

# **DFG700-1**

## **Diamond Floor Grinder**

# **Operating Manual**

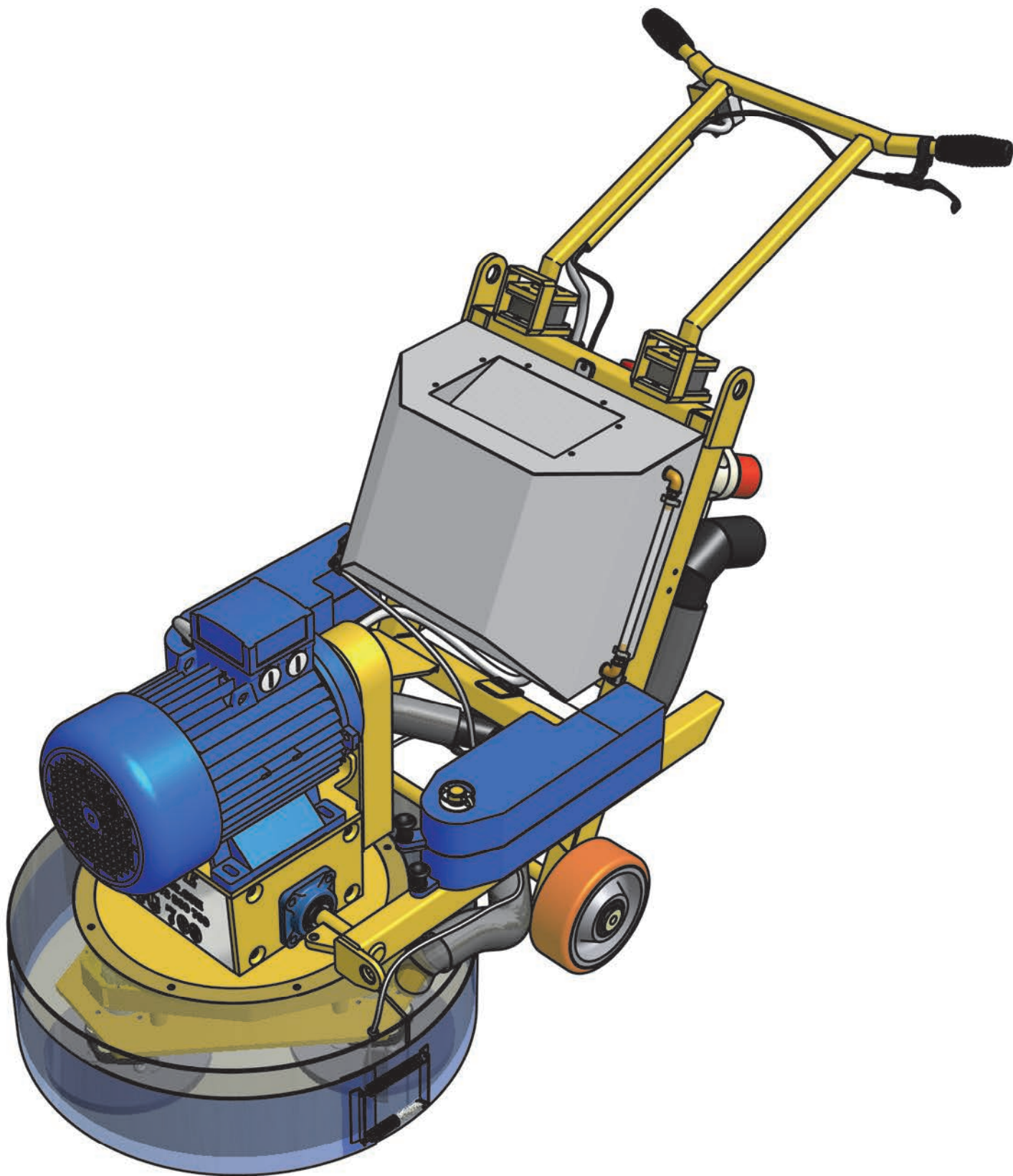
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DFG 700



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| <b>DFG700 - 1</b><br>Operating Manual |
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## **DFG700 Triple Head Diamond Floor Grinder**

### **OPERATING MANUAL**

This manual covers to the best of our knowledge the operation and maintenance of the **DFG 700 - 1** diamond floor grinder. Before operation of the equipment the manual should be read and understood by the operator. The safety regulations must be followed at all times. Service of electrical components should be carried out by authorised personnel.

#### **WARNING**

Failure to follow these instructions may result in serious personal injury or death. SPE disclaims all responsibility for damage to persons or objects arising as a consequence of incorrect handling of the machine and failure to inspect the machine for damage or other faults that may influence the operation prior to starting work.

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## **STARTING WORK**

1. BEFORE STARTING WORK ENSURE THAT THE GRINDING HEADS HAVE BEEN FITTED, SEE PAGE 2
2. Ensure the power supply is correct.DFG 700-1 - This should be a 380/415v 32 amp supply from the mains or generated with a minimum of 20 kva on 50 cycles. The plug on the DFG700 machine is a 380/415v 32 amp 5 pin red plug.
3. Connect a vacuum hose or a water supply to control the dust. WARNING – DO NOT ALLOW WATER TO MAKE CONTACT WITH ANY ELECTRICAL COMPONENTS.
4. Select the number of pivotal weights required for the process and position forward over the grinding head, ensuring the locking pins are secured.
5. After connecting the machine to the power supply turn the red isolator switch to the ON position. The red light will illuminate on the electric panel. Note: the DFG700 is fitted with an automatic phase correction system. This ensures the operator does not need to worry about the power supply being phased to suit the machine.
6. Turn the speed control knob on top of the electrical panel to between 1-2 speed setting.
7. Press the green button on top of the electrical panel. The green light will illuminate and the inverter is now powered up.
8. Turn on the vacuum or water supply.
9. Pull the dead man handle in, on the left handle bar, and press the green button on the right handle bar. The machine will now start to grind the floor.
10. To increase the grinding speed, turn the speed control knob on top of the electrical panel to the next level. With experience the operator will be able to feel the correct speed setting for the grinding process.
11. To stop the machine, release the dead man handle on the left handle bar.

**Please note that if the isolator switch or red stop button is turned off, then immediately back on again, the inverter will not start with the green button on top of the panel for 3 minutes.**



## **FITTING GRINDING PLATES**

1. Disconnect from the power supply.
2. Tip the DFG700 backwards on to its support bars. The machine must be secured and supported.

## **METAL GRINDING TOOLS**

1. Fit the required metal tools to the 6451 drive plate and ensure M6 allen screws are securely tightened.
2. Place the drive plate onto the DFG700 machine and turn anti-clockwise into the locked position.
3. Fit the other two drive plates as above.
4. Lower the machine back onto the floor surface.

## **RESIN GRINDING TOOLS**

1. Fit the required resin tool to the 6450. They fit on with a velcro system.
2. Place the drive plate onto the DFG700 machine and turn anti-clockwise into the locked position.
3. Fit the other two drive plates as above.
4. Lower the machine back onto the floor surface

## **DIAMOND GRINDING PLATES**

It is possible to use the conventional DFG bolt on diamond plates with the DFG700. To fit this type of plate the 3no standard coupling plate part number 7337B, bolted to the flexible coupling must be removed and replaced with 3no 5064A adaptor plates.

