GEM LASER LIMITED
A Legend Laser machine Manufacture & Solutions
Add. : No.442, Wuluo Road, Wuhan, 430061 P.R. China
Tel. : +86-27-84793136
Fax : +86-27-84793136
E-mail: sales@gem-lasers.com
Web : www.gem-lasers.com

GEM Handheld laser cleaning machine

GEM-QX-100

GEM LASER CO., LIMITED

* We reserve the right of final interpretation of the data, subject to change without notice
OVERVIEW

GEM-LASER Launched a new generation of laser non-contact cleaning of high-tech products, do not hurt the parts matrix, no supplies, energy saving, efficient removal of the surface resin, oil, stains, dirt, rust, coating, coating, paint, to meet the complex field of industrial processing Modeling, fine positioning cleaning requirements, to achieve a cleaner cleaning effect, the overall cost of lower production efficiency. Mainly used in automobile manufacturing, machining, electronic processing, relics repair, mold industry, shipbuilding, food processing, petrochemical and other industries.

Traditional industrial cleaning

- Mechanical friction cleaning method, high cleanliness, but easy to damage the substrate.
- Chemical corrosion cleaning method, belonging to stress-free cleaning, but heavy pollution.
- Liquid solid jet cleaning method with higher flexibility, but the higher the cost, more complex waste disposal.
- High-frequency ultrasonic cleaning method good cleaning effect, but the cleaning size is limited and the workpiece after cleaning dry.
**GEM-QC-100 FEATURES**

Laser cleaning technology came into being as a green and environmentally friendly cleaning method. Compared with traditional industrial cleaning, the laser cleaning technology has the following advantages and becomes an emerging laser cleaning technology which has attracted the attention of the automobile manufacturing, electronic processing, mold industry, petrochemical industry and other industries:

01 high beam quality, stable performance

02 hand-held laser cleaning head, easy and easy to use, lightweight can be used for long hours of work

03 integrated design, compact structure easy to install, power can run

04 A wide range of material applicability, flexible and efficient application to a variety of industrial processing scenarios

05 low on the working environment, the system is stable and maintenance-free, long service life

06 non-contact processing, no supplies, no damage, no pollution

**APPLICATIONS**

- Aviation industry
- Shipbuilding
- Automotive industry
- Food processing industry
- Tire industry
- Component industry
- Cultural relics protection
- Construction industry
SPECIFICATIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>The working mode</td>
<td>randomly polarized</td>
</tr>
<tr>
<td>Center wavelength</td>
<td>1060 ~ 1070(nm)</td>
</tr>
<tr>
<td>Output average power</td>
<td>100 ± 5(w)</td>
</tr>
<tr>
<td>Repeat frequency</td>
<td>20 ~ 200(khz)</td>
</tr>
<tr>
<td>Light pulse width</td>
<td>140 ± 10(ns)</td>
</tr>
<tr>
<td>Beam quality</td>
<td>&lt;2.0(M2)</td>
</tr>
<tr>
<td>Maximum pulse energy</td>
<td>5(mj)</td>
</tr>
<tr>
<td>Power adjustment range</td>
<td>10 ~ 100(%)</td>
</tr>
<tr>
<td>Power consumption</td>
<td>≤600(W)</td>
</tr>
<tr>
<td>Laser/Isolator cooling</td>
<td>air-cooled</td>
</tr>
<tr>
<td>Red power</td>
<td>≥50(uw)</td>
</tr>
<tr>
<td>Working voltage</td>
<td>220/110(AV)</td>
</tr>
<tr>
<td>Size</td>
<td>586 * 482.6 * 142.5(mm)</td>
</tr>
</tbody>
</table>

LASER ENGRAVED SAMPLES

Derust before        After derust