

THE POLLUTION CONTROL ENGINEERS

The Cascade water-wash spray booth has been designed for use in workshops where there is continuous spraying throughout the day.

Water is stored in a 10 swg mild steel tank and is pumped to the top of the spray booth, where it then falls in a continuous cascade over a galvanised wash sheet so as to form a water curtain, thus washing an operator's oversprayed paint into the water tank.

The air is drawn through the space between the wash sheet and the tank water level.

The air then passes up through three more water screens in the back of the booth before being discharged to atmosphere as virtually clean air. A chemical agent should be added to the water to de-nature the paints stickiness and ensure more efficient cleaning.

The advantages of the Cascade include: suitable for continuous production work; minimal fire risk; cleanliness of operation; low maintenance costs; longer runs between services.

The Fercell range of economical spray booths are manufactured in standard widths from 1.1 metre to 6.6 metres, with specials made to a customer's individual requirements.



2 x 6.6 metre wide Cascade spray booths



3 x 5.5 metre wide Cascade spray booths



4.4 metre wide Cascade spray booth

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**Model 'EG' Energy Saving Switch Systems**



For spray booths fitted with two fans, a specially modified 'EG' switching system is available, which enables the two fans to be activated by a single switch.

Minimum compressed air required to operate all models is 10 psi.

| Specification |             |           |           |                            |
|---------------|-------------|-----------|-----------|----------------------------|
| Model         | Diameter mm | Height mm | Weight Kg | Compressed Air Consumption |
| EG40          | 400         | 400       | 30        | 0.016 Ltr/cu.m.            |
| EG50          | 500         | 500       | 32        | 0.016 Ltr/cu.m.            |
| EG60          | 605         | 600       | 40        | 0.016 Ltr/cu.m.            |
| EG63          | 630         | 600       | 42        | 0.016 Ltr/cu.m.            |
| EG70          | 710         | 700       | 50        | 0.016 Ltr/cu.m.            |
| EG80          | 800         | 800       | 60        | 0.016 Ltr/cu.m.            |

**For Wet and Dry-Back Spray Booths**

The Ferrell 'EG' energy switch system is ideally suited for use with most types of wet and dry-back spray booths.

The switch is activated when the spraying operative hooks the spray gun onto a trigger switch once spraying has finished. This, in turn, activates a pneumatically-operated valve which slowly shuts off a damper valve located directly below the fan on top of the spray booth.

When the damper valve is fully closed, a small amount of air passes through, thus ensuring that any fumes arising from products left in the spray booth are evacuated.

The 'EG' switch system is easily installed, (when compared with most other types), and it will enable the user to effect considerable savings in both heat loss and electrical consumption.

**Features**

- Complete with wall-mounted trigger switch
- Major heat loss savings
- Reductions in electrical consumption
- Appropriate lengths of flexible pneumatic piping from trigger to switch

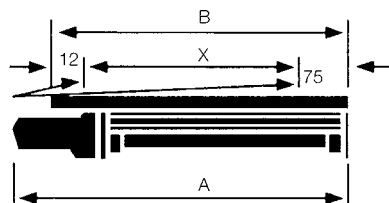
**Zone I EExd Flameproof Fluorescent Lights**



**Standards**

- BASEEFA certified No. Ex 94C 1488
- BS 5501 Pts 1 & 5 (EN 50014 and 50018)
- EExd IIB T6 (EExd IIC T6 to special order) for use in Zone 1 and 2 areas in accordance with thermal limitations defined in BS 5345, Pts 2 and 3 LEC 79 10
- Body alloy BS 1004 A
- CE marked
- BS 5750 Pt 2\ISO 9002
- IP66 -20° to +40°C ambient temperature range
- Class 1 insulated - earth required
- 220v - 254v, 50/60 Hz

| Specification  |            |               |      |      |
|----------------|------------|---------------|------|------|
| Normal Width m | Lamp Watts | Dimensions mm |      |      |
|                |            | A             | B    | X    |
| 0.6            | 18         | 835           | 748  | 661  |
| 1.2            | 36         | 1440          | 1353 | 1266 |
| 1.5            | 58         | 1740          | 1653 | 1566 |



The **Zone I Luminaire** is a high quality, heavy duty, high frequency fluorescent luminaire with full certification for use in hazardous and environmentally extreme conditions. It is a product range that has been tried and tested over many years and has an excellent record for versatility, performance, reliability and maintainability.

It is certified to be suitable for use in both Zone 1 and Zone 2 areas with group IIB gases and has a T6 surface temperature classification. This makes it a very versatile product in its application.

