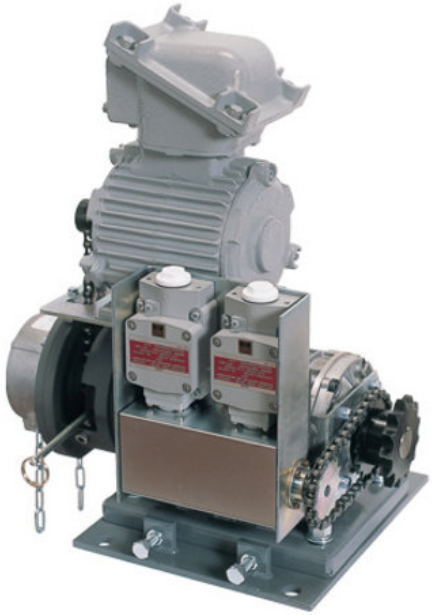
BX GROUP

Explosion-proof Shutter Operator

US-600W(d) & US-1000W(d)



Explosion-proof Shutter Operator

Explosion-proof Control Panel

Let's think!

BX GROUP

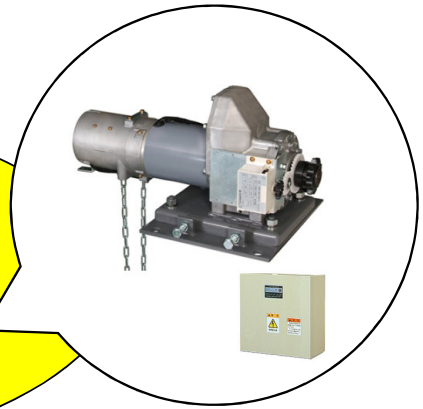
You got a project of Oil Refinery Plant.

You need to install 1 shutter at site.

The shutter size is W5.0m X H7.0m and weight 600kg.

AHA-!!

USA-700G!!



Are you sure...?

BAD Choice!

BX GROUP

EXPLODE!!

Why this is happened?

Explosive Atmosphere

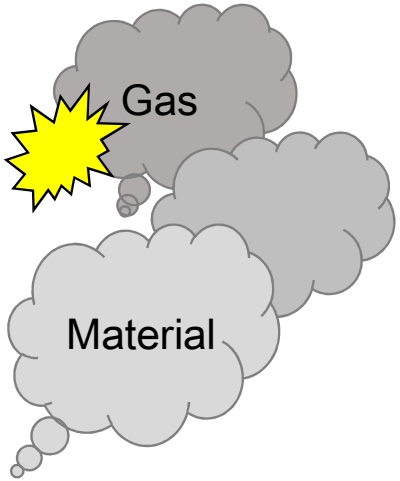
BX GROUP

At chemical plant like Oil Refinery Plant , there most likely Explosive gases or materials are flying in the air. It is called “Explosive Atmosphere”.

In those kind of environment, you should NOT install normal shutter operator, but ones that have “Special Structure”.

①Normal shutter operator makes SPARKS

②SPARKS set the fire on Explosive materials in the air



~Explosive Atmosphere~

③

You’d better to choose

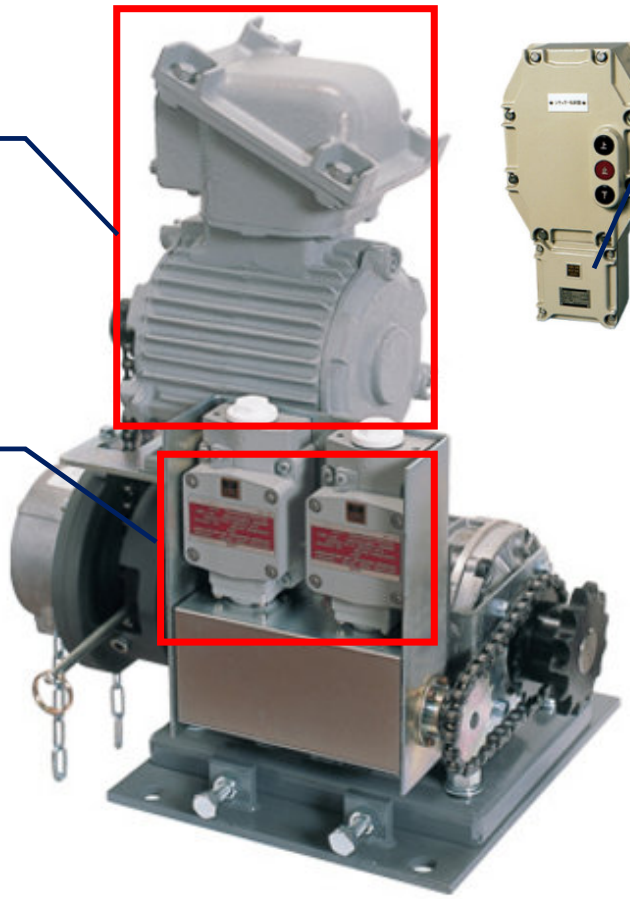
BX Shinsei Seiki Co., Ltd.

BX Shinsei Explosion-proof Shutter Operator

BX GROUP

Motor
JIS: d2G4
IEC: Ex d IIB T4
*IP Code: IP-44
**Applicable Zone: Zone 1 & 2

Limit Switch
IEC: Ex d IIC T6
*IP Code: IP-67
**Applicable Zone: Zone 1 & 2



MODEL: US-600W(d) / US-1000W(d)

Control Panel
JIS: d2G4
IEC: Ex d IIB T4
*IP Code: IP-50
**Applicable Zone: Zone 1 & 2

External Push Button Switch
IEC: Ex d IIC T6
*IP Code: IP-65
**Applicable Zone: Zone 1 & 2

To grade our shutter operator as a whole,

Equivalent to

IEC: Ex d IIB T4

What is Ex d IIB T4?

