLOCK DIAGRAM



Q\B - E A	MPE 0 T . S
	Z %S2P B 2S2P
	% B P
	C P Y
	QSP% C 2 P
	B %QS2P % B P
	PE T S2P
	S D ?T C . S E C

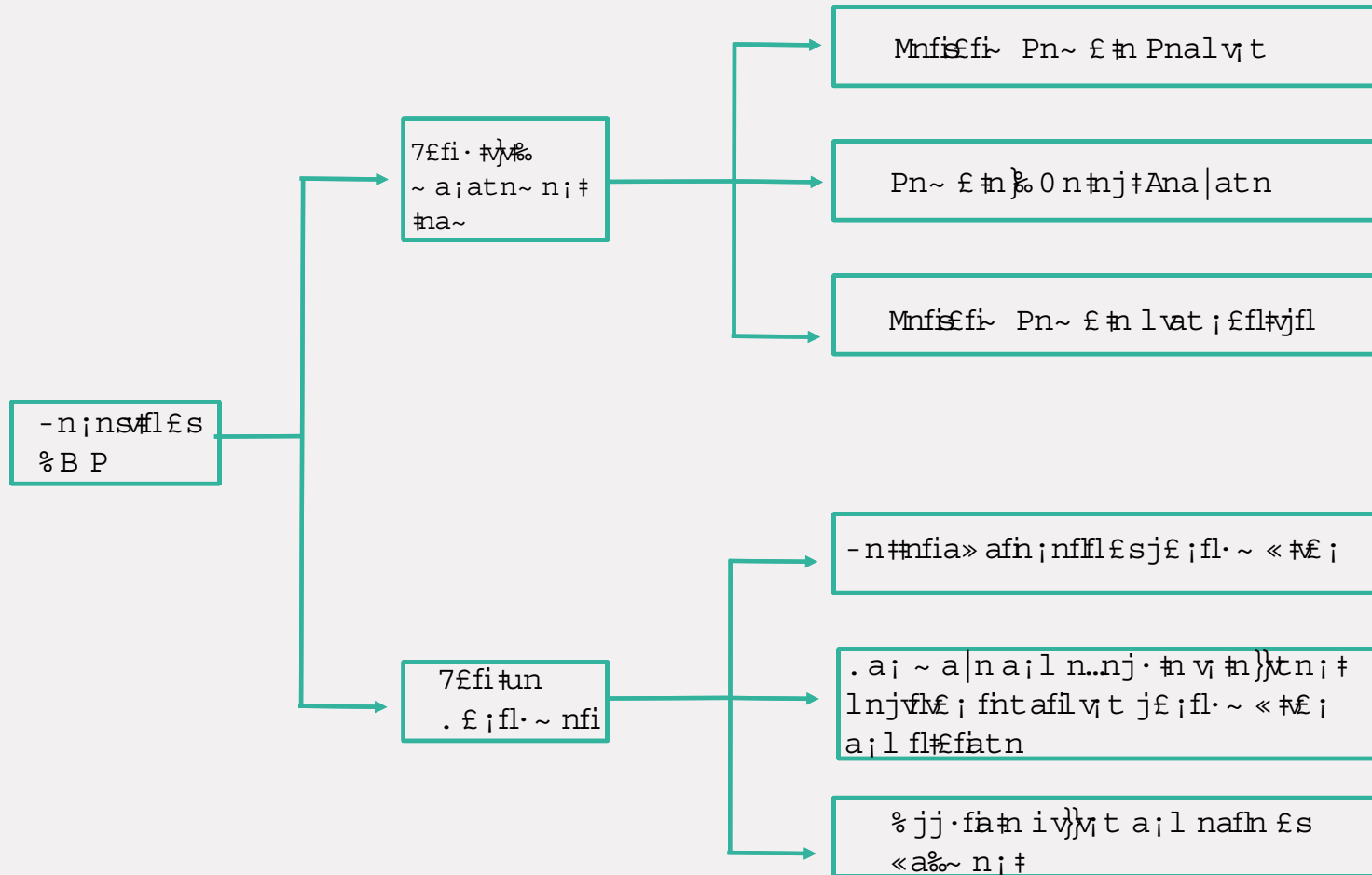
Typical Detail For Water Meter



Standard detail for water meter installation

- Z a n f i B n n f i
- Q # i a v n f i i n s f n t u n ~ n n f i
- C P Y a s n f i t u n ~ n n f i
- f l e j a t e ; Y a } n f l

Why Water Management?



