	SCOPE OF WORK (SOW)	TURBO GEN SERVICES (TGS)
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Maintenance Equipment and Tools

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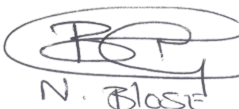
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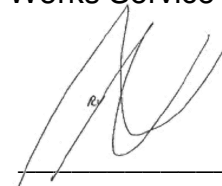


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1 Objectives

As part of ERI TGS Maintenance, Projects and Works Services, it is required to make use of various high quality industrial rated lifting equipment, as well as maintenance equipment and tools for use during maintenance of ERI and Eskom Turbine and Generator Plant, as well as for use at ERI Mechanical and Welding Workshops.

The objective of this document is to outline the services that are required from approved lifting equipment and approved Industrial Tools and Equipment supply and services companies. It seeks to ensure that the proposed services required are executed in a planned and structured manner, and that all quality and safety requirements during activities are met.

2 Scope of services

The scope of responsibility includes the supply, delivery, exchange and transport of New Lifting Equipment, New Maintenance Equipment and Tools to listed ERI work stations and Eskom Power Stations, as per the list in the Scopes of Work. **The scope of services will be rendered to ERI, as and when required, over a period of 5 years.**

3 General Requirements

3.1 Compliance

- It is the responsibility of the supplier to ensure that the Lifting Equipment supply and services comply to all aspects of the relevant South African Acts and Regulations, i.e. Occupational Health and Safety Act Act 85 of 1993, Road Safety Act, Driven Machinery Regulations and Traffic Safety Act, including but not limited to:
 - ERI Lifting Machines and Lifting Tackle Safe Working Practices (ref: 240-126606734)
 - ERI Non Standard Lifting Equipment Supplier Requirements (E-65)
 - ERI Technical Specifications for Procurement of Lifting tackle
 - ERI Technical Requirements for Suppliers of Lifting Machines available “off the shelf”
 - ERI Technical Requirements for Suppliers of Lifting Machines not available “off the shelf”

3.2 Quality of Lifting Equipment, Maintenance Equipment and Tools

- All Lifting equipment, Maintenance equipment and tools will be supplied as new, un-used and undamaged, packaged in their original packaging and inclusive user and required documentation, i.e: manuals, calibration certificate, test certificate, etc. where applicable for the specific lifting equipment (refer to Compliance Requirements), maintenance equipment and tools.
- The Lifting equipment, Maintenance equipment and Tools will be rated high quality for industrial, construction and mechanical workshop use, of reputable brands in the market.
- Lifting equipment, Maintenance equipment and Tools, must be supplied with manufacturer Warrantees and be exchangeable with the supplier where premature failure occurs due to manufacturing defects.

3.3 Lead / Turn Around times

- The supplier must ensure quick turnaround time when lifting equipment, maintenance equipment and tools orders are placed, to be able to meet 24hour turnaround time for any request or emergency, including delivery.

3.4 Where Services will be rendered

- It is the responsibility of the supplier to transport and deliver the tools and equipment to where they will be used, safely and securely.
- The ERI work stations/premises for the services include:
 - ERI Rosherville, Germiston
 - ERI Homebase, Witbank
- The Eskom Power Station for the Services include:
 - Arnot Power Station

- Camden Power Station
- Duvha Power Station
- Grootvlei Power Station
- Hendrina Power Station
- Kendal Power Station
- Koeberg Power Station
- Komati Power Station
- Kriel Power Station
- Kusile Power Station
- Lethabo Power Station
- Majuba Power Station
- Matimba Power Station
- Matla Power Station
- Medupi Power Station
- Tutuka Power Station
- Eskom Peaking Power Stations

4 Scope of Work for Lifting Tools and Equipment

- The table below include the detail list of specific lifting tools and equipment to be supplied, as and when required:

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
1	13MM X 2M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
2	13MM X 4M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
3	13MM X 6M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
4	13MM X 8M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
5	16MM X 2M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
6	16MM X 4M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
7	16MM X 6M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
8	16MM X 8M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
9	20MM X 2M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
10	20MM X 4M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
11	20MM X 6M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
12	20MM X 8M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
13	26MM X 6M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
14	26MM X 8M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
15	26MM X 10M WIRE ROPE SLING (0.5M SOFT EYES, UNGALV)	W				EA	30
16	32MM X 6M WIRE ROPE SLING (1M SOFT EYES, UNGALV)	W				EA	30
17	32MM X 8M WIRE ROPE SLING (1M SOFT EYES, UNGALV)	W				EA	30
18	32MM X 10M WIRE ROPE SLING (1M SOFT EYES, UNGALV)	W				EA	30
19	38MM X 6M WIRE ROPE SLING (1M SOFT EYES, UNGALV)	W				EA	10
20	38MM X 8M WIRE ROPE SLING (1M SOFT EYES, UNGALV)	W				EA	10
21	38MM X 10M WIRE ROPE SLING (1M SOFT EYES, UNGALV)	W				EA	10
22	50MM X 6M WIRE ROPE SLING (1M SOFT EYES, UNGALV)	W				EA	10
23	50MM X 8M WIRE ROPE SLING (1M SOFT EYES, UNGALV)	W				EA	10
24	50MM X 10M WIRE ROPE SLING (1M SOFT EYES, UNGALV)	W				EA	10

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
25	2M X 2T FLAT WEBBING SLING	W				EA	30
26	4M X 2T FLAT WEBBING SLING	W				EA	30
27	6M X 2T FLAT WEBBING SLING	W				EA	30
28	2M X 3T FLAT WEBBING SLING	W				EA	30
29	3M X 3T FLAT WEBBING SLING	W				EA	30
30	4M X 3T FLAT WEBBING SLING	W				EA	30
31	6M X 3T FLAT WEBBING SLING	W				EA	30
32	4M X 5T FLAT WEBBING SLING	W				EA	30
33	6M X 5T FLAT WEBBING SLING	W				EA	30
34	8M X 5T FLAT WEBBING SLING	W				EA	30
35	2M X 2T POLYESTER ROUND SLING	W				EA	30
36	3M X 2T POLYESTER ROUND SLING	W				EA	30
37	4M X 2T POLYESTER ROUND SLING	W				EA	30
38	6M X 2T POLYESTER ROUND SLING	W				EA	30
39	2M X 3T POLYESTER ROUND SLING	W				EA	30
40	3M X 3T POLYESTER ROUND SLING	W				EA	30
41	4M X 3T POLYESTER ROUND SLING	W				EA	30
42	6M X 3T POLYESTER ROUND SLING	W				EA	30
43	2M X 5T POLYESTER ROUND SLING	W				EA	30
44	3M X 5T POLYESTER ROUND SLING	W				EA	30
45	4M X 5T POLYESTER ROUND SLING	W				EA	30
46	6M X 5T POLYESTER ROUND SLING	W				EA	30
47	8M X 5T POLYESTER ROUND SLING	W				EA	30
48	6M X 8T POLYESTER ROUND SLING	W				EA	30
49	8M X 8T POLYESTER ROUND SLING	W				EA	30
50	6M X 10T POLYESTER ROUND SLING	W				EA	30
51	8M X 10T POLYESTER ROUND SLING	W				EA	30
52	10M X 10T POLYESTER ROUND SLING	W				EA	30
53	4M X 25T POLYESTER ROUND SLING	W				EA	30
54	6M X 25T POLYESTER ROUND SLING	W				EA	30
55	8M X 25T POLYESTER ROUND SLING	W				EA	30
56	10M X 25T POLYESTER ROUND SLING	W				EA	30
57	M20 SWIVEL HOIST MATRIX THREAD, UNGALV	W				EA	20
58	M24 SWIVEL HOIST MATRIX THREAD, UNGALV	W				EA	20
59	M30 SWIVEL HOIST MATRIX THREAD, UNGALV	W				EA	20
60	M36 SWIVEL HOIST MATRIX THREAD, UNGALV	W				EA	20
61	M42 SWIVEL HOIST MATRIX THREAD, UNGALV	W				EA	20
62	3/4 " BSW EYE BOLT, UNGALV	W				EA	20
63	5/8 " BSW EYE BOLT, UNGALV	W				EA	20
64	1" BSW EYE BOLT, UNGALV	W				EA	20
65	0.75 DEE-SHACKLE SCREW PIN LARGE SHAPE, UNGALV	W				EA	20
66	1.5T DEE-SHACKLE SCREW PIN LARGE SHAPE, UNGALV	W				EA	20
67	2T DEE-SHACKLE SCREW PIN LARGE SHAPE, UNGALV	W				EA	20
68	3.75T DEE-SHACKLE SCREW PIN LARGE SHAPE, UNGALV	W				EA	20
69	5T DEE-SHACKLE SCREW PIN LARGE SHAPE, UNGALV	W				EA	20
70	7T DEE-SHACKLE SCREW PIN LARGE SHAPE, UNGALV	W				EA	20
71	9T DEE-SHACKLE SCREW PIN LARGE SHAPE, UNGALV	W				EA	20
72	1.5T CHAIN BLOCK, TIGER/ KITO BRAND	W				EA	10
73	2T CHAIN BLOCK, TIGER/ KITO BRAND	W				EA	10
74	3T CHAIN BLOCK, TIGER/ KITO BRAND	W				EA	10
75	1.6T LEVER HOIST, TIGER/ KITO BRAND	W				EA	20
76	2T STEEL PLATE MAGNET, HEAVY DUTY	W				EA	2
77	3T STEEL PLATE MAGNET, HEAVY DUTY	W				EA	2
78	TIGER MANILA ROPE, 20MM DIA X 95M LENGTH	W				EA	10
79	7MM X 1.5M 2LEG ADJUSTABLE CHAIN SLING, UNGALV	W				EA	5
80	7MM X 2M 2LEG ADJUSTABLE CHAIN SLING, UNGALV	W				EA	5

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
81	10MM X 1.5M 2LEG ADJUSTABLE CHAIN SLING, UNGALV	W				EA	5
82	10MM X 2M 2LEG ADJUSTABLE CHAIN SLING, UNGALV	W				EA	5
83	1 inch BSW Eyebolt	W					64
84	1/2 inch Bsw eyebolt	W	M		P		64
85	1/4 inch Bsw eyebolt	W	M		P		64
86	10 x 13 MM SHACKLE	W	M	V	P		200
87	13 X 16 MM SHACKLE	W	M	V	P		200
88	16 X 19 MM SHACKLE	W	M	V	P		200
89	16 X 20 MM SHACKLE	W	M	V	P		200
90	19 X 22 MM SHACKLE	W	M	V	P		200
91	2 inch Bsw eyebolt	W					30
92	20 X 22 MM SHACKLE	W	M	V	P		200
93	22 X 25 MM SHACKLE	W	M	V	P		200
94	24MM Bs4278 Eyebolt	W					64
95	25 X 28 MM SHACKLE	W	M	V	P		200
96	27MM Eyebolt	W					30
97	28 x32 MM SHACKLE	W	M	V	P		200
98	2TON X2 METER FLAT WEBBING SLING	W					30
99	3/4 BSW Eyebolt	W					30
100	300mm X 08m five layer webbing sling	W					30
101	300mm X 10m five layer webbing sling	W					30
102	300mm X 12m five layer webbing sling	W					30
103	300mm X 14m five layer webbing sling	W					30
104	300mm X 16m five layer webbing sling	W					30
105	300mm X 6m five layer webbing sling	W					30
106	32 X 35 MM SHACKLE	W	M	V	P		200
107	35 X 38 MM SHACKLE	W	M	V	P		200
108	38 X 45 MM SHACKLE	W	M	V	P		200
109	3T Lever Hoist	W					30
110	3Ton Chain Block	W					30
111	3TON X3 METER FLAT WEBBING SLING	W					30
112	5 ton Chain Block	W					30
113	5/16 inch Bsw eyebolt	W					30
114	5/8 inch Bsw eyebolt	W					30
115	6T Lever Hoist	W					30
116	7/8 inch Bsw eye bolt	W					30
117	BSW Eyebolt 1 1/8 inch	W					30
118	BSW Eyebolt 1 3/4inch	W					30
119	BSW Eyebolt 3/8	W					30
120	Chain Block 1.5 Ton	W					30
121	CHAIN BLOCK 1TON	W					30
122	Chain Block 1ton 3m	W					30
123	CHAIN BLOCK 1ton x5m	W					30
124	Chain Block 2T	W					30
125	ENDLESS ROUND SLING 1X20TON X08M	W					30
126	ENDLESS ROUND SLING 1X20TON X10M	W					30
127	ENDLESS ROUND SLING 1X20TON X14M	W					30
128	ENDLESS ROUND SLING 1X20TON X16M	W					30
129	EYE BOLT 1/4 inch BFS	W					30
130	EYE BOLT 1 1/2 inch BFS	W					30
131	EYE BOLT 1 1/2 inch Bsw eyebolt	W					30
132	EYE BOLT 1 1/4 inch BFS	W					30
133	EYE BOLT 1 1/8 inch BFS	W					30
134	EYE BOLT 1 3/4 inch BFS	W					30
135	EYE BOLT 1 inch BFS	W					30
136	EYE BOLT 10mm Bs4278	W			P		250

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
137	EYE BOLT 12 mm Bs4278	W			P		250
138	EYE BOLT 14 mm Bs4278	W			P		250
139	EYE BOLT 16 mm Bs4278	W			P		250
140	EYE BOLT 18 mm Bs4278	W			P		64
141	EYE BOLT 2 inch BFS	W					30
142	EYE BOLT 22 mm Bs4278	W			P		64
143	EYE BOLT 3/4 inch BFS	W					30
144	EYE BOLT 3/8 inch BFS	W					30
145	EYE BOLT 33 mm Bs4278	W			P		100
146	EYE BOLT 36 mm Bs4278	W			P		120
147	Eye Bolt 39mm	W					30
148	EYE BOLT 45 mm Bs4278	W					30
149	EYE BOLT 5/16 inch BFS	W					30
150	EYE BOLT 5/8 inch BFS	W					30
151	EYE BOLT 6 mm Bs4278	W					30
152	EYE BOLT 7/16 inch BFS	W					30
153	EYE BOLT 7/8 inch BFS	W					30
154	EYE BOLT 9/16 inch BFS	W					30
155	M30 Eyebolt	W					30
156	M42 Eyebolt	W					30
157	Pallet jack 3T	W					30
158	POLYESTER SLING 10T X 6 M	W					30
159	Polyester sling 1T X 1M	W					30
160	Polyester sling 1T X 2M	W					30
161	Polyester sling 1T X 3M	W					30
162	Polyester sling 1T X 4M	W					30
163	Polyester sling 2T X 1M	W					30
164	Polyester sling 2T X 3M	W					30
165	Polyester sling 2T X 4M	W					30
166	Polyester sling 3T X 2M	W					30
167	Polyester sling 3T X 4M	W					30
168	Polyester sling 4T X 2M	W					30
169	Polyester sling 4T X 4M	W					30
170	Polyester sling 5T X 2M	W					30
171	Polyester sling 5T X 3M	W					30
172	Safety Harness 100KGs	W					20
173	Webbing sling 5T X 4M	W					30
174	Wire sling 10mm X 1,5M	W					30
175	WIRE SLING 10MM X 2 METER	W					30
176	WIRE SLING 10MM X 3 METER	W					30
177	WIRE SLING 10MM X 4 METER	W					30
178	WIRE SLING 13MM X 2 METER	W					30
179	WIRE SLING 13MM X 3 METER	W					30
180	WIRE SLING 13MM X 4 METER	W					30
181	Wire Sling 16mm x1 ,5m	W					30
182	Wire Sling 16mm x1 m	W					30
183	Wire Sling 16mm x2 m	W					30
184	Wire Sling 16mm x3 m	W					30
185	Wire Sling 16mm x4 m	W					30
186	Wire Sling 19mm x 3m	W					30
187	Wire Sling 19mm x 4m	W					30
188	Wire Sling 19mm x 2 m	W					30
189	Wire Sling 19mm x1 m	W					30
190	Wire Sling 19mm x1,5 m	W					30
191	Wire Sling 26mm x 1,5 m	W					30
192	Wire Sling 26mm x 1m	W					30

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
193	Wire Sling 26mm x 2m	W					30
194	Wire Sling 26mm x 3m	W					30
195	Wire Sling 26mm x 4m	W					30
196	Wire Sling 32mm x 2 m	W					30
197	Wire Sling 32mm x 3 m	W					30
198	Wire Sling 32mm x 4 m	W					30
199	M39 Eye Bolt	W					30
200	M45 Eye Bolt	W					30
201	M52 Eye Bolt	W					30
202	M72 Eye Bolt	W					30
203	1/4 B.S.W Eye Bolt	W					30
204	3/8 B.S.W Eye Bolt	W					30
205	5/16 B.S.W Eye Bolt	W					30
206	1/2 B.S.W Eye Bolt	W					30
207	5/8 B.S.W Eye Bolt	W					30
208	3/4 B.S.W Eye Bolt	W					30
209	7/8 B.S.W Eye Bolt	W					30
210	1" B.S.W Eye Bolt	W					30
211	1 1/8" B.S.W. Eye Bolt	W					30
212	1 1/4 B.S.W Eye Bolt	W					30
213	1 3/8 B.S.W. Eye Bolt	W					30
214	1 1/2 B.S.W Eye Bolt	W					30
215	1 3/4 B.S.W Eye bolt	W					30
216	2" B.S.W Eye Bolt	W					30
217	2 1/2 B.S.W. Eye Bolt	W					30
218	1/4 B.S.F Eye Bolt	W					30
219	5/16 B.S.F Eye Bolt	W					30
220	3/8 B.S.F Eye Bolt	W					30
221	1/2 B.S.F Eye Bolt	W					30
222	9/16 B.S.F Eye Bolt	W					30
223	5/8 B.S.F Eye Bolt	W					30
224	3/4 B.S.F Eye Bolt	W					30
225	7/8 B.S.F Eye Bolt	W					30
226	1" B.S.F Eye Bolt	W					30
227	1 1/8 B.S.F Eye Bolt	W					30
228	1 1/4 Eye Bolt	W					30
229	1 1/2 B.S.F Eye Bolt		M				32
230	1 3/4 B.S.F Eye Bolt		M				32
231	2" B.S.F Eye Bolt		M				32
232	0,5 Ton Shackle		M				32
233	0,75 Ton Shackle		M				32
234	1,5 Ton Shackle		M				32
235	2 Ton Shackle		M				32
236	3 Ton Shackle		M				32
237	5 Ton Shackle		M				32
238	6 Ton Shackle		M				32
239	9 Ton Shackle		M				32
240	Shackle 13 Ton		M				32
241	16 Ton Shackle		M				32
242	11.5 Ton Shackle		M				32
243	Wire Sling 13mm X 3m		M				32
244	Wire Sling 13mm X 4m		M				32
245	Wire Sling 13mm X 7m		M				32
246	Wire Sling 16mm X 1m		M				32
247	Wire Sling 16mm X 2m		M				32
248	Wire Sling 16mm X 3m		M				32

