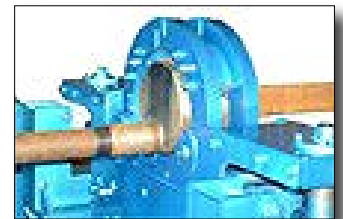
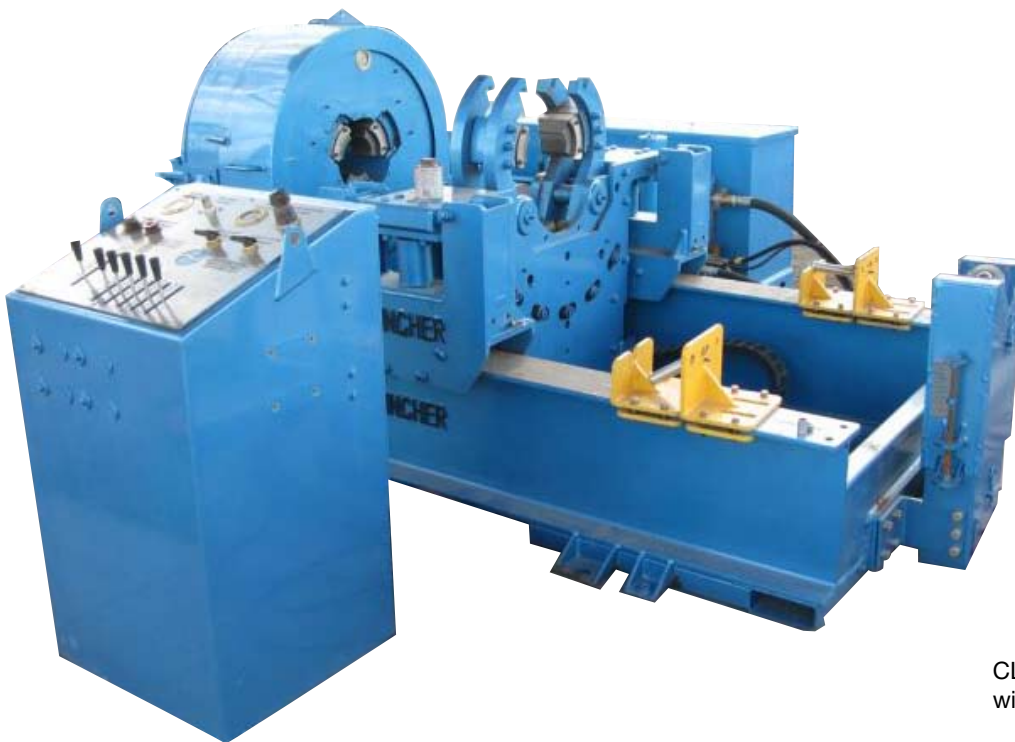




SHARPE
ENGINEERING

is proud to announce the arrival of:

CLEBU11750 Bucking Unit - Type III



Close-up of backup in offset position showing two differing diameter tools.

CLINCHER® Type III Bucking Unit shown with electric hydraulic power unit.

The CLINCHER® TYPE III Bucking Unit is the premiere bucking unit specifically designed to make and break premium thread connections on all oil country tubular goods. The unit minimizes the radial load on the tube to prevent deformation while allowing maximum torque for the connection

requirements. The CLINCHER® Type III Bucking Unit is a gear driven unit which allows closer tong and backup spacing. Minimum tong die center to backup die center distance is 11". Additionally this unit is capable of a 4" offset, allowing the operator to make up differing O.D.s on offset tools.

