GENERATION II SOLUTIONS

FLEX GUN™

T. J. SNOW CO., INC.
1-800-NOW-SNOW
http://www.tjsnow.com

centerline®
Centered on Solutions
The FLEX GUN™ Advantage

**Features**
- Improved design flexibility
- Robust construction
- Common sized modular body with varying arm designs
- Common gun body for both equalizing & non-equalizing pinch guns
- Common cage for 55 to 136 KVA AC and Size 2&3 DC transformers
- Simple adapter plate options for robotic applications
- Ease of installation
- Regional adaptation
- Common components within FLEX GUN family
- Reduced stock level for spares
- Optional stainless steel side plates for heavy duty applications requiring lower deflections
- Wrought aluminum and copper arms and side plates offer superior strength-to-weight ratios
- Unitized body cage design for easy transformer access and serviceability
- Easy to access shunts for quicker shunt replacement
- Easy to access fasteners for service
- Common gun body for air/oil, pneumatic, or servo actuator options
- Common robot mounting plate and bracket options for both Pinch and C-gun configurations

**Actuator Options**
- Tolomatic Servo
- OHMA® Cylinder
- Soft-touch STAAC® Air Cylinder
- Fixed Cushion Air Cylinder
- CenterLine Servo
- 90° Pinch with Tolomatic Actuator

**Gun Arm Variations**
- Aluminum Arm with Cold Form Adapter
- Aluminum Arm with Hex Adapter
- Copper Arm with Cold Form Adapter
- Custom Copper Arms with Cold Form Adapter
- Copper Arm with Hex Adapter
- Custom Aluminum Arm with Cold Form Adapter

**NOTE:** Cooling water is not routed through any current carrying aluminum components.
**Specifications**

### PINCH STYLE

#### PINCH GUN Parameters

<table>
<thead>
<tr>
<th>MODEL SERIES #</th>
<th>GUN OPENING in. (mm)</th>
<th>A THROAT HEIGHT in. (mm)</th>
<th>B THROAT HEIGHT in. (mm)</th>
<th>C THROAT DEPTH in. (mm)</th>
<th>MAX. FORCE lbs (N)*</th>
<th>APPROX. GUN WEIGHT lbs (kg)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFSPIN-020-040-XXX</td>
<td>3.5-10.7 (89-272)</td>
<td>2.0 (50)</td>
<td>4.0 (101)</td>
<td>8 - 28 (203-711)</td>
<td>1000-2500 (4448-11120)</td>
<td>231-261 (105-119)</td>
</tr>
<tr>
<td>CFSPIN-020-060-XXX</td>
<td>3.5-10.7 (89-272)</td>
<td>2.0 (50)</td>
<td>6.0 (152)</td>
<td>8 - 28 (203-711)</td>
<td>1000-2500 (4448-11120)</td>
<td>233-263 (106-120)</td>
</tr>
<tr>
<td>CFSPIN-040-040-XXX</td>
<td>3.5-10.7 (89-272)</td>
<td>4.0 (101)</td>
<td>4.0 (101)</td>
<td>8 - 28 (203-711)</td>
<td>1000-2500 (4448-11120)</td>
<td>235-265 (107-120)</td>
</tr>
<tr>
<td>CFSPIN-040-060-XXX</td>
<td>3.5-10.7 (89-272)</td>
<td>4.0 (101)</td>
<td>6.0 (152)</td>
<td>8 - 28 (203-711)</td>
<td>1000-2500 (4448-11120)</td>
<td>237-267 (108-121)</td>
</tr>
<tr>
<td>CFSPIN-060-040-XXX</td>
<td>3.5-10.7 (89-272)</td>
<td>6.0 (152)</td>
<td>4.0 (101)</td>
<td>8 - 28 (203-711)</td>
<td>1000-2500 (4448-11120)</td>
<td>237-267 (108-121)</td>
</tr>
<tr>
<td>CFSPIN-060-060-XXX</td>
<td>3.5-10.7 (89-272)</td>
<td>6.0 (152)</td>
<td>6.0 (152)</td>
<td>8 - 28 (203-711)</td>
<td>1000-2500 (4448-11120)</td>
<td>240-270 (109-125)</td>
</tr>
</tbody>
</table>

*Maximum gun force is dependent on several factors including actuator type, gun geometry and electrode size.