1. Fit the diamond plate to the adaptor plate (5064A).
2. Ensure the grinding plate is seated to the adaptor plate correctly prior to inserting and tightening the 4no counter sunk screws diagonally to a maximum torque of 75NM.
3. Fit the other two grinding plates as above.
4. Lower the machine back onto the floor surface.

## **WET GRINDING/POLISHING**

The DFG700 accessories can be used wet or dry however should water be required fill water tank to required level. Open the tap beneath the tank and water will be fed on to the grinding heads.

**NOTE – ALWAYS USE THE SAME TYPE AND BOND OF TOOL ON EACH OF THE THREE HEADS. EQUALLY WORN TOOLS MUST BE FITTED AS A SET.**

TO ENSURE THE CORRECT TOOL IS BEING USED CHECK WEAR RATES AFTER QUARTER OF AN HOUR AND AGAIN AT HALF HOURLY INTERVALS, THIS WILL GIVE AN INDICATION OF TOTAL WEAR RATES AND COST PER M

## MAINTENANCE

### AFTER USE:

- Clean the machine to remove all build up of dust and surface residue. If using a hose pipe or pressure washer take care that water is not directed onto electrical components and switches. (Note: Motors and switches are not waterproof)  
Clean the filter at the bottom of the electric panel. Remove and blow out any dust. Replace with a new filter if damaged. See Fig 1
- The drive belts will give a long and trouble free operating life if basic procedures are followed. To inspect remove the belt guard. The drive belts are tensioned by sliding the tension pulley along the adjusting slot allowing 10mm belt deflection. See Fig 2. It is important that the drive belts are not over tensioned. Serious damage could be caused to the drive shaft, drive shaft bearings and drive motor if the belts are excessively tight.
- Periodically check the oil level in the drive gearbox (part no 7309) either through the sight level gauge or level plug depending on the model. See Fig 3. If oil comes out the inspection hole when level plug is removed the gearbox contains sufficient oil. If oil level is low top up to just above the main gear by removing the gearbox oil filler plug. See Fig 4. Access to the oil filler plug is gained by removing the drive motor and motor mount plate. If any oil is required, use an 'SY320' grade gear oil.



Fig 1 - Electric Panel Filter

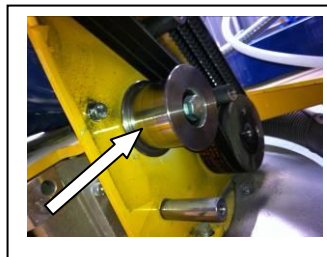


Fig 2 - Belt Tension Pulley



Fig 3 - Oil Level Plug or Level Gauge site



Fig 4 - Gearbox Oil Filler Plug

The planetary gear case is sealed and should not require any maintenance. The internal gears are lubricated with lithium EPO grease.

- All components should be checked daily for tightness and the drive belts for tension weekly.
- The flexible drive couplings that support the grinding heads should be checked on a weekly basis, the couplings should be firm without excessive movement.
- Any excess vibration due to uneven plate wear should result in the grinding plates being changed to eliminate damage to couplings and bearing assembly support units.



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## SAFETY

Only trained operatives should be allowed to work the **DFG700** range of floor grinders.

Note: It is possible that the noise level produced by the Diamond Floor Grinder could exceed 90dbA. Appropriate PPE must be worn and the equipment must be used in line with guidelines laid down by the Health & Safety Executive.

Always ensure that all power leads and hoses are disconnected before attempting to service the machine. Never tip the machine backwards until the grinding plates have stopped rotating and the machine has been isolated at the main supply.

Noise and vibration will occur at various levels dependent on the grinding attachments and work being completed. It is recommended that tests are taken on site to provide the operator with accurate information on using the equipment within the guidelines laid down by the Health & Safety Executive.

### NOTE:

1. NEVER OPERATE THE DFG700 FLOOR GRINDER WITHOUT THE BELT GUARDS FITTED
2. NEVER OPERATE THE DFG700 FLOOR GRINDER OUTDOORS IN WET CONDITIONS AS THE ELECTRICAL COMPONENTS ARE NOT WATERPROOF
3. NEVER OPERATE THE DFG700 WITH THE HEADS RAISED FROM THE FLOOR

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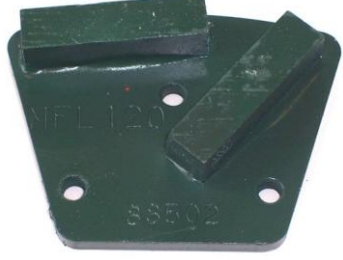
|                                                                                     | Part No | Description                                         | Application                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------|---------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | 6450    | Resin Tool Drive Plate                              | Quick release drive plate with Velcro for the fitment of resin tools.<br>Can be used wet or dry.                                                                                                                                       |
|    | 6460    | Combination<br>Resin / Metal Tool<br>80 Grit Orange | Mixed bond ensures a very fine scratch profile for use after metal bond or directly onto power floated concrete leaves perfect surface for thin film coatings or polishing with a minimum number of stages.<br>Can be used wet or dry. |
|   | 6461    | Resin Tool<br>100 Grit Black                        | For the first stage of resin polishing leaves a matt finish.<br>Can be used wet or dry.                                                                                                                                                |
|  | 6462    | Resin Tool<br>200 Grit Blue                         | For the second stage of resin polishing leaves a closed matt finish.<br>Can be used wet or dry.                                                                                                                                        |
|  | 6463    | Resin Tool<br>400 Grit Red                          | For the third stage of resin polishing leaves a honed silk finish.<br>Can be used wet or dry                                                                                                                                           |
|  | 6464    | Resin Tool<br>800 Grit White                        | For the forth stage of resin polishing leaves a light reflective finish suitable for most industrial and commercial applications.<br>Can be used wet or dry                                                                            |

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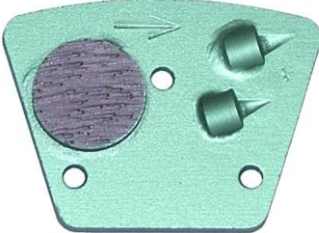
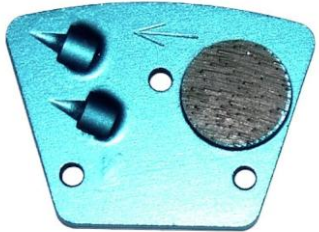
|                                                                                     | Part No | Description                      | Application                                                                                                                            |
|-------------------------------------------------------------------------------------|---------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
|    | 6465    | Resin Tool<br>1500 Grit Yellow   | For the final stage of resin polishing<br>leaves a clear reflective shine ideal for<br>decorative surfaces.<br>Can be used wet or dry. |
|    | 6451    | Metal Tool Drive Plate           | Quick release drive plate for the bolt on<br>fitment of metal tools.<br>Can be used wet or dry.                                        |
|   | 6470    | Metal Tool<br>16 Grit Hard Bond  | For initial smoothing of rough surfaces,<br>coating and adhesive removal from soft<br>concrete.<br>Can be used wet or dry.             |
|  | 6471    | Metal Tool<br>120 Grit Hard Bond | First Stage Tool for grinding / polishing<br>soft concrete.<br>Can be used wet or dry.                                                 |
|  | 6472    | Metal Tool<br>80 Grit Hard Bond  | Second Stage Tool for grinding /<br>polishing soft concrete.<br>Can be used wet or dry.                                                |
|  | 6473    | Metal Tool<br>120 Grit Hard Bond | Third Stage Tool for grinding / polishing<br>soft concrete.<br>Can be used wet or dry.                                                 |

