

# Dlyte PRO500

## PRECISE METAL SURFACE FINISHING FOR MASS PRODUCTION

DlytePRO500 is the most advanced, powerful and versatile metal surface finishing equipment on the market specially designed for mass production.



*Workbowl and cathode set are not included.*

### 01. MACHINE SPECIFICATIONS

#### TECHNICAL DATA (1/2)

|                               |                                       |  |  |
|-------------------------------|---------------------------------------|--|--|
| CAPACITY                      | DIMENSION                             | Machine dimensions   | 1,300 x 2,770 x 1,380 mm                             |
|                               | CAPACITY                              | Electrolyte capacity   | 250 l  |
|                               |                                       | Holder + piece area  | Ø500 x 540 mm (x1)<br>Ø200 x 540 mm (x8)             |
|                               |                                       | Work piece area  | Up to Ø500 x 250 mm (x1)<br>Up to Ø200 x 200 mm (x8) |
|                               | Weight                                | 50 kg (work piece(s) + holder) (x1)<br>20 kg (work piece(s) + holder) (x8) |  |
| MACHINE WEIGHT                | Dlyte PRO500 weight                   | 1600 kg  |  |
|                               | Tank with electrolyte                 | 400 kg   |  |
| ELECTRICAL <sup>(1)</sup>     | Rated power                           | 25 KW <sup>(2)</sup>   |  |
|                               | Short-circuit breaking capacity (ics) | 6 kA   |  |
|                               | Rated voltage                         | 400 Vac ± 10% (3P+N+GND)   |  |
|                               | Frequency                             | 50 - 60 Hz   |  |
|                               | Rated current                         | 35 A   |  |
|                               | Full load current                     | 40 A   |  |
|                               | Grounding connection                  | TN system  |  |
|                               | Earth leakage current                 | > 10 mA <sup>(3)</sup>   |  |
|                               | AIR                                   | Air supply (Main line)   | 6 - 7 bar (air connector Ø10 mm)                     |
| Air flow (Main line)          |                                       | 1,000 l/min <sup>(4)</sup>   |  |
| Air supply (Holder line)      |                                       | 6 - 7 bar (air connector Ø12 mm)   |  |
| Air flow (Holder line)        |                                       | 1,500 l/min <sup>(4)</sup>   |  |
| Air quality (ISO 8573-1:2010) |                                       | - . 4 . - (dewpoint ≤ +3°C)  |  |
| DISTILLED WATER               | Water supply                          | Connection (Ø10 mm)  |  |
|                               | Water tank                            | 16 l   |  |
| TEMPERATURE                   | Operating                             | 5°C to 35 °C   |  |
|                               | Dlyte PRO500 storage                  | -10°C to + 70°C  |  |
|                               | Electrolyte storage                   | 5°C to 40°C (max. 24 months)   |  |

<sup>(1)</sup> The machine shall be connected to a power line with: A) Differential switch: 4P - 40A, 300mA - Type B. B) Circuit breaker switch: 4P - 40A, C curve. C) The female connector shall meet the IEC 60309 series. <sup>(2)</sup> Detailed power consumption in Table 2. <sup>(3)</sup> Note Leakage current: 20 mA. <sup>(4)</sup> Detailed air consumption in the last table.

# TECHNICAL DATASHEET. DLYTE PRO500

## 01. MACHINE SPECIFICATIONS

|                         |                  |                                     |                          |
|-------------------------|------------------|-------------------------------------|--------------------------|
| TECHNICAL DATA<br>(2/2) | PROTECTION INDEX | Machine                             | IP20                     |
|                         |                  | Electric cabinets and peripherals   | IP22                     |
|                         | NOISE            | Holder vibrators OFF (EN ISO 11202) | <70 dB                   |
|                         |                  | Holder vibrators ON (EN ISO 11202)  | 74 dB (1 m); <70 dB (7m) |

## 02. DETAILED POWER CONSUMPTION

The power consumption depends on the total surface to be polished in one cycle.

| LOAD   | CURRENT CONSUMPTION (A) 1 HOLDER | CURRENT CONSUMPTION (A) 8 HOLDERS | VOLTAGE (V) | POWER (W) | OTHER MODULES CONSUMPTION (W) | MACHINE POWER CONSUMPTION (W) |
|--------|----------------------------------|-----------------------------------|-------------|-----------|-------------------------------|-------------------------------|
| Low    | 10                               | 80                                | 30          | 2400      | 7000                          | 9400                          |
| Medium | 25                               | 200                               | 30          | 6000      | 7000                          | 13000                         |
| High   | 45                               | 360                               | 30          | 10800     | 7000                          | 17800                         |
| Max    | 45                               | 360                               | 50          | 18000     | 7000                          | 25000                         |

## 03. DETAILED AIR CONSUMPTION

Air shall never be required for both the polishing process and the cleaning process at the same time.

The air consumption required for each line is (the duty cycle is specified in percentage):

| LINE      | FUNCTION            | SPECIFICATION | AIR CONSUMPTION (L/MIN)            |                   |           |             |                                    |                  |      |      |
|-----------|---------------------|---------------|------------------------------------|-------------------|-----------|-------------|------------------------------------|------------------|------|------|
|           |                     |               | INSERT THE CORE INTO THE TANK (8s) | POLISHING PROCESS |           |             | REMOVE THE CORE INTO THE TANK (8s) | CLEANING PROCESS |      |      |
|           |                     |               |                                    | Standard          | Min       | Most common |                                    | Max              | Min  | Med. |
| Main Line | Up/Down movement    | 600           | 500 (100%)                         | 0                 | 0         | 500 (50%)   | 500 (100%)                         | -                | -    | -    |
|           | Holder gripping     | 600           | -                                  | -                 | -         | -           | -                                  | -                | -    | -    |
|           | Electrolyte blowers | 600           | -                                  | 0                 | 100 (20%) | 100 (20%)   | -                                  | -                | -    | -    |
|           | Cleaning system     | 1000          | -                                  | -                 | -         | -           | -                                  | 600              | 1000 | -    |
| Main Line | Holder vibration    | 500           | -                                  | -                 | -         | 500 (100%)  | -                                  | -                | -    | -    |
|           | Holder blowers      | 1000          | -                                  | -                 | -         | 1000 (100%) | -                                  | -                | -    | -    |
| TOTAL     |                     |               | 500                                | 0                 | 100       | 2100        | 500                                | 0                | 600  | 1000 |

## 04. TECHNICAL DRAW