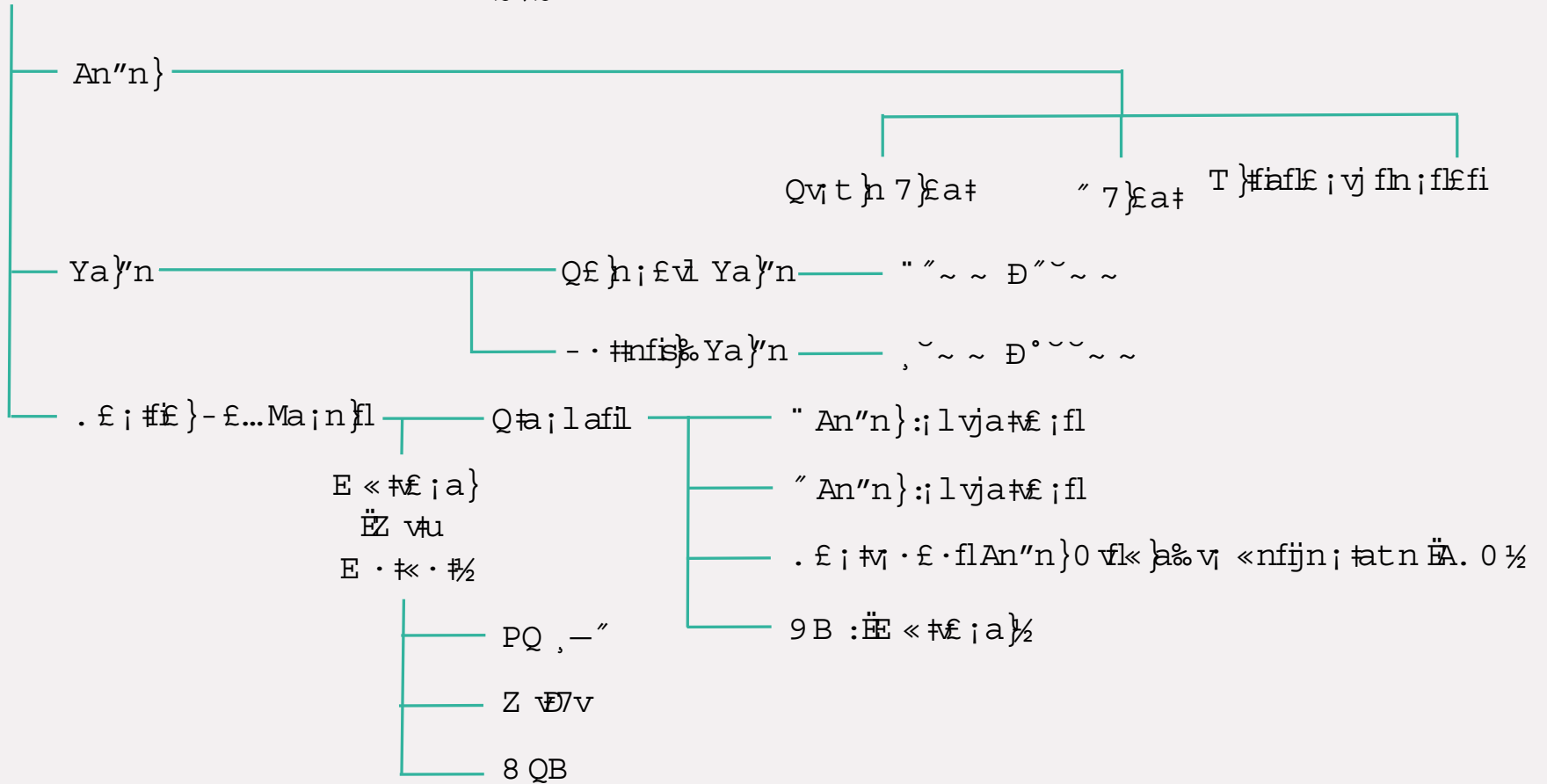


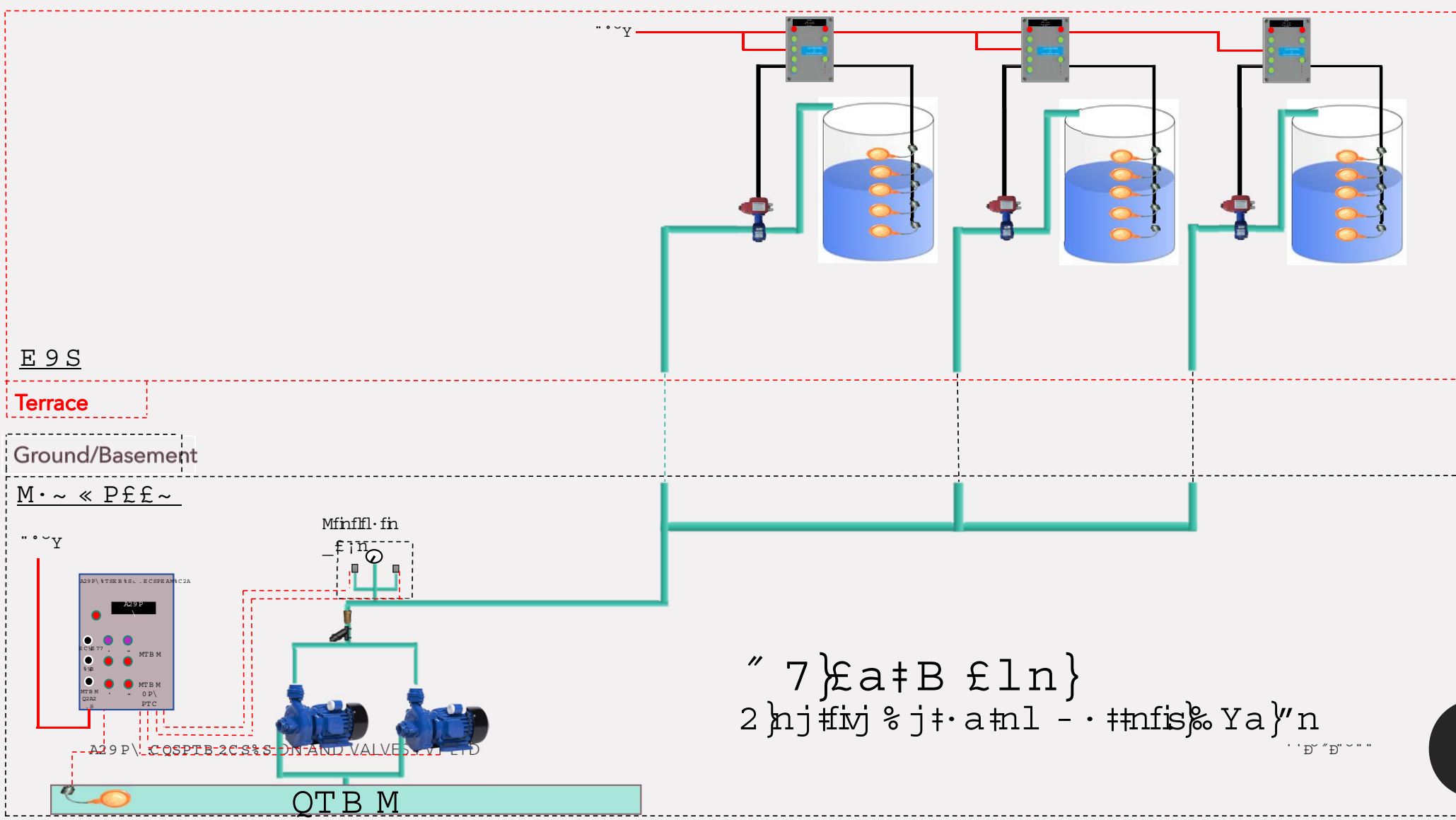
Automatic Overhead Tank Controlling System

Z a#fi. £ ; fhf' a#£ ; Suf£ · tu % · £ ~ a#£ ;