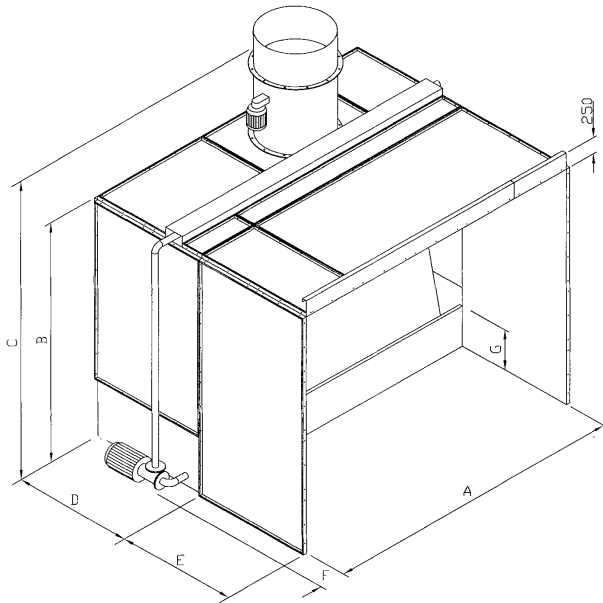
Sealed to IP 66, it is dust tight and can withstand water jets, which means that the Luminaire interior remains clean under arduous conditions.

Using its ability to be used in hazardous conditions, typical applications would be in hazardous industrial areas, marine oil and gas terminals, chemical petroleum and gas processing plants and spray booths.

- Exceptionally tough housing in marine grade, zinc alloy
- Borosilicate glass lamp overtube. This does not degrade with sunlight or UV from lamps and is scratch resistant
- Available in single lamp and twin lamp 18, 36 and 58 Watt.
- One body width for single and twin lamp versions
- High frequency operation

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**Standard Booth on Delivery Includes:**

Spray booth, fan set(s), pump and motors, one front canopy, push button DOL, non-flameproof contactor starters. The booth's scrubbing system is delivered fully assembled and only the front canopy and fan has to be fitted. Ideal for easy self-installation. Booths can also be delivered flat packed for on site assembly if required.

**Extraction Power**

Extraction is provided by indirect belt driven, polypropylene bladed fan(s). The fan casing is constructed from steel plate. The extraction rate is approximately 145 feet per minute (0.07 m/s) velocity across the face of the booth. The fan(s) is (are) mounted to the top only.

**Type of Electric Motors**

Single or three phase. Flameproof or TEFC, 50 Hz, non-flameproof.

**Canopy Lighting**

Non-flameproof fluorescent lights can be placed behind Georgian wired glass panels, mounted in the canopy roof or Zone 1 protection flameproof fluorescent lights can be mounted directly to the canopy roof.

**Replacement Air**

Adequate filtered air must be introduced to compensate for air lost through the extraction fan(s) and ensure that the booth operates to its optimum design parameters. The extraction rates are as per the specification tables.

Any non-standard sizes manufactured to specific requirements

| Specification - 2.2 metre high      |      |      |      |      |      |      |      |             |             |        |                            |                          |           |      |
|-------------------------------------|------|------|------|------|------|------|------|-------------|-------------|--------|----------------------------|--------------------------|-----------|------|
| Nominal Size of Booth (metres wide) | A mm | B mm | C mm | D mm | E mm | F mm | G mm | No. of Fans | Fan Dia. mm | Fan kW | Fan Vol. m <sup>3</sup> /h | Water Tank Capacity Ltrs | Weight Kg |      |
|                                     |      |      |      |      |      |      |      |             |             |        |                            |                          | Empty     | Full |
| 1.10                                | 1100 | 2200 | 2800 | 1100 | 1100 | 500  | 420  | 1           | 500         | 1.5    | 8925                       | 327                      | 530       | 855  |
| 1.65                                | 1650 | 2200 | 2800 | 1100 | 1100 | 500  | 420  | 1           | 630         | 1.5    | 11600                      | 490                      | 590       | 1078 |
| 2.20                                | 2200 | 2200 | 2800 | 1100 | 1100 | 500  | 420  | 1           | 630         | 2.2    | 14620                      | 654                      | 625       | 1275 |
| 2.75                                | 2750 | 2200 | 2800 | 1100 | 1100 | 500  | 420  | 1           | 630         | 3.0    | 17850                      | 817                      | 700       | 1513 |
| 3.30                                | 3300 | 2200 | 2900 | 1100 | 1100 | 500  | 420  | 1           | 710         | 3.0    | 20400                      | 980                      | 780       | 1756 |
| 3.85                                | 3850 | 2200 | 2900 | 1100 | 1100 | 500  | 420  | 1           | 710         | 4.0    | 23800                      | 1144                     | 930       | 2068 |
| 4.40                                | 4400 | 2200 | 2900 | 1100 | 1100 | 500  | 420  | 1           | 710         | 5.5    | 27200                      | 1307                     | 990       | 2290 |
| 4.40                                | 4400 | 2200 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 630         | 2.2    | 14620 x 2                  | 1307                     | 1030      | 2330 |
| 4.95                                | 4950 | 2200 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 630         | 2.2    | 14620 x 2                  | 1470                     | 1076      | 2539 |
| 5.50                                | 5500 | 2200 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 630         | 3.0    | 17850 x 2                  | 1634                     | 1195      | 2821 |
| 6.05                                | 6050 | 2200 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 630         | 3.0    | 17850 x 2                  | 1797                     | 1310      | 3098 |
| 6.60                                | 6600 | 2200 | 2900 | 1100 | 1100 | 500  | 420  | 2           | 710         | 3.0    | 20400 x 2                  | 1960                     | 1469      | 3420 |

