

## CHOOSE FROM 4 HYDRUALIC STRESSING JACKS

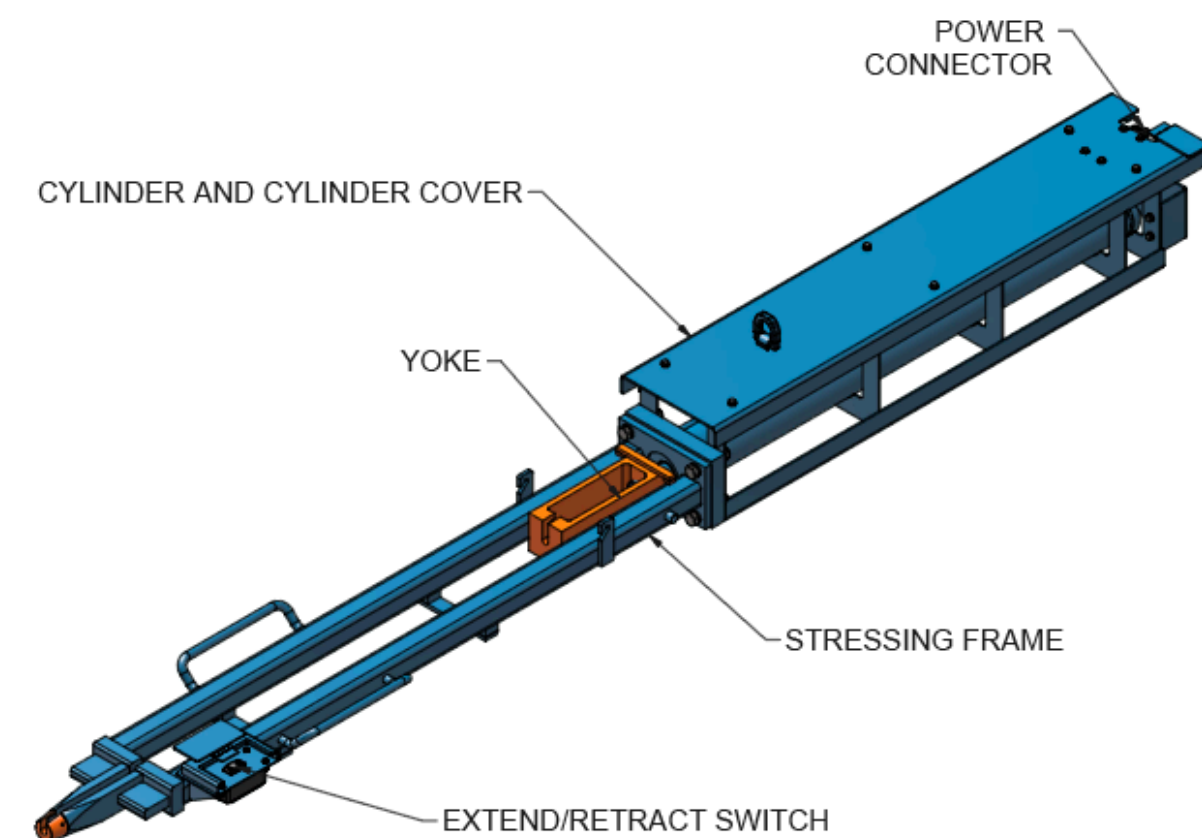
Multiple length jacks are available for all lengths of strand. Please ask us for details.

**1. 0.5" X 48" Stroke Jack**  
11' 3 1/16" X 1' 4 15/32" X 11 1/4"  
450 lbs.

**2. 0.5" X 60" Stroke Jack**  
13' 3 9/16" X 1' 4 15/32" X 11 1/4"  
500 lbs.

**3. 0.6" X 48" Stroke Jack**  
11' 6 1/16" X 1' 5 15/32" X 11 1/4"  
525 lbs.

**4. 0.6" X 60" Stroke Jack**  
13' 6 1/16" X 1' 5 15/32" X 11 1/4"  
600 lbs.



## BRAINS MEET BRAWN

Hamilton Form's Smart Stress System (SSS) is used to tension steel strands for prestressed concrete forms. The Smart Stress System incorporates a position sensing cylinder, a human machine interface (HMI), and a programmable logic controller (PLC) to provide monitoring and control over the pulling operation.

