



El Dorado

Sistemas de Sinergia, S.A. de C.V.



**MARTILLOS DE
CIRCULACIÓN
INVERSA**

2022-2023



16 años de
EXPERIENCIA
nos
respaldan

Fundada en 2006, nuestra empresa cuenta con 13 años de experiencia en la industria minera mexicana. Desde nuestros inicios fué trabajar en las siguientes áreas como pilares de nuestro plan de crecimiento:

1. Exploración: Específicamente en el ramo de suministros varios como **Martillos de Circulación Inversa** (RC Hammer)

2. Geología; En este rubro se ha tratado de ir abarcando todo lo relacionado al mismo, desde brújulas, flagging tape, hasta lo mas esencial en requerimientos del área.

3. Acero de barrenación:

En esta área la subdividimos en dos de gran importancia:

Acero de superficie:

Donde se atiende el mercado de:

- *Martillos de fondo (DTH)*
- *Triconos*
- *Martillo en cabeza.*

Acero para subterránea:

En este rubro se atiende la necesidad de acero utilizado para:

- *Jumbos*
- *Barrenación larga*
- *Maquinas de pierna*
- *Ancladores*

Pertenece a un Corporativo con 20 años de
Experiencia





Visión

Consolidarnos en el 2020, como una empresa competitiva y rentable en el suministro de productos y servicios a la industria como empresa socialmente responsable enfocada a la satisfacción del cliente.

Misión

Satisfacer las necesidades del cliente con productos y servicios de calidad para obtener el mayor beneficio en el desarrollo de sus procesos, sumando a colaboradores y accionistas en un mismo equipo, logrando el desarrollo integral.

VALORES





El Dorado pertenece desde sus inicios a un corporativo de varias empresas, donde la empresa central es Sonora Naturals (Sonnat) siendo la empresa que da inicio a varias compañías, que van desde comercialización en USA, El Dorado, Call Center, Laboratorio metalúrgico así como proyectos de energía solar. Todo lo anterior con el afán de diversificar la cartera de clientes de nuestros directivos.





CERTIFICACIONES

A continuación se presentan las certificaciones con las que contamos las diversas compañías del grupo.

“Cada logro comienza con la decision de intentarlo”



SONORA NATURALS, S.A. de C.V.



En Proceso



ACCREDITED LABORATORY

En Proceso



El Dorado

Sistemas de Sinergia, S.A. de C.V.





Presencia en la **República Mexicana**



Con el afán de brindar el mejor de los servicios, en el corporativo se cuentan con 5 oficinas y 3 almacenes desde donde se pretende brindar el mejor de los servicios, buscando siempre estar lo mas cercano al cliente, aumentando asi la lealtad y confianza en nuestras compañías.

Estamos presentes en:

Hermosillo, Sonora-Matriz

Cahuisori, Chihuahua.

Durango, Durango.

Zacatecas, Zacatecas.

Campo Iguala, Guerrero.





Aceros de **BARRENACIÓN**

La gamma de productos que manejamos de la marca son:

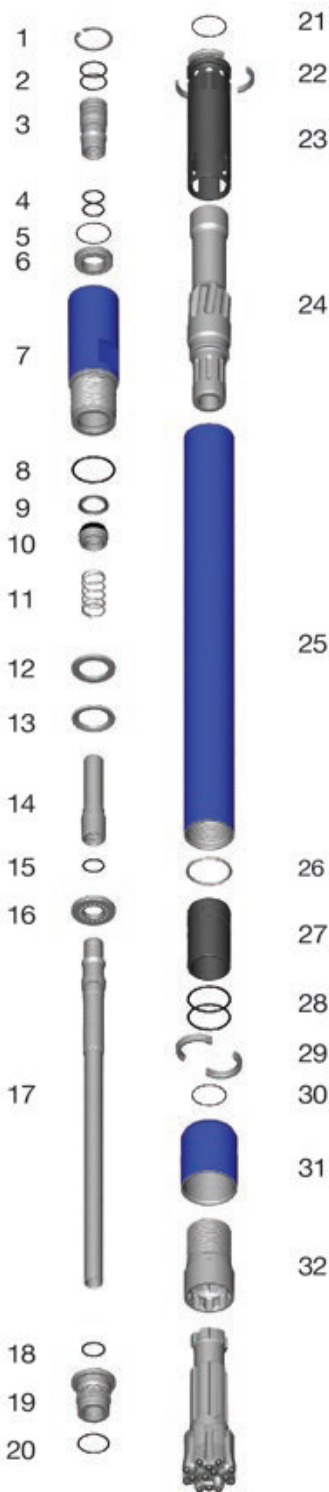
- Martillos de fondo (DTH)
- Triconos
- Martillos y brocas de circulación inversa (RC)
- Tubería para rotarias y circulación inversa.
- Acero para fundaciones
- Forepolin para tuneles



MinconTM

Representante
Exclusivo de la
marca en
México





Mincon MR92

Art	Descripción	Número de parte	Notas
	MR92AS01	Hammer 3½" Remet	
	MR92AS02	Hammer 90mm ARDA	
1	1300-0700	Internal Circlip	
2	BS132	O Ring x 2 (OD)	3½" Remet only
3	MX4044AT01	Adaptor Tube	3½" Remet only
	MR92AT02	Adaptor Tube	90 ARDA only
4	BS 126	O Ring x 2 (Adaptor tube ID)	
5	BS 036	O Ring (Airscren)	Not required for ARDA
6	MX4044SC01	Airscren	Not required for ARDA
7	MX4044BH01	Backhead	3½" Remet only
	MX4044BH02	Backhead	90 ARDA only
8	BS 233	O Ring (Backhead)	
9	8405-137	Check Valve Seal	
10	MX4044CV01	Check Valve Plunger	
11	MX4044SP01	Check Valve Spring	
12	MX4044SM01	Steel Make Up Ring	
13	MX4044LR01	Lock Ring	
14	MX4044TT01	Top Tube	
15	BS 126	O Ring x 2 (Top tube inner)	
16	MX4044SS01	Spacer	
17	MX4044ST01	Sample Tube	
18	BS 128	O Ring (S/T mount ID)	
19	MX4044DR01	Sample Tube Mount	
20	BS 138	O Ring (S/T mount OD)	
21	BS 036	O Ring (Seating ring)	
22	MX4044SR01	Seating Ring	
23	MX4044IC01	Inner Cylinder	
24	MX4044PN01	Piston	
25	MR92WS01	Wear Sleeve	
26	MX4044PR01	Piston Retain Ring	
27	MR92BB01	Aligner Bearing Bush	
28	BS 232	O Ring x 2 (Aligner)	
29	MR92BR01	Bit Retaining Rings	
30	BS 139	O Ring x 1 (Bit rings)	
31	MR92CSxxx	Chuck Sleeve	
32	MR92CK01	Chuck	
	MR92OK01	O Ring Kit	
	MR92MK01	Make-up Kit	
24	MR120BB01	Aligner Bearing Bush	
25	N7-92x4	O Ring x 2	
26	BS 237	O Ring	
27	MR120BR01	Bit Ring	
28	BS 152	O Ring	
29	MR120CK01 (21)	Chuck (NB:21 for Retention variants)	
30	MR120(R)CSxxxL	Chuck Sleeve	
	MR120OK01	O Ring Kit	
	MR120MK01	Make up kit	
	5120xxxYY	MR120 Bit	
	5120190C1	MR120 Bit Collaring	





