

Technical Data Sheet: HDU 7-1/16" X 15,000 psi

All HEC HU Blowout Preventers are manufactured and tested according to HEC Quality Management Standards

Part Number: 715MHDU

Performance Requirement Level: PR1

Through Bore: 7-1/16"

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

Pipe Diameter Ranges: 2-1/16" to 5-1/2"

Temperature Ranges:

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

Assembly Weights and Dimensions:

7-1/16" x 15M	Flange x Flange	Stud x Stud	Stud x Flange	Flange x Stud
Weight (lbs.) w/o Shear Bonnets	7,615	6,790	7,215	7,190
Height (in.)	49.875	33.313	42.094	41.094
Width, Bonnets Closed (in.) w/locking screws Unlocked	85			
Width, Bonnets Closed (in.) w/ locking screws locked	77			
Width, Bonnets Open (in.) w/locking screws unlocked	114			
Width, Shear Bonnets Closed (in.)	Regular Booster		116	
w/ locking screws unlocked	SD Booster		130	
Width, Shear Bonnets Open (in.)	Regular Booster		141	
w/ locking screws unlocked	SD Booster		155	

⁻¹⁵⁰ lbs. for Snubbing Style

Operating Capacities:

SIZE AND WORKING PRESSURE	CONFIGURATION	Gallons to Open Rams (1 set)	Gallons to Close Rams (1 set)	Closing Ratio	Locking Screw Turns (Each End)	Opening Ratio
7-1/16" 5, 10, 15M	Standard	1.3	1.4	6.9:1	19.5	2.9:1
7-1/16" 10, 15M	REG. Shear Booster	1.7	3.5	13.8:1	24	4.4:1
7-1/16" 10, 15M	SD Booster	1.7	4.6	19.3:1	24	4.4:1

⁺⁴²⁶ lbs. with Boosters

⁺⁷⁷⁵ lbs. with SD Booster



Minimum Operating Pressure For a low Pressure Seal (MOPFLPS):

Ram	Operator Type			
Type	Standard	Tandem Booster	SD Booster	
Blind	200	100	72	
Pipe	250	125	89	
VBR	750	375	268	

Operating Pressure to effect a wellbore seal at rated working pressure:

	Operator Type			
Ram Type	Standard	Tandem Booster	SD Booster	
Blind	2,400	1,200	858	
Pipe	2,500	1,250	894	
VBR	3,000	1,500	1,073	

Elastomers:

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

Test Results:

Ram Access: 200 cycles with 10 pressure cycles

Fatigue Test: 546 open/close cycles, 78 pressure test

Ram Locking completed during fatigue testing

➤ Low Temperature Test: 3 pressure cycles at 20°F

Hot Temperature Test: 10 pressure cycles and 1 hour hold time at 200°F

Shear: Maximum shear pressure: 3000 psi.

o Shear Doors with Tandem Boosters must be installed to shear pipe

Hang Off

o 7-1/16" HU Pipe Rams

Rated up to 450,000 lbs.

■ 3-1/2" test mandrel with 18° taper

Note: Do not recommend hanging off on the smallest size pipe for VBR rams

Stripping

o 7-1/16" HU

■ 3-1/2" test mandrel

50,000 ft. of pipe stripped at 3,000 psi wellbore

Not Recommended on VBR's or flex packers

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 below the shear rams.

• It is recommended that shear rams be replaced and/or inspected after shearing operation by OEM.