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
249	Wire Sling 16mm X 4m		M				32
250	Wire Sling 10mm X 1m		M				32
251	Wire Sling 10mm X 2m		M				32
252	Wire Sling 10mm X 3m		M				32
253	Wire Sling 10mm X 4m		M				32
254	Wire Sling 13mm X 1m		M				32
255	Wire Sling 13mm X 2m		M				32
256	Wire Sling 20mm X 1m		M				32
257	Wire Sling 20mm X 2m		M				32
258	Wire Sling 20mm X 3m		M				32
259	Wire Sling 20mm X 4m		M				32
260	Poleyster Sling 1T X 1m		M				32
261	Polyester Sling 1T X 2m		M				32
262	Polyester Sling 2T X 1m		M				32
263	Polyester Sling 2T x 2m		M				32
264	Polyester Sling 2T x 3m		M				32
265	Poleyster Sling 2T x 4m		M				32
266	Polyester Sling 3T x 2m		M				32
267	Polyester Sling 3T X 3m		M				32
268	Polyester Sling 3T X 4m		M				32
269	Polyester Sling 5T X 2m		M				32
270	Polyester Sling 5T X 3m		M				32
271	Polyester Sling 5T X 4m		M				32
272	Polyester Sling 10T X 2,3m		M				32
273	Polyester Sling 30t x 14mt		M				32
274	Polyester Endless 20t x 2mt		M				32
275	Polyester Endless 10t x 2.5mt		M				32
276	Polyester Endless 60t x 12.mt		M				32
277	Tirfore and rope 4 ton		M				32
278	1.5Ton Chain Block		M				32
279	2 Ton Chain Block		M				32
280	3 Ton Chain Block		M				32
281	5 Ton Chain Block		M				32
282	10 Ton Chain Block		M				32
283	Lever hoist 6 Ton		M				32
284	Lever Hoist 3 Ton		M				32
285	Crawl 5Ton		M				32
286	Crawl 2Ton		M				32
287	Crawl 1.5Ton		M				32
288	Beam Clamp 1Ton		M				32
289	Beam Clamp 3Ton		M				32
290	Beam Clamp 5Ton		M				32
291	Safety Harness		M				32
292	Palley Trolley 2.5ton		M				32
293	Polyester Sling 3T x 2m		M				32
294	Polyester Sling 3T X 3m		M				32
295	Polyester Sling 3T X 4m		M				32
296	Polyester Sling 5T X 2m		M				32
297	Polyester Sling 5T X 3m		M				32
298	Polyester Sling 5T X 4m		M				32
299	Polyester Sling 10T X 2,3m		M				32
300	Polyester Sling 30t x 14mt		M				16
301	Polyester Endless 20t x 2mt		M				16
302	Polyester Endless 10t x 2.5mt		M				16
303	Polyester Endless 60t x 12.mt		M				16
304	Tirfore and rope 4 ton		M				16

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
305	1.5Ton Chain Block		M		P		75
306	2 Ton Chain Block		M		P		75
307	3 Ton Chain Block		M		P		75
308	5 Ton Chain Block		M		P		75
309	10 Ton Chain Block		M		P		75
310	Lever hoist 6 Ton		M		P		75
311	Lever Hoist 3 Ton		M		P		75
312	Lever Hoist 1.5 Ton with 3m chain		M	V	P		75
313	Crawl 5Ton		M				16
314	Crawl 2Ton		M				32
315	Crawl 1.5Ton		M				32
316	Beam Clamp 1Ton		M				32
317	Beam Clamp 3Ton		M				16
318	Beam Clamp 5Ton		M				16
319	Safety Harness		M		P		200
320	Palley Trolley 2.5ton		M				16
321	Jack - 2.5 T		M				16
322	Jack - 5 T		M				16
323	SAFETY HARNESS SIZE L (X100 OFF)			V			50
324	SAFETY HARNESS SIZE XL (X250 OFF)			V			120
325	SAFETY HARNESS SIZE XXL (X2 OFF)			V			50
326	1 ton x 1m endless round polyester nylon			V			50
327	1Tx2m endless round polyester nylonsling			V			50
328	1Tx3m endless round polyester nylonsling			V			50
329	1 ton x 4m endless round polyester nylon			V			50
330	2 ton x 1m endless round polyester nylon			V			50
331	2Tx2m endless round polyester nylonsling			V			50
332	2Tx3m endless round polyester nylonsling			V			50
333	2 ton x 4m endless round polyester nylon			V			50
334	3 ton x 1m endless round polyester nylon			V			50
335	3Tx2m endless round polyester nylonsling			V			50
336	3Tx3m endless round polyester nylonsling			V			50
337	3 ton x 4m endless round polyester nylon			V			50
338	4 ton x 4m endless round polyester nylon			V			50
339	4 ton x 1m endless round polyester nylon			V			50
340	4Tx2m endless round polyester nylonsling			V			50
341	4Tx3m endless round polyester nylonsling			V			50
342	5 ton x 1m endless round polyester nylon			V			50
343	5Tx2m endless round polyester nylonsling			V			50
344	5Tx3m endless round polyester nylonsling			V			50
345	5 ton x 4m endless round polyester nylon			V			50
346	10 ton x 6m endless round polyester nylo			V			50
347	10mm x 1m swr sling c/w 300mm soft eyes			V			50
348	10mm x 2m swr sling c/w 500mm soft eyes			V			50
349	10mm x 3m swr sling c/w 500mm soft eyes			V			50
350	13mm x 1m swr sling c/w 500mm soft eyes			V			50
351	13mm x 2m swr sling c/w 500mm soft eyes			V			50
352	13mm x 3m swr sling c/w 500mm soft eyes			V			50
353	Webbing sling flat eye type 1 ton x 1m			V			50
354	Webbing sling flat eye type 1 ton x 2m			V			50
355	Webbing sling flat eye type 1 ton x 3m			V			50
356	Webbing sling flat eye type 2 ton x 1m			V			50
357	Webbing sling flat eye type 2 ton x 2m			V			50
358	Webbing sling flat eye type 2 ton x 3m			V			50
359	Webbing sling flat eye type 3 ton x 1m			V			50
360	Webbing sling flat eye type 3 ton x 2m			V			50

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
361	Webbing sling flat eye type 3 ton x 3m			V			50
362	Webbing sling flat eye type 4 ton x 1m			V			50
363	Webbing sling flat eye type 4 ton x 2m			V			50
364	Webbing sling flat eye type 4 ton x 3m			V			50
365	Webbing sling flat eye type 5 ton x 1m			V			50
366	Webbing sling flat eye type 5 ton x 2m			V			50
367	Webbing sling flat eye type 5 ton x 3m			V			50
368	44 x 51mm bs3032 large d shackles			V			50
369	51 x 56mm bs3032 large d shackles			V			50
370	6 x 10mm bs3032 large d shackles			V			50
371	10 x 13mm Bs3032 large d shackles			V			50
372	13 x 16mm bs3032 large d shackles			V			50
373	16 x 20mm Bs3032 large d shackles			V			50
374	20 x 22mm Bs3032 large d shackles			V			50
375	28 x 32mm Bs3032 large d shackles			V			50
376	35mm x 38mm bs3032 large d shackles			V			50
377	38mm x 44mm Bs3032 large d shackles			V			50
378	20 x 22mm bs3032 large d shackles			V			50
379	22 x 25mm Bs3032 large d shackles			V			50
380	25mm x 28mm Bs3032 large d shackles			V			50
381	32 x 35mm Bs3032 large d shackles			V			50
382	8mm eyenut ungalvanized			V			50
383	6mm Bs4278 eyebolt ungalvanized			V			50
384	8mm BS4278 eyebolt ungalvanized			V			50
385	10mm Bs4278 eyebolt ungalvanized			V			50
386	12mm Bs4278 eyebolt ungalvanized			V			50
387	14mm Bs4278 eyebolt ungalvanized			V			50
388	16mm Bs4278 eyebolt ungalvanized			V			50
389	18mm Bs4278 eyebolt ungalvanized			V			50
390	20mm Bs4278 eyebolt ungalvanized			V			50
391	22mm Bs4278 eyebolt ungalvanized			V			50
392	24mm Bs4278 eyebolt ungalvanized			V			50
393	27mm Bs4278 eyebolt ungalvanized			V			50
394	30mm Bs4078 eyebolt ungalvanized			V			50
395	33mm Bs4278 eyebolt ungalvanized			V			50
396	36mm Bs4278 eyebolt ungalvanized			V			50
397	39mm Bs4278 eyebolt ungalvanized			V			50
398	42mm Bs4278 eyebolt ungalvanized			V			50
399	3/8 inch BSW eyebolt ungalvanized bs529			V			50
400	1/2 inch BSW eyebolt ungalvanized bs529			V			50
401	5/8 inch BSW eyebolt ungalvanized bs529			V			50
402	3/4 inch BSW eyebolt ungalvanized bs529			V			50
403	7/8 inch BSW eyebolt ungalvanized bs529			V			50
404	1 inch BSW eyebolt ungalvanized bs529			V			50
405	1 1/8 inch BSW eyebolt ungalvanizedbs529			V			50
406	1¼ inch BSW eyebolt ungalvanized bs529			V			50
407	1 1/2 inch BSW eyebolt ungalvanizedbs529			V			50
408	1 3/4 inch BSW eyebolt ungalvanizedbs529			V			50
409	2 inch BSW eyebolt ungalvanized bs529			V			50
410	3/8 inch BSF eyebolt ungalvanized bs529			V			50
411	1/4 inch BSF eyebolt ungalvanized bs529			V			50
412	5/16 inch BSF eyebolt ungalvanized bs529			V			50
413	9/16 inch BSF eyebolt ungalvanized bs529			V			50
414	5/8 inch BSF eyebolt ungalvanized bs529			V			50
415	7/8 inch BSF eyebolt ungalvanized bs529			V			50
416	16mm Eyenut Un-galvanised,			V			50

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
417	20mm Eyenut Un-galvanised,			V			50
418	24mm Eyenut Un-galvanised,			V			50
419	36mm Eyenut Un-galvanised,			V			50
420	30mm Eyenut Un-galvanised,			V			50
421	EYE BOLT 20MM				P		64
422	EYE BOLT 24MM				P		32
423	EYE BOLT 42MM				P		32
424	EYE BOLT 45MM				P		32
425	EYE BOLT 48MM				P		32
426	EYE BOLT 64MM				P		32
427	EYE BOLT 5/16" BSW				P		32
428	EYE BOLT 3/8" BSW				P		32
429	EYE BOLT 1/2BSW				P		32
430	EYE BOLT 5/8" BSW				P		32
431	EYE BOLT ¾" BSW				P		32
432	EYE BOLT 7/8" BSW				P		32
433	EYE BOLT 1" BSW				P		32
434	EYE BOLT 1 1/8" BSW				P		32
435	EYE BOLT 1 ¼" BSW				P		32
436	EYE BOLT 1 ½" BSW				P		32
437	EYE BOLT 1 ¾" BSW				P		32
438	EYE BOLT 2" BSW				P		32
439	EYE BOLT 2 ½" BSW				P		32
440	EYE BOLT 3/8" BSF				P		32
441	EYE BOLT ½" BSF	W			P		32
442	EYE BOLT 5/8" BSF				P		32
443	EYE BOLT ¾" BSF				P		32
444	EYE BOLT 7/8" BSF				P		32
445	EYE BOLT 1" BSF				P		32
446	EYE BOLT 1/8" BSF				P		32
447	EYE BOLT 1 1/8" BSF				P		32
448	EYEBOLT 1 ¼" BSF				P		32
449	EYE BOLT 1 ½" BSF				P		32
450	EYE BOLT 1¾" BSF				P		32
451	EYE BOLT 2" BSF				P		32
452	EYE NUT 16MM				P		32
453	POLYESTER SLING 1T X 3M				P		32
454	POLYESTER SLING 1T X 4M				P		32
455	POLYESTER SLING 2T X 1M				P		32
456	POLYESTER SLING 2T X 2M				P		32
457	POLYESTER SLING 2T X 3M				P		32
458	POLYESTER SLING 2T X 4M				P		32
459	POLYESTER SLING 2T X 6M				P		32
460	POLYESTER SLING 3T X 2M				P		32
461	POLYESTER SLING 3T X 3M				P		32
462	POLYESTER SLING 3T X 4M				P		32
463	POLYESTER SLING 5T X 2M				P		32
464	POLYESTER SLING 5T X 3M				P		32
465	POLYESTER SLING 5T X 4M				P		32
466	POLYESTER SLING 8T X 4M				P		32
467	WIRE SLING 10MM X 1.5M				P		32
468	WIRE SLING 10MM X 2M				P		32
469	WIRE SLING 10MM X 3M				P		32
470	WIRE SLING 10MM X 4M				P		32
471	WIRE SLING 13MM X 2M				P		32
472	WIRE SLING 13MM X 3M				P		32

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
473	WIRE SLING 13MM X 4M				P		32
474	WIRE SLING 16MM X 1.5M				P		32
475	WIRE SLING 16MM X 2M				P		32
476	WIRE SLING 16MM X 3M				P		32
477	WIRE SLING 16MM X 4M				P		32
478	WIRE SLING 20MM X 2M				P		32
479	WIRE SLING 20MM X 3M				P		32
480	WIRE SLING 20MM X 4M				P		32
481	SAFETY HARNESS				P		120
482	4-LEG CHAIN SLING				P		64
483	EYE BOLT 8mm	W			P		75
484	EYE BOLT 16MM				P		32
485	EYE BOLT 18MM				P		32
486	EYE BOLT 20MM				P		32
487	EYE BOLT 22MM				P		32
488	EYE BOLT 24MM				P		32
489	EYE BOLT 27MM				P		32
490	EYE BOLT 30MM				P		32
491	EYE BOLT 33MM				P		32
492	EYE BOLT 36MM				P		32
493	POLYSTER SLING 1T X 1M				P		32
494	POLYSTER SLING 1T X 2M				P		32
495	POLYSTER SLING 1T X 3M				P		32
496	POLYSTER SLING 1T X 4M				P		32
497	POLYSTER SLING 2T X 2M				P		32
498	POLYSTER SLING 2T X 3M				P		32
499	POLYSTER SLING 2T X 4M				P		32
500	POLYSTER SLING 2T X 6M				P		32
501	POLYSTER SLING 3T X 2M				P		32
502	POLYSTER SLING 3T X3M				P		32
503	POLYSTER SLING 3T X4M				P		32
504	POLYSTER SLING 5T X2M				P		32
505	POLYSTER SLING 5T X3M				P		32
506	POLYSTER SLING 5T X4M				P		32
507	POLYSTER SLING 10T X6M				P		32
508	TIRFOR 5TON				P		32
509	HYDRAULIC PUMP 700 BAR P80				P		32
510	Enerpac Flat Jack 5ton RSM-200	W	M		P		50
511	Enerpac Hydraulic Jack 5ton	W	M		P		50
512	Enerpac Hydraulic Jack 5ton RC-53	W	M		P		50
513	Enerpac Flange Spreader 5ton WR5	W	M		P		50
514	Enerpac Hydraulic Jack 10ton RCS-101	W	M		P		50
515	Enerpac Hydraulic Jack 10ton RC-1010	W	M		P		50
516	Enerpac Hydraulic Jack 15ton	W	M		P		50
517	Enerpac Hydraulic Jack 15ton Long Stroke	W	M		P		50
518	Enerpac Hydraulic Jack 20ton RCS202	W	M		P		50
519	Enerpac Hydraulic Jack 20ton RC102	W	M		P		50
520	Enerpac Hydraulic Jack 25ton	W	M		P		50
521	Enerpac Hydraulic Jack 25ton RC256	W	M		P		50
522	Enerpac Hydraulic Jack 30ton	W	M		P		50
523	Enerpac Cylinder and Pump Puller Set 30ton	W	M		P		25
524	Enerpac Hydraulic Jack 50ton RC506	W	M		P		25
525	Enerpac Hydraulic Jack 90ton	W	M		P		25
526	Enerpac Hydraulic Jack 100ton	W	M		P		25
527	Enerpac Hydraulic Pump P80	W	M		P		25
528	Enerpack Hydraulic Pump P39	W	M				32

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
529	Kenndy folding Mobi Jack 2ton		M				16
530	Hytorg Machine 1000psi Twin Hydraulic Hose		M				16
531	Enerpac Hydraulic Press 25ton		M				16
532	M8 Eye Bolt		M				64
533	M10 Eye Bolt		M				64
534	M12 Eye Bolt		M				64
535	M14 Eye Bolt		M				64
536	M16 Eye Bolt		M				64
537	M18 Eye Bolt		M				64
538	M20 Eye Bolt		M				64
539	M22 Eye Bolt		M				64
540	M24 Eye Bolt		M				64
541	M27 Eye Bolt		M				64
542	M30 Eye Bolt		M				64
543	M33 Eye Bolt		M				64
544	M36 Eye Bolt		M				64
545	M39 Eye Bolt		M				64
546	M45 Eye Bolt		M				64
547	M52 Eye Bolt		M				64
548	M72 Eye Bolt		M				64
549	1/4 B.S.W Eye Bolt		M				64
550	3/8 B.S.W Eye Bolt		M				64
551	5/16 B.S.W Eye Bolt		M				64
552	1/2 B.S.W Eye Bolt		M				64
553	5/8 B.S.W Eye Bolt		M				64
554	3/4 B.S.W Eye Bolt		M				64
555	7/8 B.S.W Eye Bolt		M				64
556	1" B.S.W Eye Bolt		M				64
557	1 1/8" B.S.W. Eye Bolt		M				64
558	1 1/4 B.S.W Eye Bolt		M				64
559	1 3/8 B.S.W. Eye Bolt		M				64
560	1 1/2 B.S.W Eye Bolt		M				64
561	1 3/4 B.S.W Eye bolt		M				64
562	2" B.S.W Eye Bolt		M				64
563	2 1/2 B.S.W. Eye Bolt		M				64
564	1/4 B.S.F Eye Bolt		M				64
565	5/16 B.S.F Eye Bolt		M				64
566	3/8 B.S.F Eye Bolt		M				64
567	1/2 B.S.F Eye Bolt		M				64
568	9/16 B.S.F Eye Bolt		M				64
569	5/8 B.S.F Eye Bolt		M				64
570	3/4 B.S.F Eye Bolt		M				64
571	7/8 B.S.F Eye Bolt		M				64
572	1" B.S.F Eye Bolt		M				64
573	1 1/8 B.S.F Eye Bolt		M				64
574	1 1/4 Eye Bolt		M				64
575	1 1/2 B.S.F Eye Bolt		M				64
576	1 3/4 B.S.F Eye Bolt		M				64
577	2" B.S.F Eye Bolt		M				64
578			M				0
579	0,5 Ton Shackle		M				64
580	0,75 Ton Shackle		M				64
581	1,5 Ton Shackle		M				64
582	2 Ton Shackle		M				64
583	3 Ton Shackle		M				64
584	5 Ton Shackle		M				64