Mincon MR92

Especificaciones	Métrico
Hammer Outside Diameter	92mm (3.6")
Hammer Length (Less Bit, Backhead Shoulder to Chuck)	1,146mm (45")
Backhead Spanner Flat Size	76mm (3")
Drill Bit Shank Type	MR92
Backhead thread types	90 ARDA, 3.5" Remet
Drill Bit Size Range	102mm – 114mm (4" – 4.5")
Hammer Weight (Less Bit)	40kg (88 lbs)
Maximum Drill Bit Weight	7.5kg (17 lbs)
Piston Weight	7.5kg (17 lbs)
Backhead Stand Off	0.75mm (0.03")
Recommended Minimum Air Package	425 L/s @ 24 bar (900 cfm @ 350 psi)
Paquete de aire mínimo recomendado	283 L/s @17.2 Bar (600 CFM@250 Psi)



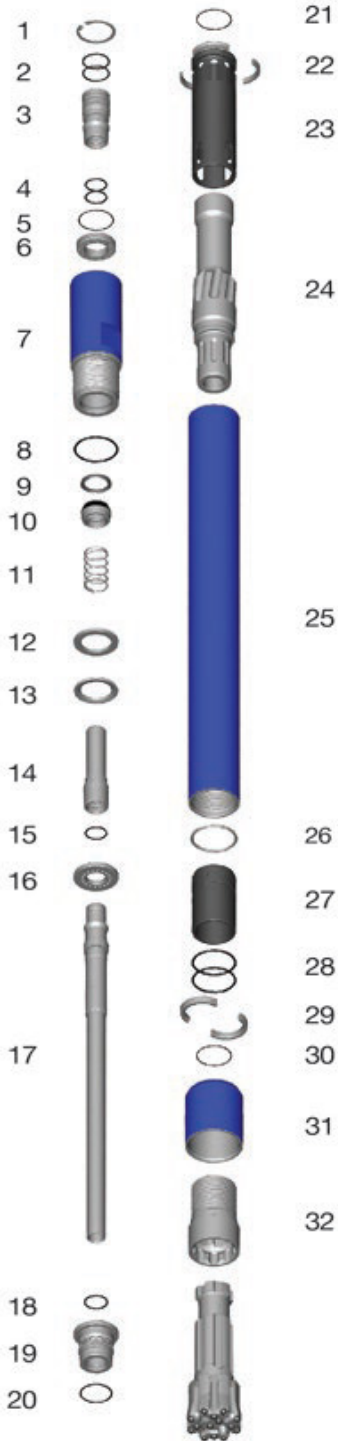
Compatible drill bits – MR92

Description	Part Number	Diameter	Face Type	Quantity and size (inch)			Sample holes	Weight
				Outer	Face	Centre		
"MR92 102mm HF Bit"	509102H1	102mm (4")	Hard Formation	8 (1/2")	4 (1/2")	2 (1/2")	2	7.8kg (17.2 lbs)
"MR92 105mm HF Bit"	5092105H1	105mm (4.125")	Hard Formation	8 (1/2")	4 (1/2")	2 (1/2")	2	8kg (17.6 lbs)
"MR92 108mm HF Bit"	5092108H1	108mm (4.25")	Hard Formation	8 (1/2")	4 (1/2")	2 (1/2")	2	8.2kg (18.1 lbs)
"MR92 114mm HF Bit"	5092114H1	114mm (4.5")	Hard Formation	8 (9/16")	4 (9/16")	2 (1/2")	2	8.6kg (19 lbs)
"MR92 117mm HF Bit"	5092117H1	117mm (4.625")	Hard Formation	8 (9/16")	4 (9/16")	2 (1/2")	2	9kg (19.8 lbs)
"MR92 146mm Collaring Bit"	5092146C1	146mm (4.75")	Collaring	8 (5/8")	8 (1/2")	2 (1/2")	2	10.1kg (23 lbs)