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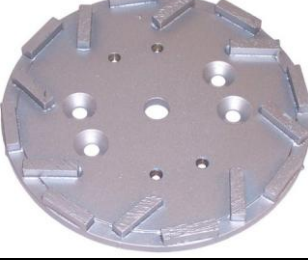
|                                                                                     | Part No     | Description                        | Application                                                                                                                           |
|-------------------------------------------------------------------------------------|-------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>6474</b> | Metal Tool<br>16 Grit Medium Bond  | For initial smoothing of rough surfaces,<br>coating and adhesive removal.<br>Can be used wet or dry.                                  |
|    | <b>6475</b> | Metal Tool<br>30 Grit Medium Bond  | First Stage Tool for grinding /<br>polishing concrete and<br>seamless terrazzo.<br>Can be used wet or dry.                            |
|   | <b>6476</b> | Metal Tool<br>80 Grit Medium Bond  | Second Stage Tool for grinding /<br>polishing concrete and<br>seamless terrazzo.<br>Can be used wet or dry.                           |
|  | <b>6477</b> | Metal Tool<br>120 Grit Medium Bond | Third Stage Tool for grinding /<br>polishing concrete and<br>seamless terrazzo.<br>Can be used wet or dry.                            |
|  | <b>6478</b> | Metal Tool<br>16 Grit Soft Bond    | For initial smoothing of hard rough<br>surfaces, coating and adhesive<br>removal from hard dense concrete.<br>Can be used wet or dry. |
|  | <b>6479</b> | Metal Tool<br>30 Grit Soft Bond    | First Stage Tool for grinding /<br>polishing hard dense concrete.<br>Can be used wet or dry.                                          |

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|                                                                                     | Part No     | Description                                | Application                                                                                |
|-------------------------------------------------------------------------------------|-------------|--------------------------------------------|--------------------------------------------------------------------------------------------|
|    | <b>6480</b> | Metal Tool<br>80 Grit Soft Bond            | Second Stage Tool for grinding / polishing hard dense concrete.<br>Can be used wet or dry. |
|    | <b>6481</b> | Metal Tool<br>120 Grit Soft Bond           | Third Stage Tool for grinding / polishing hard dense concrete.<br>Can be used wet or dry.  |
|   | <b>6486</b> | Green PCD Tool<br>1 Segment Anti-clockwise | For the rapid removal of adhesive, coatings and failed latex from a hard substrate.        |
|  | <b>6488</b> | Green PCD Tool<br>2 Segment Anti-clockwise | For the rapid removal of adhesive, coatings and failed latex from a hard substrate.        |
|  | <b>6498</b> | Blue PCD Tool<br>1 Segment Clockwise       | For the rapid removal of adhesive, coatings and failed latex from a hard substrate.        |
|  | <b>6499</b> | Blue PCD Tool<br>2 Segment Clockwise       | For the rapid removal of adhesive, coatings and failed latex from a hard substrate.        |

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|                                                                                     | Part No      | Description                           | Application                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------|--------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>5064A</b> | DFG700 250mm Adapter Plate            | Allows conventional 250mm segmented diamond grinding plates to be fitted.                                                                                                                           |
|    | <b>6401</b>  | 10 Segment Blue, 250mm Diamond Plate  | 10 Segments, 10mm segment depth.<br>Economical grinding of concrete and adhesive.<br>Can be used wet or dry.                                                                                        |
|   | <b>6402</b>  | 10 Segment Red, 250mm Diamond Plate   | 10 Segments, 10mm segment depth.<br>Removal of coatings and S/L.<br>Coarse diamond grit.<br>Can be used wet or dry.                                                                                 |
|  | <b>6403</b>  | 16 Segment Blue, 250mm Diamond Plate  | 16 Segments, 10mm segment depth.<br>Grinding of concrete in preparation for following on coatings.<br>Excellent cost per square metre.<br>Can be used wet or dry.                                   |
|  | <b>6403A</b> | 16 Segment Black, 250mm Diamond Plate | 16 Segments, 10mm segment depth.<br>Hard bond for softer surfaces.<br>Grinding of concrete in preparation for following on coatings.<br>Excellent cost per square metre.<br>Can be used wet or dry. |
|  | <b>6403B</b> | 16 Segment Grey, 250mm Diamond Plate  | 16 Segments, 10mm segment depth.<br>Soft bond for hard surfaces.<br>Grinding of concrete in preparation for following on coatings.<br>Excellent cost per square metre.<br>Can be used wet or dry.   |

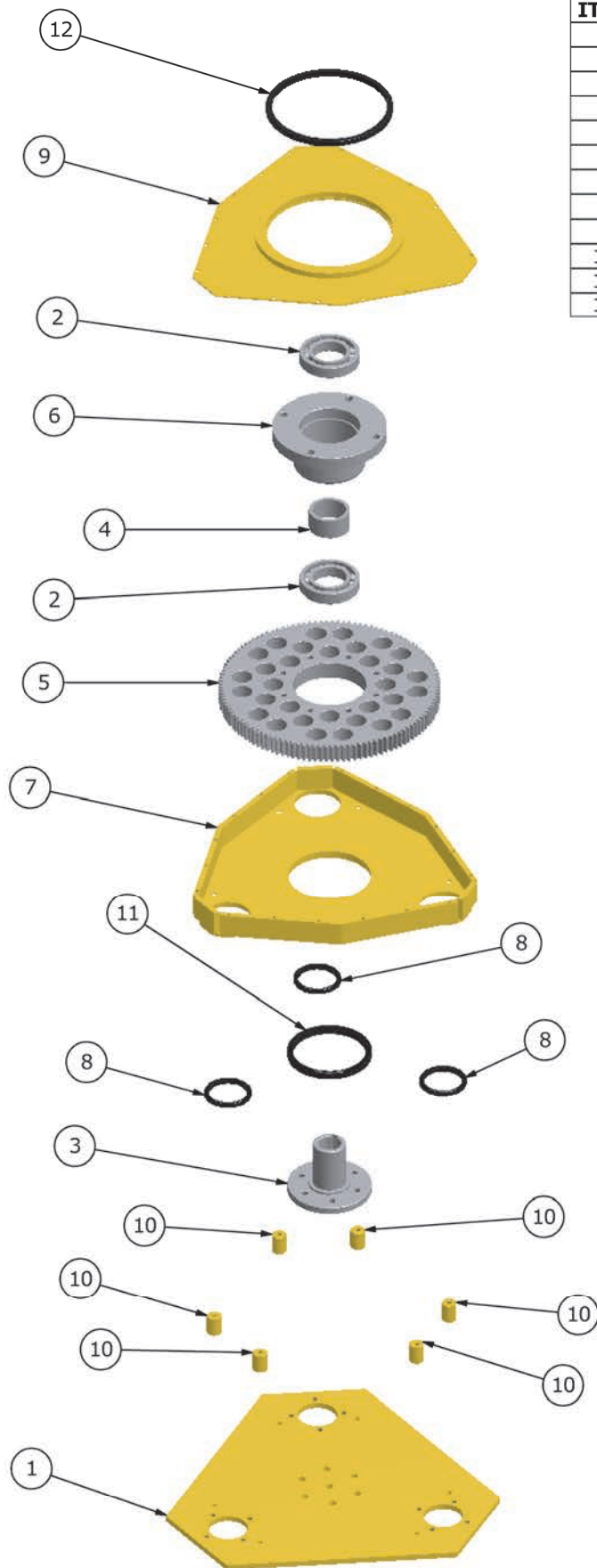
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|                                                                                     | Part No      | Description                                         | Application                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|--------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>6403C</b> | 16 Segment Purple, 250mm Diamond Plate              | 16 Segments, 10mm segment depth.<br>Soft bond for hard surfaces.<br>Second stage grinding of terrazzo and decorative concrete.<br>Leaves a smooth flat finish.                                               |
|    | <b>6403Y</b> | 16 Segment Yellow, 250mm Diamond Plate              | 16 Segments, 10mm segment depth.<br>Economical grinding of concrete in preparation for following on coatings.<br>Excellent cost per square metre.<br>Can be used wet or dry                                  |
|   | <b>6404</b>  | 20 Segment Blue, 250mm Premium Diamond Plate        | 20 Segments, 10mm segment depth.<br>Premium plate for concrete grinding, paint removal, 1st stage grinding of resin based terrazzo.<br>Can be used wet or dry.                                               |
|  | <b>6405</b>  | 16 Segment Button Head, 250mm Premium Diamond Plate | For the removal of thicker adhesive, on sand / cement screed whether open or closed. Will cope with large volume areas in a cost effective manner. To be used with softer elastomeric and thin film coatings |