The SSS has several intelligent features for ease of use and data retention. This includes the ability to monitor cylinder position and fluid pressure in real time and display that information on the HMI. The SSS can also save and export this data for the customer's record. The rugged build combined with the smart features makes the Smart Stress System the ideal solution for the modern prestressed industry.

## PRO OR LITE — WHICH IS RIGHT FOR YOU?

The PRO version of the Smart Stressing System (SSS) includes many customer requested features and conveniences.

The LITE version is a more basic unit, with the same stressing capacities, and has the option of coming with a 4-wheel cart with foam-filled tires.

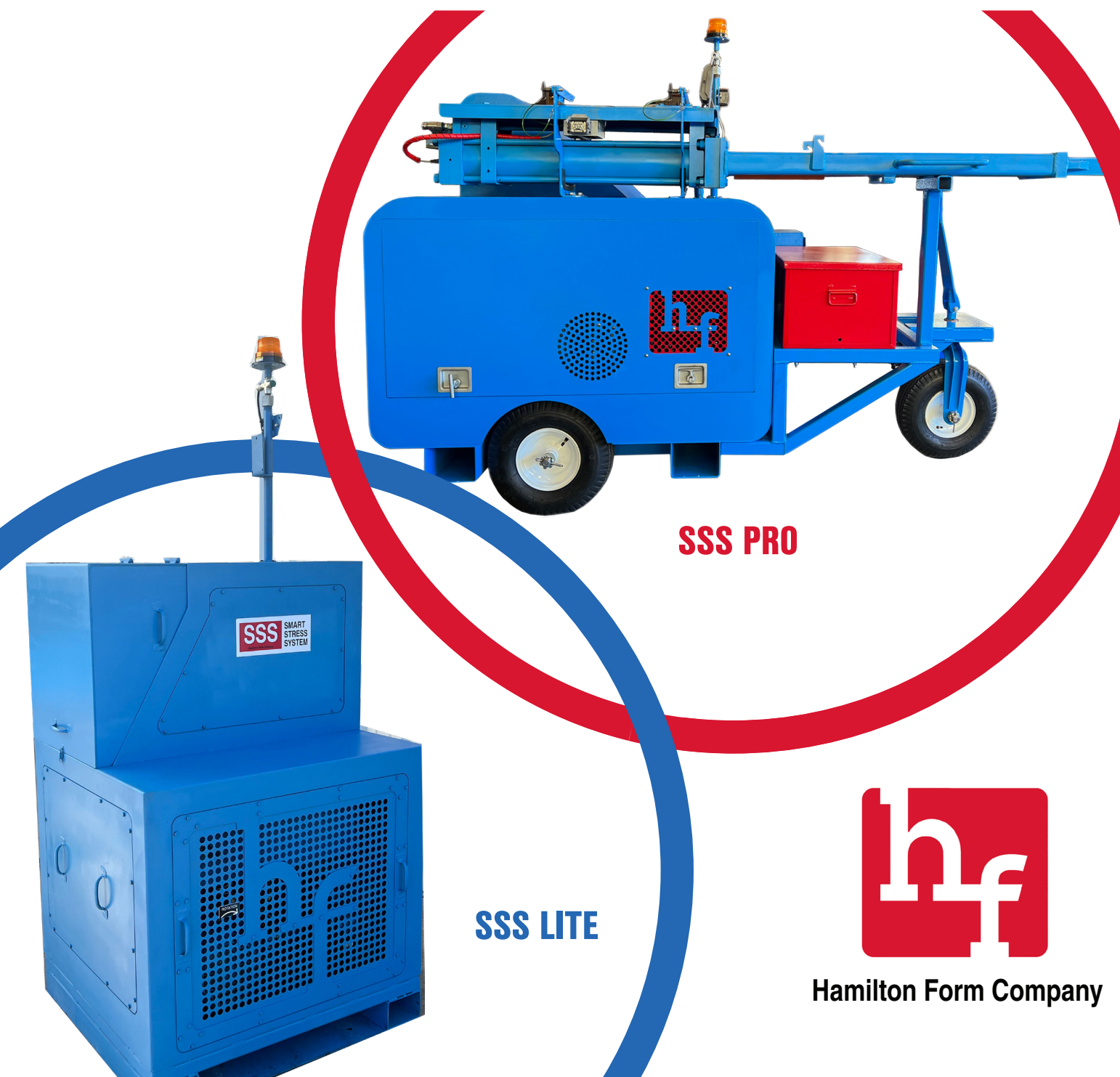
Call us to review which unit and features are best for your plant.

