

Technical Writing Services

Technical Writing Services

We can assist your staff in the creation of technical bulletins, collateral material, catalogs, and web-based content. Whether your needs are for entire documents or minor editing, Terra Tu can be a valuable resource.

Our background in engineering and support for technically complex products give us the ability to help bridge the gap between the technical and marketing arms of a company to reach your customer base with the clearest and most accurate representation of your products and services.

Since the late 1970's, Terra Tu has assisted in the production of a wide range of work, including:

Writing

- * Product manuals and installation guides

Instructional Design

- * Operation, maintenance and repair documents
- * Software manuals
- * On-line help

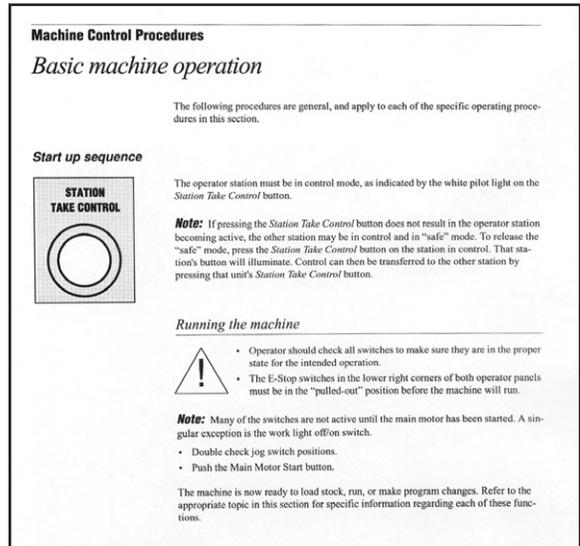
Editing

- * Product catalogs, brochures and data sheets
- * Foreign language translations
- * Technical bulletins and white papers

Terra Tu supports most publishing applications and formats, including:

- Adobe Framemaker®
- Ventura Publisher®
- Microsoft Office®
- Sun Open Office®

Writing



Logan Clutch Corporation, a manufacturer of industrial clutches and brakes, established a good business by retrofitting the mechanical clutches in vintage screw machines with hydraulic and pneumatic versions. While this modification increased the productivity of those older machines, adding automation would make them more competitive with modern offerings at a fraction of the cost.

The CS 2000® was designed to provide CNC functions by precisely managing the Logan Clutch products in the modified screw machines. Terra Tu was given a prototype of the programming control unit and asked to document its functions in order to create a user manual that machine operators could easily understand and use as both a setup guide and quick reference for machine-side use. We employed a task-oriented structure to give the operator a step-by-step operation manual and programming guide with focus on their real-world operations.

In the course of this project, we were also able to assist the designer in trouble-shooting the software and give valuable feedback about the ease of access to the control functions. This unit became successful, and became an option offered by other companies in the business of rebuilding and retrofitting vintage machinery.

Instructional Design

B-3 OPERATION

Refer to Fig. B-1b

4. Circuit Breaker - Protects machine from damage if maximum output is exceeded. Button will extend out when tripped (Manual reset).

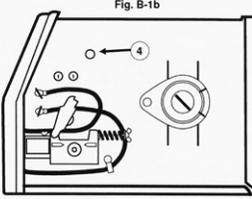


Fig. B-1b

SEQUENCE OF OPERATION

Wire Loading

Refer to Fig. B-2.

The machine power switch should be turned to the OFF ("0") position before working inside the wire feed enclosure.

The machine is shipped from the factory ready to feed 8" (200 mm) diameter spools (2.2" (56 mm) max. width). These spools fit on a 2" (50 mm) diameter spindle that has a built-in adjustable* friction brake to prevent overrun of the spool and excess slack in the wire. The thumb screw at the end of the shaft is not intended to be loosened. It should be tightened full clockwise.

*Earlier spindle shafts did not include a set screw to adjust brake friction. If a set screw is desired, order Lincoln part number T12932-2.