Types of Tank Control Systems

E Y2P 9 2% 0 S% C@ A2Y2A . E C SPE A Q\QS2B





E 9 S

Terrace

Ground/Basement

M. ~ « P £ £ ~

Mfinfl. fin

- £ 11

A29 P
 ECSE 77
 MFB M
 MFB M
 QPA
 PEC

A29 P \ C O S P T B 2 C S S D N A N D V A L V E S V J L T D

QT B M

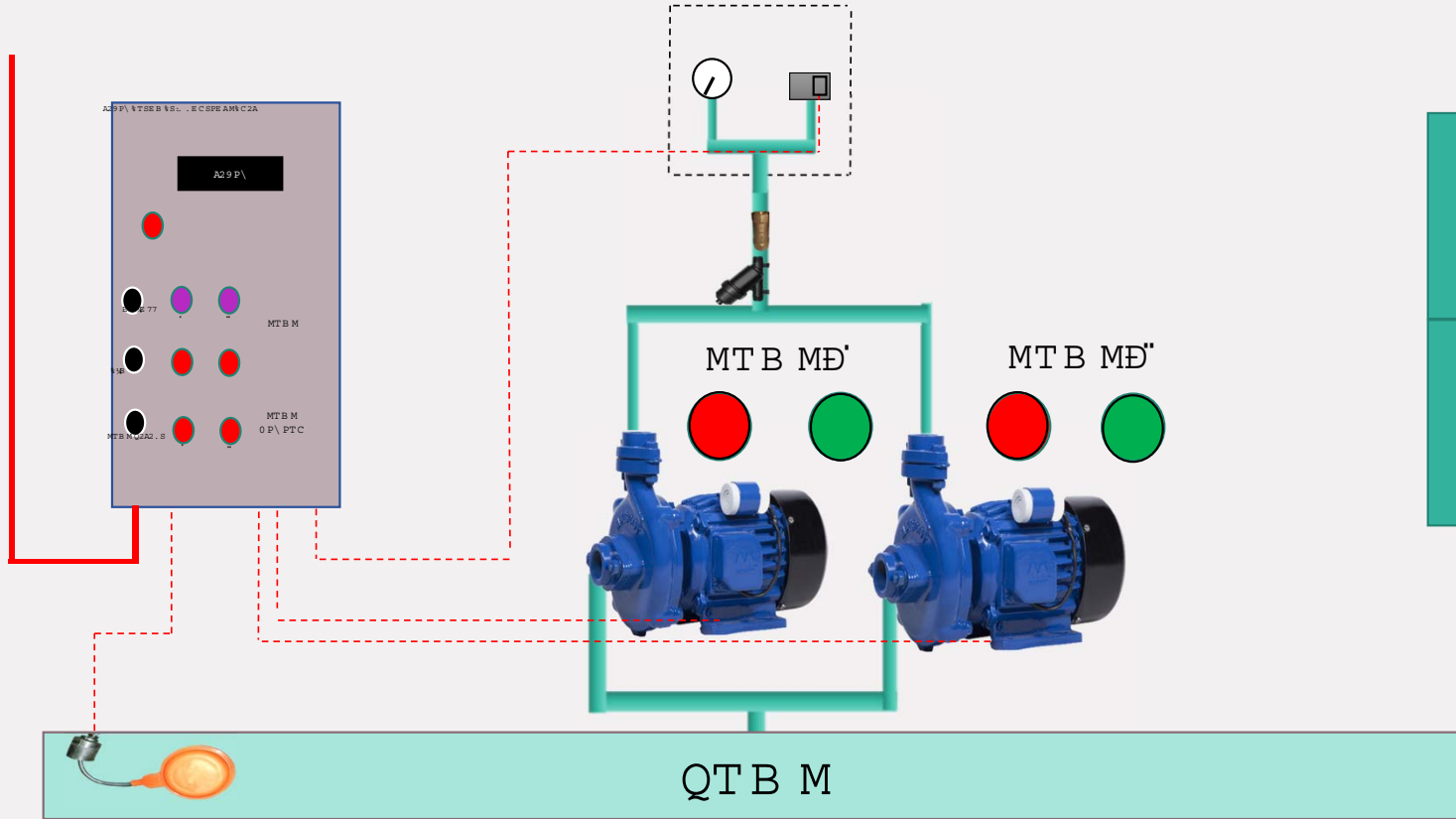
" 7 } £ a † B £ l n }
 2 } n j # i v j % j † · a † n l - · † n f i s } % Y a } " n

· · · · ·

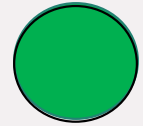
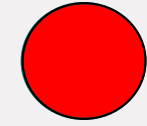
M. ~ « P £ £ ~

~ ~ Y

Mfnfl. fn_£ j n



E 9 S S % C @ : C A 2 S Y % A Y 2 M E Q : S E C



. A E Q 2 0

E M 2 C

. T S E E 7 7 M P 2 Q Q T P 2

P T C C £ 8 M P 2 Q Q T P 2

. T S E E C M P 2 Q Q T P 2

~ ~ Y

The Fix – Automatic Tank Control



%YE :0QAE C 8
Z :P C 8 Z E P @ 1



AE Z 0 E Z C S B 2 1



AE Z
B % C S 2 C % C . 2 1



Q % Y 2 Q
2 A 2 . S P : . S \ å
Z % S 2 P 1



C . P 2 % Q 2 Q M T B M
A : 7 2 1



" , Y % . E M 2 P % S 2 0 1
Z 2 % S 9 2 P M P E E 7
Q \ Q S 2 B 1

Questions?



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ADNAN@LEHRYVALVES.COM



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+919600177762

www.lehryvalves.com