***IP Code:**
Ingress Protection Marking, classifies and rates the degree protection provided by mechanical casings and electrical enclosures against intrusion, dust, accidental contact, and water.

****Applicable Zone:**
Zone 1 & 2 defined as the place where has the risk to create the hazardous atmosphere under the usual(Zone1) and unusual(Zone2) condition.

Explosion-proof Standard

BX GROUP

【In Japan】

Japanese Industrial Standard

(JIS Standard)

We have certificates!

BX Shinsei Product:
【Symbol】

d 2 G4

This symbol shows Ignition Temperature of Explosive Gases. Gases classified as **"G4"** ignite with the temperature of over 135℃ and below 200℃.

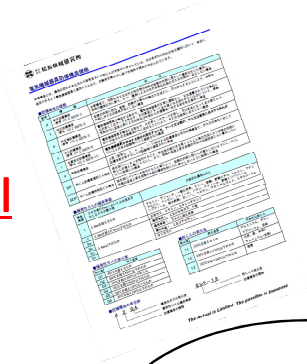
The number shows Explosive Gas Classification. **"2"** includes Ethylene, Coal Gas etc…

The letter shows a Type of Structure. **"d"** shows it is Flame-proof Type.

【International】

International Electrotechnical Commission Standard

(IEC Standard)



There is a matrix that defines equipment's **Explosion-proof Grade**.

BX Shinsei Product :
【Symbol】

Ex d IIB T4

This symbol shows Temperature Resistance of Equipment. Equipment classified as **"T4"** can withstand the temperature of over 135℃ and below 200℃.

This symbol shows Group of Equipment. Group **"IIB"** includes "Flame-proof Type" and effective for Ethylene, City Gas etc…

The letter shows a Type of Structure. **"d"** shows it is Flame-proof Type.

This symbol shows it is "Explosion-proof Structure"

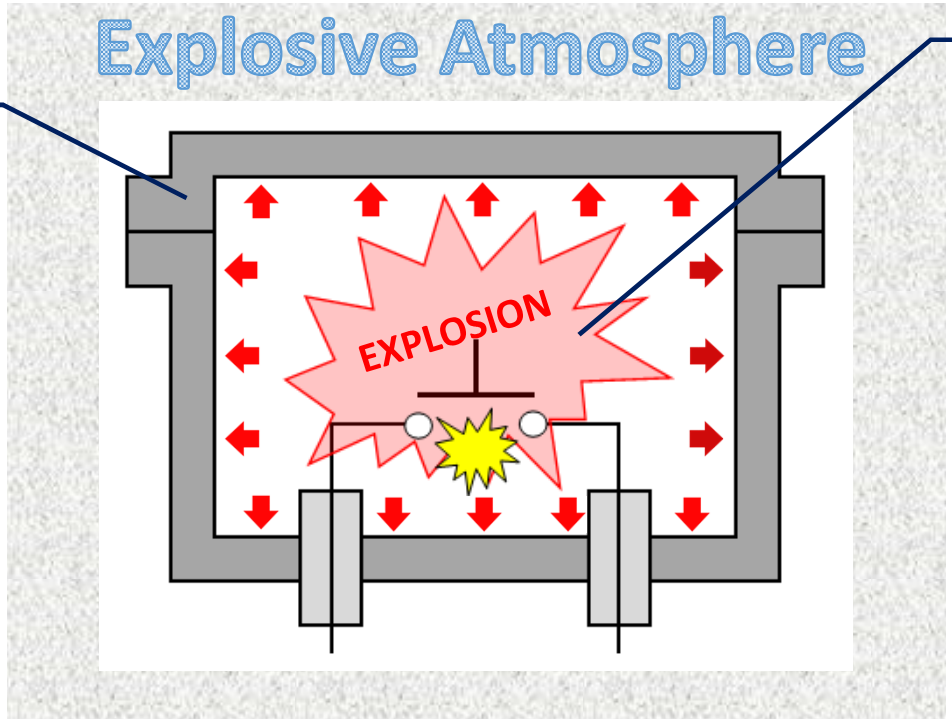
Flame-proof Type?

Explosion-proof Structure

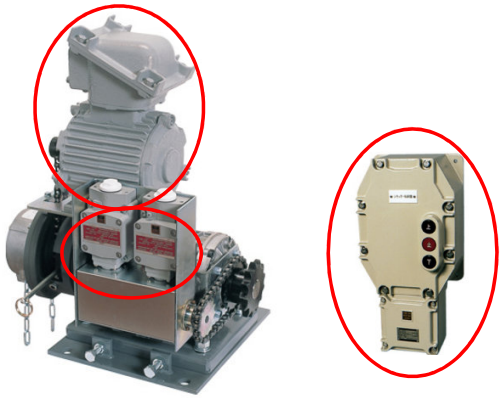
One of the most effective Explosion-proof structure is Flame-proof Type.

Ignition source is covered by special shell and explosion can occur only in the shell. This shell is very strong designed and withstand the shock of explosion. This way, fire source will not get out.

The shell withstands pressure of explosion.



The shell is designed assuming explosion can be occurred inside.



There are various kinds of Explosion-proof structure types. But Flame-proof type is the one adopted to our Explosion-proof products.

Now you know what to choose

BX Shinsei Seiki Co., Ltd.

GOOD Choice!

BX GROUP

BX Shinsei Explosion-proof Shutter Operator!

Model: US-600W(d)
Winding Capacity: 700kg
3-phase 380-440V

Model: US-1000W(d)
Winding Capacity: 1100kg
3-phase 380-440V