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
585	6 Ton Shackle		M				64
586	9 Ton Shackle		M				64
587	Shackle 13 Ton		M				64
588	16 Ton Shackle		M				64
589	11.5 Ton Shackle		M				64
590			M				0
591	Wire Sling 13mm X 3m		M				64
592	Wire Sling 13mm X 4m		M				64
593	Wire Sling 13mm X 7m		M				64
594	Wire Sling 16mm X 1m		M				64
595	Wire Sling 16mm X 2m		M				64
596	Wire Sling 16mm X 3m		M				64
597	Wire Sling 16mm X 4m		M				64
598	Wire Sling 10mm X 1m		M				64
599	Wire Sling 10mm X 2m		M				64
600	Wire Sling 10mm X 3m		M				64
601	Wire Sling 10mm X 4m		M				64
602	Wire Sling 13mm X 1m		M				64
603	Wire Sling 13mm X 2m		M				64
604	Wire Sling 20mm X 1m		M				64
605	Wire Sling 20mm X 2m		M				64
606	Wire Sling 20mm X 3m		M				64
607	Wire Sling 20mm X 4m		M				64
608	Poleyster Sling 1T X 1m		M				64
609	Polyester Sling 1T X 2m		M				64
610	Polyester Sling 2T X 1m		M				64
611	Polyester Sling 2T x 2m		M				64
612	Polyester Sling 2T x 3m		M				64
613	Poleyster Sling 2T x 4m		M				64
614	Polyester Sling 3T x 2m		M				64
615	Polyester Sling 3T X 3m		M				64
616	Polyester Sling 3T X 4m		M				64
617	Polyester Sling 5T X 2m		M				64
618	Polyester Sling 5T X 3m		M				64
619	Polyester Sling 5T X 4m		M				64
620	Polyester Sling 10T X 2,3m		M				64
621	Polyester Sling 30t x 14mt		M				32
622	Polyester Endless 20t x 2mt		M				32
623	Polyester Endless 10t x 2.5mt		M				32
624	Polyester Endless 60t x 12.mt		M				32
625	Tirfore and rope 4 ton		M				32
626	1.5Ton Chain Block		M				64
627	2 Ton Chain Block		M				96
628	3 Ton Chain Block		M				96
629	5 Ton Chain Block		M				64
630	10 Ton Chain Block		M				32
631	Lever hoist 6 Ton		M				96
632	Lever Hoist 3 Ton		M				96
633	Crawl 5Ton		M				32
634	Crawl 2Ton		M				64
635	Crawl 1.5Ton		M				64
636	Beam Clamp 1Ton		M				64
637	Beam Clamp 3Ton		M				32
638	Beam Clamp 5Ton		M				32
639	Safety Harness		M				192
640	Palley Trolley 2.5ton		M				32

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
641	Jack - 2.5 T		M				32
642	Jack - 5 T		M				32
	CAPEX ITEMS – to be manufactured, tested, certified and supplied						
1	20 TON SPREADER/ LIFTING BEAM	W					1
2	80 TON SPREADER/ LIFTING BEAM	W					1
3	GEC HP transportation brackets & Spreader beam as per design drawings	W					1
	MAINTENANCE EQUIPMENT AND TOOLS						
1	100MM ANGLE GRINDER (PNEUMATIC)	W	M	P		EA	36
2	6mm Long Pencil Grinder (pneumatic)	W	M	P		EA	36
3	6mm short Pencil Grinder (pneumatic)	W	M	P		EA	36
4	Pneumatic Grinder long straight Shank	W	M	P		EA	36
5	Air grinders 4 in 1 variable multifunction with a set of its accessories	W	M	P		EA	36
6	6mm Angle head Pencil Grinder (pneumatic)	W	M	P		EA	36
7	3mm Pencil grinder (straight and 90 degrees angle head)/ (Dentist grinder)(pneumatic)	W	M	P		EA	36
8	115mm Elec Angle grinder	W	M	P		EA	36
9	230mm Elec Angle grinder	W	M	P		EA	36
10	Temperature probe	W				EA	12
11	Oxygen pressure Gauges	W				EA	12
12	Acetylene pressure Gauges	W				EA	12
13	Propane pressure Gauges	W				EA	12
14	Oxy acetylene Mixers	W				EA	12
15	Argon Gauges with airflow meter	W				EA	12
16	Carbon dioxide pressure Gauges	W				EA	12
17	Elec Straight pencil grinder	W	M	P	V	EA	48
18	Electrode holders	W				EA	12
19	Flashback arrestors Gauge side (oxygen)	W				EA	12
20	Flashback arrestors Gauge side (acetylene)	W				EA	12
21	Flashback arrestors Torch side (oxygen)	W				EA	12
22	FLASHBACK ARRESTORS TORCH SIDE (ACETYLENE)	W				EA	12
23	PNEUMATIC NEEDLE PIN DISCALERS	W				EA	12
24	Power/ T- Bars various sizes	W				EA	12
25	Extension bars various sizes	W				EA	12
26	Combination (ring & open end) spanners = 32 to 95mm	W	M	P	V	EA	48
27	Hand Held spot welder	W				EA	2
28	Portable AC/DC welding machines	W				EA	4
29	Auto Darkening welding helmets	W				EA	12
30	MIG/TIG spool gun	W				EA	12
31	Pistol Drilling machine (electric)	W				EA	12
32	Reversible Angle Drill (pneumatic)	W				EA	12
33	Pin drilling machine tapered (MT3) collet sets of 12 or more each	W				EA	12
	Taper Sleeves for drilling and reaming :						
34	5-4 mm	W					12
35	4-3mm	W					12
36	3-2mm	W					12
37	2-1mm	W					12
	Extension Sleeves for drilling and reaming:						
38	5-4mm	W					12
39	4-3mm	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
40	Dial Gauges.	W					12
41	Magnetic base with micro adjusting arm for Dial Gauges	W					12
42	Mitutoyo Dial indicators 0-10 mm travel code 2046 S	W					12
	Conventional Caliper/ Micrometres/ Vernier's:						
43	0-25mm	W					12
44	25-50mm	W					12
45	50-75mm	W					12
46	75-100mm	W					12
	Digital Micrometres /Vernier's :						
47	150mm	W					12
48	300mm	W					12
49	Biax Electrical Scraper with blades for scraper	W					12
50	Sandvic hand scraper	W					12
51	Air Scraper	W					12
	SHIFTINGS:						
52	450mm Shifting Spanner (18")						8
53	Shifting spanner(12")	W					8
54	Shifting Spanner (6")	W					8
55	Pliers	W					8
56	Bent nose pliers	W					8
57	Long nose pliers	W					8
58	Vice-grip	W					8
59	Tin snips	W					8
60	Side cutters	W					8
61	Circlip pliers	W					8
62	Deburring tool sets 12 or 17 pieces	W					12
63	Air pipes =10meters including fittings i.e clamps & seals.	W					12
64	Magnetic Base Drills	W					12
65	Pipe Wrenches (36")	W					12
66	Pipe wrenches(18")	W					12
67	Combination Ratchet socket head Podger spanner (17x 19mm, 19x21mm, 19x24mm, 24x27mm, 24x 30mm, 27x 32mm, 30 x33mm, 38x 41 mm)	W					12
	Hammers/ sledge hammers:						
68	700 grams Ballpen hammers with wooden handles	W					12
69	450 grams Ballpen hammers with wooden handles	W					12
70	16 (LBS)Pound Hammer with handle	W					12
71	14 (LBS)pounds/ 6.3 Kg hammer with handle	W					12
72	8 Pound Hammer	W					12
73	4 Pound Hammer	W					12
74	4 pound Copper Hammers	W					12
75	4 pound Mallet Hammers	W					12
76							
77	8 pound Copper hammer	W					12
78	14 pound Copper hammer	W					12
79	8 pound Mallet hammers.	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
80	Nylon faced hammer(medium &large)	W					12
81	Rubber hammer(medium & large)	W					12
82	Blade measuring digital Scales (120 to 150kg Capacity).	W					2
83	Impact driver sets with deep sockets	W					12
84	Impact driver sets with sockets ½" and 3/8"	W					12
	Tap wrenches:						
85	24mm	W					12
86	30mm	W					12
87	38mm	W					12
88	Impact Wrench gun or Electric/Pneumatic impact tool with accompanying chisels	W					12
89	Caulking impact guns(URYU brh-5u)with chisels. Riveting caulking gun(URYU brh-5us).	W					12
90	Hydraulic Foot pump(including pipe & pipe fittings	W					12
91	Hydraulic Hand pump (including pipe& pipe fittings	W					12
92	Pry Bar sets of 4	W					12
93	Manual honing tools 10 to 60mm diameters with honing stones attachments	W					12
94	Open ended slogging/flogging spanners with holders 41, 46mm, 50mm, 65mm, 70mm	W					12
95	Ring ended slogging/flogging spanners with holders 41, 46mm, 50mm, 65mm, 70mm	W					12
96	slogging/flogging spanners with holders 41, 46mm, 50mm, 65mm, 70mm	W					12
97	Drill press vices	W					8
98	Hydraulic Jack 50 ton	W					8
99	Hydraulic Jack 25 ton	W					8
100	Hydraulic jack 10 ton	W					8
101	Hydraulic jack 5 ton	W					8
102	Pipe ring spanner: 30mm.	W					8
103	36mm.	W					8
104	40mm.	W					8
105	47mm.	W					8
106	60mm.	W					8
107	Feeler Gauges with 19/20 integral blades .	W					8
108	Portable inspection camera bore scopes with 2 to 5m flexible tube and colour LCD monitor	W					8
109	Abrasive wheel dressers various sizes	W					8
110	G- clamps- 75mm, 100mm, 150mm, 200mm, 250mm and 300mm	W					12
111	F- Clamps (120mmx 250mm, 120mm x 400mm, 120mm x 600mm, 120mm x1000mm)	W					12
112							
113	Ratchet style F-clamps (120mmx 250mm, 120mm x 400mm, 120mm x 600mm, 120mm x 1000mm	W					12
114	Feeler Gauge (800mm Long)	W					8
115	Stanley Knives with blades	W					12
116	Stanley Knives blades	W					12
117	Snap off blade retractable knives with blades	W					12
118	Scribers	W					8
119	Heavy duty Electrical Cords/ cables 16A 220V(10m long)	W					12
120	Ratchet Belts	W					12
121	Water Traps for compressors	W					12
	Allen Keys Chrome Vanadium :						
122	Allen keys-4mm-36mm (9 or 19 or 25 pcs).(metric/imperial)(Long & short reach)	W					12
123	Allen key sockets-6mm-36mm(9 or 19 or 25 pcs).(metric/imperial)	W					12
124	Professional Chrome Vanadium metric ball point key set in a holder	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
125	Professional Chrome Vanadium metric Hex Key with joint ball point/joint for hard to reach areas set of 10 in a holder	W					12
126	Allen key sets-metric & imperial long reach.	W					12
127	Studs and nuts sockets	W					40
128	M30 & M24 nuts with accompanying threaded bar required .	W					40
129	M30 nuts	W					40
130	M24 nuts	W					40
131	M20 nuts	W					40
132	1 meter threaded bar high tensile M30 & M24	W					40
133	1 meter threaded bar high tensile M20	W					40
134	clamps to be supplied for the new machine Soraluze not having clamps, studs and nuts as per sample on machine	W					40
135	Truth check measuring probes for automated runouts checks on the lathes	W					12
136	Professional unique lockable multiple drawer tool cabinets with tools about 193 and more pieces) on wheels blue or red colour	W					12
137	18 Pieces Hex and Torx Star Key sets	W					8
138	Number Stamps punchers:6mm-12mm	W					8
139	Letter Stamps:6mm-12mm.	W					8
140	Alphabets Stamps punchers:6mm-12mm Letter Stamps:6mm-12mm.	W					8
141	Taps: 6mm-36mm sets each.(metric/BSF/imperial).	W					12
142	HSS Drill bits:4mm-18mm	W					12
143	HSS Drill bits: 20mm-30mm	W					12
144	Masonry Drill Bits: 4mm-18mm	W					12
145	Wood Drill Bits: 4mm-18mm and 20mm-30mm	W					12
146	Taper shank drills: 10mm-20mm=0.5 increments-	W					12
147	Taper shank drills: 21mm-30mm=1mm increments	W					12
148	Taper shank drills: 30mm-50mm=2mm increments	W					12
149	(Jacobs Chucks.	W					12
150	Centre drills:2.5mm-10mm	W					12
151	Core drill : 4mm-10mm	W					12
152	Parallel Reamers : 6mm-30mm(0.25 increments)	W					12
153	Taper Reamers(1:50) : 10mm-30mm(0.50 increments)	W					12
154	Taper Reamers(1:100):10mm-30mm(0.50 increments)	W					12
155	Collets for pin drill machine: 3mm-20mm	W					12
156	Arbor collet chuck set of 9 pieces etc (4-16mm)	W					12
157	Arbor collet chuck set of 8 pieces etc (4-16mm)	W					12
158	Mist Sprayer.	W					12
159	Air guns.	W					12
160	Mandrills (arbors) for quick change abrasive discs	W					12
161	Lanishers (portable sander-Marpol brand) with sanding belts for portable sander	W					12
162	Spotlight(with stand)	W					12
163	Bolt Cutter.	W					12
164	Punch Holder.	W					12
165	Pencil Grinders	W					12
166	Pencil Angle grinder	W					12
167	18V Cordless Drill Portable	W					12
168	Small Centre Drill (8mm)	W					12
169	Grinder Wheels for Service grinder A46N 200x20x31.75	W					12
170	Air guns (red):.	W					12
171	Magnetic base comparator stand 3 point adjustable column.	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
172	Drill chuck with morse taper no.2	W					12
173	Revolving Centre Morse taper no.2	W					12
174	Seal Puller Tool	W					12
175	Parallel pin punches(6 piece per set)	W					12
176	Long reach pin punches (6 pieces per set)	W					12
177	Electric hand drilling machines (810W-1050W)	W					12
178	Hacksaws with Hacksaw metal 10 blades each	W					12
179	Standard Grip Wrench	W					8
180	Hand stamp set-numbers (6mm)= 2 sets off	W					8
181	Hand stamp set-alphabets (6mm)= 2 sets off	W					8
182	Screwdriver set	W					8
183	Three jaw internal (15-30mm & 30 -80mm)& external (15-80mm)puller with sliding hammer	W					8
184	Thermocouple welders	W					8
185	Temperature probes	W					8
186	Long nose pliers/	W					8
187	side cutter	W					8
188	cable cutter	W					8
189	Crimping tool for lugs	W					8
190	Set of spanners (6-32mm)	W					8
191	Wheelbarrows	W					8
192	Shovels round nose	W					8
193	Shovels square mouth	W					8
194	Digital multimeter Fluke 177	W					8
195	13mm Bosch hand drill GBM I 3-2RE	W					12
196	Maglite torch 2 cell LED	W					12
197	Ryobi 13mm bench drill press BD5 13 c/w 100mm drill press vice	W					4
198	Kennedy holesaw kit 22-64mm	W					8
199	Allen key Torx driver set 0760K	W					8
200	Torx socket set 1/2" drive gedore	W					8
201	Kennedy precision screwdriver set 4470	W					12
202	Kennedy Allen key set long series metric 5500K	W					8
203	Kennedy Allen key set long series imperial 5730K	W					8
204	Gedore spanner set imperial 1/4" - 1 "	W					8
205	Panel key 4 way	W					4
206	Metabo jigsaw STE1 40 with set of assorted blades	W					8
207	Cable shears KEN558-8220K	W					8
208	Gedore shifters 150mm	W					12
209	Gedore shifters 300mm	W					12
210	Electrical toolkit Major tech TKC3-9	W					8
211	Electricians toolbag KEN593-0560K	W					8
212	40watt Weller soldering iron c/w stand, spare tips & sponge	W					8
213	60 Watt Weller soldering iron c/w stand, spare tips & sponge	W					8
214	100 Watt Weller soldering iron c/w stand, spare tips & sponge	W					8
215	De-soldering tool 8500K	W					8
216	Portable cordless vacuum cleaner 220v	W					8
217	Pozi bit sets	W					8
218	Pop rivet gun with assorted rivets 3020K	W					8
219	Bench grinder (600w) 200mm	W					6
220	Tube spanner set 8mm - 19mm	W					4