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Operating Manual

# Spare Parts Breakdown



| Parts List |     |                 |                                    |
|------------|-----|-----------------|------------------------------------|
| ITEM       | QTY | SPE PART NUMBER | DESCRIPTION                        |
| 1          | 1   | 7357B           | Carrier Plate- [gear]              |
| 2          | 2   | 7341            | Main Bearing                       |
| 3          | 1   | 7340B           | Main Shaft Hub - [gear]            |
| 4          | 1   | 7342B           | Bearing Spacer Main Shaft - [gear] |
| 5          | 1   | 7427            | Spur Gear - drive                  |
| 6          | 1   | 7343B           | Driving Hub Flange - [gear]        |
| 7          | 1   | 7421            | Gear Guard Bottom                  |
| 8          | 3   | 7426            | Lipped Seal (driven shaft)         |
| 9          | 1   | 7423            | Gear Guard Top                     |
| 10         | 6   | 7422            | Gear Guard Pillar                  |
| 11         | 1   | 7424            | Lipped Seal (main shaft-lower)     |
| 12         | 1   | 7425            | Lipped Seal (main shaft-upper)     |

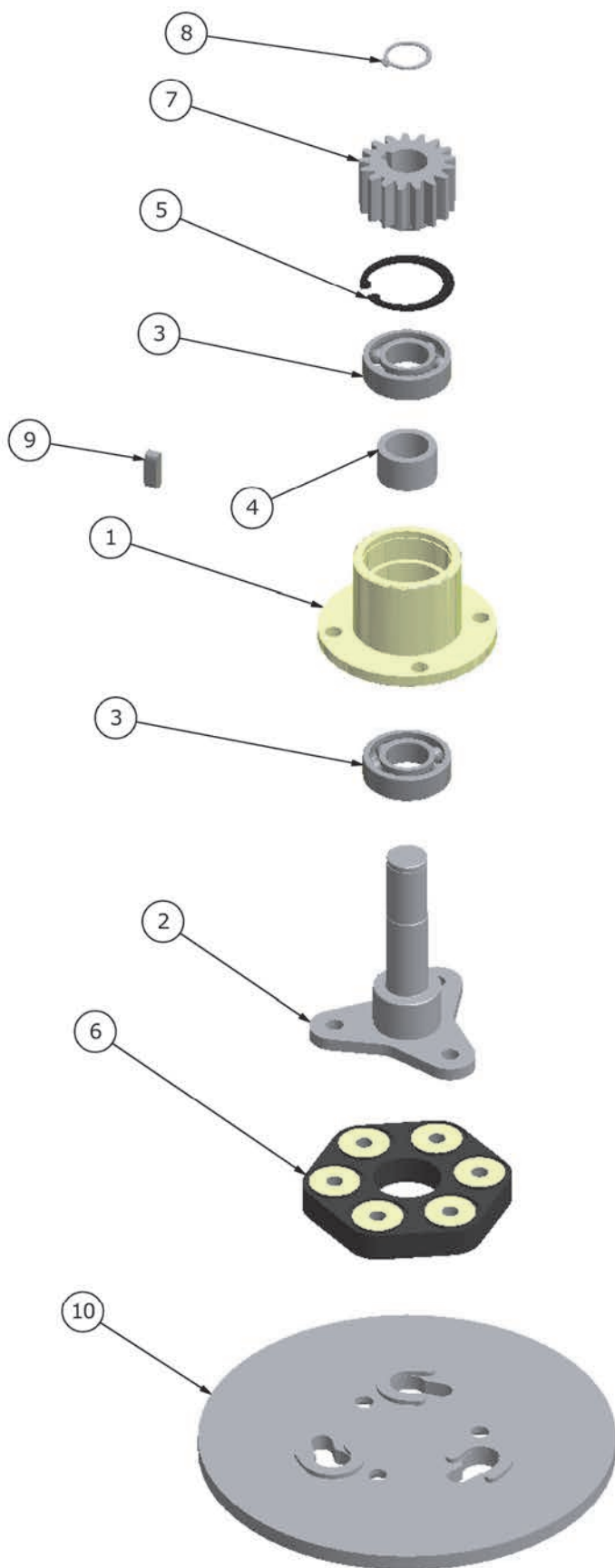
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|         |                             |           |
|---------|-----------------------------|-----------|
| Drawn   | TITLE Head Drive Components |           |
| D.G.A.  |                             |           |
| Checked | Drawing No.                 | MACHINE   |
| R.C.    | DFG-700_HDr-21              | DFG 700-1 |



| Parts List |     |                 |                        |
|------------|-----|-----------------|------------------------|
| ITEM       | QTY | SPE PART NUMBER | DESCRIPTION            |
| 1          | 3   | 7334B           | Bearing Housing - gear |
| 2          | 3   | 7335B           | Drive Shaft - gear     |
| 3          | 6   | 5058            | Bearing                |
| 4          | 3   | 7336            | Bearing Spacer         |
| 5          | 3   | 5059            | Int. Circlip           |
| 6          | 3   | 5226            | Flexi Coupling         |
| 7          | 3   | 7428            | Spur Gear - driven     |
| 8          | 3   | 7429            | Ext. Circlip           |
| 9          | 3   | 3065            | 8x25 Parallel Key      |
| 10         | 3   | 7337B           | Coupling Plate [ccw]   |

