Location

KJTJ is located in Lanzhou, the capital city of Gansu Province. Lanzhou which in the upper reaches of the Yellow River is a large city on the Ancient Silk Road, and also an important city on the “Belt and Road”.
Lanzhou Kejin Taiji New Technology Co., Ltd. was founded in 2002 with registered capital of 15.08 million RMB. It is a new high-tech company holding by Institute of Modern Physics (IMP), Chinese Academy of Sciences (CAS).
At present, our company is engaged in the development of the heavy-ion tumor therapy facility.

Basic research related to heavy-ion tumor therapy has been carried out at IMP since 1993. Fruitful achievements have been obtained in radiation physics, radiobiology and therapeutic techniques.

The Wuwei project was completed in 2015. Beam extraction succeeded on December 23, 2015. Please see the progress of the project:
Lanzhou Kejin Taiji New Technology Co., Ltd.
Lanzhou Kejin Taiji New Technology Co., Ltd.

Horizontal & Vertical Direction Treatment Terminal

Central Control Room
# Main Specifications of Heavy Ion Medical Accelerator

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Ion</strong></td>
<td>$^{12}$C$^{6+}$</td>
</tr>
<tr>
<td><strong>Maximum Energy</strong></td>
<td>400MeV/u</td>
</tr>
<tr>
<td><strong>Maximum Range</strong></td>
<td>27cm</td>
</tr>
<tr>
<td><strong>Step Length of Range</strong></td>
<td>0.5 mm water equivalent length</td>
</tr>
<tr>
<td><strong>Dose Rate</strong></td>
<td>3GyE/min</td>
</tr>
<tr>
<td><strong>Radiation Field</strong></td>
<td>200×200mm²</td>
</tr>
<tr>
<td><strong>Beam Size</strong></td>
<td>FWHM ≤ 15mm</td>
</tr>
<tr>
<td><strong>Beam Intensity</strong></td>
<td>$1 \times 10^7$ppp ~ $1.2 \times 10^9$ppp</td>
</tr>
<tr>
<td><strong>Cut-off Time</strong></td>
<td>&lt;1ms</td>
</tr>
<tr>
<td><strong>Beam Delivery Mode</strong></td>
<td>Uniform scanning and modulated scanning</td>
</tr>
<tr>
<td><strong>Treatment Terminal</strong></td>
<td>One horizontal-direction terminal, one vertical-direction terminal, one terminal combined both horizontal and vertical direction, and one 45°-direction terminal,</td>
</tr>
</tbody>
</table>
Electromagnets

Our main users of the high-precision electromagnets are the domestic and international research institutes, colleges and universities, serving for physical experiments and industrial production line.

Φ 140 Sextupole Lens Magnet

Φ 52 Quadrupole Lens Magnet
The company has developed various high-precision pulse electromagnets for PSI Institute in Switzerland, GSI in Germany, AIBT company and Michigan State University of USA.

The Award Issued by MSU
Lanzhou Kejin Taiji New Technology Co., Ltd.

Electromagnets

- Analysis Magnet
- GSI Superconducting Lens Magnet
- Dipole Magnet
- Octupole Lens Magnet
Lanzhou Kejin Taiji New Technology Co., Ltd.

Electromagnets Developed for MSU
Lanzhou Kejin Taiji New Technology Co., Ltd.

Electromagnets Developed for MSU
 ADS-RFQ Accelerator Cavity

RFQ (Radio Frequency Quadrupole) cavity which adopts the four-wing structure, is the key component of the ADS (Accelerator Driven Sub-critical System) and the high current proton accelerator. We produce the most excellent RFQ cavities for the ADS project. Meanwhile we also resolve all the key technical problems, which can ensure the stability and reliability of the high current proton accelerator.
ADS-superconducting Niobium Accelerating Cavity

Superconducting radio frequency niobium accelerating cavity is the key part of the electron accelerator and high energy & high average current particle beam accelerator. The spoke superconducting cavity and elliptic superconducting cavity produced by us have the most excellent quality. What is more, it has been applied to mold making, punching forming, electron beam welding, frequency regulation, magnetic shield, vertical test and horizontal test and so on.
Lanzhou Kejin Taiji New Technology Co., Ltd.

Discharge Room

Superconducting Solenoid
Lanzhou Kejin Taiji New Technology Co., Ltd.

Optical Products
Lanzhou Kejin Taiji New Technology Co., Ltd.

**Company Aim**

- Industrializing the high and new technology obtained in the large-scale scientific projects.
- Developing high and new technology and serving the development of the national economy by taking advantage of the talents, knowledge and technology from the research institutes.

**Technological Innovation**

- Keep on Improving
- Serving the Clients
- Benefiting Mankind

**Quality Policy**

- Serving the large-scale scientific projects and institutes for survival and turning to the domestic and international market for development.
Looking forward to cooperation & mutual leaning!