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
221	Insulated water pump pliers KEN534 -4860K	W					4
222	Multi angle vice 2000K 60mm	W					4
223	Vice attachment helping hands 1800K	W					4
224	Gedore vice grip 250mm	W					4
225	Pipe wrench 1 8" 3 I 80K	W					4
226	Pipe wrench 36" 3360K	W					4
227	4 drawer service cart Y MT594-2040K with tools	W					4
	Knife Tools						
228	MDJNR 2525 (DNMG R/H) – (1101357)	W					12
229	MDJNL 2525 (DNMG L/H) - 1102316	W					12
230	MDNNR 2525 M15 (DNMG CENTER) – (1101636)	W					12
231	MTJNR 2525 M22 H4 (TNMG R/H) – (1245000)	W					12
232	MTJNL 2525 M22 H4 (TNMG L/H) – (1245001)	W					12
233	MTENNS 2525 M22 (TNMG CENTER) – (1102171)	W					12
234	NKLCR 2525 M11 (KNUX R/H) – (1098818)	W					12
235	NKLCL 2525 M11 (KNUX L/H) – (1098889)	W					12
236	NKLCR 2525 M11 (KNUX R/H) shims only	W					12
237	NKLCL 2525 M11 (KNUX L/H) shims only	W					12
238	screws for shims	W					12
239	KCUX110302R05 NPR5M02	W					12
240	KCUX110305R05 NPR5M05	W					12
241	MWLNK 2525 M08 H4 (WMNG R/H) – (1192355)	W					12
242	MWLNK 2525 M08 H4 (WMNG L/H) – (1244922)	W					12
243	WNMG080402MS KCU10 5090891	W					12
244	MSSNR 2525 M12 (45° CHAMPHER TOOL) – (1102165)	W					12
245	A25RMDUNR 15 (DNMG R/H B/BAR) – (1098102)	W					12
246	A40TMDUNR 15 (DNMG L/H B/BAR) – (109810)	W					12
	External threading tools						
247	NSR 2525 M2 (NTP2 R/H) – (1098794)	W					12
248	NSL 2525 M2 (NTP2 L/H) – (1098865)	W					12
249	NSR 2525 M3 (NTP3 R/H) – (1098796)	W					12
250	NSL 2525 M3 (NTP3 L/H) – (1098867)	W					12
251	NSR 2525 M4 (NTP3 R/H) – (1098799)	W					12
252	NSL 2525 M4 (NTP3 L/H) – (1098870)	W					12
	Full form threading tools						
253	1620 LSER 16 ISRAEL (FULL FORM T/BAR) – (1131509)	W					12
254	LSSR2525 M22Q (PRE FORM R/H) – (1137069)	W					12
255	LSSL2525 M22Q (PRE FORM L/H) – (1137029)	W					12
	Grooving tools						
256	A3SMR2525 M0316 (3MM R/H GROOVING) – (1775626)	W					12
257	A3SML2525 M0316 (3MM L/H GROOVING) – (1775627)	W					12
258	A3SMR2525 M0426 (4MM R/H GROOVING) – (1775677)	W					12
259	A3SML2525 M0426 (4MM L/H GROOVING) – (1775679)	W					12
260	A3SMR2525 M0526 (5MM R/H GROOVING) – (1775685)	W					12
261	A3SML2525 M0526 (5MM L/H GROOVING) – (1775686)	W					12
262	A3SMR2525 M0316 (3MM GROOVING inserts) – (1775626)	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
	Parting blocks & blades						12
263	Parting blocks for 2mm & 3mm blades	W					12
264	Parting blades for 2mm & 3mm	W					12
265	2mm inserts	W					12
266	3mm inserts	W					12
	Internal threading bars						
267	NTP2 boring bars (Conventional lathe)	W					12
268	NTP3 boring bars (Conventional lathe)	W					12
	All Kennametal tools						
269	Biax electrical scrappers for fitting	W					12
270	Blades for scrappers	W					12
271	Heavy duty (industrial) bench vices (Jaws 200mm) (Opening 300mm)	W					12
272	Sandvic hand scrappers	W					12
273	Hydraulic Vices	W					12
274	HMD-150	W					12
275	HMD-200	W					12
276	HMD-100	W					12
	Rose cutters:						
277	ASX400R403S32	W					12
278	ASX400-063A04R	W					12
279	ASX400-080B04R	W					12
280	ASX400-125B06R	W					12
281	ER32-DC – SET 3	W					12
282	ER16-DC – SET	W					12
	HSS Drills						
283	HSS Drill set 1 – 13 x 0.5	W					12
284	HSS Drill set 1 – 6 x 0.1	W					12
285	HSS Drill set 6 – 10 x 0.1	W					12
	Taper shank drills:						
286	10mm – 20mm 0.5mm increments-(20 for this range)	W					12
287	21mm – 30mm 1mm increments (09 for this range)	W					12
288	30mm – 40mm 2mm increments (5 for this range)	W					12
289	41mm – 50mm 3mm increments (3 for this range)	W					12
290	51mm – 63mm 3mm increments (4 for this range)	W					12
291	65 mm	W					12
292	70 mm	W					12
	HSS Blanks CO8						
293	6 x 6mm	W					12
294	8 x 8mm	W					12
295	10 x 10mm	W					12
296	12 x 12mm	W					12
297	14 x 14mm	W					12
298	16 x 16mm	W					12
299	18 x 18mm	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
300	20 x 20mm	W					12
301	25 x 25mm	W					12
	Morse taper sleeves						
302	5 – 4	W					12
303	4 – 3	W					12
304	3 – 2	W					12
305	2 – 1	W					12
306	Skoda running centres (4 – CSN243328M)	W					12
307	Knife tools						
308	DDJNR 2525M15-M TOOLHOLDER	W					12
309	DNMG 150604 & 08 INSERTS	W					12
310	INSERT SHIM (DDN110310)	W					12
311	FLOATING WEDGE CLAMP (CD12-S)	W					12
312	SHIM SCREW (C04008-T15P)	W					12
313	CLAMP SCREW (L84021-T15P)	W					12
314	DDJNL 2525M15-M TOOLHOLDER	W					12
315	DNMG 150604 & 08 INSERTS	W					12
316	INSERT SHIM (DDN110310)	W					12
317	CLAMP SCREW (L84021-T15P)	W					12
318	FLOATING WEDGE CLAMP (CD12-S)	W					12
319	SHIM SCREW (C04008-T15P)	W					12
320	PTGNL 4040 T27 TOOLHOLDER	W					12
321	TNMG270608-M5 INSERTS	W					12
322	INSERT SHIM (117.26-628)	W					12
323	WEDGE SCREWS (10.26-655)	W					12
324	PTGNR 4040 T27 TOOLHOLDER	W					12
325	TNMG270608- M5 INSERTS	W					12
326	INSERT SHIM (117.26-628)	W					12
327	WEDGE SCREWS (10.26-655)	W					12
328	SDJCR 1010M07 TOOLHOLDER	W					12
329	DCGT CP500 –F1 & MF2 INSERTS	W					12
330	INSERT SCREW (C02506-T07P)	W					12
331	SDJCL 1010M07 TOOLHOLDER	W					12
332	DCGT CP500 –F1 & MF2 INSERTS	W					12
333	INSERT SCREW (C02506-T07P)	W					12
334	SCLCR 0808K06 TOOLHOLDER	W					12
335	CCMT 060202 & 04 CP500 –FF1 & MF2 INSERTS	W					12
336	INSERT SCREW (C02506-T07P)	W					12
337	SCLCR 1010K06 TOOLHOLDER	W					12
338	SCLCL 0808K06 TOOLHOLDER	W					12
339	SCLCL 1010K06 TOOLHOLDER	W					12
340	SVLBR 2525M16 TOOLHOLDER	W					12
341	SVLBL 2525M16 TOOLHOLDER	W					12
342	VBMT 160404-MF3 INSERTS	W					12
343	INSERT SCREWS C03512-T15P	W					12
344	INSERT SHIMS 171.19-620	W					12
345	A25R-PDYNNR11 TOOLHOLDER	W					12
346	DNMU110404-FF2 INSERTS	W					12
347	DNMU110408-FF2 INSERTS	W					12
348	DNMU110404-MF1 INSERTS	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
349	S25T-PDUNR11 TOOLHOLDER	W					12
350	PP3611 INSERT LEVER	W					12
351	PDN110308 INSERT SHIM	W					12
352	LS0512 LEVER SCREW	W					12
353	RP5153 SHIM PIN	W					12
354	S32U-PDUNR11 TOOLHOLDER	W					12
355	PP3512 INSERT LEVER	W					12
356	LS0616 LEVER SCREW	W					12
357	S40V-PDUNR15 TOOLHOLDER	W					12
358	PP4716 INSERT LEVER	W					12
359	PDN150308 INSERT SHIM	W					12
360	LS0822 LEVER SCREW	W					12
361	RP6757 SHIM PIN	W					12
362	S50W-PDUNR15 TOOLHOLDER	W					12
363	C8-DCLNR-55080-19 CAPTO TOOLHOLDER	W					12
364	DCN190416 INSERT SHIM	W					12
365	C05010-T20P SHIM SCREW	W					12
366	L86026-T20P CLAMP SCREW	W					12
367	CNMG 1906912-MF4 INSERTS	W					12
368	C8-DCLNL-55080-19 CAPTO TOOLHOLDER	W					12
369	CNMG 190608-M3 INSERTS	W					12
370	CNMG 190616-M3 INSERTS	W					12
371	C8-DDJNR-55080-15 CAPTO TOOLHOLDER	W					12
372	CD12-S12 CLAMP KIT	W					12
373	C03007-T09P SHIM SCREW	W					12
374	DNMG 150604-M3 INSERTS	W					12
375	DNMG 150608-M3 INSERTS	W					12
376	C8-DDJNL-55080-15 CAPTO TOOLHOLDER	W					12
377	DDN150416 INSERT SHIM	W					12
378	DNMG 150612-M3 INSERTS	W					12
379	DNMG 150616-M3 INSERTS	W					12
380	C8-DSSNR-55080-25 CAPTO TOOLHOLDER	W					4
381	SNMG 250924-MR7 INSERTS	W					12
382	C8-DSSNL-55080-25 CAPTO TOOLHOLDER	W					4
383	SNMG 250924-MR7 INSERTS	W					12
384	CD25-S25 CLAMP KIT	W					12
385	DSN250624 INSERT SHIM	W					12
386	C06012-T25P SHIM SCREW	W					12
387	C8-DSRNR-55080-19 CAPTO TOOLHOLDER	W					4
388	SNMG 190612-M5 INSERTS	W					12
389	CD19-S FLOUTING WEDG CLAMP	W					12
390	DSN190624 INSERT SHIM	W					12
391	C05010-T20P SHIM SCREW	W					12
392	L86026-T20P CLAMP SCREW	W					12
393	C8-DSRNL-55080-19 CAPTO TOOLHOLDER	W					12
394	SNMG 190616-M5 INSERTS	W					12
395	TP1837 8MM LH SPECIAL GROOVING TOOL	W					12
396	LCMF 300808-0800-FT CP500 INSERTS	W					12
397	LCMF 300808-0800-FT CP500 INSERTS	W					12
398	LCMF 3008M0-0800-MP CP500 INSERTS	W					12
399	LCMR 3008M0-0800-MP CP500 INSERTS	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
400	TCEI0613 CLAMP SCREW	W					12
401	TP1837 8MM RH SPECIAL GROOVING TOOL	W					12
402	LCMF 300808-0800-FT CP500 INSERTS	W					12
403	LCMF 300808-0800-FT CP500 INSERTS	W					12
404	LCMF 3008M0-0800-MP CP500 INSERTS	W					12
405	LCMR 3008M0-0800-MP CP500 INSERTS	W					12
406	TCEI0613 CLAMP SCREW	W					12
407	TP1190 LH SPECIAL TOOL RAILWAY WHEELS	W					4
408	LNMX191940-MF INSERTS	W					12
409	LNMX301940-MF INSERTS	W					12
410	R175.32-3223-19 CASSETS	W					12
411	L175.32-3223-19 CASSETS	W					12
412	TP1190 RH SPECIAL TOOL RAILWAY WHEELS	W					4
413	LNMX191940-R2 INSERTS	W					12
414	LNMX301940-R2 INSERTS	W					12
415	R175.32-3223-30 CASSETS	W					12
416	L175.32-3223-30 CASSETS	W					12
417	TP1490 LH SPECIAL TOOL	W					12
418	TP1490 RH SPECIAL TOOL	W					12
419	PTJNL 4032R22 TOOL HOLDER	W					12
420	170.26-624 INSERT SHIM	W					12
421	PP2015-1-T15P SHIM PIN	W					12
422	TNMG220404-MR4 INSERTS	W					12
423	TNMG220412-MR4 INSERTS	W					12
424	TNMG220408-MR7 INSERTS	W					12
425	TNMG220412-MR7 INSERTS	W					12
426	PTJNL 4032R22 TOOL HOLDER	W					12
427	110.26-643.1 WEDGE CLAMP	W					12
428	170.26-655 WEDGE SCREW	W					12
429	TNMG220408-MR4 INSERTS	W					12
430	TNMG220416-MR4 INSERTS	W					12
431	TNMG270612-MR7 INSERTS	W					12
432	TNMG220616-MR7 INSERTS	W					12
433	PTGNR4040T27 TOOL HOLDER	W					12
434	117.26-628 INSERT SHIM	W					12
435	110.26-655 WEDGE SCREW	W					12
436	PTGNR4040T27 TOOL HOLDER	W					12
437	126.26-650 SHIM PIN	W					12
438	110.26-645 WEDGE CLAMP	W					12
439	PCLNL4040S19 TOOL HOLDER	W					12
440	CNMG190612-MR7 INSERTS	W					12
441	CNMG190616-MR7 INSERTS	W					12
442	CNMG190624-MR7 INSERTS	W					12
443	PCLNR4040S19 TOOL HOLDER	W					12
444	PP7521 INSERT LEVER	W					12
445	PCN190416 INSERT SHIM	W					12
446	LS1236 LEVER SCREW	W					12
447	RP9811 SHIM PIN	W					12
448	CNMG190608-MR7 INSERTS	W					12
449	DDJNR 3232P15-M TOOLHOLDER	W					12
450	DNMG150604-MF2 INSERTS	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
451	DNMG150608-MF2 INSERTS	W					12
452	DDJNL 3232P156-M TOOLHOLDER	W					12
453	DNMG150604-MF1 INSERTS	W					12
454	DNMG150608-MF1 INSERTS	W					12
455	PSBNR4040S19 TOOL HOLDER	W					12
456	PSBNL4040S19 TOOL HOLDER	W					12
457	PSSNR3225P12 TOOL HOLDER	W					12
458	PP4713 INSERT LEVER	W					12
459	PCN120312 INSERT SHIM	W					12
460	LS0818 LEVER SCREW	W					12
461	RP6757 SHIM PIN	W					12
462	PSSNL3225P12 TOOL HOLDER	W					12
463	PRDCN5050T32 TOOL HOLDER	W					12
464	PP8030 INSERT LEVER	W					12
465	PRN3206M0 INSERT SHIM	W					12
466	LS1236 LEVER SCREW	W					12
467	RP1312 SHIM PIN	W					12
468	PCGNL5050-32 TOOL HOLDER	W					12
469	RCMX320900 INSERTS	W					12
470	RCMX320900-RR94 INSERTS	W					12
471	DCLNR4040R19-M TOOL HOLDER	W					12
472	FP2012 CLAMP PIN	W					12
473	L86026-T20P CLAMP SCREW	W					12
474	CD19-S FLOATING WEDGE CLAMP	W					12
475	DCLNR4040R19-M TOOL HOLDER	W					12
476	DCN190416 INSERT SHIM	W					12
477	C05010-T20P SHIM SCREW	W					12
478	S7010 SPRING	W					12
479	MCBNL 4040R19 TOOL HOLDER	W					12
480	MCBNR 4040R19 TOOL HOLDER	W					12
481	MC22 CANTILEVER CLAMP	W					12
482	LD6024-T20P CLAMP SCREW	W					12
483	CSN190412 INSERT SHIM	W					12
484	MN1920-T20P SHIM PIN	W					12
485	CGIR3223P08R TOOL HOLDER	W					12
486	CGIL3223P08R TOOL HOLDER	W					12
	Grooving tools						
487	CFIR 2525M03 TOOLHOLDER	W					12
488	LCMF160304-0300-MT GROOVING INSERTS	W					12
489	LCMF1603M0-0300-MP GROOVING INSERTS	W					12
490	CFIL 2525M03 TOOLHOLDER	W					12
491	CFIR 2525M04 TOOLHOLDER	W					12
492	LCMF160404-0400-MT GROOVING INSERTS	W					12
493	LCMF1604M0-0400-MP GROOVING INSERTS	W					12
494	CFIL 2525M04 TOOLHOLDER	W					12
495	CFIR 2525M05 TOOLHOLDER	W					12
496	LCMF160508-0500-MT GROOVING INSERTS	W					12
497	LCMF1605M0-0500-MP GROOVING INSERTS	W					12
498	CFIL 2525M05 TOOLHOLDER	W					12
499	CFIR 2525M06 TOOLHOLDER	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
500	LCMF160608-0600-MT GROOVING INSERTS	W					12
501	LCMF1606M0-0600-MP GROOVING INSERTS	W					12
502	CFIL 2525M06 TOOLHOLDER	W					12
503	CFMR 2525M03 TOOLHOLDER	W					12
504	CFML 2525M03 TOOLHOLDER	W					12
505	CFMR 2525M04 TOOLHOLDER	W					12
506	CFML 2525M04 TOOLHOLDER	W					12
507	CFMR 2525M05 TOOLHOLDER	W					12
508	CFML 2525M05 TOOLHOLDER	W					12
509	CFMR 2525M06 TOOLHOLDER	W					12
510	CFML 2525M06 TOOLHOLDER	W					12
511	CFMR 2525M08 TOOLHOLDER	W					12
512	LCMF 300808-0800-FT GROOVING INSERTS	W					12
513	LCMF1608M0-0800-MP GROOVING INSERTS	W					12
514	SRDCN 2525M06 TOOLHOLDER	W					12
515	RCMT CENTER INSERTS	W					12
516	INSERT SCREW C02506-T07P	W					12
517	SHIM SCREW CA3510	W					12
518	SRDCN 2525M08 TOOLHOLDER	W					12
519	RCMT CENTER INSERTS	W					12
520	SRDCN 2525M10 TOOLHOLDER	W					12
521	INSERT SHIM 111.19-620	W					12
522	SRDCN 3225M12 TOOLHOLDER	W					12
523	INSERT SHIM 111.19-621	W					12
524	SRDCN 3225M16 TOOLHOLDER	W					12
525	INSERT SHIM SRN16T3M0	W					12
526	SHIM SCREW CA3515	W					12
	Parting blocks & blades						
527	8 x Parting blocks 150.10-2525-25	W					12
528	8 x Parting blocks 150.10-3232-25	W					12
529	100 x Screw MF6S6X25	W					12
530	100 x Wedge clamp 150.10-646	W					12
531	100 x Wedge screw 150.10-650	W					12
532	200 x 3mm parting inserts	W					12
533	200 x 4mm parting inserts	W					12
534	200 x 5mm parting inserts	W					12
535	200 x 6mm parting inserts	W					12
536	10 x 3mm parting blade	W					12
537	10 x 4mm parting blade	W					12
538	10 x 5mm parting blade	W					12
539	10 x 6mm parting blade	W					12
540	3 x ISCAR parting block SGTBU 40	W					8
541	10 x ISCAR parting blades SGIH 53-8	W					12
542	100 x GTN8 IC354 inserts R249.00 PER INSERT	W					16
543	TP2313 SPECIAL TOOL HOLDER 2 TRIANGLE INSERTS BOTH SIDES FOR PULL FACE MACHINING	W					12
544	TP1859 L/R SPECIAL TOOL HOLDER FOR ARNOT	W					12
545	TP21517 L/R SPECIAL TOOL HOLDER FOR KENDAL	W					12
546	100 x LCGN1603MO-0100L-R CP500 INSERTS	W					12
547	100 x LCGN1603MO-0100R-R CP500 INSERTS	W					12
548	TP1734 LCMF INSERTS ONE ON EITHER SIDE OF TOOL	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
	U Drill, inserts & spares						
549	SD503-15-45-20R7 U DRILL	W					12
550	SD503-16-48-20R7 U DRILL	W					12
551	SD503-17-51-20R7 U DRILL	W					12
552	Centre insert SPGX0502-C1 (RANGE 15-17 U DRILL)	W					12
553	Periph insert SCGX050204-P2 (RANGE 15-19 U DRILL)	W					12
554	SD503-18-54-20R7 U DRILL	W					12
555	SD503-19-57-20R7 U DRILL	W					12
556	SD503-20-60-25R7 U DRILL	W					12
557	SD503-21-63-25R7 U DRILL	W					12
558	Centre insert SPGX0602-C1 (RANGE 18-21 U DRILL)	W					12
559	Periph insert SCGX060204-P2 (RANGE 20-22 U DRILL)	W					12
560	SD503-22-66-25R7 U DRILL	W					12
561	SD503-23-69-25R7 U DRILL	W					12
562	SD503-24-72-25R7 U DRILL	W					12
563	SD503-25-75-32R7 U DRILL	W					12
564	Centre insert SPGX0703-C1 (RANGE 22-25 U DRILL)	W					12
565	SD503-26-78-32R7-SP09 U DRILL	W					12
566	SD503-27-81-32R7 U DRILL	W					12
567	SD503-28-84-32R7-SC07 U DRILL	W					12
568	SD503-29-87-32R7 U DRILL	W					12
569	SD503-30-90-32R7 U DRILL	W					12
570	SD503-31-93-32R7 U DRILL	W					12
571	Centre insert SPGX0903-C1 (RANGE 26-31 U DRILL)	W					12
572	Periph insert SCGX070308-P2 (RANGE 23-28 U DRILL)	W					12
573	SD503-32-96-32R7-SP11 U DRILL	W					12
574	SD503-33-99-32R7 U DRILL	W					12
575	SD503-34-102-32R7 U DRILL	W					12
576	SD503-35-105-32R7 U DRILL	W					12
577	SD503-36-108-32R7 U DRILL	W					12
578	SD503-37-111-32R7 U DRILL	W					12
579	Centre insert SPGX11T3-C1 (RANGE 32-37 U DRILL)	W					12
580	Periph insert SCGX09T308-P2 (RANGE 29-34 U DRILL)	W					12
581	SD503-38-114-32R7-SP12 U DRILL	W					12
582	SD503-39-117-32R7 U DRILL	W					12
583	SD503-40-120-32R7 U DRILL	W					12
584	SD503-41-123-40R7 U DRILL	W					12
585	SD503-42-126-40R7 U DRILL	W					12
586	SD503-43-129-40R7 U DRILL	W					12
587	Centre insert SPGX12T3-C1 (RANGE 38-43 U DRILL)	W					12
588	Periph insert SCGX120408-P2 (RANGE 35-44 U DRILL)	W					12
589	SD503-44-132-40R7 U DRILL	W					12
590	SD503-45-135-40R7 U DRILL	W					12
591	SD503-46-138-40R7 U DRILL	W					12
592	SD503-47-141-40R7 U DRILL	W					12
593	SD503-48-144-40R7 U DRILL	W					12
594	SD503-49-147-40R7 U DRILL	W					12
595	SD503-50-150-40R7 U DRILL	W					12
596	SD503-51-153-32R7 U DRILL	W					12
597	Centre insert SPGX1504-C1 (RANGE 44-51 U DRILL)	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
598	Periph insert SCGX150512-P2 (RANGE 45-59 U DRILL)	W					12
599	SD503-52-156-40R7 U DRILL	W					12
600	SD503-53-159-40R7 U DRILL	W					12
601	SD503-54-162-40R7 U DRILL	W					12
602	SD503-55-165-40R7 U DRILL	W					12
603	SD503-56-168-40R7 U DRILL	W					12
604	SD503-57-171-40R7 U DRILL	W					12
605	SD503-58-174-40R7 U DRILL	W					12
606	SD503-59-177-40R7 U DRILL	W					12
607	Centre insert SPGX1904-C1 (RANGE 52-59 U DRILL)	W					12
608	SD542-60-150-40R7 U DRILL	W					12
609	Centre insert SPGX0903-C1	W					12
610	Periph insert SCGX09T308	W					12
611	SD542-65-162.5-40R7 U DRILL	W					8
612	Centre insert SPGX11T3-C1	W					12
613	Periph insert SCGX09T308	W					12
614	SD542-70-175-40R7 U DRILL	W					12
615	Centre insert SPGX11T3-C1	W					12
616	Periph insert SCGX120408	W					12
617	SD542-75-187.5-50R7 U DRILL	W					8
618	Centre insert SPGX12T3-C1	W					12
619	Periph insert SCGX120408	W					12
620	SD542-80-200-50R7 U DRILL	W					8
621	Centre insert SPGX12T3-C1	W					12
622	Periph insert SCGX120408	W					12
623	SD542-85-212.5-50R7 U DRILL	W					8
624	Centre insert SPGX12T3-C1	W					12
625	Periph insert SCGX120408	W					12
626	C03007-T07P INSERT SCREW	W					12
627	C03009-T09P INSERT SCREW	W					12
628	C03508-T07P INSERT SCREW	W					12
629	C03508-T08P INSERT SCREW	W					12
630	C03508-T15P INSERT SCREW	W					12
631	C05012-T15P INSERT SCREW	W					12
632	C02245-T07P INSERT SCREW	W					12
633	C02205-T07P INSERT SCREW	W					12
634	C02506-T08P INSERT SCREW	W					12
635	C02507-T08P INSERT SCREW	W					12
636	C03007-T09P INSERT SCREW	W					12
637	C03009-T08P INSERT SCREW	W					12
638	C03508-T15P INSERT SCREW	W					12
639	C05012-T15P INSERT SCREW	W					12
640	C03007-T07P INSERT SCREW	W					12
641	C03009-T09P INSERT SCREW	W					12
642	C05012-T15P INSERT SCREW	W					12
643	C03508-T07P INSERT SCREW	W					12
	Solid carbide slot drills						
644	8 mm	W					12
645	10 mm	W					12
646	12 mm	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
647	14 mm	W					12
648	16 mm	W					12
649	18 mm	W					12
650	20 mm	W					12
651	25 mm	W					12
652	30 mm	W					12
653	40 mm	W					12
	Minimaster shanks MM06						
654	MM06-10040.0-0007 TOOLHOLDER	W					12
655	MM06-06007-R05A30-M02 INSERTS	W					12
656	MM06-06007-R05A30-E02 INSERTS	W					12
657	MM06-06007-R20A30-M02 INSERTS	W					12
658	MM06-16075.3-3009 TOOLHOLDER	W					12
659	MM06-06004-R04-MD02 INSERTS	W					12
660	MM06-06004-R10-MD02 INSERTS	W					12
661	MM06-06004-R20-MD02 INSERTS	W					12
662	MM06-12120.0-1050DS TOOLHOLDER	W					12
663	MM06-06003-C90-M02 INSERTS	W					12
664	MM06-06004-R10-PL-MD02 INSERTS	W					12
665	MM06-20250.0-1035DS TOOLHOLDER	W					12
666	MM06-06007-B90A30-E02 INSERTS	W					12
667	MM06-06006-B90-MD02 INSERTS	W					12
668	MM06-10100.0-1035DS TOOLHOLDER	W					12
	Minimaster shanks MM08						
669	MM08-16070.3-0007 TOOLHOLDER	W					12
670	MM08-08009-R05A30-M03 INSERTS	W					12
671	MM08-08009-R10A30-D02 INSERTS	W					12
672	MM08-08009-R20A30-M03 INSERTS	W					12
673	MM08-16075.3-3012 TOOLHOLDER	W					12
674	MM08-08005-R04-MD03 INSERTS	W					12
675	MM08-08005-R10-MD03 INSERTS	W					12
676	MM08-08009-B90A30-M03 INSERTS	W					12
677	MM08-16120.3-5048M TOOLHOLDER	W					12
678	MM08-08008-B90P-M03 INSERTS	W					12
679	MM08-07809-R02A30-M03 INSERTS	W					12
680	MM08-16150.0-1030M TOOLHOLDER	W					12
681	MM08-08004-C90-M03 INSERTS	W					12
682	MM08-08006-6030-E03 INSERTS	W					12
683	MM08-20250.0-1050DS TOOLHOLDER	W					12
	Minimaster shanks MM10						
684	MM10-20075.3-0010 TOOLHOLDER	W					12
685	MM10-10012-R05A30-M03 INSERTS	W					12
686	MM10-10012-R10A30-D03 INSERTS	W					12
687	MM10-10012-R20A30-M03 INSERTS	W					12
688	MM10-20085.3-3023 TOOLHOLDER	W					12
689	MM10-10007-R04-MD04 INSERTS	W					12
690	MM10-10007-R10-MD04 INSERTS	W					12
691	MM10-10005-C90-M03 INSERTS	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
692	MM10-20140.3-5060 TOOLHOLDER	W					12
693	MM10-10008-6040-E03 INSERTS	W					12
694	MM10-10007-R10-PL-MD04 INSERTS	W					12
695	MM10-32250.0-10063 TOOLHOLDER	W					12
696	MM10-10012-B90A30-M03 INSERTS	W					12
697	MM10-10010-B90-MD04 INSERTS	W					12
698	MM10-16160.0-1055DS TOOLHOLDER	W					12
	Minimaster shanks MM12						
699	MM012-20080.3-0012 TOOLHOLDER	W					12
700	MM12-12015-R05A30-M04 INSERTS	W					12
701	MM12-12015-R10A30-M04 INSERTS	W					12
702	MM12-12015-R20A30-M04 INSERTS	W					12
703	MM12-20095.3-3027 TOOLHOLDER	W					12
704	MM12-12008-R08-MD05 INSERTS	W					12
705	MM12-12008-R20-MD05 INSERTS	W					12
706	MM12-11715-R03A30-M04 INSERTS	W					12
707	MM12-20150.3-5049 TOOLHOLDER	W					12
708	MM12-13709T-R03-D05 INSERTS	W					12
709	MM12-12006-C90-M04 INSERTS	W					12
710	MM12-32250.0-10085 TOOLHOLDER	W					12
711	MM12-12010-CR10-MD05 INSERTS	W					12
712	MM12-12010-CR20-MD05 INSERTS	W					12
713	MM12-12010-CR30-MD05 INSERTS	W					12
714	MM12-16120.0-1045DS TOOLHOLDER	W					12
715	MM12-12015-B90A30-M04 INSERTS	W					12
716	MM12-12012-B90S-E05 INSERTS	W					12
	Minimaster shanks MM16						
717	MM016-25100.3-0019 TOOLHOLDER	W					12
718	MM16-16019-R05A30-M06 INSERTS	W					12
719	MM16-16019-R10A30-M06 INSERTS	W					12
720	MM16-16019-R20A30-M06 INSERTS	W					12
721	MM16-20115.3-3045 TOOLHOLDER	W					12
722	MM16-20015-R05A30-M06 INSERTS	W					12
723	MM16-20015-R10A30-M06 INSERTS	W					12
724	MM16-16011-R08-MD07 INSERTS	W					12
725	MM16-25170.3-5056 TOOLHOLDER	W					12
726	MM16-16011-R20-MD07 INSERTS	W					12
727	MM16-16013-R08A8-E06 INSERTS	W					12
728	MM16-32250.0-10047 TOOLHOLDER	W					12
729	MM16-15719-R03A30-M06 INSERTS	W					12
730	MM16-15711T-R03-D07 INSERTS	W					12
731	MM16-19019-C90 INSERTS	W					12
732	MM16-20130.0-1045DS TOOLHOLDER	W					12
733	MM16-16019-B90A30-M06 INSERTS	W					12
734	MM16-16016-B90-MD07 INSERTS	W					12
	Square shoulder milling						
735	R217.69-2020.0-12-2AN ARBOR	W					4
736	C03507-T10P SCREWS	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
737	XOEX 120404FR-E06 INSERTS	W					12
738	R217.69-3232.0-12-3AN ARBOR	W					4
739	C03508-T10P SCREWS	W					12
740	XOEX 120408FR-E06 INSERTS	W					12
741	R217.69-3240.0-12-5AN ARBOR	W					4
742	C03509-T10P SCREWS	W					12
743	XOEX 120412-TR-ME08 INSERTS	W					12
744	R217.69-2020.0-12-2AN ARBOR	W					4
745	R217.69-3232.0-18-3AN ARBOR	W					4
746	C04510-T20P SCREWS	W					12
747	XOEX180604FR-E10 INSERTS	W					12
748	R217.69-3240.0-18-4AN ARBOR	W					12
749	XOEX180608FR-E10 INSERTS	W					12
750	XOEX180620R-M10 INSERTS	W					12
751	XOEX180631R-M10 INSERTS	W					12
752	XOEX180640R-M10 INSERTS	W					12
753	XOEX180650R-M10 INSERTS	W					12
754	XOEX180663R-M10 INSERTS	W					12
755	R220.69-0050-18-4AN ARBOR	W					4
756	C04510-T20P SCREWS	W					12
757	R220.69-0080-18-5AN ARBOR	W					4
758	R220.69-0100-18-6AN ARBOR	W					4
759	R220.69-0125-18-7AN ARBOR	W					4
760	R220.69-8160-18-10CN ARBOR	W					4
761	AU1114T-T15P SETTING GAUGE	W					4
762	C04510-T20P SCREWS	W					12
763	FS96018 CASSET SCREWS	W					12
764	XO18PRN CASSETS	W					12
765	R220.69-8200-18-12CN ARBOR	W					4
766	R220.69-8250-18-16CN ARBOR	W					4
	Copy milling cutters						
767	R218.20-2016.0-14.070A ARBOR	W					4
768	C02506-T08P SCREWS	W					12
769	218.20-080ER-M04 INSERT	W					12
770	R218.20-2520.0-18.120A ARBOR	W					4
771	C03007-T09P SCREWS	W					12
772	218.20-100ER-M05 INSERT	W					12
773	R218.20-3225.0-22.160A ARBOR	W					4
774	C04009-T15P SCREWS	W					12
775	218.20-125ER-M07 INSERT	W					12
776	R218.20-3230.0-26.160A ARBOR	W					4
777	C024009-T08P SCREWS	W					12
778	218.20-150ER-M08 INSERT	W					12
779	R218.20-3232.0-28.160A ARBOR	W					4
780	C04011-T08P SCREWS	W					12
781	218.20-160ER-M08 INSERT	W					12
782	R218.20-3240.3S-60.100 ARBOR	W					4
783	C05013-T20P SCREWS	W					12
784	R218.20-3250.3S-70.100 ARBOR	W					4
785	C06018-T25P SCREWS	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
	Thread milling						
786	R396.19-2517.3S-4003-2AM ARBOR	W					4
787	19A71000 SCREWS	W					12
788	369.19-4003.0N1.0ISO INSERTS	W					12
789	369.19-4003.0N1.5ISO INSERTS	W					12
790	396.19-4003.0N10UN INSERTS	W					12
791	R396.19-2522.3S-4003-3AM ARBOR	W					4
792	19A71000 SCREWS	W					12
793	369.19-4003.0N2.0ISO INSERTS	W					12
794	369.19-4003.0N2.5ISO INSERTS	W					12
795	396.19-4003.0N12UN INSERTS	W					12
796	R396.19-3232.3S-4003-6AM ARBOR	W					12
797	369.19-4003.0N3.0ISO INSERTS	W					12
798	369.19-4003.0N2.5ISO INSERTS	W					12
799	396.19-4003.0N14UN INSERTS	W					12
800	R396.19-3236.3S-4005-6AM ARBOR	W					12
801	396.19-4005.0N3.5ISO INSERTS	W					12
802	396.19-4005.0N4.0ISO INSERTS	W					12
803	396.19-4005.0N4.5ISO INSERTS	W					12
804	396.19-0058-4003-6AM ARBOR	W					4
805	19A71000 SCREWS	W					12
	Rough boring head EPB750 Graflex						
806	G0 A75000 Boring head	W					4
807	Centre screw 90A75000	W					12
808	Insert holder A75000CP0590	W					12
809	CCMT060204-F1 INSERT	W					12
810	G1 A75010 Boring head	W					4
811	Centre screw 90A75010	W					12
812	Insert holder A75010CC0690	W					12
813	G2 A75020 Boring head	W					4
814	Centre screw 90A75020	W					12
815	Insert holder A75020CC0690	W					12
816	G3 A75030 Boring head	W					4
817	Centre screw 90A75030	W					12
818	Insert holder A75030CC0990	W					12
819	CCMT009T308-F1 INSERT	W					12
820	G4 A75040 Boring head	W					4
821	Centre screw 90A75040	W					12
822	Insert holder A75040CC1290	W					12
823	CCMT120408-F2 INSERT	W					12
824	G5 A75050 Boring head	W					4
825	Centre screw 90A75050	W					12
826	Insert holder A75050CC1290	W					12
827	G6 A75060 Boring head	W					4
828	Centre screw 90A75060	W					12
829	Insert holder A75050CC1290	W					12
830	CCMT120408-F2 INSERT	W					12
	REAMERS						