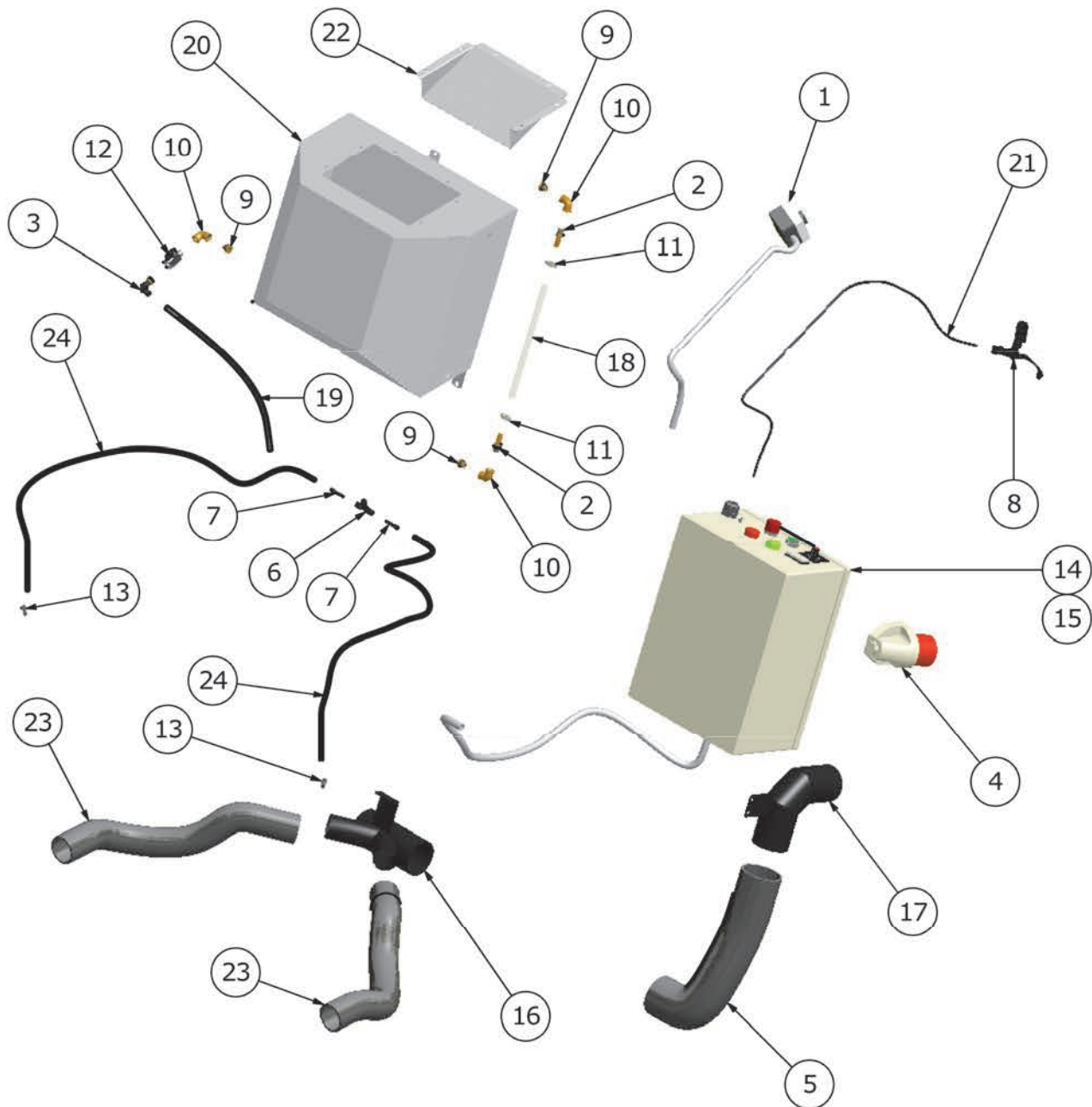
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|         |                                     |           |
|---------|-------------------------------------|-----------|
| Drawn   | TITLE Grinding Head (3 per machine) |           |
| D.G.A.  |                                     |           |
| Checked | Drawing No.<br>DFG-700_GrH-21       | MACHINE   |
| R.C.    |                                     | DFG 700-1 |



| Parts List |     |                 |                      | Parts List |     |                 |                         |
|------------|-----|-----------------|----------------------|------------|-----|-----------------|-------------------------|
| ITEM       | QTY | SPE PART NUMBER | DESCRIPTION          | ITEM       | QTY | SPE PART NUMBER | DESCRIPTION             |
| 1          | 1   | 5018            | Switch               | 13         | 2   | 7370            | Extended Grommet        |
| 2          | 2   | 7358            | 1/4" Hose Tail       | 14         | 1   | 7400            | Electrical Panel (400v) |
| 3          | 1   | 7359            | 1/4"x8mm Connector   | 15         | 1   | 7400A           | Electrical Panel (440v) |
| 4          | 1   | SP630           | Surface Mounted Plug | 16         | 1   | 7372            | Vac 'Y' Piece (50/75)   |
| 5          | 1   | 7360            | Vac Hose (75mm)      | 17         | 1   | 7373            | Vac Exhaust (75mm)      |
| 6          | 1   | 7361            | 8mm Equal Tee        | 18         | 1   | 7374            | Level Tube              |
| 7          | 2   | 7362            | 8x6mm Reducer        | 19         | 1   | 7375            | Flexi Pipe (8mm)        |
| 8          | 1   | 7365            | Dead Man Lever       | 20         | 1   | 7376            | Water Tank              |
| 9          | 3   | 7366            | 1/4" Reducing Bush   | 21         | 1   | 7371            | Dead Man Cable          |
| 10         | 3   | 7367            | 1/4" Elbow           | 22         | 1   | 7377            | Tank Filler Plate       |
| 11         | 2   | 7368            | "O" Clip             | 23         | 2   | 7363            | Vac Hose (50mm)         |
| 12         | 1   | ADAPT 045       | 1/4" Ball Valve      | 24         | 2   | 7364            | Flexi Pipe (6mm)        |

**Note**

Tank Filler Plate (7377)  
and  
1/4" Reducing Bush (7366)  
are inside the water tank