# SSS

Hamilton Form Company

## SMART STRESS SYSTEM

## Two Smarter Ways to Stress Strand



## HAMILTON FORM COMPANY

For more than 50 years, Hamilton Form has been helping the precast community achieve stunning results with our custom, highly-engineered steel forms. Precast. It's all we do.

Patent Pending

### CONTACT US

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Hamilton Form Company  
Custom forms  
Custom products  
Practical solutions  
hamiltonform.com

## THE POWER & THE PROOF YOU NEED

### Smart Features

- Automatically displays PCI QC pull acceptance ( $\pm 5\%$ ) after each pull.
- Hydraulic cylinder has position-sensing capabilities (LVDT sensor).
- Controls (including HMI screens) are easy to understand without extensive training of the product.
- SSS has capability to store calibration data points for a maximum of 5 different cylinder stroke sizes.
- Hydraulic fluid temperature is automatically maintained. Temperature range is adjustable.
- SSS records "target" and "actual" pull information for each strand pull. This includes strand elongation using the position sensor and pull force using the fluid pressure sensor.

- SSS can wirelessly pull, store, and export in the form of logs or reports for customer's use.

### Pull Information

Predetermined pull information, or "target" data, can be loaded before the operation to avoid the potential for error that comes with manual input. This includes the following fields:

- Bed #
- Bed length
- Strand size
- Strand #
- Initial tension (target)
- Final tension (target)
- Final elongation (target)

This information is visible and editable on the HMI during the pull for adjusting if necessary.

"Actual" pull information includes the following minimum fields:

- Date/time
- Initial tension (actual)
- Final tension (actual)
- Final elongation (actual)



After each final pull the information for the next strand is automatically loaded. Live data (cylinder position and fluid pressure) is always displayed on the HMI, even when the system is not under pressure.

Data is automatically saved during the strand pulling process in as many instances as possible (i.e. switching from initial to final pressure settings to automatically save the initial pull data) to avoid operator error.

Colored indicators on the HMI inform operator of pull status (i.e. green when the strand has been pulled within the acceptable tolerance level, and red if the strand has been pulled outside the tolerance level).

# SSS PRO GOES WHERE THE WORK IS

### SMART CONTROLS

Downloadable pull data reports replace handwritten logs and records. Customizable software — your data in your format. Pre-program pulls on a large, easy-to-read weatherproof control screen. Monitor pulls in real-time.

### EMERGENCY SHUT-OFF

And other intuitive safety features to keep crews safe.

### RETRACTABLE HOSES & CORDS

Convenience and an uncluttered work area.

### THE INSIDE STORY

Critical components protected from the elements.

### FORKLIFT POCKETS

For easy loading and unloading at the work site.

### PROFESSIONAL-GRADE COUPLINGS

Built to last in demanding work environments.

### CONVENIENT STORAGE

Helps keep the work area orderly.

### RUGGED TIRES

Rugged foam-filled tires.

### THIRD WHEEL TRICYCLE CART

Tough-as-nails cart for taking the SSS PRO where you want it.