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
	(Diameter x Length in mm Metric size)						
831	11.5X150	W					12
832	16X150	W					12
833	18X150	W					12
834	16.5X150	W					12
835	19X150	W					12
836	18.5X150	W					12
837	20X300	W					12
838	20.5X300	W					12
839	24X300	W					12
840	26X300	W					12
841	28X300	W					12
842	30X300	W					12
843	30.5X300	W					12
844	34X300	W					12
845	34.5X300	W					12
846	36X300	W					12
847	36.5X300	W					12
848	38X300	W					12
849	38.5X300	W					12
850	40X300	W					12
851	40.5X300	W					12
852	42X300	W					12
853	44X300	W					12
854	46X300	W					12
855	45X300	W					12
856	47X300	W					12
857	48X300	W					12
858	50X300	W					12
	DRILLS						
	(Diameter x Length mm Metric size)						
859	11X150	W					12
860	15.5X150	W					12
861	17.5X150	W					12
862	16X150	W					12
863	18.5X150	W					12
864	18X150	W					12
865	19.5X300	W					12
866	20X300	W					12
867	23.5X300	W					12
868	25.5X300	W					12
869	27.5X300	W					12
870	29.5X300	W					12
871	30X300	W					12
872	33.5X300	W					12
873	34X300	W					12
874	35.5X300	W					12
875	36X300	W					12
876	37.5X300	W					12
877	38X300	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
878	39.5X300	W					12
879	40X300	W					12
880	41.5X300	W					12
881	43.5X300	W					12
882	45.5X300	W					12
883	44.5X300	W					12
884	46.5X300	W					12
885	47.5X300	W					12
886	49.5X300	W					12
	Blades/Strips						
887	HSS parting blades	W					12
888	TP178B/M SMALL SPECIAL BLADE FOR SEAL STRIPS	W					12
889	TP178A/M BIG SPECIAL BLADE FOR SEALSTRIPS	W					12
890	75 x size 3x16x140 HSSCO PARTING BLADES	W					12
891		W					
892	ELECTRIC HAND DRILL/ IMPACT 13MM CHUCK 910 WATT (BOSCH / MAKITA / METABO)	W					12
893	BATTERY CORDLESS DRILL 18V 1.5 AH 2 WH (BOSCH / MAKITA / METABO)	W					12
894	ELECTRIC GRINDER 115 MM 900WATT (BOSCH / MAKITA / METABO)	W					12
895	JIG SAW (BOSCH / MAKITA / METABO)	W					12
896	MT M5802B CIRCULAR SAW (MAKITA)	W					2
897	JIG SAW BLADES (SET)	W					8
898	DRILL BITS 1MM TO 13MM (SET)	W					12
899	PIPE WRENCH 600MM	W					4
900	PIPE WRENCH 900MM	W					4
901	BOLT CUTTER SIZE 760	W					8
902	POP RIVET GUN	W					8
	<u>U Drills</u>	-	-	-	-		
903	K4D 20025-07	W					12
904	K4D 23025-07	W					12
905	K4D 25032-09	W					12
906	K4D 28032-09	W					12
907	K4D 30032-11	W					12
908	K4D 32032-11	W					12
909	K4D 35032-11	W					12
910	K4D 40040-13	W					12
	<u>Hydraulic Vices</u>	-	-	-	-		
911	HA-150	W					8
912	HA-200	W					8
	<u>CARBIDE 4FLUTE ENDMILLS</u>	-	-	-	-		
913	MS4MCD0100	W					12
914	MS4MCD0200	W					12
915	MS4MCD0300	W					12
916	MS4MCD0400	W					12
917	MS4MCD0500	W					12
918	MS4MCD0600	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
919	MS4MCD0800	W					12
920	MS4MCD1000	W					12
921	MS4MCD1200	W					12
922	MS4MCD1600	W					12
923	MS4MCD2000	W					12
	<u>Carbide Ball nose cutters</u>	-	-	-	-		
924	MS2MBR0150	W					12
925	MS2MBR0200	W					12
926	MS2MBR0250	W					12
927	MS2MBR0300	W					12
928	MS2MBR0400	W					12
929	MS2MBR0500	W					12
930	MS2MBR0600	W					12
931	MS2MBR0800	W					12
932	MS2MBR1000	W					12
	<u>Milling Cutters</u>	-	-	-	-		
933	AJX08R2025A20S	W					12
934	AJX09R2525A25S	W					12
935	AJX09R3235 A32S	W					12
936	AJX09R404SA32S	W					12
937	AJX12-050A03R	W					12
938	AJX14-063A03R	W					12
939	AJX14R08004D	W					12
940	ASX400R403S32	W					12
941	ASX400R503S32	W					12
942	ASX400R634S32	W					12
943	ASX400R804S32	W					12
944	ASX400-050A03R	W					12
945	ASX400-063A04R	W					12
946	ASX400-080B04R	W					12
947	ASX400-125B06R	W					8
948	AQXR254SA25L	W					8
949	AQXR254SA25S	W					8
950	AQXR324SA32L	W					8
951	AQXR324SA32S	W					8
952	AQXR404SA32L	W					8
953	AQXR404SA32S	W					8
	<u>Thread Milling Holders</u>	-	-	-	-		
954	TMC25-4 124/002	W					12
955	TMC25-5	W					12
956	TMC20-2	W					12
957	TMSH-D63-22-5	W					12
	<u>Turning Tool Holders</u>	-	-	-	-		
958	MDJNL2525M15	W					12