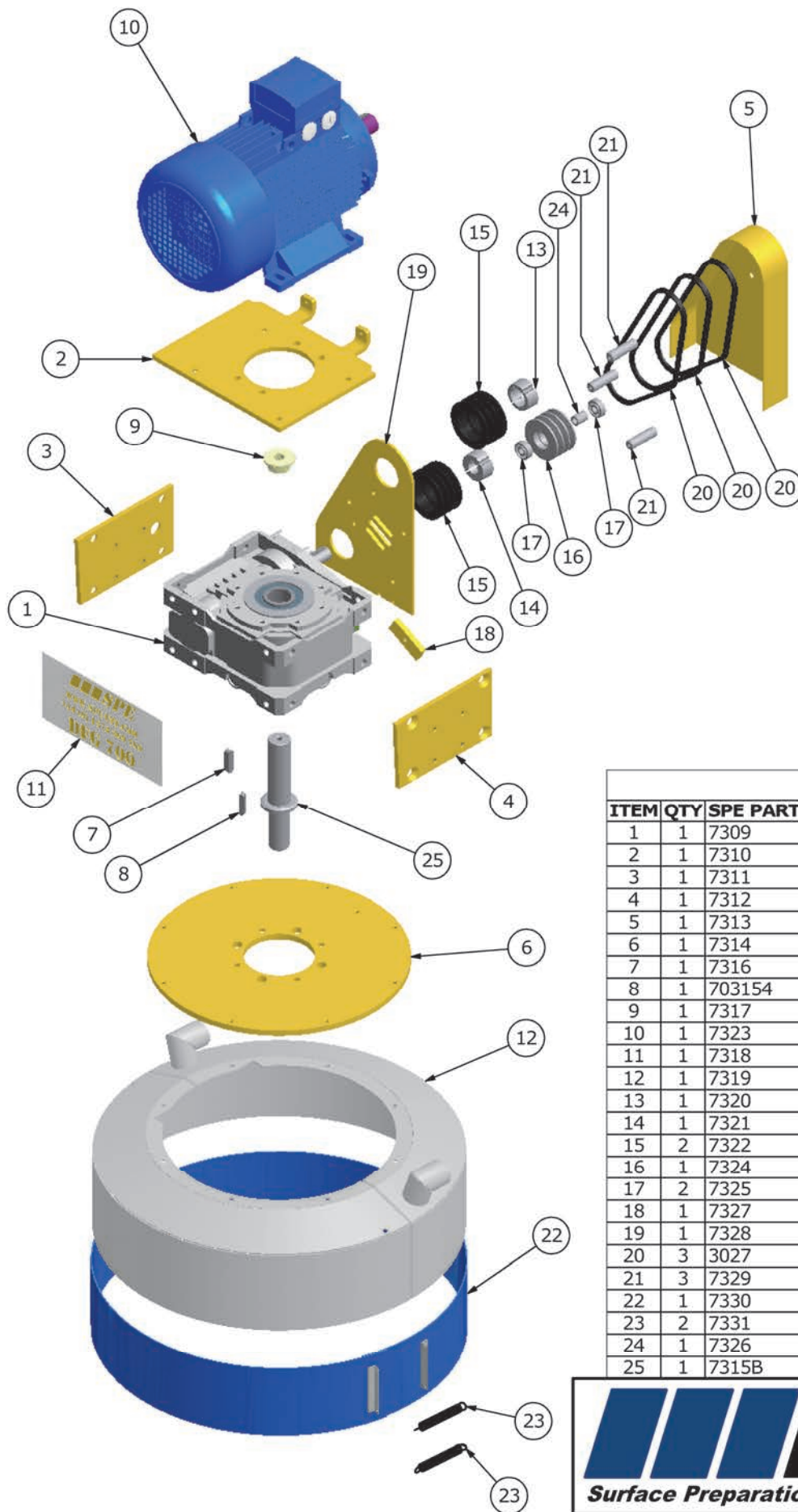


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|         |                          |  |           |
|---------|--------------------------|--|-----------|
| Drawn   | TITLE Utility Components |  |           |
| D.G.A.  |                          |  |           |
| Checked | Drawing No.              |  | MACHINE   |
| R.C.    | DFG-700_Utl-21           |  | DFG 700-1 |

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**Parts List**

| ITEM | QTY | SPE PART NUMBER | DESCRIPTION                   |
|------|-----|-----------------|-------------------------------|
| 1    | 1   | 7309            | Gearbox                       |
| 2    | 1   | 7310            | Motor Plate                   |
| 3    | 1   | 7311            | Gearbox Side Plate (RH)       |
| 4    | 1   | 7312            | Gearbox Side Plate (LH)       |
| 5    | 1   | 7313            | Belt Guard                    |
| 6    | 1   | 7314            | Gearbox Plate                 |
| 7    | 1   | 7316            | 12x50 Parallel Key            |
| 8    | 1   | 703154          | 10x50 Parallel Key            |
| 9    | 1   | 7317            | Drive Shaft Cap               |
| 10   | 1   | 7323            | Drive Motor                   |
| 11   | 1   | 7318            | Gearbox Front Plate           |
| 12   | 1   | 7319            | Grinding Hood                 |
| 13   | 1   | 7320            | Taper Lock Bush [1610 - 38mm] |
| 14   | 1   | 7321            | Taper Lock Bush [1610 - 25mm] |
| 15   | 2   | 7322            | Motor & G/Box Pulley          |
| 16   | 1   | 7324            | Tensioner Pulley              |
| 17   | 2   | 7325            | Bearing (Tensioner)           |
| 18   | 1   | 7327            | Belt Tensioner Retainer       |
| 19   | 1   | 7328            | Belt Guard Back Plate         |
| 20   | 3   | 3027            | Drive Belt (SPA)              |
| 21   | 3   | 7329            | Belt Guard Post               |
| 22   | 1   | 7330            | Polyurethane Dust Skirt       |
| 23   | 2   | 7331            | Spring                        |
| 24   | 1   | 7326            | Tensioner Spacer              |
| 25   | 1   | 7315B           | Gearbox Output Shaft          |



