

FRD FURUKAWA FURUKAWA ROCK DRILL USA

BREAKER/ATTACHMENT
DIVISION

MEETING THE EQUIPMENT NEEDS OF THE MINING AND CONSTRUCTION INDUSTRIES.



Leading Innovations for Construction and Industrial Applications

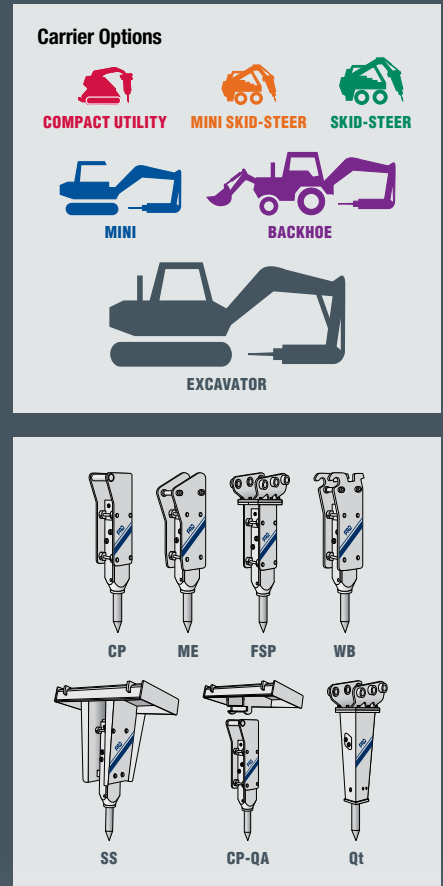
FURUKAWA ROCK DRILL (FRD) USA IS A LEADING MANUFACTURER OF ATTACHMENTS FOR COMPACT UTILITY LOADERS, SKID STEERS, MINI EXCAVATORS, BACKHOES AND EXCAVATORS.

We provide a complete line of attachments that are built to last, including breakers, compactors, compactor wheels and mechanical thumbs.

Our breakers incorporate innovative features such as mono-block body design, the elimination of thru-bolts, improved internal grease routing and patented dust intake prevention systems. The FRD-USA Our breaker line includes:

- **Small breakers** (Fx15a, Fx25a, Fx35a, Fx45a and Fx55a) that are ideal for use in tight work environments, sidewalks, driveway removal or any other demolition task.
- **Medium breakers** (F6, F9 and Fx125) engineered with a higher back head pressure and larger pistons for an increase in impact energy of 20-30%.
- **Large breakers** (Fx175 Qtv, Fx225 Qtv, Fx275 Qtv, Fx375 Qtv, Fx475 Qtv, Fx770 Qtv and Fx1070 Qtv) are the perfect choice for working in quarries, breaking hard rock or large demolition jobs.

No matter what application, you can trust that FRD-USA attachment technology represents our ongoing commitment to innovation, durability and quality operation.