Mincon MR116



Art	Descripción	Número de parte	Notas
	MR116AL01	MR116 Hammer 4" Remet	
	MR116AL02	MR116 Hammer 4" Metzke	
	MR116AL03	MR116 Hammer 4 ½" Remet	
	MR116AL04	MR116 Hammer 4 ½" Metzke	
	MR116AL05	MR116 Hammer 115 ARDX	
1	1300-0780	Internal Circlip	
2	BS 226	O Ring x 2	4" Remet only
	BS 228	O Ring x 2	4 ½"Remet only
3	MX5053AT01	Adaptor Tube	4" Remet only
	MX5053AT11	Adaptor Tube	4" Metzke only
	MR120AT23	Adaptor Tube – lugged	4 ½"Remet only
	MR120AT33	Adaptor Tube – lugged	4 ½"Metzke only
	MR120AT73	Adaptor Tube – lugged	115 ARDX only
4	BS 224	O Ring x 2 (Adaptor tube ID)	
5	BS 040	O Ring (Airscreen)	Not required for lugged adaptor tubes
6	MX5053SC01	Airscreen	Not required for lugged adaptor tubes
7	MR116BH01	Backhead	4" Remet only
	MR116BH11	Backhead	4" Metzke only
	MR116BH21	Backhead	4 ½" Remet only
	MR116BH31	Backhead	4 ½" Metzke only
	MR116BH41	Backhead	115 ARDX only
8	BS 240	O Ring (Backhead)	
9	8406-175	Check Valve Seal	
10	MR120CV01	Check Valve Plunger	
11	MR120SP01	Check Valve Spring	
12	MR120SS02	Spacer	
13	MX4550LR01	Lock Ring	
14	MR116ST01	Sample Tube (Large bore)	
	MR116ST03	Sample Tube (Small bore)	
15	BS 139	O Ring (ST mount ID)	
16	MR116DR02	Sample Tube Mount	
17	BS 223	O Ring (ST mount OD)	
18		O Ring x 2 (Obsolete)	
19	BS 040	O Ring (Seating ring)	
20	MR116SR01	Seating Ring	
21	MR116IC01	Inner Cylinder	
22	MR116PN01	Piston	
23	MR116WS01	Wear Sleeve	
24	MR116PR01	Piston Retain Ring	
25	MR116BB01	Aligner Bearing Bush	
26	N7 88 X 4	O Ring x 2 (Aligner)	
27	BS 236	O Ring (Aligner)	
28	MR116BR01	Bit Ring	
29	BS 152	O Ring (Bit ring)	
30	MR116CSyyyL	Chuck Sleeve	
31	MR116CK01	Chuck	
	MR116CK02	Chuck Wide spline - Preferred design	
	MR116OK01	O-ring service kit	
	MR116MK01	Make up service kit	
	5116xxxYY	MR116 Bit 121/124/127/130/133mm	
	5116165C1	MR116 Bit 165mm Collaring	
	5116190C1	MR116 Bit 190mm Collaring	





Mincon MR116

Especificaciones	Métrico
Hammer Outside Diameter	116mm (4.57")
Hammer Length (Less Bit, Backhead Shoulder to Chuck)	1,185mm (46.5")
Backhead Spanner Flat Size	94mm (3.7")
Drill Bit Shank Type	MR116
Backhead thread types	"115 ARDX 4" and 4.5" Remet 4" and 4.5" Metzke"
Drill Bit Size Range	121mm – 127mm (4.75" – 5")
Hammer Weight (Less Bit)	60kg (132 lbs)
Maximum Drill Bit Weight	13kg (29 lbs)
Piston Weight	14kg (31 lbs)
Backhead Stand Off	0.75mm (0.03")
Recommended Minimum Air Package	425 L/s @ 24 bar (900 cfm @ 350 psi)
Paquete de aire mínimo recomendado	283 L/s @17.2 Bar (600 CFM@250 Psi)



