

# Technical Data Sheet: CTHU 5-1/8" X 15,000 psi Double

All HEC HU Well Intervention Equipment is manufactured and tested according to HEC Quality Management Standards

Performance Requirement Level: PR1

Through Bore: 5-1/8"

Rated Working Pressure: 15,000 psi Rated Hydraulic Pressure: 1,500 psi

Note: Hydraulic Pressure can be applied up to 3,000 psi. in emergency situations

**Temperature Ranges:** 

Metallic: -20 to 250°F Elastomers: 20 to 200°F

# **Assembly Weights and Dimensions:**

5-1/8" x 15M	Flange x Flange	Stud x Stud	Stud x Flange	Flange x Stud			
Weight (lbs.) w/o Shear Bonnets	3,170	2,730	2,900	2,900			
Height (in.)	39.75	27	33.5	33.5			
Width, Bonnets Closed (in.) w/locking screws Unlocked		60.50					
Width, Bonnets Closed (in.)  w/ locking screws locked	53.75 79.75						
Width, Bonnets Open (in.) w/locking screws unlocked							
Width, Shear Bonnets Closed (in.)  w/locking screws unlocked	99.00						
Width, Shear Bonnets Open (in.)  w/locking screws unlocked							

<sup>+190</sup> lbs. with Boosters

## **Operating Capacities:**

SIZE AND WORKING PRESSURE	CONFIGURATION	GALLONS TO OPEN RAMS (1 SET)	GALLONS TO CLOSE RAMS (1 SET)	LOCKING SCREW TURNS (EACH END)	CLOSING RATIO	OPENING RATIO
5-1/8" 15M	Standard	0.6	0.6	13.5	7.91:1	3.5:1
5-1/8" 15M	Tandem Shear Booster	0.7	1.4	15.5	15.8:1	3.5:1

#### **Elastomers:**

Acrylonitrile Butadiene Rubber (NBR) Nominal Operating Range: 20 to 200°F



## **Operational Characteristics Summary**

- Ram Access: 200 cycles with 10 pressure cycles
- Fatigue Test: 546 open/close cycles, 78 pressure test
- Slip/Seal Ram
  - o Rated for up to 50,000 lbs. of hang off
  - o Recommended hydraulic pressure for hang off: 3000 psi.
  - Locking screws locked
- Shear and Seal Rams
  - o Recommended hydraulic pressure for shearing tube: 3000 psi.
  - o Shear bonnets and boosters must be installed to use shear rams
- CTHU temperature rating
  - o 20°F to +200°F

## **Recommended Shear Operation:**

- Tandem Boosters must be installed to shear
- Accumulator Pressure to Shear: 3000 psi.
- Horn Equipment recommends isolating well bore pressure using pipe rams and slip rams below the shear rams.
- It is recommended that shear rams be replaced and/or inspected after shearing operation by OEM.