**Gun weight includes typical servo actuator and MFDC transformer, approx. 88 lbs (40 kg).

NOTE: The above parameters are meant as a guideline only; please consult with a CenterLine applications specialist to select specific weld gun solutions.

### C STYLE

#### C GUN Parameters

<table>
<thead>
<tr>
<th>MODEL SERIES #</th>
<th>GUN OPENING in. (mm)</th>
<th>A THROAT DEPTH in. (mm)</th>
<th>B THROAT HEIGHT in. (mm)</th>
<th>MAX. FORCE lbs (N)*</th>
<th>APPROX. GUN WEIGHT lbs (kg)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFSCIN-040-060-XXX</td>
<td>max. 8.25 (209)</td>
<td>4.0 (101)</td>
<td>6.0 (152)</td>
<td>1200-2000 (5337-8896)</td>
<td>211 (96)</td>
</tr>
<tr>
<td>CFSCIN-080-100-XXX</td>
<td>max. 8.25 (209)</td>
<td>8.0 (203)</td>
<td>10.0 (254)</td>
<td>1200-2000 (5337-8896)</td>
<td>228 (104)</td>
</tr>
<tr>
<td>CFSCIN-100-170-XXX</td>
<td>max. 8.25 (209)</td>
<td>10.0 (254)</td>
<td>17.0 (431)</td>
<td>1200-2000 (5337-8896)</td>
<td>247 (112)</td>
</tr>
<tr>
<td>CFSCIN-160-110-XXX</td>
<td>max. 8.25 (209)</td>
<td>16.0 (406)</td>
<td>11.0 (279)</td>
<td>1200-2000 (5337-8896)</td>
<td>260 (118)</td>
</tr>
</tbody>
</table>

*Maximum gun force is dependent on several factors including actuator type, gun geometry and electrode size.

**Gun weight includes typical servo actuator and MFDC transformer, approx. 88 lbs (40 kg).
Accessories

**Overhead Robot Mounting Brackets**
Available in insulated & non-insulated designs.

| BRRO-FWM-1X-140 | BRRO-FWM-1X-170 | NON-INSULATED |
| BRRO-FWM-1X-200 | BRRO-FWM-1X-225 | INSULATED |

**Robot Mounting Plates**

**Integrated Pneumatic Control Packages**

CenterLine has selected ServoWeld® from Tolomatic to expand our servo offering to include an in-line design servo actuator solution. We have partnered with Tolomatic to bring our customers the optimum in FLEX GUN solutions with an integral servo motor to provide high RSW quality.

**ServoWeld Advantages:**
- No Water Cooling
- High Force
- Highest Repeatability
- Manual Override
- Complete robot 7th axis RSW functionality
- Integrates with most motion controllers
- Low life cycle costs
- Low energy costs
CenterLine Integrated Solutions

All integrated solutions have easily configurable modular components.

Pedestal Gun Stand
(several heights available)

Gun position can be rotated to mount at desired angle

C Gun Stand with Nut Feeder
(several heights available)

Gun position can be rotated to mount at desired angle

Pedestal Gun Stand with Tip Dresser

Weld cap dresser pivots into the gun for cap dressing & then out of the way for welding

Tip Maintenance Station
(components can be positioned at desired height & angle)

Cap changer
Scrap cap container
Cap dresser

Single Weld Gun, Servo Driven Slide

Direction of motion

Dual Gun Station, One Stationary Gun, One Gun on Servo Driven Slide

Stationary Gun
Sliding Gun

Direction of motion

29.5" (750 mm) Range of Programmable Weld Pitch

Single Weld Gun, X slide axis, & Y pivot axis, Servo Driven

Y axis Pivot
X axis Slide
CenterLine (Windsor) Limited
3 Locations:
• Machinery
• Electrodes & SST
• Automation Components
Windsor, Ontario

CenterLine Welding Products Inc.
Troy, Michigan

CenterLine Mexico
Queretaro, Mexico

CenterLine (U.K.) Limited
Oxford, UK

CenterLine Seubert GmbH
Breidenbach, Germany

CenterLine Romania SRL
Brasov, Romania

US Electrodes Inc.
Telford, Pennsylvania

T. J. SNOW CO., INC.
1-800-NOW-SNOW
http://www.tjsnow.com