| Specification - 2.75 metre high     |      |      |      |      |      |      |      |             |             |        |                            |                          |           |      |
|-------------------------------------|------|------|------|------|------|------|------|-------------|-------------|--------|----------------------------|--------------------------|-----------|------|
| Nominal Size of Booth (metres wide) | A mm | B mm | C mm | D mm | E mm | F mm | G mm | No. of Fans | Fan Dia. mm | Fan kW | Fan Vol. m <sup>3</sup> /h | Water Tank Capacity Ltrs | Weight Kg |      |
|                                     |      |      |      |      |      |      |      |             |             |        |                            |                          | Empty     | Full |
| 2.20                                | 2200 | 2750 | 2800 | 1100 | 1100 | 500  | 420  | 1           | 630         | 3.0    | 17850                      | 654                      | 687       | 1337 |
| 2.75                                | 2750 | 2750 | 2800 | 1100 | 1100 | 500  | 420  | 1           | 710         | 3.0    | 20400                      | 817                      | 748       | 1561 |
| 3.30                                | 3300 | 2750 | 2900 | 1100 | 1100 | 500  | 420  | 1           | 710         | 4.0    | 23800                      | 980                      | 906       | 1882 |
| 3.85                                | 3850 | 2750 | 2900 | 1100 | 1100 | 500  | 420  | 1           | 710         | 5.5    | 27200                      | 1144                     | 1105      | 2243 |
| 4.40                                | 4400 | 2750 | 2800 | 1100 | 1100 | 500  | 420  | 1           | 800         | 5.5    | 32300                      | 1307                     | 1230      | 2530 |
| 4.95                                | 4950 | 2750 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 630         | 3.0    | 17850 x 2                  | 1470                     | 1300      | 2763 |
| 5.50                                | 5500 | 2750 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 630         | 3.0    | 17850 x 2                  | 1634                     | 1360      | 2986 |
| 6.05                                | 6050 | 2750 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 710         | 3.0    | 20400 x 2                  | 17797                    | 1470      | 3258 |
| 6.60                                | 6600 | 2750 | 2900 | 1100 | 1100 | 500  | 420  | 2           | 710         | 4.0    | 23800 x 2                  | 1960                     | 1820      | 3771 |

| Specification - 3.3 metre high      |      |      |      |      |      |      |      |             |             |        |                            |                          |           |      |
|-------------------------------------|------|------|------|------|------|------|------|-------------|-------------|--------|----------------------------|--------------------------|-----------|------|
| Nominal Size of Booth (metres wide) | A mm | B mm | C mm | D mm | E mm | F mm | G mm | No. of Fans | Fan Dia. mm | Fan kW | Fan Vol. m <sup>3</sup> /h | Water Tank Capacity Ltrs | Weight Kg |      |
|                                     |      |      |      |      |      |      |      |             |             |        |                            |                          | Empty     | Full |
| 2.75                                | 2750 | 3300 | 2800 | 1100 | 1100 | 500  | 420  | 1           | 710         | 4.0    | 23800                      | 817                      | 790       | 1603 |
| 3.30                                | 3300 | 3300 | 2900 | 1100 | 1100 | 500  | 420  | 1           | 800         | 5.5    | 27200                      | 980                      | 946       | 1922 |
| 3.85                                | 3850 | 3300 | 2900 | 1100 | 1100 | 500  | 420  | 2           | 630         | 3.0    | 17850 x 2                  | 1144                     | 1150      | 2288 |
| 4.40                                | 4400 | 3300 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 710         | 3.0    | 20400 x 2                  | 1307                     | 1280      | 2580 |
| 4.95                                | 4950 | 3300 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 710         | 4.0    | 23800 x 2                  | 1470                     | 1389      | 2852 |
| 5.50                                | 5500 | 3300 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 710         | 4.0    | 23800 x 2                  | 1634                     | 1450      | 3076 |
| 6.05                                | 6050 | 3300 | 2800 | 1100 | 1100 | 500  | 420  | 2           | 710         | 5.5    | 27200 x 2                  | 17797                    | 1560      | 3348 |
| 6.60                                | 6600 | 3300 | 2900 | 1100 | 1100 | 500  | 420  | 2           | 800         | 5.5    | 32300 x 2                  | 1960                     | 1946      | 3897 |

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