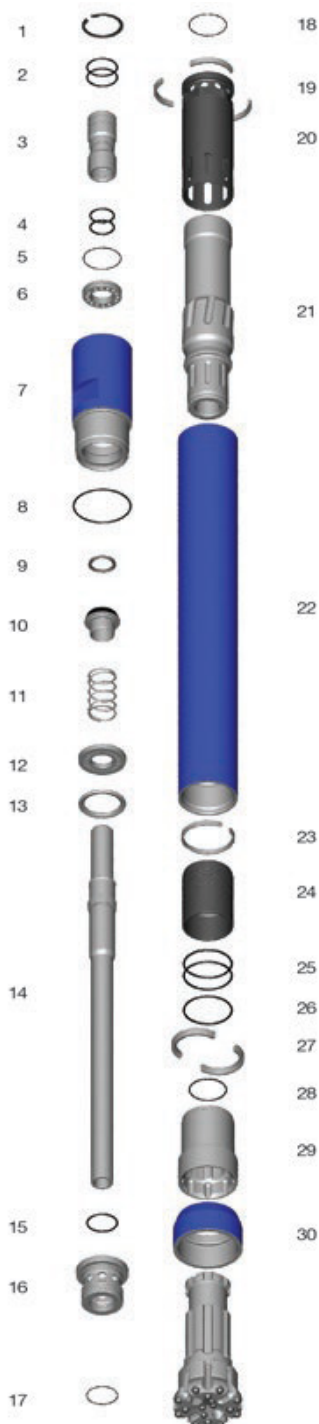
Compatible drill bits – MR116

Description	Part Number	Diameter	Face Type	Quantity and size (inch)			Sample holes	Weight
				Outer	Face	Centre		
"MR116 121mm HF Bit"	5116121H1	121mm (4.75")	Hard Formation	8 (5/8")	6 (9/16")	3 (1/2")	2	14kg (30.9 lbs)
"MR116 124mm HF Bit"	5116X124H2	124mm (4.875")	Hard Formation	8 (5/8")	6 (9/16")	5 (1/2")	2	14kg (30.9 lbs)
"MR116 127mm HF Bit"	5116X127H2	127mm (5")	Hard Formation	8 (5/8")	6 (9/16")	5 (1/2")	2	14kg (30.9 lbs)
"MR116 130mm HF Bit"	5116X130H2	130mm (5.125")	Hard Formation	8 (5/8")	6 (9/16")	5 (1/2")	2	14kg (30.9 lbs)
"MR116 133mm HF Bit"	5116X133H2	133mm (5.25")	Hard Formation	8 (5/8")	6 (9/16")	5 (1/2")	2	14kg (30.9 lbs)
"MR116 165mm Collaring Bit"	5116165C1	165mm (6.5")	Drop Centre	8 (5/8")	8 (5/8")	4 (9/16")	2	17kg (37.5 lbs)
"MR116 190mm Collaring Bit"	5116190C1	190mm (7.5")	Drop Centre	8 (5/8")	12 (5/8")	4 (9/16")	2	19kg (41.9 lbs)
"MR120 6 1/2 Collaring Bit"	5120165C1	165mm (6.5")	Drop Centre	8 (5/8")	8 (9/16")	4 (9/16")	2	18kg (39.7 lbs)
"MR120 7 1/2 Collaring Bit"	5120190C1	190mm (7.5")	Drop Centre	8 (5/8")	12 (5/8")	4 (6/16")	2	21kg (46.3 lbs)