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
959	MWLNL2525M08	W					12
960	MTHR 25-25 M4	W					12
961	AI 25-3 LH	W					12
962	AL 25-4 LH	W					12
	Boring Bars	-	-	-	-		
963	A25R PDUNR15	W					12
964	A25R DWLNR08	W					12
965	MMTIR 24 20AQ16-C	W					12
966	A32S-PWLNR 08	W					12
967	A32S-PVPCR 13	W					12
968	NVR 10-2 RH	W					12
969	A40T-PWLNR 08	W					12
970	A40T-CGGR 04	W					12
971	A40T-CGGR 06	W					12
972	FSWUB1008R-3S	W					12
973	FSWUB1210R-3S	W					12
974	FSWUP1412R-4S	W					12
975	FSWUP1816R-4S	W					12
976	FSWUP2220R-6S	W					12
	Milling tool BT40 Holders	-	-	-	-		
977	BT40-1-13MM KEYLESS CHUCK	W					12
978	BT40-ER32 COLLET CHUCK	W					12
979	BT40-ER16 COLLET CHUCK	W					12
980	BT40-16MM SIDE LOCK HOLDER	W					12
981	BT40-20MM SIDE LOCK HOLDER	W					12
982	BT40-25MM SIDE LOCK HOLDER	W					12
983	BT40-32MM SIDE LOCK HOLDER	W					12
984	BT40-FMC-22MM-MILLING HOLDER	W					12
985	BT40-FMC-32MM-MILLING HOLDER	W					12
986	BT40-FMC-27MM MILLING HOLDER	W					12
987	Engraver	W					6
988	PENCIL GRINDER (DENTIST)	W				EACH	3
989	PENCIL GRINDER (NORMAL)	W				SET	1
990	ELECTRICAL DRILL 850 WATTS	W				EACH	3
991	SPECIAL TOOLS FOR REMOVING OF WEIGHTS	W					2
992	10 TO 40 NM TORQUE WRENCH	W					2
993	HEAT GUN 2000W	W				EACH	3
994	PNEUMATORQUE WITH REACTION ARM - WITH BATTERIES	W				EACH	2
995	Bridge Cam Gauge -To assist welding visual inspection. To measure depth of undercut, butt weld reinforcement height, fillet leg length and weld preparation angles.	W					4
996	Steel ruler -150 mm in metric and imperial measurements	W					6
997	Inspection Mirror with rotating head and magnetic base	W					5
998	Digital Vernier calliper -150 mm with internal and external measuring jaws as well as depth blade - LCD display and Alkaline lithium button cell battery 1.5V	W					6
999	Inspection Torch Rechargeable - LED with pouch	W					5
1000	Shielding Gas Flow Check Tool -Accurately measure the flow of gas from nozzle to the weld. Gas flow reads in litres per minute (L/min) with marked increments	W					2
1001	Non-contact Voltage True-RMS AC/DC Clamp Meter . 33 mm Clamp jaw opening. Measures AC/DC Current up to 1000A. Measures AC/DC Voltage up to 1000V. Temperature measurement to 10000C . LCD Display. Premium carrying Case. To measure Voltage and Current with clamp jaw.	W					2

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
1002	Handheld Digital Probe Thermometer . K-type: -2000C to 13720C. J-type: -2100C to 11000C. Single input digital thermometer for Lab, QA, process calibration, food safety and HVAC. Presents results in 0C, 0F or Kelvin (K) on a large backlit display. Includes a relative time clock on MIN, MAX, and AVG to provide a time reference for major events.	W					2
1003	Digital Cameras - 20mega pixel with SD card	W					4
1004	Thread gauges 60 degree	W					4
1005	Digital Verniers 0-150MM	W					5
1006	Tape measures 3meters	W					5
1007	Tape measures 5 meters	W					5
1008	Digital thermometer K-TYPE- 0- 100 degree Celcius.	W					2
1009	Small Shifting Spanner. 150mm	W					4
1010	600mm vernier	W					6
1011	Clock Gauges Small one 100-150 Diametre	W					8
1012	Clock Gauges magnatic base	W					8
1013	Rubber Mallets small one	W					6
1014	Knee Pads	W					10
1015	Temperature Gauge 0-100 Degree celcius	W					2
1016	Electrical extension cord 15m	W					2
1017	Electrical extension cord 5 m	W					2
1018	Mulleges	W					20
1019	Gas Mater	W					2
1020	Clamp meter	W					2
1021	SSD EXTERNAL HARD DRIVE- 1T –	W					5
1022	TELESCOPIC, MAGNETIC FLEXIBLE MIRROR	W					5
1023	THREAD PITCH GAUGE (METRIC & IMPERIAL)	W					5
1024	COMBINATION SQUARE	W					5
1025	PRECISION SPRING DIVIDER EXTERNAL -300MM -	W					5
1026	PRECISION SPRING DIVIDER INTERNAL-150MM -R200	W					5
1027	INSPECTION TORCH WITH RECHARGEABLE BATTERY & PORCH	W					5
1028	SCRIBER- STRAIGHT SET	W					5
1029	MICROMETER SET, 0-100MM	W					5
1030	ALLEN KEY SET	W					5
1031	POCKET SIZE PI TAPE (MODEL DCT120)	W					5
1032	THREE EDGE HOLLOW SCAPER SIZE 200	W					5
1033	PORTABLE DIGITAL MICROSCOPE-	W					5
1034	VIDEOSCOPE	W					5
1035	DIGITAL VERNIER- UP TO 150MM	W					5
1036	BOREScope/ENDOSCOPE	W					5
1037	ULTRASONIC THICKNESS GAUGE	W					5
1038	HANDHELD LASER SCANNER-for small components	W					5
1039	THERMAL CAMERA -diagnise failures	W					2
1040	GORILLA TAPE- stronger than duct tape	W					10
1041	LARGE DESKTOP MONITOR	W					10
1042	HANDHELD STROBOSCOPE	W					2
1043	DIGITAL FORCE GAUGE	W					4
1044	VIBRATION MONITOR	W					1
1045	LEATHERMAN WINGMAN TOOL OR HANDHELD MULTITOOL	W					10
1046	TELESCOPIC MAGNET	W					15
1047	WRENCH STEEL TAP NO 1 M1-12		M	P	V		32
1048	WRENCH STEEL TAP NO 3 M5-20		M	P	V		32
1049	WRENCH STEEL TAP NO 4 M11-27		M	P	V		32
1050	WRENCH STEEL TAP NO 5 M13-32		M	P	V		32

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
1051	WRENCH STEEL TAP NO 6 M18-42		M	P	V		32
1052	Expanding Barriers 5mt		M	P	V		160
1053	Flogging Spanner 95MM		M	P	V		32
1054	SOCKET SET 1/2"DR 8-32MM		M	P	V		32
1055	SPANNER PIPE RING 52MM		M	P	V		32
1056	CALIPER SPRING INSIDE 200MM (Stahlwille/Gedore)		M	P	V		32
1057	CALIPER SPRING O/SIDE 200MM (Stahlwille/Gedore)		M	P	V		32
1058	SPANNER RING PIPE H/D 60MM		M	P	V		32
1059	CIRCLIP PLIERS O/S 300MM A41		M	P	V		32
1060	GWALA 450MM		M	P	V		32
1061	HAMMER DEAD BLOW 5.21KG		M	P	V		32
1062	TOMMY BAR AF TOOL 450 X 19MM		M	P	V		32
1063	HACKSAW JUNIOR ECIPLSE		M	P	V		16
1064	SILICONE GUN H/DUTY ALCOLINE		M	P	V		32
1065	MALLET RUBBER FACE LIVINGSTON		M	P	V		32
1066	SPANNER RING PIPE 55MM		M	P	V		32
1067	DRILL BIT SET 1 - 13MM SOMTA		M	P	V		32
1068	SCRAPER PAINT WEDGE TYPE		M	P	V		48
1069	ENGINEERS LEVEL 300MM		M	P	V		32
1070	POP RIVITER LAZY BOY (Somta)		M	P	V		16
1071	G CLAMP H/D 12' RECORD		M	P	V		32
1072	TIN SNIP 300MM - CRESCENT		M	P	V		32
1073	CIRCLIP PLIER 315MM EXT		M	P	V		32
1074	T-BAR HANDLE & HEAD 3/4"DR		M	P	V		32
1075	SIDE CUTTER 250MM CRESENT		M	P	V		32
1076	COMBINATION PLIER 250MM 17		M	P	V		32
1077	PLIER LONG NOSE 200MM (Gedore)		M	P	V		32
1078	TIN SNIP 250MM - CRESCENT		M	P	V		32
1079	SPANNER FLOGGING O/END 27MM(Gedore)		M	P	V		32
1080	SPANNER FLOGGING 42MM STAHL		M	P	V		32
1081	SPANNER FLOGGING 48MM STAHL		M	P	V		32
1082	HAMMER ENG 500G - LASHER (Gedore)		M	P	V		32
1083	SOCKET IMPACT 1"DR 48MM (Gedore)		M	P	V		32
1084	RATCHET & HNDL 1"DR (Gedore)		M	P	V		32
1085	RATCHET & HNDL 3/4"DR		M	P	V		32
1086	SOCKET IMPACT 1/2" M 3/4"DR		M	P	V		32
1087	SOCKET IMPACT 1"DR 48MM		M	P	V		32
1088	SPANNER OPEN END - 50MM		M	P	V		32
1089	SOCKET IMPACT 1 1/2" DR 46MM		M	P	V		32
	<u>Spanners</u>						
1090	SPANNER FLOGGING 38MM - STW42 Stahlwille		M	P	V		32
1091	SPANNER FLOGGING 24MM Stahlwille		M	P	V		32
1092	SPANNER FLOGGING 27MM Stahlwille		M	P	V		32
1093	SPANNER FLOGGING 30MM Stahlwille		M	P	V		32
1094	SPANNER FLOGGING 32MM Stahlwille		M	P	V		32
1095	SPANNER FLOGGING 38MM Stahlwille		M	P	V		32
1096	SPANNER FLOGGING 41MM Stahlwille		M	P	V		32
1097	SPANNER FLOGGING 46MM Stahlwille		M	P	V		32
1098	SPANNER FLOGGING 50MM Stahlwille		M	P	V		32
1099	SPANNER FLOGGING 52MM Stahlwille		M	P	V		32

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
1100	SPANNER FLOGGING 55MM Stahlwille		M	P	V		32
1101	SPANNER FLOGGING 60MM Stahlwille		M	P	V		32
1102	SPANNER FLOGGING 65MM Stahlwille		M	P	V		32
1103	SPANNER FLOGGING 70MM Stahlwille		M	P	V		16
1104	SPANNER FLOGGING 75MM Stahlwille		M	P	V		16
1105	SPANNER FLOGGING 80MM Stahlwille		M	P	V		16
1106	SPANNER FLOGGING 90MM Stahlwille		M	P	V		16
1107	SPANNER FLOGGING 95MM Stahlwille		M	P	V		16
1108	SPANNER FLOGGING 100MM Stahlwille		M	P	V		16
1109	SPANNER FLOGGING 105MM Stahlwille		M	P	V		16
1110	SPANNER FLOGGING 110MM Stahlwille		M	P	V		16
1111	SPANNER PIPE RING 24MM Stahlwille		M	P	V		32
1112	SPANNER PIPE RING 27MM Stahlwille		M	P	V		32
1113	SPANNER PIPE RING 30MM Stahlwille		M	P	V		48
1114	SPANNER PIPE RING 32MM Stahlwille		M	P	V		32
1115	SPANNER PIPE RING 36MM Stahlwille		M	P	V		48
1116	SPANNER PIPE RING 38MM Stahlwille		M	P	V		32
1117	SPANNER PIPE RING 41MM Stahlwille		M	P	V		32
1118	SPANNER PIPE RING 46MM Stahlwille		M	P	V		32
1119	SPANNER PIPE RING 50MM Stahlwille		M	P	V		32
1120	SPANNER PIPE RING 55MM Stahlwille		M	P	V		32
1121	SPANNER PIPE RING 60MM Stahlwille		M	P	V		32
1122	SPANNER PIPE RING 65MM Stahlwille		M	P	V		16
1123	SPANNER PIPE RING 70MM Stahlwille		M	P	V		16
1124	SPANNER PIPE RING 75MM Stahlwille		M	P	V		16
1125	SPANNER PIPE RING 80MM Stahlwille		M	P	V		16
1126	SPANNER PIPE RING 85MM Stahlwille		M	P	V		16
1127	SPANNER PIPE RING 90MM Stahlwille		M	P	V		16
1128	SPANNER PIPE RING 95MM Stahlwille		M	P	V		16
1129	SPANNER PIPE RING 100MM Stahlwille		M	P	V		16
1130	HAMMER BLACK SMITH 6;3KG		M	P	V		32
1131	HAMMER BLACK SMITH 3;6KG		M	P	V		32
1132	SPANNER 1/8' - 1 1/4'		M	P	V		32
1133	SPANNER FLOGGING 47MM - STAHL		M	P	V		32
	<u>Sockets</u>	-	-	-	-	-	-
1134	SOCKET IMPACT 22MM 3/4' DR Gedore		M	P	V		32
1135	SOCKET IMPACT 24MM 3/4' DR Gedore		M	P	V		32
1136	SOCKET IMPACT 27MM 3/4' DR Gedore		M	P	V		32
1137	SOCKET IMPACT 30MM 3/4' DR Gedore		M	P	V		32
1138	SOCKET IMPACT 32MM 3/4' DR Gedore		M	P	V		32
1139	SOCKET IMPACT 36MM 3/4' DR Gedore		M	P	V		32
1140	SOCKET IMPACT 38MM 3/4' DR Gedore		M	P	V		32
1141	SOCKET IMPACT 41MM 3/4' DR Gedore		M	P	V		32
1142	SOCKET IMPACT 46MM 3/4' DR Gedore		M	P	V		32
1143	SOCKET IMPACT 50MM 3/4' DR Gedore		M	P	V		32
1144	SOCKET IMPACT 55MM 3/4' DR Gedore		M	P	V		32
1145	SOCKET IMPACT 60MM 3/4' DR Gedore		M	P	V		32
1146	SOCKET IMPACT 65MM 3/4' DR Gedore		M	P	V		32
1147	EXTENSION IMPACT 170MM 3/4' Gedore		M	P	V		32
1148	EXTENSION IMPACT 180MM 1' DR Gedore		M	P	V		32

