Product range

Robotics | Experts in Man and Machine
A unique industrial robot range, power cobots and mobile robot systems for many industries

Main benefits

SMART DESIGN
- Encapsulated arms, no external cables
- Compatible with all environments from harsh and dirty to sterile
- IP65/67 for the entire arm with pressurization kit

INTEGRATION FLEXIBILITY
- Large and efficient work envelope
- Multiple mounting possibilities for flexible and scalable integration
- Small foot print for entire range

HIGH PERFORMANCE
- Patented JCS gearbox specially designed for compact robots bringing high dynamics, agility and path precision
- Compatible with NSF H1 food oil with no loss in performance
- 19-bit multi-turn absolute encoder technology

CONNECTIVITY TO THE SMART PRODUCTION
- Integrated electrical and pneumatic user circuit including Cat5e
- Compatibility with all production devices, ERP and standardized protocols including OPC UA
- Web server embedded in CS9 controller

CONSISTENT RELIABILITY FOR SECURED PAYBACK
- Lower total cost of ownership and faster return on investment
- Most energy efficient robot system based on VDMA norm 24608
- High lifetime and low maintenance, all subcomponents easily accessible and exchangeable
### TX2touch POWER cobot range

<table>
<thead>
<tr>
<th>Model</th>
<th>Payload (max)</th>
<th>Wrist Reach</th>
<th>Nominal Stroke</th>
<th>Repeatability X-Y (ISO 9283)</th>
<th>Reach at Wrist</th>
<th>Nominal Power</th>
<th>Nominal Ground Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS2-6</td>
<td>1 kg</td>
<td>740 mm</td>
<td>1100 mm</td>
<td>±0,015 mm</td>
<td>2,4 kg</td>
<td>1,7 kVA</td>
<td>1,5 kVA</td>
</tr>
<tr>
<td>TS2-8</td>
<td>2 kg</td>
<td>1100 mm</td>
<td>2000 mm</td>
<td>±0,015 mm</td>
<td>8,4 kg</td>
<td>4 kVA</td>
<td>2 kVA</td>
</tr>
<tr>
<td>TX2-10</td>
<td>3 kg</td>
<td>1300 mm</td>
<td>2500 mm</td>
<td>±0,015 mm</td>
<td>11 kg</td>
<td>5,5 kVA</td>
<td>3,0 kVA</td>
</tr>
<tr>
<td>TX2-12</td>
<td>6 kg</td>
<td>1600 mm</td>
<td>3000 mm</td>
<td>±0,015 mm</td>
<td>15 kg</td>
<td>8,4 kVA</td>
<td>4,0 kVA</td>
</tr>
<tr>
<td>TX2-16</td>
<td>8 kg</td>
<td>1800 mm</td>
<td>3500 mm</td>
<td>±0,015 mm</td>
<td>20 kg</td>
<td>11,0 kVA</td>
<td>5,0 kVA</td>
</tr>
<tr>
<td>TX2-20</td>
<td>12 kg</td>
<td>2000 mm</td>
<td>4000 mm</td>
<td>±0,015 mm</td>
<td>28 kg</td>
<td>14,2 kVA</td>
<td>6,5 kVA</td>
</tr>
<tr>
<td>TX2-25</td>
<td>16 kg</td>
<td>2200 mm</td>
<td>4500 mm</td>
<td>±0,015 mm</td>
<td>35 kg</td>
<td>17,3 kVA</td>
<td>8,0 kVA</td>
</tr>
<tr>
<td>TX2-30</td>
<td>20 kg</td>
<td>2400 mm</td>
<td>5000 mm</td>
<td>±0,015 mm</td>
<td>42 kg</td>
<td>20,4 kVA</td>
<td>9,5 kVA</td>
</tr>
</tbody>
</table>

### HeMo mobile robot system

The HeMo mobile robot system is an autonomous, long-opening, and navigating vehicle that has been developed especially for Human-Robot Collaboration. It is designed to be safe and reliable in crowded areas, allowing for safe interaction and navigation. The system includes a safe tool, a safe zone/safe tool, and a safe zone/safe tool interaction.

- **Safe zones ensure safe limited arm performance within predefined safe areas.**
- **Safe touch skin**
- **Gripper peaking**
- **Tool changing system**
- **Optical and acoustical status feedback**
- **Static and flexible multi-couplings**
- **Rotation unit with embedded CS9 controller**
- **Arm kinematics inherited from TX2 robots**
- **Tool changing system**
- **Optical and acoustical status feedback**
- **Static and flexible multi-couplings**
- **Rotation unit with embedded CS9 controller**
- **Arm kinematics inherited from TX2 robots**

### Collaborative Sensitive environments

TX2touch is a unique range of robots designed to work with Human-Robot Collaboration systems, maintaining high productivity. Based on the proven TX2 cobot platform, TX2Touch comes equipped with a range of safety functionalities, including integrated laser scanners, quick reaction time, and advanced navigation systems. The cobot’s skin is up to 20 mm thick to optimize the safety of human-robot interaction. TX2Touch is highly productive due to its advanced safety and navigation systems, ensuring a smooth and reliable operation while maintaining high productivity.
Controller range

**CS9**
(H x W x D) 270 x 445 x 365 mm - 38 kg
- IP20
- 1 GB RAM
- USB ports
- 2 GB CFAST
- Serial link RS232, 2 Ethernet ports (Socket, FTP Server/Client)
- EtherCAT Master

**CS8C**
(H x W x D) 481 x 445 x 455 mm - 60 kg
- IP20 (IP54 option)
- 512 Mb RAM
- USB ports
- 2 GB Nand Flash
- Communication RS232/422 serial link, 2 Ethernet ports (Socket, FTP Server/Client)
- 1 or 2 boards 16/16 digital I/O, optional

**CS8C paint / CS8C HP**
(H x W x D) 1035 x 850 x 780 mm - 140 kg
- IP54
- 512 Mb RAM
- USB ports
- 2 GB Nand Flash
- Communication RS232/422 serial link, 2 Ethernet ports (Socket, FTP Server/Client)
- 1 or 2 boards 16/16 digital I/O, optional

**CS8C M**
(H x W x D) 520 x 200 x 300 mm - 17 kg
- IP20
- 512 Mb RAM
- USB ports
- 2 GB Flash disk

**CS8C HP**
(H x W x D) 1035 x 607 x 815 mm - 140 kg
- 2 GB Nand Flash
- Communication RS232/422 serial link, 2 Ethernet ports (Socket, FTP Server/Client)
- 1 or 2 boards 16/16 digital I/O, optional
- Modbus TCP/IP Server & Client, Sercos III Slave, Ethernet IP Adapter, Profinet IO-Device, EtherCAT Slave, PowerLink Controlled Node

**Modbus TCP/IP Server**
- Optional for CS9 model:
  - PCIe card: ASI Master, CCLink Client, Profinet DP Master & Slave, Ethernet IP Scanner & Adapter, Profinet IO-Controller & Device, EtherCAT Master & Slave, Sercos III Master & Slave, PowerLink Controlled Node
- Remote I/O
- OPC UA server

**SP2 manual control unit**
This unique terminal combines a lightweight design, ergonomics (for left or right-handed user) and robustness to deliver advantages in all environments:
- Built-in programming, maintenance and supervision,
- Safety functions (3-position dead-man control, emergency stop),
- Ease of use, graphics and intuitive interface,
- Integrated Web technology.
Global presence of the Stäubli Group

www.staubli.com