SMALL Fx_a SERIES HYDRAULIC BREAKERS

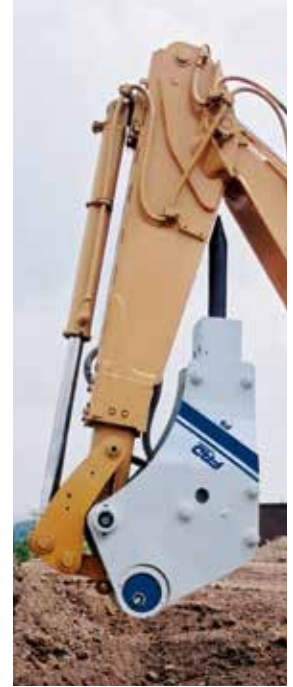
IMPACT ENERGY CLASS	Fx15a – 150 ft lb	Fx25a – 275 ft lb	Fx35a – 375 ft lb	Fx45a – 550 ft lb	Fx55a – 800 ft lb
Weight in lbs. (kg)*					
FB configuration	130 (59)	181.5 (82.33)	320 (150)	n/a	n/a
SS configuration	n/a	n/a	549 (247)	784 (356)	840 (381)
FSP configuration**	n/a	n/a	460 (209)	606 (275)	714 (324)
Qt configuration**	n/a	n/a	470 (213)	550 (250)	550 (250)
Length in inches (mm)*					
FB configuration	36.63 (930)	43.5 (1106)	53.33 (1354.5)	n/a	n/a
SS configuration	n/a	n/a	51 (1295)	57.5 (1461)	61 (1549)
FSP configuration**	n/a	n/a	50 (1270)	54 (1372)	60 (1524)
Qt configuration**	n/a	n/a	48.5 (1232)	52.75 (1340)	57.5 (1461)
Working Steel***					
Diameter in inches (mm)	1.42 (36)	1.77 (45)	2.05 (52)	2.36 (60)	2.68 (68)
Replaceable length measured from fronthead in inches (mm)	7 (175)	8.5 (215)	9 (225)	9.5 (240)	10 (250)
General Specifications					
Blows per minute (variable)	600 ~ 1500	600 ~ 1500	600 ~ 1300	600 ~ 1100	500 ~ 1000
Oil flow range gpm (lpm)	2.6 ~ 7.4 (10 ~ 28)	4.75 ~ 9.25 (18 ~ 35)	6.0 ~ 13.75 (24 ~ 52)	7.9 ~ 15.8 (30 ~ 60)	10.5 ~ 22.5 (40 ~ 85)
Operating pressure psi (MPa)	1450 ~ 2030 (10 ~ 14)	1450 ~ 2030 (10 ~ 14)	1740 ~ 2320 (12 ~ 16)	1740 ~ 2320 (12 ~ 16)	1740 ~ 2320 (12 ~ 16)
Qt configuration; 85 dB(A) @	n/a	n/a	7.5m	7.5m	8.0m
Recommended carrier range in U.S. tons	0.55 ~ 1.65	1.1 ~ 2.75	1.65 ~ 4.41	2.75 ~ 6.1	4.4 ~ 7.7
Carrier options	■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■

Notes * Weights and lengths for all configurations include standard Working Steel (less mounting & Hose Whips)
 ** Weights and lengths for FSP's & Qt's include a Universal Top Cap (less mounting & Hose Whips)
 *** All working steels are interchangeable with the previous F-Series and Fx-Series

MEDIUM SERIES HYDRAULIC BREAKERS

IMPACT ENERGY CLASS	F6 – 1,000 ft lb	F9 – 1,500 ft lb	Fx125 – 2,000 ft lb
Weight in lbs. (kg)*			
TLB Version	700 (317)	1,120 (508)	1,348 (611.4)
SS Version	939 (426)	n/a	n/a
FSP Version	875 (397)**	1,121 (554)**	n/a
Qt Version	958 (434)**	1,403 (636)**	1,820 (825.5)
Length in inches (mm)*			
TLB Version	57 (1,448)	63.25 (1,606)	77 (1,956)
SS Version	63 (1,600)	n/a	n/a
FSP Version	56.5 (1,435)**	75.5 (1,918)**	n/a
Qt Version	55.25 (1,403)	74.5 (1,461)	94.25 (2,394)
Working Steel***			
Diameter in inches (mm)	3 (76.2)	3.5 (90)	4.33 (110)
New length measured from fronthead (in)	17.75	19.5	26.75 (680)
Replaceable length measured from fronthead (in)	12.25	13.75	15.94 (405)
General Specifications			
Adjustable Blows Per Minute (BPM)	650 ~ 1,500	550 ~ 900	400 – 650
Acceptable GPM Range (LPM)	13 ~ 40 (50 ~ 150)	17 ~ 30 (65 ~ 114)	18.5 – 31.5
Acceptable PSI Range (Bar)	1,450 ~ 2,320 (100 ~ 160)	1,700 ~ 2,150 (120 ~ 150)	2,320 – 2,610
Qt configuration; 85 dB(A) @	10 - meters	11 - meters	12 - meters
Recommended carrier range in U.S. tons	6 ~ 7	7 ~ 10	10 – 15
Carrier options	■ ■ ■	■ ■ ■	■ ■

Notes 1. Weights and lengths for all versions include Working Steel
2. All weights and lengths for FSP's & Qt versions marked** include a "Universal" Top Cap



