



DIGITAL HYDRAULIC BREAKOUT UNIT



CHE YCZ Digital Hydraulic Breakout Unit is a high precision thread-make up and breakout machine used to assemble, disassemble and repair thread connection of drilling motors, tubular and other down-hole tools. The equipment applies precision torque and even clamping force for the assembly and disassembly of pipe threads.

The YCZ Digital Hydraulic Breakout Unit can accurately measure thread makeup with torque precision of 73.8 ft-lbs (0.1kN·m), and pressure precision of 14.5 psi (0.1Mpa). The unit incorporates a real-time display of torque and clamping pressure of each clamping cylinder which in conjunction with human-computer interface achieves precise control and a data acquisition and display system which collects, displays and saves critical data of the make-up torque.

The YCZ Digital Hydraulic Breakout Unit has incorporates high precision torque testing devices to ensure accurate control spinner torque. High torque spinner motors significantly increase the efficiency of the make-up/breakdown process. The unit also incorporates a 5FT (1.5) meter hydraulic push pull device for removing rotors from stators and/or other operations requiring push/pull operations for ease of assembling and disassembling.

The unit incorporates cameras which allow the operator to view the bite of jaws on the tubular in both head stock and tail stock, which eliminates requirement for a second operator.

We also manufacture customized Breakout unit per customer's



Specifications

English Units

Description	YCZ180S	YCZ380S	YCZ580S	YCZ380LXS
Clamping Drift Diameter	2 3/8" - 8 5/8"	2 3/4" - 15"	6" - 22 3/4"	2 3/4" - 15"
Torque Control Precision	74 ft-lbs	74 ft-lbs	74 ft-lbs	74 ft-lbs
Rated Right-Hand Torque	56,055 ft-lbs	103,260 ft-lbs	62,692 ft-lbs	56,055 ft-lbs
Rated Left-Hand Torque	70,068 ft-lbs	132,762 ft-lbs	81,132 ft-lbs	70,068 ft-lbs
One Time Spinner Angle	36°	36°	36°	36°
Rated Fast Spin Torque	1,475 ft-lbs	2,950 ft-lbs	2,950 ft-lbs	-
Continuously Spin Torque	-	-	-	29,508 ft-lbs
Continuously Spin Speed	-	-	-	6 r/min
Rated Thrust	26,977 lbs	53,956 lbs	-	53,956 lbs
Rated Pulling	20,233 lbs	40,467 lbs	-	40,467 lbs
Rated System Pressure	2,320psi	2,320psi	2,320psi	2,320psi
Working Medium	#46 Water Resistant Hydraulic Oil	#46 Water Resistant Hydraulic Oil	#46 Water Resistant Hydraulic Oil	#46 Water Resistant Hydraulic Oil
Total Weight	20,283lb	29,762lb	37,480lb	28,660lb
Length x Width x Height (ft)	46' x 3.94' x 4.26'	68.9' x 7.5' x 6.5'	52.5' x 8.5' x 7.2'	42.7' x 5.6' x 5.9'

SI Units

Description	YCZ180S	YCZ380S	YCZ580S	YCZ380LXS
Clamping Drift Diameter	60-220mm	70-380mm	150-580mm	70-380mm
Torque Control Precision	0.1 kN.m	0.1 kN.m	0.1 kN.m	0.1 kN.m
Rated Right-Hand Torque	76 kN.m	140 kN.m	85 kN.m	76 kN.m
Rated Left-Hand Torque	95 kN.m	180 kN.m	110 kN.m	95 kN.m
One Time Spinner Angle	36°	36°	36°	36°
Rated Fast Spin Torque	2kN.m	4kN.m	4kN.m	-
Continuously Spin Torque	-	-	-	40kN.m
Continuously Spin Speed	-	-	-	6 r/min
Rated Thrust	120kN	240kN	-	240kN
Rated Pulling	90kN	180kN	-	180kN
Rated System Pressure	16MPa	16MPa	16MPa	16MPa
Working Medium	#46 Water Resistant Hydraulic Oil	#46 Water Resistant Hydraulic Oil	#46 Water Resistant Hydraulic Oil	#46 Water Resistant Hydraulic Oil
Total Weight	9.2Ton	13.5Ton	17Ton	13Ton
Length x Width x Height (m)	14 x 1.2 x 1.3	21 x 2.3 x 2	16 x 2.6 x 2.2	13 x 1.7 x 1.8