

MHT4-20 Hot Tapping machine

72" stroke – Ø4 - 20" capacity



Description

A Hot Tapping machine used to make connections and branches to pipelines without shutdown either surface or sub sea (with optional kit) .

The Mirage MHT range is designed for ease of use in making 4 – 20 inch (102 – 508mm) taps into various material pipelines and tanks with the ability to fast traverse and vary the cutter feed rate.

Hydraulically or pneumatically operated with industry standard boring bar connection and flange adapter connection for existing equipment.

Maximum working pressure is 1,480 p.s.i (100 bar) at 100°F (38°C). Operating temperature continuous rating is 350 °F (177°C) at 1025 psi (70 bar). Intermittent service rating is -20°F (-9°C) to 700°F (371°C) at 700 psi (48 bar).

Features

- ***Helical geared drive close to the cut.***
- ***4 speed feed gearbox***
- ***Fast traverse feed motor (optional)***
- ***3" Boring bar as standard***
- ***Cutter holders 4 – 20" included***
- ***Measuring rod for depth control***
- ***Interchangeable seal cartridge***
- ***Industry standard connections***

Technical Details

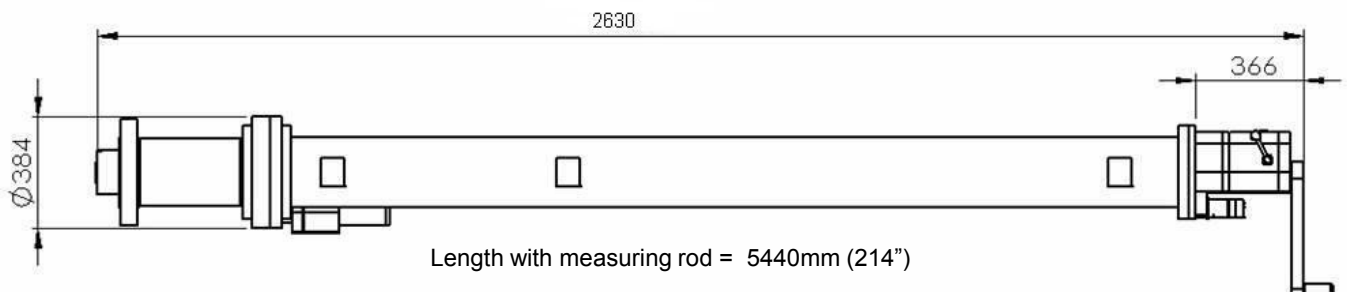
Minimum tapping hole diameter	102mm	4"
Maximum tapping hole diameter	508mm	20"
Maximum operating pressure	102 bar	1480 p.s.i
Standard certified pressure	102 bar	1480 p.s.i
Maximum operating temperature (continuous)	177° C	350° F
Boring bar travel	1830mm	72"
Boring bar diameter	75mm	3"
R.P.M	Min: 5	Max: 40
Drive – Hydraulic @ 100bar (1450 psi)	3.7 Kw	5 Hp
Hydraulic supply required @ 1050 p.s.i (100bar)	50 L/min	13 gal/min
Pneumatic Drive @ 6 bar (90 psi)	3 Kw	4 Hp

Feed Rates

Feed rate – Manual / revolution	8.46mm	0.333"
Fast traverse feed rate	0 – 1000 mm/min	0 – 40" /min
Feed rate auto feed gearbox / rev	0.025, 0.076, 0.10, 0.14mm	0.001", 0.003", 0.004", 0.0055"

Weights and dimensions

Machine weight	505 kgs	1111 lbs	
Shipping weight	605 kgs	1331 lbs	
Shipping dimensions	L - 270cm (106")	W - 93cm (36")	H - 70cm (28")



Supplied complete with Hot tap machine, (air preparation equipment where required) and boring bar drive motor, lifting brackets, (3 - 4"), (6 -12") (12 - 20") cutter holders, connection hoses, valves and pressure gauge, Toolkit, all required mounting studs and nuts and #600 RTJ connection spool, RTJ soft iron seal, CE certificate, Packing list and Manual – pressure certificate for working pressure - 1480 psi (100 bar)