### UNIVERSAL HITCH

Easily take the SSS PRO to where the work is being done.

### ACCESSIBLE PORTS

Easy access to system electronics and hydraulics.

### HYDRAULIC JACKS

4 different models — 48" & 60" jack options for both 0.5" and 0.6" strand sizes — packing 46,000 pounds of tensioning power.

### BEACON LIGHT & HORN

Helps maintain a safe work environment.

### MULTIPLE STRAND SIZES

Depending on model, jack can accommodate either 0.5" or 0.6" wire strand.

### ADJUSTABLE WORKLIGHTS

For safe operation in dark conditions.



# FEATURES COMPARISON



### Accessible Ports

Easy access to system electronics and hydraulics.



### Adjustable Work Lights

For safe operation in dark conditions.



### Beacon Light & Horn

Helps maintain a safe work environment.



### Convenient Storage

Helps keep the work area orderly.



### Emergency Shut-Off

And other intuitive safety features to keep work crews safe.



### Forklift Pockets

For easy loading and unloading at the work site.



### 4-Wheel Cart for SSS LITE — Optional

Tough-as-nails cart for taking the SSS LITE where you want it



### Hydraulic Jacks

4 different models — 48" & 60" jack options for both 1/2" and 0.6" strand sizes — each packing 46,000 pounds of tensioning power.



### Inside Story

Critical components protected from the elements.



### Multiple Strand Sizes

Depending on model, jack can accommodate either 0.5" or 0.6" wire strand.



### Professional-grade Couplings

Built to last in demanding work environments.



### Retractable Hoses & Cords

For convenience and keeping an uncluttered work area.



### Rugged Tires

Rugged foam-filled tires.



### Smart Controls

Downloadable pull data reports replace handwritten logs and records. Customizable software — your download, your way. Pre-program pulls on an easy-to-read weatherproof control screen. Monitor pulls in real-time.



### Third Wheel Tricycle Cart

Tough-as-nails cart for taking the SSS PRO where you want it.



### Universal Hitch

Easily take the SSS PRO to where the work is being done.

## SSS PRO

## SSS LITE

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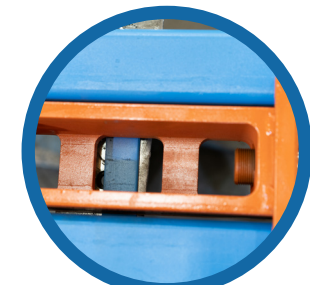
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# SSS LITE STREAMLINED FOR ON-SITE USE



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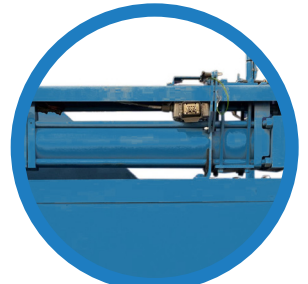
**MULTIPLE STRAND SIZES**  
Depending on model, jack can accommodate either 0.5" or 0.6" wire strand.



**THE INSIDE STORY**  
Critical components protected from the elements.



**BEACON LIGHT & HORN**  
Helps maintain a safe work environment.



**HYDRAULIC JACKS**  
4 different models — 48" & 60" jack options for both 0.5" and 0.6" strand sizes — packing 46,000 pounds of tensioning power.



**EMERGENCY SHUT-OFF**  
And other intuitive safety features to keep crews safe.



**FORKLIFT POCKETS**  
For easy loading and unloading at the work site.



**PROFESSIONAL-GRADE COUPLINGS**  
Built to last in demanding work environments.

### ACCESSIBLE PORTS

Easy access to system electronics and hydraulics.

### TOTAL WEIGHT & SIZE

Weight: 1,500 lbs. Body Dimensions: 5'3" (H) x 2'11" (W) x 3'5" (L)  
Optional Cart for LITE — Weight: 460 lbs.

### TOTAL WEIGHT & SIZE

Weight: 2,350 lbs. Body Dimensions: 5'2" (H) x 3'6" (W) x 7'8" (L)