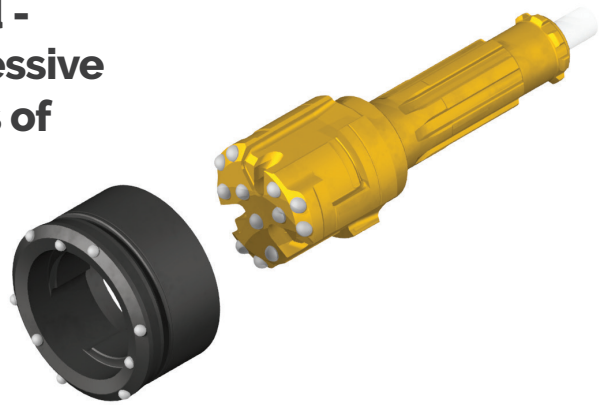




Compressive and tensile load limits of drilling equipment in piling



When it comes to drilling equipment used in piling operations, there are two distinct forces that must be considered - compressive and tensile loads. Compressive load limits refer to the maximum levels of downward force that can be applied to a pile, while tensile load limits refer to the 'pulling force' of the ring set/ pile during drilling when the casing shoe pulls the casing into the ground. It is important for drilling equipment to be able to withstand these forces to ensure the stability and safety of structures.



The following tables document the compression and tension limits of casing shoes and ring bits made by TerraRoc to help you determine structural loads prior to commencing any piling work.

For additional support, contact your local TerraRoc sales engineer.



Product code	Product number	Reference identifier	Compression limit* ¹	Tension limit* ²
P140/10-100-G2	8092403632	V100 G2	2020 kN	470 kN
P168/12.7-123-G2	8092403634	V123 G2	3030 kN	610 kN
P178/12.7-131-G2	8092403655	V133 G2	3220 kN	650 kN
P194/12.7-147-G2	8092403610	V146 G2	3530 kN	780 kN
P219/12.7-171-G2	8092403648	V171 G2	4020 kN	920 kN
P245/12.7-200-G2	8092403656	V200 G2	4510 kN	950 kN
P273/12.7-227-G2	8092403651	V227 G2	5070 kN	1270 kN
P324/12.7-273-G2	8092403653	V273 G2	6060 kN	1500 kN
P406/12.7-356-G2	8092403700	V356 G2	7660 kN	1720 kN
P114/8-81/92	8092403661	C114P	1430 kN	230 kN
P140/10-100/114	8092403689	C140P	2000 kN	350 kN
P168/12.7-123/139	8092403691	C168P	3200 kN	430 kN
P194/12.7-148/165	8092403734	C194P	3610 kN	530 kN
P219/12.7-171/188	8092403693	C219P	4030 kN	630 kN
P273/12.7-222/241	8092403695	C273P	3580 kN	850 kN
P324/12.7-273/291	8092403697	C324P	4140 kN	1010 kN
P406/16-348/368	8092403703	C406P	6480 kN	1430 kN
P508/16-447/468	8092403765	C508P	9500 kN	1790 kN
P610/16-545/568	8092403705	C610P	11490 kN	2390 kN
P711/19-640/663	8092403707	C711P	16560 kN	2790 kN
P813/20-736/762	8092403711	C813P	19700 kN	3190 kN
P914/20-831/862	8092403789	C914P	22840 kN	3950 kN
P1016/20-931/962	8092403791	C1016P	25430 kN	4390 kN
P1219/20-1132/1165	8092403794	C1219P	30610 kN	5750 kN
P114/10-65-G2	8092403678	SE114 G2	1980 kN	1160 kN
P114/8-65-G2	8092403717	SE114 G2	1630 kN	960 kN
P140/10-85-G2	8092403672	SE140 G2	2450 kN	1440 kN
P140/8-85-G2	8092403724	SE140 G2	2020 kN	1190 kN
P168/12.7-107-G2	8092403675	SE168 G2	3740 kN	2200 kN
P168/10-107-G2	8092403726	SE168 G2	3210 kN	1890 kN
P168/8-107-G2	8092403730	SE168 G2	2670 kN	1570 kN
P219/12.7-151-G2	8092403681	SE219 G2	5020 kN	2960 kN
P219/10-151-G2	8092403735	SE219 G2	4050 kN	2390 kN
P219/8-151-G2	8092403812	SE219 G2	3320 kN	1950 kN
P245/12.7-171-G2	8092403687	SE245 G2	5660 kN	3340 kN
P245/10-171-G2	8092403737	SE245 G2	4570 kN	2690 kN
P245/8-171-G2	8092403738	SE245 G2	3740 kN	2200 kN
P273/12.7-201-G2	8092403720	SE273 G2	6380 kN	3760 kN
P273/10-201-G2	8092403741	SE273 G2	5150 kN	3030 kN
P273/8-201-G2	8092403742	SE273 G2	4220 kN	2490 kN