PP4 - Hydraulic power unit

Engine – Diesel	35 Kw	47 Hp
Maximum Pump delivery	0 -80 Lpm	0 - 21 gpm
Maximum operating pressure	100 bar	1450 p.s.i
Standard reservoir capacity	250 litres	55 gallons
Diesel fuel tank capacity	25 litres	5.5 gallons
Weight (not including fuel and hydraulic oil)	727 Kgs	1600 Lbs
12volt battery start and pendant control		

Plug holders

Nominal size		Weight		
Inches	mm	Lbs	Kgs	Part Number
3 – 4	80 – 100	2.5	1	MHT3-12-5-3
6 – 12	150 - 305	8	4	MHT3-12-5-4
14 – 20	355 - 508	16	7	MHT4-20-5-3

Optional accessories

Description	Lbs	Kgs	Part Number
Skid and packaging for MHT4-20	165	75	MHT4-20-7
Seal and spare parts kit	11	5	MHT4-20-SK

Standard Flange adapters

Nominal size		ASME class 150			ASME class 300			ASME class 600		
In	DN	Lbs	Kgs	Part Number	Lbs	Kgs	Part Number	Lbs	Kgs	Part Number
4	100	70	32	150-4FA	365	79	300-4FA	82	37.5	600-4FA
6	150	79	36	150-6FA	45	99	300-6FA	103	47	600-6FA
8	200	99	45	150-8FA	59	130	300-8FA	136	62	600-8FA
10	250	128	58	150-10FA	79	174	300-10FA	193	88	600-10FA
12	300	185	84	150-12FA	111	244	300-12FA	254	116	600-12FA
14	350	231	105	150-14FA	145	319	300-14FA	379	172	600-14FA
16	400	301	137	150-16FA	186	409	300-16FA	549	250	600-16FA
18	450	361	164	150-18FA	231	508	300-18FA	748	340	600-18FA
20	500	442	201	150-20FA	280	616	300-20FA	811	369	600-20FA

Standard Hot tap applications

Nominal size		Actual size		Standard hot tap cutters			Standard hot tap pilot drills		
In	DN	In	mm	Lbs	Kgs	Part Number	Lbs	Kgs	Part Number
3	80	2.43	67	1	0.5	HTC3	0.5	0.2	SHTPD3
4	100	3.43	87.3	2	1	HTC4	0.5	0.2	SHTPD4
6	150	5.47	138.9	5.75	3	HTC6	2	0.9	SHTPD6
8	200	7.31	185.8	14.5	7	HTC8	2	0.9	SHTPD8
10	250	9.5	241.3	22.5	10	HTC10	2	0.9	SHTPD10
12	300	11.5	292.1	36	16	HTC12	2.5	1	SHTPD12
14	350	12.75	323	42	19	HTC14	5.5	2.5	SHTPD14
16	400	14.68	373	61	28	HTC16	6	2.7	SHTPD16
18	450	15.06	383	73.5	33	HTC18	6	2.7	SHTPD18
20	500	17	432	84	38	HTC20	6.5	3	SHTPD20

Standard Line stop applications

Nominal size		Actual size		Standard line stop cutters			Standard line stop pilot drills		
In	DN	In	mm	Lbs	Kgs	Part Number	Lbs	Kgs	Part Number
4	100	3.93	99.8	3.5	2	LSC4	0.5	0.2	LSPD4
6	150	5.93	150.6	9	4	LSC6	2	0.9	LSPD6
8	200	7.87	200.03	16	7	LSC8	2	0.9	LSPD8
10	250	9.87	250.7	27	12	LSC10	2	0.9	LSPD10
12	300	11.81	299.9	40.5	18	LSC12	2.5	1	LSPD12
14	350	13.06	332	49	22	LSC14	5.5	2.5	LSPD14
16	400	15.06	383	64	29	LSC16	6	2.7	LSPD16
18	450	17	432	84	38	LSC18	6.5	3	LSPD18
20	500	19	483	98	45	LSC20	7.5	3.4	LSPD20