Mincon MR120



Art	Descripción	Número de parte	Notas
	MR120AL01 (R)	MR120 Hammer 4" Remet	
	MR120AL02 (R)	MR120 Hammer 4" Metzke	
	MR120AL03 (R)	MR120 Hammer 4 1/2" Remet	
	MR120AL04 (R)	MR120 Hammer 4 1/2" Metzke	
	MR120AL05 (R)	MR120 Hammer 115 ARDX	
1	1300-0780	Internal Circlip	
2	BS 226	O Ring x 2	4" Remet only
	BS 228	O Ring x 2	4 1/2" Remet only
3	MX5053AT01	Adaptor Tube	4" Remet only
	MX5053AT11	Adaptor Tube	4" Metzke only
	MR120AT23	Adaptor Tube – lugged	4 1/2" Remet only
	MR120AT33	Adaptor Tube – lugged	4 1/2" Metzke only
	MR120AT73	Adaptor Tube – lugged	115 ARDX only
4	BS-224	O Ring x 2 (Adaptor tube ID)	
5	BS-040	O Ring (Airscren)	Not required for lugged adaptor tubes
6	MX5053SC01	Air Screen	Not required for lugged adaptor tubes
7	MR120BH01	Back Head	4" Remet only
	MR120BH11	Back Head	4" Metzke only
	MR120BH21	Back Head	4 1/2" Remet only
	MR120BH31	Back Head	4 1/2" Metzke only
	MR120BH41	Back Head	115 ARDX only
8	BS-241	O Ring (Backhead)	
9	8406-175	Check Valve Seal - Nitrile U	
10	MR120CV01	Check Valve Plunger	
11	MR120SP01	Check Valve Spring	
12	MR120SS02	Spacer	
13	MX4550LR01	Lock Ring	
14	MR120ST01	Sample Tube - Large Bore	
	MR120ST03	Sample Tube - Small bore	
15	BS 228	O Ring (ST mount ID)	
16	MR120DR02	Sample Tube Mount	
17	BS 234	O Ring (ST mount OD)	
18	BS 040	O Ring (Seating ring)	
19	MX5053SR01	Seating Ring	
20	MR120IC01	Inner Cylinder	
21	MR120PN01	Piston	
22	MR120WS01	Wear Sleeve	
23	MX5053PR01	Piston Retain Ring	
24	MR120BB01	Aligner Bearing Bush	
25	N7-92x4	O Ring x 2	
26	BS 237	O Ring	
27	MR120BR01	Bit Ring	
28	BS 152	O Ring	
29	MR120CK01 (21)	Chuck (NB:21 for Retention variants)	
30	MR120(R)CSxxxL	Chuck Sleeve	
	MR120OK01	O Ring Kit	
	MR120MK01	Make up kit	
	5120xxxYY	MR120 Bit	
	5120190C1	MR120 Bit Collaring	





Mincon MR120

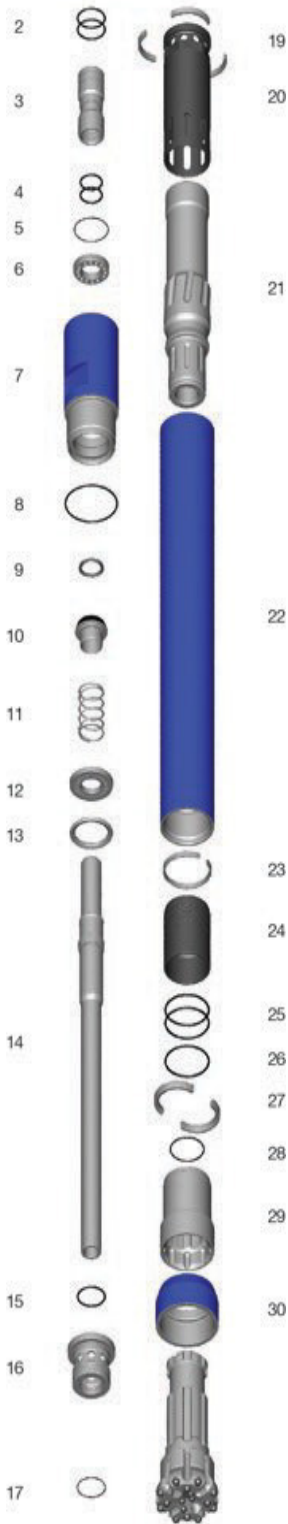
Especificaciones	Métrico
Hammer Outside Diameter	120mm (4.72")
Hammer Length (Less Bit, Backhead Shoulder to Chuck)	1191mm (46.9")
Backhead Spanner Flat Size	94mm (3.7")
Drill Bit Shank Type	MR116
Backhead thread types	"115 ARDX 4" and 4.5" Remet 4" and 4.5" Metzke"
Drill Bit Size Range	127mm – 143mm (5" – 5.675")
Hammer Weight (Less Bit)	60kg (132 lbs)
Maximum Drill Bit Weight	21kg (46lbs)
Piston Weight	15kg (33lbs)
Backhead Stand Off	0.75mm (0.03")
Recommended Minimum Air Package	425 L/s @ 24 bar (900 cfm @ 350 psi)
Paquete de aire mínimo recomendado	283 L/s @17.2 Bar (600 CFM@250 Psi)