LARGE SERIES HYDRAULIC BREAKERS

IMPACT ENERGY CLASS	Fx175 Qtv 3,250 ft lb	Fx225 Qtv 4,250 ft lb	Fx275 Qtv 5,250 ft lb	Fx375 Qtv 6,500 ft lb	Fx475 Qtv 8,500 ft lb	Fx770 Qtv 12,000 ft lb	Fx1070 Qtv 15,000 ft lb
*Total Weight in lbs. (kg)	2,095 (1,402)	3,734 (1,694)	3,758 (1,705)	5,390 (2,444)	7,021 (3,185)	10,742 (4,872)	14,550 (6,600)
*Total Length in inches (mm)	100 (2,540)	113 (2,870)	119 (3,026)	135 (3,249)	146 (3,708)	155.7 (3,955)	149.60 (3,800)
Working Steel***							
Diameter in inches (mm)	4.72 (120)	5.31 (135)	5.51 (140)	6.10 (155)	6.69 (170)	7.48 (190)	8.27 (210)
New Length of Steel Measured from Front Face in Inches (mm)	27.36 (695)	29.02 (737)	30.3 (770)	31.89 (810)	32.68 (830)	33.85 (860)	38.5 (978)
Replaceable Steel Length, Measured from Front Face in Inches (mm)	16.14 (410)	16.93 (430)	17.72 (450)	19.30 (490)	20.08 (510)	21.25 (540)	25.25 (641)
General Specifications							
Adjustable Blows Per Minute (BPM)	450 ~ 600	350 ~ 550	350 ~ 550	300 ~ 450	250 ~ 350	250 ~ 330	200 - 375
Acceptable GPM Range (LPM)	26 ~ 42 (98 ~ 158)	33 ~ 50 (124 ~ 189)	38 ~ 58 (144 ~ 220)	45 ~ 69 (170 ~ 261)	53 ~ 79 (200 ~ 299)	66 ~ 90 (250 ~ 340)	52 - 99 (200 - 375)
Acceptable PSI Range (Bar)	2,320 ~ 2,610 (160 ~ 180)	2,350 ~ 2,610 (160 ~ 180)	2,320 ~ 2,610 (160 ~ 180)	2,320 ~ 2,610 (160 ~ 180)	2,320 ~ 2,610 (160 ~ 180)	2,320 ~ 2,610 (160 ~ 180)	2,320 - 2,610 (160 - 180)
85 dB(A) @	~ 13 meters	14 - meters	~ 14 meters	~ 19 meters	~ 22 meters	17 - meters	17 - meters
Recommended carrier range in U.S. tons (tonnes)	13 ~ 22 (12 ~ 20)	21 ~ 26.5 (19 ~ 24)	21 ~ 33 (19 ~ 30)	28 ~ 44 (25 ~ 40)	39 ~ 61 (35 ~ 55)	48.5 ~ 83 (44 ~ 75)	65 – 110 (59 – 100)
Carrier options	■	■	■	■	■	■	■

Notes * Total weight and total length include standard working steel and universal top cap less mounting pins and bushings.

HP SERIES COMPACTORS/DRIVERS

MODEL	HP35 ME	HP65 II	HP65 II 18"	HP75
Impulse Force lbs. (kg)	3,000 (1361)	6,500 (2948)	6,500 (2948)	7,800 (3538)
Cycles Per Minute	2,000	2,000	2,000	2,000
Operating Pressure PSI (BAR)	2,000 (138)	1,800 - 2,200 (124-152)	2,000 - 2,400 (138-152)	1,800 - 2,200 (124-152)
Hydraulic Flow Req'd GPM (LPM)	7.5 (28)	12-15 (45-57)	12-15 (45-57)	18-22 (68-83)
Approximate Weight in lbs. (kg)*	350 (159)	850 (385)	742 (336)	850 (385)
Approximate Height in inches (mm)*	20 (508)	27.5 (699)	27.5 (702)	27.5 (699)
Width in inches (mm)	12 (305)	24 (610)	18 (457)	24 (610)
Pin Spacing in inches (mm)	As required	As required	As required	As required
Mounting Pin Diameter	As required	As required	As required	As required
Base Plate Dimensions in inches (mm)	12 x 26 (305 x 660)	24 x 34 (610 x 864)	18 x 34 (457 x 864)	24 x 34 (610 x 864)
Compaction Area sq. ft. (sq. m)	2.2 (.20)	5.7 (.53)	4.25 (.39)	5.7 (.53)
Hose Size in inches (mm)				
Pressure Line in inches (mm)	0.5 (13)	0.75 (19)	0.75 (19)	0.75 (19)
Return Line in inches (mm)	0.5 (13)	0.75 (19)	0.75 (19)	0.75 (19)
Carrier options	■ ■	■ ■	■ ■	■ ■