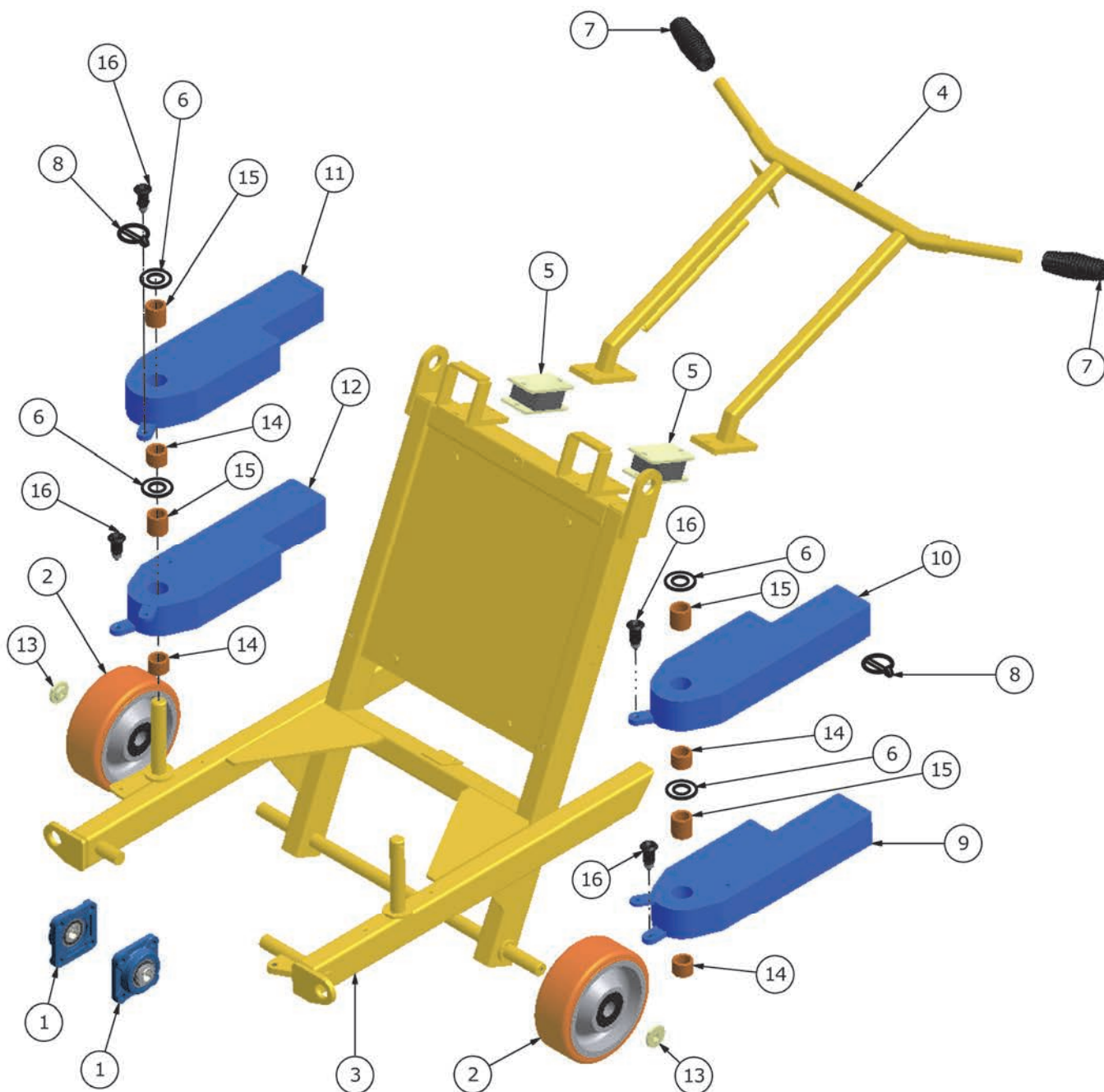
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|         |                        |           |
|---------|------------------------|-----------|
| Drawn   | TITLE Drive Components |           |
| D.G.A.  |                        |           |
| Checked | Drawing No.            | MACHINE   |
| R.C.    | DFG-700_Drv-21         | DFG 700-1 |

*This drawing should not be used,  
copied, shown or handed to a third  
party without the prior written  
consent of SPE International Ltd.*

| Parts List |     |                 |                   | Parts List |     |                 |                    |
|------------|-----|-----------------|-------------------|------------|-----|-----------------|--------------------|
| ITEM       | QTY | SPE PART NUMBER | DESCRIPTION       | ITEM       | QTY | SPE PART NUMBER | DESCRIPTION        |
| 1          | 2   | 6012            | Flange Bearing    | 9          | 1   | 7302            | Weight - Lower L/H |
| 2          | 2   | 7306            | Wheel             | 10         | 1   | 7303            | Weight - Upper L/H |
| 3          | 1   | 7300            | Frame             | 11         | 1   | 7304            | Weight - Upper R/H |
| 4          | 1   | 7301            | Handlebar         | 12         | 1   | 7305            | Weight - Lower R/H |
| 5          | 2   | 5017            | Flexible Mounting | 13         | 2   | 07035           | Hub Cap            |
| 6          | 4   | 5098            | Spacer            | 14         | 4   | 7307            | Bush - Short       |
| 7          | 2   | 9104            | Handlebar Grip    | 15         | 4   | 7308            | Bush - Long        |
| 8          | 2   | 5029            | Locking Pin       | 16         | 4   | 7379            | Weight Lock Pin    |



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|         |                |  |                  |
|---------|----------------|--|------------------|
| Drawn   | TITLE          |  | Frame Components |
| D.G.A.  |                |  |                  |
| Checked | Drawing No.    |  | MACHINE          |
| R.C.    | DFG-700_Frm-21 |  | DFG 700-1        |

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consent of SPE International Ltd.*





**DFG700 - 1**  
 Operating Manual

## ELECTRIC PANEL COMPONENTS

| QTY | DESCRIPTION                 | SPE PART NO. |
|-----|-----------------------------|--------------|
| 1   | Panel & Back Plate          | SP83318      |
| 1   | Frequency Inverter          | 7401         |
| 1   | Mains Filter                | 7402         |
| 1   | Panel Fan                   | 7403         |
| 1   | Panel Fan Filter            | 7404         |
| 1   | Panel Fan Grille            | 7405         |
| 1   | Panel Fan Lead              | 7406         |
| 1   | Panel Fan Transformer       | 7407         |
| 1   | Contactor (400v only)       | SPLC1D25V7   |
| 2   | Contactor (400v only)       | SPLC1D09V7   |
| 1   | Timer                       | SPLADR4      |
| 1   | Limit Switch                | SPZCKE05     |
| 1   | Micro Switch-Body           | SPZCKJ1H29   |
| 1   | Micro Switch-Roller         | SPZCKY11     |
| 1   | Isolator 40 amp             | SPVCCF2      |
| 1   | Stop Button                 | SPZB4BS44    |
| 1   | Start Button                | SPZB4BA3     |
| 1   | Start Switch                | SPZB4BZ101   |
| 1   | Stop Switch                 | SPZB4BZ102   |
| 1   | Lens                        | SPZB4BV04    |
| 1   | Lens                        | SPZB4BV03    |
| 2   | Panel Lamp (400v only)      | SPZB4BV5     |
| 1   | Trip-3 Pole 25 amp          | SP60HD325    |
| 1   | Trip-2 Pole 2 amp           | SP60HD202    |
| 1   | Hour Run Meter              | SPH7ET-N     |
| 1   | Speed Con Knob Kit          | 11124        |
| 2   | Gland                       | SPCG/LNM20   |
| 1   | Gland                       | SPCG/LNM25   |
| 1   | Bush Lock Nut               | SP608-828    |
| 1   | Compression Gland           | SP542-188    |
| 1   | Bush Lock Nut               | SP608-828    |
| 2   | Brass Bush 20mm Short       | SP608-222    |
| 2   | Bush Lock Nut               | SP608-812    |
| 1   | 415v 32 amp 5 pin Surf Plug | SP630        |
| 1   | Return Spring               | 7332         |
| 1   | Cable Guide                 | 7333         |
| 1   | Contactor (440v USA only)   | SPLC1D25R7   |
| 1   | Contactor (440v USA only)   | SPLC1D09R7   |
| 2   | Panel Lamp (440v USA only)  | SPZB4BV8     |