Compatible drill bits – MR120

Description	Part Number	Diameter	Face Type	Quantity and size (inch)			Sample holes	Weight
				Outer	Face	Centre		
"MR120 5"" HF Bit"	5120X127H2	127mm (5")	Hard Formation	8 (5/8")	6 (9/16")	5 (1/2")	2	15kg (33.1 lbs)
"MR120 5 1/8" HF Bit"	5120X130H2	130mm (5.125")	Hard Formation	8 (5/8")	6 (9/16")	5 (1/2")	2	15kg (33.1 lbs)
"MR120 5 1/4" HF Bit"	5120X133H2	133mm (5.25")	Hard Formation	8 (5/8")	6 (9/16")	5 (9/16")	2	15kg (33.1 lbs)
"MR120 5 3/8" HF Bit"	5120X137H2	137mm (5.375")	Hard Formation	8 (5/8")	6 (5/8")	5 (9/16")	2	15kg (33.1 lbs)
"MR120 5 1/2" HF Bit"	5120X140H2	140mm (5.5")	Hard Formation	8 (5/8")	6 (5/8")	5 (9/16")	2	15kg (33.1 lbs)
"MR120 5 5/8" HF Bit"	5120X143H2	143mm (5.625")	Hard Formation	8 (5/8")	6 (5/8")	5 (9/16")	2	15kg (33.1 lbs)
"MR120 6"" Collaring Bit"	5120152C1	152mm (6")	Drop Centre	8 (5/8")	6 (9/16")	4 (1/2")	2	16kg (35.3 lbs)
"MR120 6 1/2" Collaring Bit"	5120165C1	165mm (6.5")	Drop Centre	8 (5/8")	8 (9/16")	4 (9/16")	2	18kg (39.7 lbs)
"MR120 7 1/2" Collaring Bit"	5120190C1	190mm (7.5")	Drop Centre	8 (5/8")	12 (5/8")	4 (6/16")	2	21kg (46.3 lbs)