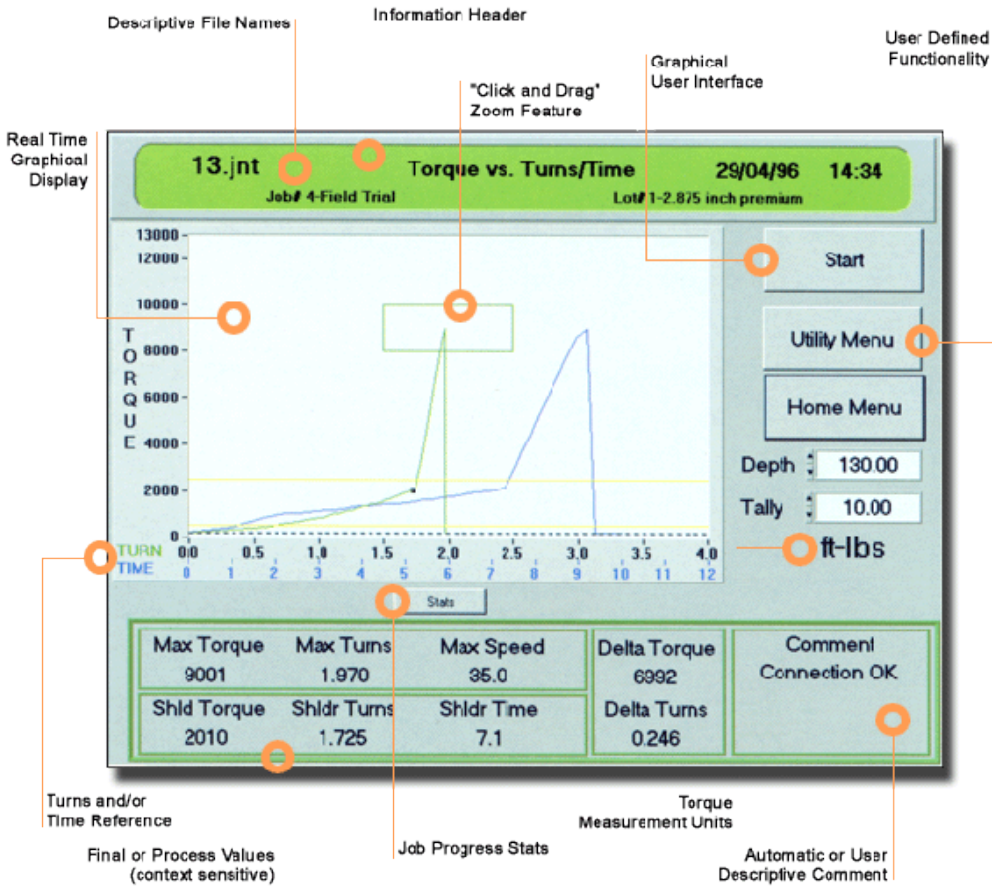
Specifications

Maximum Gripping Diameter	11-3/4"
Minimum Gripping Diameter	2-1/16"
Maximum Applied Torque	35,000 ft lbs @2,500 psi in low speed mode
Rotational speed @ 60 GPM	9 RPM low and 18 RPM high
Maximum allowable flow rate	60 GPM
Maximum pressure required for clamping	3,000 psi

CLINCHER®



SHARPE ENGINEERING



WinCatt™

WinCatt™ is a software tool which interacts with external control hardware to provide real time monitoring and control of tubular connection power tong make-up. The graphical user interface and logical software structure combined with powerful control, data acquisition and presentation

capabilities enable the user to easily specify make-up parameters, control the make-up process and evaluate quality.

WinCatt™ was developed with an emphasis on the user's needs for reliability, accuracy, and ease of use. Key features are:

Function:

- monitors torque, turns, and rotational speed during make-up
- controls speed during make-up (optional)
- controls based on either final torque or final turns
- includes calibration management system
- includes automatic „Start Recording“ & „Dump Valve Release“
- includes automatic descriptive comments with optional over-ride
- available with optional pressure test system

Analysis:

- analyzes make-up to determine: conformance to manufacturer's specification shouldering point for premium connections shouldering time, delta torque, delta turns
- reviews results from previous make-ups

Safety:

- limit torque to user specifies maximum during idle time

Reporting:

- job description
- summary reports of make-up results
- statistical analysis
- real time or post job make-up plots