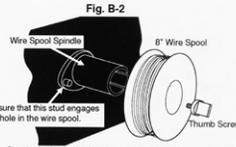


Fig. B-2

Be sure that this stud engages the hole in the wire spool.

Wire Spool must be pushed all the way on the spindle so that the spindle's tab will hold it in place. The Wire Spool will rotate clockwise when wire is dispensed.

WELDING OPERATIONS

PROCESS GUIDELINES

The SP-100 can be used for welding mild steel using the GMAW, single pass, process which requires a supply of shielding gas or it can be used for the self shielded, Innershield electrode process.

The recommended gas and electrode for GMAW is welding grade CO₂ gas and 0.025" (0.6 mm) diameter Lincoln L-56 mild-steel welding wire (supplied on 12 1/2 lb (6 kg) spools). For 14 gauge (2.0 mm) and thinner, CO₂ gas is recommended because it gives equal or better performance than a blended gas at a lower cost. A mixed gas consisting of 75 to 80% Argon and 20 to 25% CO₂ is recommended for welding on heavier gauge (12 gauge (2.5 mm) for example) steel.

The recommended electrode for the self shielded process is Lincoln E-6010.

CAUTION

If full tightening of the spindle thumbscrew causes too much tension in the wire spool, the

The Lincoln Electric SP-100® was introduced as a basic electric welder aimed at the home market, so it needed a manual that consumers would find inviting and easy to read before attempting to use the unit. Terra Tu was given an early production model of the welder and worked with Lincoln Electric's technical documentation department to write, illustrate and lay out the manual for this unit.

With no prior instruction on how to go about this, we had to determine the easiest way to undertake the various tasks that users would encounter, such as replacing welding wire and cleaning the welder's moving parts. To accomplish this, we disassembled the welder and documented the process of replacing its consumables and servicing broken or worn parts, utilizing a task-oriented presentation structure. In less than a month we produced two manuals; one to help the home user replenish the welder's supplies and one aimed at repair facilities for advanced servicing and maintenance.

Editing

Tackifier Products

Food Grade Tackifiers

Applications

- Greases
- Chain Oils
- Anti-mist
- Way Oils

Where these oils may come into incidental contact with food.



Nonfood Compounds Program Listed

Typical Properties

| Product | Diluent | Polymer | Viscosity (cSt@100C) | Color (ASTM) | Shear Stability | Stringiness |
|---------|-------------------|-------------|----------------------|--------------|-----------------|-------------|
| V422 | White Mineral Oil | PIB | 3000 | <1 | Good | Good |
| V425 | White Mineral Oil | OCP | 3000 | <2 | Excellent | Fair |
| V498 | White Mineral Oil | PIB | 4000 | <1 | Good | Good |
| V584 | Vegetable Oil | Proprietary | 2500 | <4 | Fair | Excellent |

• For more information please refer to our *Additives for Food Grade Lubricants* catalog.

Biobased Tackifiers

Applications

Primarily used to provide adherence in saw-chain and saw-guide oils in environmentally sensitive locations.

Treat Level

Functional Products Incorporated makes additives for lubricants and greases. Their product line includes many additives with similar qualities that are best differentiated by their suitability for particular applications.

Before Terra Tu was hired, they were only able to offer customers hundreds of product data sheets in a loose leaf binder, creating a formidable task of going through the individual data sheets to determine which product may be best suited to a prospective customer's needs.

By working with their chemical engineers, sales staff and management, we were able to create product catalogs that logically grouped their offerings and identified the differences between similar products, using formats that quickly communicated their advantages.

The new catalogs were well-received by Functional's distributors and prospects and within a few months, their sales volume increased dramatically.

Terra Tu
 Technical
 Graphics
 & Media

Expertise in the creation of:

- * Instruction manuals
- * Maintenance and repair manuals
- * Software manuals
- * On-line help
- * Language translations
- * White papers
- * Data sheets

Terra Tu

*Technical
Graphics
& Media*

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