Notes * Weight and Height are specific for HydraPaks with Flat Top (FT) Hanger Assemblies, less mounting bracket. For accurate weight and height for models utilizing a different or specific hanger arrangement, please contact our Engineering Department.

MODEL	HP135 II	HP135 FB II	HP135 FT II	HP210 II	HP210 FB II	HP210 FT II
Impulse Force lbs. (kg)	13,500 (6124)	13,500 (6124)	13,500 (6124)	21,000 (9525)	21,000 (9525)	21,000 (9525)
Cycles Per Minute	2,000	2,000	2,000	2,000	2,000	2,000
Operating Pressure PSI (BAR)	2,000 (138)	2,000 (138)	2,000 (138)	2,000 (138)	2,000 (138)	2,000 (138)
Hydraulic Flow Req'd GPM (LPM)	30 (114)	30 (114)	30 (114)	48 (182)	48 (182)	48 (182)
Approximate Weight in lbs (kg)*	1,335 (606)	1,470 (667)	1,770 (803)	2,150 (975)	2,235 (1014)	2,730 (1238)
Approximate Height in inches (mm)*	34 (864)	34 (864)	27 (686)	39.5 (1003)	39.5 (1003)	32 (813)
Width in inches (mm)	28 (711)	28 (711)	28 (711)	34 (864)	34 (864)	34 (864)
Pin Spacing in inches (mm)	15.75 (400)	O.E.M.	O.E.M.	18.7 (475)	O.E.M.	O.E.M.
Mounting Pin Diameter	As required	As required	As required	As required	As required	As required
Base Plate Dimensions in inches (mm)	28 x 40 (711 x 1,016)	28 x 40 (711 x 1,016)	28 x 40 (711 x 1,016)	34 x 46 (864 x 1,168)	34 x 46 (864 x 1,168)	34 x 46 (864 x 1,168)
Compaction Area sq. ft. (sq. m)	7.8 (.72)	7.8 (.72)	7.8 (.72)	10.8 (1.0)	10.8 (1.0)	10.8 (1.0)
Hose Size in inches (mm)						
Pressure Line in inches (mm)	0.75 (19)	0.75 (19)	0.75 (19)	1 (25)	1 (25)	1 (25)
Return Line in inches (mm)	1 (25)	1 (25)	1 (25)	1.25 (32)	1.25 (32)	1.25 (32)
Carrier options	■	■	■	■	■	■

Notes * FT weight is based on average O.E.M. top cap and does not include mounting pins and bushings.

TEFRA COUPLERS

MODEL	TAC30	TAC50	TAC70	TAC130	TAC160
Approx. Carrier Range in Tons*	3 - 4	5 - 7	8 - 9	10 - 14	15 - 18
Pin Diameter Pick-Up in inches (mm)	1.4 - 1.6 (35 - 50)	1.6 - 2.2 (40 - 55)	1.7 - 1.9 (45 - 50)	2.3 - 2.5 (60 - 65)	2.7 - 3.1 (70 - 80)
Bottom Frame Width in inches (mm)	4.6 (117)	5.6 - 7.2 (143 - 183)	6.4 - 7.2 (163 - 183)	8.6 - 9.4 (218 - 238)	11 - 11.7 (277 - 298)
Pin Pick-Up Range in inches (mm)	6.4 - 8.5 (162 - 217)	8.5 - 10.7 (216 - 272)	11 - 14 (279 - 356)	13.6 - 17.12 (345 - 435)	15 - 20 (386 - 510)

Notes * Confirm all carrier and coupler compatibility with FRD USA engineering.