Mincon MR132

Art	Descripción	Número de parte	Notas
	MR132AL01 (R)	MR132 Hammer 4 1/2" Remet	
	MR132AL02 (R)	MR132 Hammer 4 1/2" Metzke	
	MR132AL03 (R)	MR132 Hammer 115 ARDX	
1	1300-0850	Internal Circlip	
2	BS 228	O Ring x 2	Remet only
3	MX5456AT01	Adaptor Tube	4 1/2" Remet only
	MX5456AT11	Adaptor Tube	4 1/2" Metzke only
	MX5456AT71	Adaptor Tube – lugged	115 ARDX only
4	BS 226	O Ring x 2 (Adaptor tube ID)	
5	BS 040	O Ring (Airscren)	Not required for lugged adaptor tubes
6	MX5456SC01	Airscren	Not required for lugged adaptor tubes
7	MR132BH01	Back Head	4 1/2" Remet only
	MR132BH11	Back Head	4 1/2" Metzke only
	MR132BH41	Back Head	115 ARDX only
8	BS 244	O Ring (Backhead)	
9	8406-0200-N8	Check Valve Seal	
10	MR132CV01	Check Valve Plunger	
11	MR132SP01	Check Valve Spring	
12	MR132SS03	Spacer	
13	MR132LR01	Lock Ring	
14	MR132ST01	Sample tube - Large Bore	
	MR132ST03	Sample Tube - Small Bore	
15	BS230	O Ring (ST mount ID)	
16	MR132DR02	Sample Tube Mount	
17	BS 237	O Ring (ST mount OD)	
18	BS042	O Ring (Seating ring)	
19	MX5456SR01	Seating Ring	
20	MR132IC01	Inner Cylinder	
21	MR132PN01	Piston	
22	MR132WS01	Wear Sleeve	
23	MX5456PR01	Piston Retain Ring	
24	MR132BB01	Aligner Bearing Bush	
25	N7-102-4	O Ring x 2 (Aligner)	
26	BS 241	O Ring (Aligner)	
27	MR132BR01	Bit Ring	
28	BS 152	O Ring (Bit ring)	
29	MR132CK01 (21)	Chuck	(Use 21 not 01 for Retention Chuck)
30	MR132(R)CSxxxL	Chuck Sleeve (Retention)	
	MR132OK01	O Ring Kit	
	MR132MK01	Make Up Service Kit	
	5132(R)xxxYY	MR132 Bit	
	5132152C1	MR132 Bit 152mm Collaring	
	5132165C1	MR132 Bit 165mm Collaring	
	5132190C1	MR132 Bit 190mm Collaring	
30	MR120(R)CSxxxL	Chuck Sleeve	
	MR120OK01	O Ring Kit	
	MR120MK01	Make up kit	
	5120xxxYY	MR120 Bit	
	5120190C1	MR120 Bit Collaring	





Mincon MR132

Especificaciones	Métrico
Hammer Outside Diameter	132mm (5.2")
Hammer Length (Less Bit, Backhead Shoulder to Chuck)	1,185mm (46.5")
Backhead Spanner Flat Size	94mm (3.7")
Drill Bit Shank Type	MR132
Backhead thread types	"115 ARDX 4.5" Remet 4.5" Metzke"
Drill Bit Size Range	137mm – 146mm (5.375" – 5.75")
Hammer Weight (Less Bit)	77kg (170lbs)
Maximum Drill Bit Weight	17kg (37.5lbs)
Piston Weight	18kg (40lbs)
Backhead Stand Off	0.75mm (0.03")
Recommended Minimum Air Package	425 L/s @ 24 bar (900 cfm @ 350 psi)
Paquete de aire mínimo recomendado	283 L/s @17.2 Bar (600 CFM@250 Psi)



Compatible drill bits – MR132

Description	Part Number	Diameter	Face Type	Quantity and size (inch)			Sample holes	Weight
				Outer	Face	Centre		
"MR132 5 3/8 HF Bit"	5132137H1	137mm (5.375")	Hard Formation	8 (5/8")	6 (5/8")	4 (9/16")	2	17kg (37.5 lbs)
"MR132 5 1/2 HF Bit"	5132X140H2	140mm (5.5")	Hard Formation	8 (5/8")	6 (5/8")	5 (9/16")	2	17kg (37.5 lbs)
"MR132 5 5/8 HF Bit"	5132X143H2	143mm (5.625")	Hard Formation	8 (5/8")	6 (5/8")	5 (9/16")	2	17kg (37.5 lbs)
"MR132 5 3/4 HF Bit"	5132X146H2	146mm (5.75")	Hard Formation	8 (5/8")	6 (5/8")	5 (9/16")	2	17kg (37.5 lbs)
"MR132 6"" Collaring Bit"	5132152C1	152mm (6")	Drop Centre	8 (5/8")	6 (9/16")	4 (1/2")	2	18kg (39.7 lbs)
"MR132 6 1/2 Collaring Bit"	5132165C1	165mm (6.5")	Drop Centre	8 (5/8")	8 (5/8")	4 (9/16")	2	19kg (41.9 lbs)
"MR132 7 1/2 Collaring Bit"	5132190C1	190mm (7.5")	Drop Centre	8 (5/8")	12 (5/8")	4 (9/16")	2	21kg (46.3 lbs)