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
1149	EXTENSION IMPACT 270MM 1'DR Gedore		M	P	V		32
1150	EXTENSION IMPACT 330MM 1' DR Gedore		M	P	V		32
1151	EXTENSION IMPACT 330MM 3/4' Gedore		M	P	V		32
1152	REDUCER IMPACT 3/4' F - 1' Gedore		M	P	V		32
1153	REDUCER IMPACT 3/4' F-1' M Gedore		M	P	V		32
1154	SOCKET IMPACT 13MM 1/2' DR Gedore		M	P	V		32
1155	SOCKET IMPACT 14MM 1/2' DR Gedore		M	P	V		32
1156	SOCKET IMPACT 15MM 1/2' DR Gedore		M	P	V		32
1157	SOCKET IMPACT 16MM 1/2' DR Gedore		M	P	V		32
1158	SOCKET IMPACT 17MM 1/2' DR Gedore		M	P	V		32
1159	SOCKET IMPACT 19MM 1/2' DR Gedore		M	P	V		32
1160	SOCKET IMPACT 21MM 1/2' DR Gedore		M	P	V		32
1161	SOCKET IMPACT 24MM 1/2' DR Gedore		M	P	V		32
1162	SOCKET IMPACT 24MM 1' DR Gedore		M	P	V		32
1163	SOCKET IMPACT 27MM 1/2' DR Gedore		M	P	V		32
1164	SOCKET IMPACT 30MM 1/2' DR Gedore		M	P	V		32
1165	SOCKET IMPACT 32MM 1/2' DR Gedore		M	P	V		32
1166	SOCKET IMPACT 32MM 1' DR Gedore		M	P	V		32
1167	SOCKET IMPACT 36MM 1' DR Gedore		M	P	V		32
1168	SOCKET IMPACT 38MM 1' DR Gedore		M	P	V		32
1169	SOCKET IMPACT 41MM 1' DR Gedore		M	P	V		32
1170	SOCKET IMPACT 46MM 1' DR Gedore		M	P	V		32
1171	SOCKET IMPACT 55MM 1' DR Gedore		M	P	V		32
1172	SOCKET IMPACT 60MM 1' DR Gedore		M	P	V		32
1173	SOCKET IMPACT 65MM 1' DR Gedore		M	P	V		16
1174	SOCKET IMPACT 70MM 1' DR Gedore		M	P	V		16
1175	SOCKET IMPACT 75MM 1' DR Gedore		M	P	V		16
1176	SOCKET IMPACT 80MM 1' DR Gedore		M	P	V		16
1177	SOCKET IMPACT 85MM 1' DR Gedore		M	P	V		16
1178	SOCKET IMPACT 90MM 1' DR Gedore		M	P	V		16
1179	SOCKET IMPACT 95MM 1' DR Gedore		M	P	V		16
1180	SHIFTING SPANNER 18' Gedore		M	P	V		32
1181	SHIFTING SPANNER 24' Gedore		M	P	V		32
1182	SHIFTING SPANNER 30' Gedore		M	P	V		16
1183	SOCKET SET 22-50MM 3/4' Gedore		M	P	V		32
1184	SOCKET SET 32-80MM 1' DR Gedore		M	P	V		32
1185	STILSON WRENCH 36' - RIDGID		M	P	V		32
1186	TOMMY BAR 1200MM Lasher		M	P	V		32
1187	TOMMMY BAR 600MM Lasher		M	P	V		32
1188	NORBAR SL2 TORQUE WRENCH		M	P	V		16
1189	NORBAR 3AR TORQUE WRENCH		M	P	V		16
1190	REDUCER IMPACT 3/4' DR M-1'		M	P	V		32
1191	SOCKET IMPACT 30MM X 1' DR Gedore		M	P	V		32
1192	SOCKET IMPACT 50MM 1 1/2' DR Gedore		M	P	V		32
1193	SOCKET IMPACT 1 1/2' F - 1' Gedore		M	P	V		32
1194	SOCKET IMPACT 1' DR 50MM Gedore		M	P	V		32
1195	SOCKET IMPACT 70MM 3/4' DR Gedore		M	P	V		32
1196	SOCKET IMPACT 100MM 1' DR Gedore		M	P	V		32
1197	TOMMY BAR 1800MM Gedore		M	P	V		32
1198	SOCKET IMPACT 3/4' DR 1/2' Gedore		M	P	V		32
1199	STILSON WRENCH 600MM Gedore		M	P	V		16

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
1200	PIPE WRENCH 450MM		M	P	V		16
1201	HAMMER DEAD BLOW 5LBS		M	P	V		32
1202	HAMMER DEAD BLOW 8LBS		M	P	V		32
1203	SOCKET IMPACT 1" DR 52MM		M	P	V		32
1204	BENCH VICE 8'		M	P	V		64
1205	SHIM PUNCHES - SMALL SET		M	P	V		32
1206	SHIM PUNCHES - LARGE SET		M	P	V		32
1207	PORTABLE RADIO 2 Way Radio		M	P	V		160
1208	PLIER WATER PUMP 400MM-TOOLS_1 Gedore		M	P	V		32
1209	PLIER WATER PUMP 250MM-TOOLS_1 Gedore		M	P	V		32
1210	BEARING SCRAPER SET 4 PIECE-TOOLS_1		M	P	V		64
1211	VICE GRIP-TOOLS_1 Gedore		M	P	V		32
1212	SPANNER COMBINATION SET 6-36MM-TOOLS_1 Stahlwille		M	P	V		32
1213	SPANNER RING 13/16' X 11/16'-TOOLS_1		M	P	V		32
1214	SPANNER RING 13/16' X 25/32'-TOOLS_1		M	P	V		32
1215	SPANNER RING 7/8' X 3/4'-TOOLS_1		M	P	V		32
1216	SPANNER RING 7/8' X 15/16'-TOOLS_1		M	P	V		32
1217	SPANNER RING 1 7/16' X 1 1/4'-TOOLS_1		M	P	V		32
1218	SPANNER RING 1' X 1 1/8'-TOOLS_1		M	P	V		32
1219	SPANNER RING 1 3/8' X 1 1/4'-TOOLS_1		M	P	V		32
1220	SPANNER RING 1' X 1 1/8'-TOOLS_1		M	P	V		32
1221	SPANNER RING 1 7/16' X 1 1/4'-TOOLS_1		M	P	V		32
1222	SPANNER RING 1 3/4' X 1 5/8'-TOOLS_1		M	P	V		32
1223	SPANNER RING 2' X 1 13/16'-TOOLS_1		M	P	V		32
1224	SPANNER RING PIPE 1 1/8'DR-TOOLS_1		M	P	V		32
1225	SPANNER RING PIPE 1 1/4'DR-TOOLS_1		M	P	V		32
1226	SPANNER RING PIPE 1 5/16'DR-TOOLS_1		M	P	V		32
1227	SPANNER RING PIPE 1 3/8'DR-TOOLS_1		M	P	V		32
1228	SPANNER RING PIPE 1 7/16'DR-TOOLS_1		M	P	V		32
1229	SPANNER RING PIPE 1 1/2'DR-TOOLS_1		M	P	V		32
1230	SPANNER RING PIPE 1 5/8'DR-TOOLS_1		M	P	V		32
1231	SPANNER RING PIPE 1 11/16'DR-TOOLS_1		M	P	V		32
1232	SPANNER RING PIPE 1 3/4'DR-TOOLS_1		M	P	V		32
1233	SPANNER RING PIPE 2'DR-TOOLS_1		M	P	V		32
1234	SPANNER SINGLE O/E FLAT 04MM-TOOLS_1		M	P	V		32
1235	SPANNER SINGLE O/E FLAT 06MM-TOOLS_1		M	P	V		32
1236	SPANNER SINGLE O/E FLAT 07MM-TOOLS_1		M	P	V		32
1237	SPANNER DOUBLE O/E FLAT 02MM-TOOLS_1		M	P	V		32
1238	SPANNER DOUBLE O/E FLAT 03MM-TOOLS_1		M	P	V		32
1239	CIRCLIP STRAIGHT RATCHET TYPE-TOOLS_1		M	P	V		32
1240	CIRCLIP PLIER INT STRAIGHT-TOOLS_1		M	P	V		32
1241	CIRCLIP PLIER EXT BENT NOS-TOOLS_1		M	P	V		32
1242	SPANNER SINGLE FLAT 80MM-TOOLS_1		M	P	V		32
1243	SPANNER SINGLE FLAT 65MM-TOOLS_1 Stahlwille		M	P	V		32
1244	SPANNER SINGLE FLAT 55MM-TOOLS_1 Stahlwille		M	P	V		32
1245	SPANNER SINGLE FLAT 50MM-TOOLS_1 Stahlwille		M	P	V		32
1246	SPANNER D/SIDED FLAT 55MM-TOOLS_1 Stahlwille		M	P	V		32
1247	SPANNER D/SIDED FLAT 60MM-TOOLS_1 Stahlwille		M	P	V		32
1248	SPANNER D/SIDED FLAT 50MM-TOOLS_1 Stahlwille		M	P	V		32
1249	SPANNER D/SIDED FLAT 46MM-TOOLS_1 Stahlwille		M	P	V		32
1250	STRAIGHT EDGE 1828 X 76 X 12-TOOLS_1 Stahlwille		M	P	V		16

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
1251	SPANNER PEG 80MM PCD-TOOLS_1 Stahlwille		M	P	V		16
1252	SPANNER PEG 70MM PCD-TOOLS_1 Stahlwille		M	P	V		16
1253	SPANNER PEG 95MM PCD-TOOLS_1 Stahlwille		M	P	V		16
1254	SPANNER PEG 100MM PCD-TOOLS_1		M	P	V		16
1255	SPANNER PEG 105MM PCD-TOOLS_1		M	P	V		16
1256	SPANNER PEG 110MM PCD-TOOLS_1		M	P	V		16
1257	SPANNER PEG 125MM PCD-TOOLS_1		M	P	V		16
1258	SPANNER PEG 130MM PCD-TOOLS_1		M	P	V		16
1259	SPANNER PEG 140MM PCD-TOOLS_1		M	P	V		16
1260	SPANNER PEG 142MM PCD-TOOLS_1		M	P	V		16
1261	SPANNER PEG 145MM PCD-TOOLS_1		M	P	V		16
1262	SPANNER PEG 155MM PCD-TOOLS_1		M	P	V		16
1263	SPANNER PEG CW PUMP 240 MM P-TOOLS_1		M	P	V		16
1264	WYLER ADJUSTABLE MICROMETER SPIRIT LEVEL	W		P			10
	<u>Ellen key and Sockets</u>						
1265	ALLEN KEY SET 1 - 10mm		M	P			32
1266	ALLEN KEY 12mm		M	P			32
1267	ALLEN KEY 13mm		M	P			32
1268	ALLEN KEY 14mm		M	P			32
1269	ALLEN KEY 15mm		M	P			32
1270	ALLEN KEY 16mm		M	P			32
1271	ALLEN KEY 17mm		M	P			32
1272	ALLEN KEY 19mm		M	P			32
1273	ALLEN KEY 20mm		M	P			32
1274	ALLEN KEY 24mm		M	P			32
1275	ALLEN KEY 30mm		M	P			32
1276	ALLEN KEY 40mm		M	P			32
1277	ALLEN KEY 50mm		M	P			32
1278	ALLEN KEY 60mm		M	P			32
1279	ALLEN SOCKET 10MM Stahlwille		M	P			48
1280	ALLEN SOCKET 12MM Stahlwille		M	P			48
1281	ALLEN SOCKET 13MM Stahlwille		M	P			48
1282	ALLEN SOCKET 14MM Stahlwille		M	P			48
1283	ALLEN SOCKET 15MM Stahlwille		M	P			48
1284	ALLEN SOCKET 16MM Stahlwille		M	P			48
1285	ALLEN SOCKET 17MM Stahlwille		M	P			48
1286	ALLEN SOCKET 19MM Stahlwille		M	P			48
1287	ALLEN SOCKET 24MM Stahlwille		M	P			48
1288	ALLEN SOCKET 30MM Stahlwille		M	P			48
1289	ALLEN SOCKET 32MM Stahlwille		M	P			48
1290	ALLEN SOCKET 36MM Stahlwille		M	P			48
1291	HSS TAP M5		M	P			48
1292	HSS TAP M6		M				48
1293	HSS TAP M8		M				48
1294	HSS TAP M10		M				48
1295	HSS TAP M12		M				48
1296	HSS TAP M13		M				48
1297	HSS TAP M14		M				48
1298	HSS TAP M15		M				48
1299	HSS TAP M16		M				48

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
1300	HSS TAP M17		M				48
1301	HSS TAP M19		M				48
1302	HSS TAP M20		M				48
1303	HSS TAP M24		M				48
1304	HSS TAP M30		M				48
1305	HSS TAP M36		M				48
1306	DIE NUT M5		M				48
1307	DIE NUT M6		M				48
1308	DIE NUT M8		M				48
1309	DIE NUT M10		M	P			48
1310	DIE NUT M12		M	P			48
1311	DIE NUT M13		M	P			48
1312	DIE NUT M14		M	P			48
1313	DIE NUT M15		M	P			48
1314	DIE NUT M16		M	P			48
1315	DIE NUT M17		M	P			48
1316	DIE NUT M19		M	P			48
1317	DIE NUT M20		M	P			48
1318	DIE NUT M24		M	P			48
1319	DIE NUT M30		M	P			48
1320	DIE NUT M36		M	P			48
	<u>Power Tools</u>						
1321	KOSMOS EXT REEL HEAVY DUTY 30MT		M	P	V	6	96
1322	LEAD LIGHT 220V		M	P	V	10	160
1323	FLOOD / SPOT LIGHT 220V		M	P	V	6	96
1324	ELECTRIC SHREADER PAPER		M	P	V	1	16
1325	ELECTRIC BAG SEALER		M	P	V	1	16
1326	RUSSEL HOBBS AQUACOOLER - HOT & COLD		M	P	V	6	96
1327	WATER URN 220V 10lt		M	P	V	2	32
1328	KETTLE PINEWARE AUTO JUG CORDLESS 2LT		M	P	V	5	80
1329	DEFY 130LT BAR FRIDGE		M	P	V	2	32
1330	DEFY FRIDGE 226LT		M	P	V	5	80
1331	SAMSUNG 28LT MICROWAVE		M	P	V	5	80
1332	NILFISK VACUUM CLEANER 220V STEEL DRUM		M	P	V	1	16
1333	FILTER WASH BATH 750 X 1100 MM		M	P	V	1	16
1334	TRANSFORMER 220V TO 32V		M	P	V	6	96
1335	DEWALT WRENCH IMPACT 1" DR 220V		M	P	V	2	32
1336	DEWALT WRENCH IMPACT ¾" DR 220V		M	P	V	2	32
1337	DEWALT WRENCH IMPACT 1½" DR 220V		M	P	V	2	32
1338	HEATER S/WAVE INFRA RED 1 BAR 2000W WITH STAND		M	P	V	6	96
1339	MAKITA GRINDER ANGLE 115 MM 950W		M	P	V	3	48
1340	MAKITA POWER CUT OFF SAW 380V 305MM		M	P	V	1	16
1341	MAKITA POLISHER RUPES 180 MM		M	P	V	3	48
1342	MAKITA PENCIL GRINDER 220V		M	P	V	3	48
1343	MAKITA HAND DRILLING MACHINE 13 MM		M	P	V	3	48
1344	MAKITA ELECTRIC JIG SAW		M	P	V	1	16
1345	GOLDAIR PEDESTAL FAN 24 INCH		M	P	V	2	32
1346	GOLDAIR DESK FAN 24 INCH		M	P	V	2	32
1347	BIAX ELECTRIC SCRAPER 220V		M	P	V	3	48
1348	MAKITA SAND ORBITAL 220V		M	P	V	1	16

LINE ITEM NO.	PRODUCTION DESCRIPTION					UNITS	QUANTITY REQUIRED PER YEAR
1349	BOSCH ENGRAVING M/C 220V		M	P	V	1	16
1350	NILFISK HIGH PRESS WASHER 380V		M	P	V	1	16
1351	WELDING MACHINE		M	P	V	1	16
1352	MAKITA ELECTRIC NIBBLER 220V		M	P	V	1	16
1353	MAKITA ELECTRIC ANGLED DRILL 220V		M	P	V	2	32
1354	INDUSTRIAL ELECTRIC PEDESTAL DRILL		M	P	V	2	32
1355	ELECTRIC DOUBLE WIRE BRUSH MACHINE 9 INCH		M	P	V	2	32
1356	ELECTRIC DOUBLE GRINDING STONE MACHINE 9 INCH		M	P	V	2	32
1357	PIPE THREAD M/C 220V		M	P	V	1	16
1358	SPEED QUEEN WASHING MACHINE		M	P	V	1	16
1359	SPEED QUEEN CLOTHES DRYER MACHINE		M	P	V	1	16

4.1 Technical Specifications for Procurement of Lifting tackle

4.1.1. INTRODUCTION

The purpose of this report is to specify the requirements of lifting tackle by ERI, to potential lifting tackle suppliers. These requirements will be used to select suitable lifting tackle suppliers for ERI.

4.1.2. OBJECTIVES

- To ensure that suppliers do supply ERI with lifting tackle that has been manufactured and tested in accordance with the requirements of Occupational Health and Safety Act, Act 85 of 1993.
- Quality management of lifting tackle to be supplied to Rotek Engineering.

4.1.3. REFERENCES

- TT-T-70
- TWQ-F-38-RIGGING
- OHSA, Act 85 of 1993
- Relevant SANS Standards

4.1.4. LIFTING TACKLE CLASSES

Steel Wire slings, Textile slings, Chain slings, Shackles, Eye bolts and Eye nuts, Lifting hooks, Snatch blocks, Chain blocks and lever hoist.

4.1.5. LIFTING TACKLE GENERAL REQUIREMENTS

All Lifting tackle must be supplied with a valid Test or Conformance Certificate reviewed by the Lifting Machinery Inspector (LMI) containing the following minimum details on the certificate:

- Mention of the SANS or other relevant Standard to which the product comply to.
- The nominal diameter, width and thickness of the item (Size).
- The value of the proof load applied,
- The maximum working load limit (WLL) of the item
- The manufacturer's name, trade name or trade mark
- Standards not listed in this specification can be proposed by the tendering company to ERI for review
- The unique Identification number of the item or batch details in the case where sample items were tested in a batch.

4.1.6. LIFTING TACKLE REQUIREMENT PER CLASS

4.1.6.1 Steel Wire slings

- When procuring new steel wire slings the following will be stipulated to the suppliers:
 - Wire slings should be manufactured and tested to one of the following standards: - SABS 7531, SANS 2408, BS 6570, BS EN 12385 Pt 1-6.
 - The configuration accepted by ERI is a 6 x 36 Fiber Core 1800MPa Right Hand Laying (RHL); and the wire should be ungalvanised. The general construction standard is for "Super loop" (Flemish Eye with tapered steel ferrule), where different splicing techniques are required then these will be specifically requested in the enquiry.