Product code	Product number	Reference identifier	Compression limit* ¹	Tension limit* ²
P324/12.7-254-G2	8092403684	SE324 G2	7720 kN	4550 kN
P324/10-254-G2	8092403749	SE324 G2	6230 kN	3670 kN
P324/8-254-G2	8092403750	SE324 G2	5120 kN	3020 kN
P406/16-328-G2	8092403746	SE406 G2	12080 kN	7120 kN
P406/12.7-328-G2	8092403755	SE406 G2	9840 kN	5800 kN
P406/10-328-G2	8092403756	SE406 G2	7950 kN	4680 kN
P406/8-328-G2	8092403795	SE406 G2	6530 kN	3850 kN
P508/16-426-G2	8092403753	SE508 G2	15330 kN	9040 kN
P508/12.7-426-G2	8092403758	SE508 G2	12430 kN	7330 kN
P508/10-426-G2	8092403761	SE508 G2	10040 kN	5920 kN
P508/8-426-G2	8092403796	SE508 G2	8240 kN	4860 kN
P610/16-527-G2	8092403714	SE610 G2	18180 kN	10720 kN
P610/14.2-527-G2	8092403762	SE610 G2	16270 kN	9590 kN
P610/12.7-527-G2	8092403763	SE610 G2	14670 kN	8650 kN
P610/10-527-G2	8092403797	SE610 G2	11770 kN	6940 kN
P610/8-527-G2	8092403798	SE610 G2	9600 kN	5660 kN
P711/16-619-G2	8092403773	SE711 G2	21790 kN	12850 kN
P711/14.2-619-G2	8092403799	SE711 G2	19550 kN	11530 kN
P711/12.7-619-G2	8092403800	SE711 G2	17670 kN	10420 kN
P711/10-619-G2	8092403801	SE711 G2	14270 kN	8410 kN
P711/8-619-G2	8092403802	SE711 G2	11730 kN	6910 kN
P813/20-708-G2	8092403776	SE813 G2	30960 kN	18250 kN
P813/16-708-G2	8092403803	SE813 G2	25270 kN	14900 kN
P813/14.2-708-G2	8092403804	SE813 G2	22690 kN	13380 kN
P813/12.7-708-G2	8092403777	SE813 G2	20530 kN	12110 kN
P813/10-708-G2	8092403805	SE813 G2	16630 kN	9800 kN
P813/8-708-G2	8092403806	SE813 G2	13720 kN	8090 kN
P914/20-806-G2	8092403780	SE914 G2	35500 kN	20930 kN
P914/16-806-G2	8092403781	SE914 G2	29070 kN	17140 kN
P914/14.2-806-G2	8092403807	SE914 G2	26150 kN	15420 kN
P914/12.7-806-G2	8092403782	SE914 G2	23720 kN	13990 kN
P914/10-806-G2	8092403808	SE914 G2	19310 kN	11390 kN
P914/8-806-G2	8092403809	SE914 G2	16030 kN	9450 kN
P1219/20-1106-G2	8092403785	SE1219 G2	46210 kN	27250 kN
P1219/16-1106-G2	8092403786	SE1219 G2	37530 kN	22130 kN
P1219/14.2-1106-G2	8092403810	SE1219 G2	33610 kN	19820 kN
P1219/12.7-1106-G2	8092403787	SE1219 G2	30330 kN	17880 kN
P1219/10-1106-G2	8092403811	SE1219 G2	24410 kN	14390 kN

*1/2 Compression limit is used for geotechnical design whereas the tension limit is only relevant during the installation.

Disclaimer: These load limit values only represent the durability of the casing shoes and ring bits made by TerraRoc. These load limit values usually exceed the load limit values supplied by the casing manufacturers and thus they must be applied with caution.



KNOW YOUR LOAD LIMIT

Calculate the appropriate load limit of drilling equipment and deliver safe and secure foundations to support the built structure.



TerraRoc is a market leader in geotechnical drilling consumables operating in Europe, North America and Asia. The company specializes in casing advancement systems, down-the-hole hammers and core drilling.

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