**DFG700 - 1**  
Operating Manual

## SPECIFICATION SHEET

|                                  |                  |
|----------------------------------|------------------|
| <b>Type</b>                      | DFG 700 Electric |
| <b>Part number</b>               | DFG700-1         |
| <b>Power output</b>              | 11 kw            |
| <b>Voltage</b>                   | 380/415          |
| <b>Cycles</b>                    | 50               |
| <b>Head speed r.p.m.</b>         | 180~400 variable |
| <b>Engine/motor speed r.p.m.</b> | 2800             |
| <b>Machine dimensions (mm)</b>   |                  |
| Length                           | 1570             |
| Width                            | 680              |
| Height                           | 1090             |
| Weight (kg)                      | 292              |

|                      |                  |
|----------------------|------------------|
| Warranty start date: | As despatch date |
| Model:               | DFG 700-1        |
| Serial no:           |                  |
| Customer name:       |                  |
| Customer Address:    |                  |
|                      |                  |
|                      |                  |
|                      |                  |
|                      |                  |
|                      |                  |

|                      |                              |
|----------------------|------------------------------|
| <i>Manufacturer:</i> | <b>SPE International Ltd</b> |
|                      | <b>Honeyholes Lane</b>       |
|                      | <b>Dunholme</b>              |
|                      | <b>Lincoln</b>               |
|                      | <b>LN2 3SU</b>               |
|                      | <b>England</b>               |
| <i>telephone:</i>    | <b>+44 (0) 1673 860709</b>   |
| <i>fax:</i>          | <b>+44 (0) 1673 861119</b>   |
| <i>Email:</i>        | <b>sales@spe-int.com</b>     |
| <i>Web site:</i>     | <b>www.spe-int.com</b>       |

*Distributor:*



**DFG700 - 1**  
Operating Manual

## DECLARATION OF CONFORMITY

WE  
**SPE INTERNATIONAL LTD**

OF  
Honeyholes Lane  
Dunholme  
Lincoln  
LN2 3SU

**DECLARE** that under our sole responsibility for the supply/manufacture of the product

(Description/name)            **DFG 700 Floor Grinder**

(Model/type)                **DFG 700 - 1**

to which this declaration relates is in conformity with the following standards and other normative documents following the provisions of Directive 2006/42/EC.

A handwritten signature in blue ink, appearing to read 'B. Jacklin'.

.....  
Brian Jacklin – Technical Manager  
SPE INTERNATIONAL LTD



## **CONDITIONS OF SALE**

### **DFG700 - 1** **Operating Manual**

The quotation overleaf and any order placed following such quotation are subject to the following conditions of sale in which SPE International Limited is referred to as the "Company".

#### **1. Validity of quotation**

No order received from a customer by the Company shall constitute a contract until accepted in writing by the Company.

#### **2. Prices**

Prices quoted by the Company are firm for 30 days only or until previously withdrawn. Unless otherwise stated all prices are exclusive of any applicable Value Added Tax for which the customer shall be additionally liable to the Company.

#### **3. Delivery**

Delivery periods and dates are given in good faith but are not the subject of any warranty or condition and time shall not be of the essence of the contract in these respects. No liability will attach to the Company if delivery periods or dates are not met for any reason whatsoever.

#### **4. Payment**

Save as may otherwise be agreed in writing the customer shall pay the price in full on or before the estimated delivery date whereupon the Company shall raise a receipted invoice. Each invoice includes an Overdue Account Levy of 5% of the total invoice value inclusive of VAT. Subject to payment in full being made on or before the due date a sum equal to the Overdue Account Levy shall be credited to the customers account with the Company. Until such time as payment in full has been made the Company shall be under no obligation to allow or effect of any goods to the customer.

#### **5. Warranty**

The Company warrants that all goods supplied by it will correspond to their specifications and will be free from defects in materials or workmanship for a period of 12 months from the date of delivery. The Company's obligation in the event of a breach of this warranty is limited to the repair or replacement of any defective goods which shall be returned at the cost and expense of the customer to the Company. This warranty is given in lieu of all the other warranty or conditions expressed or implied (whether by statute or otherwise) and is subject to the following conditions:-

**5.1** Claims must be notified in writing to the Company within seven days from the date of delivery or (where the defect is not apparent on reasonable inspection) as soon as practicable after discovery of the defect.

**5.2** The Company shall be under no liability in respect of any defect in the goods arising from any drawing, design or specification supplied by the customer.

**5.3** The Company shall be under no liability if the defect or failure in the reasonable opinion of the Company arises from wilful damage or misuse, negligence by the customer or any third party. Failure to follow the Company instructions, usage of non-recommended parts and materials, alteration or repair of the goods without the prior approval of the Company or non-recommended maintenance.

**5.4** The Company shall be under no liability if the price for the goods has not been paid by the due date for payment.

**5.5** The above warranty does not extend to:-

**5.5.1** Parts, materials or equipment not manufactured by the company in respect of which the customer shall be entitled only to the benefit of any such warranty or guarantee as is given by the manufacturer to the Company.

**5.5.2** Any component part of the goods or associated parts coming into contact with abrasive elements or dust within surface Preparation equipment.

**5.5.3** Fair wear and tear of moving parts within the goods.

**5.6** Except in the case of death or personal injury caused by the Company negligence, the Company shall not be liable for any consequential loss or damage (whether for loss of profit or otherwise) or other claims for consequential compensation.

#### **6. Carriage**

Packing, carriage and insurance charges in respect of delivery of the goods to the customer will be charged to the customer at cost to the company.

#### **7. Damage in Transit**

The company does not accept any liability for loss or damage to the goods while in transit to the customer.

#### **8. Risk**

The risk in the goods shall pass to the customer on delivery to the customer or (if earlier) when possession of the goods is taken by a carrier for delivery to the customer.

#### **9. Force Majeure**

The Company shall not be liable to the customer or be deemed to be in breach of any contract with the customer by reason of any delay in performing or any failure to perform any obligation of the Company obligation in relation to the goods if the delay or failure was due to force majeure or to any other cause beyond the Company's reasonable control.

#### **10. Reservation of Title**

The goods sold under these conditions shall remain the absolute property of the Company and legal title in the goods shall remain vested in the Company until payment in full of all amounts invoiced or due to the Company in respect of the goods. If the customer shall enter into liquidation have a winding up order made against it or have a Liquidator, receiver, administrator or administrator receiver shall be appointed over its assets, income or any part thereof before the property in the goods has passed in accordance with this condition the Company shall be entitled immediately after giving notice of its intention to repossess any goods to enter upon the premises of the customer with such transport as may be necessary and to repossess any goods to which it has title under this condition. No liquidator, receiver, administrator or administrative receiver of the customer shall have authority to sell goods to which the Company has title without the prior written consent of the Company.

#### **11. Insolvency of Customer**

If the customer being a body corporate, shall pass a resolution or suffer an order of the Court to be made for winding – up, or if a Receiver, Administrator or Administrative Receiver shall be appointed or, being an individual or partnership, shall suspend payment, propose or enter into any composition or arrangement with his or their creditors, or have a bankruptcy order made against him or them, then the Company shall have the right, without prejudice to any other contract with the customer, not to proceed further with the contract and shall be entitled to charge for work already carried out (whether completed or not) and for goods and materials already purchased for the customer such charge to be an immediate debt due from the customer.

#### **12. Patent Rights, etc**

The acceptance of a quotation includes the recognition by the customer of the Company under any patents, trademarks, registered designs or other intellectual property rights relating to the goods and the customer undertakes that patent numbers, trademarks or other trade markings on goods supplied shall not be obliterated, altered or defaced.

#### **13. Applicable Law**

These conditions shall be governed by and construed in accordance with English law and parties acknowledge and accept the exclusive jurisdiction of the English Courts.