- Factor of Safety to be six with a minimum of 10% additional constructed strength based on the actual test certification of the steel wire rope.
- Data to be provided by the manufacturer; a load test certificate (Proof load test) for the completed sling, batch test certification for the steel wire rope.
- A durable metal tag shall be attached to the sling indicating as a minimum, the name of the manufacturer, working load limit (WLL) for the sling and the pull to pull length.
- The proof loading of the sling is to be twice the WLL, for the sling; this is to be attained without any slippage of the rope through the splice. All slings will be proof load tested, the proof loading of the slings in excess of 10Tonne WLL will be witnessed by ERI and only an approved load testing facility will be accepted by ERI.
- The manufacturer shall issue a “Statement of Conformity” for the manufactured sling stating the following as a minimum:
 - Manufacturer’s reference number;
 - Manufacturer’s name and physical address;
 - Specification and year of manufacture;
 - ERI order number;
 - Description of the sling, WLL (straight pull, pull to pull length, type, construction and material)
 - Wire rope manufacturer and batch number;
 - Testing facility, calibration date of the test bench and certificate number;
 - Test load applied to the sling and the date of this test.
- The “Statement of Conformity” must be certified by a person authorized to do so by the Manufacturer of the sling and must certify that the sling has been constructed to comply with the provisions of the Occupational Health and Safety Act (85 of 1993) DMR 18.

4.1.6.2 Textile Fiber slings

- When procuring Textile Fiber slings the following will be stipulated to the suppliers:
 - Textile Slings to be manufactured and tested to SANS 094.
 - Only polyester flat webbing or endless round slings will be accepted by ERI.
 - Factor of Safety to be seven with a minimum of 10% additional constructed strength based on the actual test Certification for the polyester strands or flat webbing.
 - Only duplex layer and not single layer slings to be supplied to ERI (flat webbing).
- The following DATA must be provided by the manufacturer:
 - A load test certificate for the completed sling.
 - Batch test certification for the polyester strands used to construct the core.
- The length of the cover for endless round slings shall be the constructed to the pull to pull of the core plus 10%. At no times must the cover for the sling be subjected to tensile loading.
- A durable label shall be sewn into the cover or splice of the sling indicating as a minimum, the name of the Manufacturer, date of manufacture, material, working load limit (WLL) for the sling and the pull to pull length.
- The proof loading of the sling is to be twice the WLL for the sling, all slings will be proof load tested; this is to Be attained without loading the cover of the sling and without any audible failure of the core or sewn lap. The proof loading of the slings in excess of 10Tonne WLL is to be witnessed by ERI and only approved load testing facility will be accepted by ERI. It is recommended that the loading to proof load of

endless round slings is gradual to ensure the core strands are correctly in the core bundle and correctly settled in the casing for the sling.

- The manufacturer shall issue a “Statement of Conformity” for the manufactured sling stating the following as a Minimum:
 - Manufacturer’s reference number;
 - Manufacturer’s name and physical address;
 - Construction specification and year;
 - ERI order number;
 - Description of the sling, WLL (straight pull), pull to pull length, type, construction, material’
 - Core supplier and batch number for the core strands;
 - Testing facility, calibration date of the test bench and certificate number;
 - Test load applied to the sling and the date of this test.
- The “Statement of Conformity” must be certified by a person authorized to do so by the Manufacturer of the sling and must certify that the sling has been constructed to comply with the provisions of the Occupational Health and Safety Act (85 of 1993) DMR 18.

4.1.6.3 Alloy Chain slings

- When ordering Alloy Chain sling the following will be stipulated to the suppliers:
 - Alloy Chain to be manufactured and tested to one of the following standard SANS EN 50818, SABS 251 and SANS 189.
 - Only short link, Grade 80 alloy quality chain should be supplied for any sling application.
 - Factor of safety to be four with a minimum of 10% additional constructed strength based on the actual test certification of the chain.
 - Manufacturer to provide, a load test certificate for the completed sling, batch test certification for the alloy chain and the fittings.
 - A durable metal tag shall be attached to the sling indicating as a minimum, the name of the manufacturer, date of manufacture, working load limit (WLL) for the sling and the pull to pull length.
- Only alloy chain and fittings from Herculoy or Crosby will be accepted by ERI.
- The proof loading of the sling is to be twice the WLL for the sling. All slings will be proof load tested. The proof loading for the slings in excess of 10 Tonne WLL will be witnessed by ERI and only approved load testing facility will be accepted by ERI.
- The manufacturer shall issue a “Statement of Conformity” for the manufactured sling stating the following as a minimum:
 - Manufacturer’s reference number;
 - Manufacturer’s name and physical address;
 - Specification for the chain and the fittings;
 - ERI order number;
 - Description of the sling, WLL (straight pull), pull to pull length, type, construction and material specification;
 - Chain and component suppliers and batch numbers;
 - Testing facility, calibration date of the test bench and certificate number;
 - Test load applied to the sling and the dates of this test.
- The “Statement of Conformity” must be certified by a person authorized to do so by the Manufacturer of the sling and must certify that the sling has been constructed to comply with the provisions of the Occupational Health and Safety Act (85 of 1993) DMR 18.

4.1.6.4 SHACKLES

- Characteristics of Shackles:
 - Types: Bow and Dee Type
 - Shackles shall be manufactured and tested in accordance with SANS 2415.
 - Pins: Screwed Pin or Bolt and Nut type
 - Shackles shall be manufactured from grade 4,6,8 steel
 - ERI to use only Ungalvanised shackles.
 - Minimum factor of safety to be used on shackles is 4.
 - Manufacturer's identity name or brand, size and WLL and traceability mark to be clearly stamped or embossed.
- Shackles shall be supplied with certificate containing the following:
 - Description of the shackle.
 - Material grade used to manufacture the shackle.
 - Traceability code, enable any particular shackle or batch of shackles in the consignment to be identified.
 - Proof force applied.
 - The working load limit (WLL).

4.1.6.5 EYE-BOLTS/EYE NUTS

- Eye bolts must be manufactured and tested in accordance with SANS 1596, and the dimensions and tolerances of the thread shall comply with SANS 1556-1 and 1556-2.
- Eye bolts shall be forged (without welds) in one piece, including the shank.
- Eye-bolt with Link: Designed for both axial and angular loading. Capacities up to 6 ton with thread sizes of 20 to 48 mm.
- Collar Eyebolt: Designed for both axial and angular loading in capacities up to 25 ton. Corresponding threads 8 to 72 mm.
- Dynamo Eyebolt: Designed for axial loading only in capacities up to 10 ton. Corresponding threads 12 to 52 mm.
- The following information should be permanently and legibly marked on the eye bolts.
 - The manufacturer's name, trade name or trade mark.
 - The working load limits (WLL).
 - The nominal thread size.
 - Batch or lot identification.
- When ordering Eye-Bolts and eye nuts the following will be stipulated to the suppliers:
 - Only ungalvanised eye bolts should be supplied to ERI.
 - Eyebolts / Eye nuts up to 16mm / 5/8" diameters are fitted with an I.D. Washer through the eye. This is to enable the 12 digit Asset Number to be stamped on the eyebolt/eye nut.

4.1.6.6 Lifting hooks

- Lifting hooks to be manufactured and tested in accordance with SANS 1595.
- Lifting hooks to be manufactured with the steel strength grade of M (4) / P (5) / S (6) / T (8) / V (10).
- All lifting hooks should be supplied with safety latches/ Hooks must be fitted with spring loaded safety latches.
- The steel from which Safety latch is made must be of the same strength grade as the hook steel.
- Each hook shall be marked with the following details:
 - Manufacturers name, trade name or trade mark.

- The chain size that the hook is compatible with.
- The strength grade of the hook steel.
- The proof load that the hook has been tested to.
- The working load limit (WLL) of the hook.
- Batch or lot traceability details.

4.1.6.7 Snatch blocks

- Snatch block shall be manufactured and tested in accordance with SANS 1819.
- The side cheeks of snatch blocks shall be of fabricated or cast design.
- Snatch block's chain links shall comply with the requirements of SANS 251.
- Locking nuts shall be securely locked in such a way that they can be removed for examination or repair of the block. Tack welding can be used.
- All rotating parts shall be lubricated for life, unless specified otherwise.
- Fabricated snatch blocks shall permanently and legibly be marked with the following:
 - The nominal diameter of the sheave, marked on the side cheek.
 - The name, trade name or trademark of the manufacturer.
 - The batch number or date of manufacturer.
- Cast snatch blocks shall permanently and legibly be marked with the following:
 - The nominal diameter of the sheave marked on the cheek side of the snatch block.
 - The batch number or date of manufacturer.
 - Material that it was manufactured from.
 - The name, trade name or trademark of the manufacturer.

4.1.6.8 Manually operated chain block

- Manually operated chain blocks to be manufactured and designed in accordance with SANS 1594.
- Test certificate should be provided for each chain block containing the following information:
 - The serial number of the chain block.
 - The manufacture's name or brand name of the chain block assembly
 - The working load limit (WLL)
 - The load chain size and grade.
 - The proof load applied.
 - The chain serial number (Batch or lot identification).
 - The hook batch number.
 - The date of test and examination.
- When ordering manually operated Chain block the following must be stipulated to the supplier:
 - The working load limit (WLL) of the chain block.
 - The lifting range of the chain block.
 - The length of the hand chain.

4.1.6.9 Manually Lever hoist

- Lever hoist to be manufactured and tested to SANS 1636.
- Each chain lever hoist shall have an automatic brake that is capable of arresting and holding the load under all working conditions and that provides smooth, controlled lowering of the load without impairing the efficient working of the lever hoist.
- Both top and bottom hooks shall have a minimum factor of safety of at least 4.
- The following information shall be forged into the hook during the manufacturing process:
 - The manufacturer's name, trade name, logo or mark for traceability;
 - The WLL; and

- The batch number to allow traceability;
- The load chain shall comply with the requirements of SANS 1592.
- The following should be specified in the purchase order:
 - The working load limit (WLL) of the lever hoist.
 - The lifting range.
 - The protective coating
- A test certificate that gives the following information shall be issued for each chain lever hoist assembly:
 - The manufacturer's name, or brand name of the chain lever hoist assembly;
 - The working load limit (WLL);
 - The load chain size and grade;
 - The proof load;
 - The hook batch number

4.2 Technical Requirements for Suppliers of Lifting Machines available “off the shelf”

4.2.1 INTRODUCTION

The requirements specified in this document are to be used when auditing suppliers and when purchasing Lifting Machines which are available “off the shelf”. This means they are manufactured according to a proprietary design which is tried and tested and not altered nor modified in any way.

4.2.2 SCOPE

- This document is applicable to all ERI and suppliers.
- The types of Lifting Machines usually available “off the shelf” to which these requirements apply are rope hoists, chain hoists, beam trolleys (crawls), chain blocks, lever hoists and jib cranes.

4.2.3 GENERAL REQUIREMENTS

- The supplier must have the capability to interpret user requirements and select an existing product for the application.
- The supplier must have the capability to supply :
 - Installation instructions
 - Operating instructions
 - Maintenance instructions
 - Spare parts lists
- The supplier must have the capability to install, commission and load test to OHSAct DMR 18.
- The supplier must have a Quality Management System to manage the quality of items supplied.
- The supplier must ensure the availability of spare parts.

4.2.4 SPECIFIC REQUIREMENTS

- Rope hoists and chain hoists must be accompanied by a manufacturer’s certificate of conformance to:
 - EN 14492-2:2006+A1:2009 Cranes — Power driven winches and hoists — Part 2: Power driven hoists, or
 - FEM 1.001 Rules for the design of hoisting appliances
- Beam trolleys (Crawls) must be accompanied by a manufacturer’s certificate of conformance to SANS 1824:2010 Beam trolleys (crawls)
- Chain blocks must be accompanied by a manufacturer’s certificate of conformance to SANS 1594:2007 Manually operated chain blocks
- Lever hoists must be accompanied by a manufacturer’s certificate of conformance to SANS 1636 Manually operated chain lever hoists
- Pneumatically powered chain hoists must be accompanied by a manufacturer’s certificate of conformance to SANS 1638 Pneumatically powered chain hoists
- Jib cranes must be accompanied by a manufacturer’s certificate of conformance to SANS 1599-1 Cranes Part 1: Cantilever/Slewing jib cranes.

4.2.5 REFERENCES

- BS EN 14492-2 Cranes – Power driven winches and hoists.
- SANS 4308-1 Cranes and lifting appliances – Selection of wire ropes.
- SANS 4309 Cranes – Steel wire ropes for general purposes – Minimum requirements

4.3 Technical Requirements for Suppliers of Lifting Machines not available “off the shelf”

4.3.1 INTRODUCTION

The requirements specified in this document are to be used when auditing suppliers and when purchasing Lifting Machines which are **NOT** available “off the shelf”, but which are custom-made, in whole or in part, to suit the application. They may be modular in concept, i.e. making use of standard components or assemblies which are fitted to custom-made structures.

4.3.2 SCOPE

- This document is applicable to all ERI and suppliers.
- The types of Lifting Machines which are not available “off the shelf” to which these requirements apply are overhead travelling cranes, portal and semi-portal cranes, cantilever & slewing jib cranes, underslung travelling cranes and monorails

4.3.3 GENERAL REQUIREMENTS

- The supplier must have the capability to design structures and mechanisms, including stress calculations or simulations, with approval by a registered professional engineer.
- Reference documents are:
 - BS 466 Power driven overhead travelling cranes, semi-goliath and goliath cranes, for general use
 - BS 2573 Part 1 Rules for the design of cranes
 - BS EN 14492-2 Cranes – Power driven winches and hoists
 - BS EN 14502-1 Cranes – Equipment for the lifting of persons Part 1: Suspended baskets
 - SANS 4308-1 Cranes and lifting appliances – Selection of wire ropes
 - SANS 1599-1 Cranes Part 1: Cantilever/Slewing jib cranes
 - SANS 10160-6 Basis of structural design and actions for buildings and industrial structures Part 6: Actions induced by cranes and machinery
 - SANS 4301-5 Cranes – Classification Part 5: Overhead travelling and portal bridge cranes
 - SANS 4309 Cranes – Steel wire ropes for general purposes – Minimum requirements
 - FEM 1.001 Rules for the design of hoisting appliances
- The supplier must have the capability to design electric and control circuits, with approval by a registered professional engineer. Reference documents are:
 - BS EN 13849-1 Safety of machinery – Safety-related parts of control systems Part 1: General principles for design
 - SANS 60204-32 Safety of machinery – electrical equipment of machines Part 32: requirements for hoisting machines
 - OHSAct Electrical Machinery Regulations
- The supplier must have the capability to produce
 - manufacturing drawings,
 - engineering parts lists.
 - specifications for manufacture.
 - installation instructions.
 - operating instructions.
 - maintenance instructions.
 - electrical circuit diagrams.
 - spare parts lists.

- The supplier must have the capability to manufacture to drawing, engineering parts list and specifications.
- The supplier must have the capability to install, commission and load test to OHSAct Driven Machinery Regulation 18.
- In the event that any of these capabilities are outsourced, the supplier must demonstrate capability to manage the process.
- The supplier must have a Quality Management System to manage the quality of items supplied.
- The supplier must ensure the availability of spare parts.

4.3.4 SPECIFIC REQUIREMENTS

- Due to the nature of this type of Lifting Machine, the specific requirements will be different for each crane. The specific requirements must be provided by the user, as per Appendices A and B of BS 466 Power driven overhead travelling cranes, semi-goliath and goliath cranes, for general use, a copies of which are given in Annexures A and B respectively.

4.3.5 REFERENCES

- BS EN 14492-2 Cranes – Power driven winches and hoists.
- SANS 4308-1 Cranes and lifting appliances – Selection of wire ropes.
- SANS 4309 Cranes – Steel wire ropes for general purposes – Minimum requirements.

5 SHEQ REQUIREMENTS

All service providers are expected to comply with, but not limited to the following:

- Compliance with the Occupational Health and Safety Act 85 of 1993 is compulsory.
- Adherence to Quality Management System Policies, Procedures and related requirements of ISO 9001.
- Adherence to Occupational Health and Safety Policies, Procedures and related requirements of the OHSAS 18001.
- Adherence to environmental aspects, related impacts and legal requirements associated with work activities in accordance with ISO 14001.
- Adherence to Life Saving Rules.
- Compliance with the Eskom Plant Safety Regulations.
- Only authorised documents and processes are to be used in the execution of duties.
- Continuously seek methods for improvements from a process, quality and safety perspective.
- Obey all instructions.
- Familiarize with:
 - The applicable work instructions and procedures in place.
 - Safe working conditions and procedures.
 - All legal and contractual requirements.
 - Discipline and integrity.
- Compliance to all ERI Work Instructions, processes, procedures, and standards
- Adherence to ERI's disciplinary code or practice.
- Set example to co-workers and others.
- Participate in Risk Assessments.
- Responsible for own safety.
- Responsible for Personal Protective Equipment issued.
- Execute duties promptly and safely.
- Safeguard tools and safety equipment issued.
- Keep good relationship with all personnel.
- Compile a HIRA for each and every activity that needs to be performed.
- Ensure the activities are carried out following a Works Instructions and Procedure.
- Adhere to clean condition policy where required.
- All activities to be carried out as per the documented processes and comply with the requirements of ISO and OHSAS certification
- Service provider to comply to Eskom PPE (Personal Protective Equipment) Policy with regards to issuing of PPE to resources
- Proper use of PPE to be followed
- Ensure that tools and equipment are stored correctly in a safe place.

6 KEY DELIVERABLES

The following deliverables are to be met by the service provider:

- No customer complaints
- Compliance to all ERI Work Instructions, processes, procedures, and standards
- No SHEQ incidents
- Project Milestones are to be achieved on time, or earlier

7 Key Performance Indicators

The performance of the contractor will be evaluated on the KPIs in the table below:

Objective	Key Performance Indicator	Measure	Unit of Measure	Source of Evidence
Zero Defects	Zero Defects	Equipment delivered and operated defect free	Nr	To be provided by Employer
Due Date Performance – turnaround time	Due Date Performance	Actual delivery date versus supplier committed delivery date	Days	To be provided by supplier
Due Date Performance – turnaround time	Due Date Performance	Actual delivery date versus supplier committed delivery date / Turnaround time to exchange or on emergency max 24hours	Hours	To be provided by supplier