MODEL	TAC210	TAC260	TAC325	TAC350	TAC450
Approx. Carrier Range in Tons*	19 - 23	24 - 28	29 - 33	34 - 39	40 - 50
Pin Diameter Pick-Up in inches (mm)	3.1 (80)	3.1 (80)	3.5 (90)	3.5 - 3.9 (90 - 100)	3.9 - 4.3 (100 - 110)
Bottom Frame Width in inches (mm)	10.9 - 11.7 (277 - 298)	11.7 (298)	14.8 (378)	15.75 (400)	17.4 (442)
Pin Pick-Up Range in inches (mm)	15 - 20 (386 - 510)	15 - 20 (386 - 510)	18 - 22.5 (455 - 572)	20.3 - 25.6 (517 - 650)	20.3 - 25.6 (517 - 650)

Notes * Confirm all carrier and coupler compatibility with FRD USA engineering.



PNEUMATIC BREAKERS

IMPACT ENERGY CLASS	B555 – 500 ft lb	B999 – 1,000 ft lb
Weight in lbs. (kg)	502 (228)	950 (431)
Length in inches (mm)		
Without Steel in inches (mm)	32.5 (826)	57 (1,448)
With Moil Point in inches (mm)	50 (1,270)	74 (1,880)
Bore in inches (mm)	3.75 (95)	4.62 (117)
Stroke in inches (mm)	4.75 (121)	15 (381)
Working Steel Diameter in inches (mm)	2.5 (64)	3.5 (89)
Chuck Sizes in inches (mm)	2.5 (64)	3.5 (89)
Optional	3.0 (96)	-
Air Hose Size in inches (mm)	1 (26)	1.5 (38)
Blows Per Minute	600	600
Required CFM	175	250
Carrier options	■ ■ ■	■ ■ ■



MT SERIES MECHANICAL THUMBS

MODEL	MT 3X10	MT 8X16	MT 16X33	MT 16X33 HD
Carrier Range (x 1,000 lbs.)	3 - 10	8 - 16	16 - 33	16 - 33
Width in inches	8	12	18	18
Length in inches	28	40	48	48
Weight (lbs.)	108	371	535	710
Pin Diameter in inches	2.00	2.00	2.00	2.00
Tine Thickness in inches	0.50	0.75	0.75	1.00
# of Tines	2	2	3	3

MODEL	MT 33X40	MT 40X55	MT 55X65	MT 65X80	MT 80X120
Carrier Range (x 1,000 lbs.)	33 - 40	40 - 55	55 - 65	65 - 80	80 - 120
Width in inches	18	24	30	34	36
Length in inches	52	58	62	63	73
Weight (lbs.)	820	996	1,410	2,452	3,105
Pin Diameter in inches	2.00	2.00	2.50	3.00	3.00
Tine Thickness in inches	1.00	1.00	1.25	1.50	2.00
# of Tines	3	4	4	4	4



CW III SERIES COMPACTION WHEELS

MODEL	CW 18 PIII	CW 24 PIII	CW 36 PIII
Weight in lbs. (kg)	1200 (544)	2380 (1080)	3350 (1520)
Wheel Width in inches (mm)	17 (432)	23 (580)	35 (889)
Height in inches (mm)	47.50 (1200)	59 (1499)	57.25 (1450)
Bracket Spacing inches (mm)	10.75 (273)	15 (400)	17 (430)
Wheel Diameter in inches (mm)	30 (762)	40 (1000)	40 (1000)
Number of Wheels	3	3	4
Foot Configuration	Pad Foot	Pad Foot	Pad Foot
Carrier options	■ ■ ■	■	■



About FRD USA

Formerly Kent Demolition Tool, FRD USA is a wholly owned subsidiary of FURUKAWA ROCK DRILL CO., LTD, with nearly 60 years of experience. FRD USA breakers, attachments and compactors are built to last and are proven reliable for today's most demanding jobs. For more information, visit frdusa.com or your local servicing dealer.



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