



**TOOL MODEL: ICE 1**

**PRESSURE/TORQUE CONVERSION CHART**

**Standard Torque Chart**

<b>PRESSURE IN PSI</b>	<b>FT.LBS.</b>	<b>TORQUE IN KGM</b>	<b>NM</b>	<b>PRESSURE IN BAR</b>
1500	196	27	266	104
1600	209	29	283	110
1800	235	33	319	124
2000	261	36	354	138
2200	288	40	390	152
2400	315	44	426	165
2600	341	47	463	179
2800	368	51	499	193
3000	395	55	535	207
3200	421	58	571	220
3400	447	62	606	234
3600	473	65	641	248
3800	499	69	676	262
4000	525	73	712	276
4200	551	76	747	290
4400	577	80	782	303
4600	603	83	817	317
4800	629	87	853	331
5000	655	91	888	345
5200	680	94	922	358
5400	705	98	956	372
5600	730	101	990	386
5800	755	104	1023	400
6000	780	108	1057	414
6200	805	111	1092	427
6400	831	115	1126	441
6600	856	118	1161	455
6800	882	122	1195	468
7000	907	125	1230	482
7200	932	129	1263	496
7400	957	132	1297	510
7600	981	136	1330	524
7800	1006	139	1364	538
8000	1031	143	1398	552
8200	1056	146	1432	565
8400	1081	150	1466	579
8600	1107	153	1500	593
8800	1132	157	1534	607
9000	1157	160	1568	620
9200	1182	164	1603	634
9400	1208	167	1637	648
9600	1233	171	1672	662
9800	1259	174	1706	676
10000	1284	178	1741	690

\* ISO DOCUMENT 9000

## IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** Your **HYTORC TORQUE MACHINE** is a power tool, and as with any power tool, certain safety precautions should be observed to avoid accidents or personal injury. The following tips will assist you.

- **READ ALL INSTRUCTIONS.**
  - **KEEP WORK AREA CLEAN AND WELL LIT.**
  - **CONSIDER WORK AREA ENVIRONMENT.** Electrical Pumps should never be used in an atmosphere which can be considered potentially volatile. If there is any doubt, use an air pump. Also Note: metal to metal contact can cause sparks, precautions should be taken.
  - **AVOID PREMATURE TOOL STARTING.** The Pump Remote Control is for the **TOOL OPERATOR** only.
  - **STAY CLEAR DURING OPERATION.** In most cases, the tool will allow “hands free” operation. If the tool must be held or steadied during operation, use alternative means of securing the tool to the application
  - **GUARD AGAINST ELECTRIC SHOCK.** Ensure the pump is properly grounded and the proper voltage is being used
  - **STORE IDLE TOOLS.** When not in use, tool and accessories should be properly stored to avoid deterioration
  - **USE RIGHT TOOL.** Don't force small tools or attachments to do the job of a larger tool. Don't use a tool for purposes not intended.
  - **PROPER SAFETY ATTIRE.** When handling/operating hydraulic equipment use work gloves, hard hats, safety shoes and other applicable clothing.
  - **USE SAFETY GLASSES.**
  - **MOVING EQUIPMENT.** Do not use hydraulic hoses, uni-swivels, pump power or remote cords as means of moving the equipment.
  - **MAINTAIN TOOLS WITH CARE.** For top performance, inspect tools, powerpack and accessories for visual damage frequently and always prior to use. Always follow instruction for proper tool and pump maintenance. Refer to the Operations Maintenance Section for further clarification
  - **STAY ALERT.** Watch what you are doing. Use Common sense. Do not use power equipment under the influence of any mood altering substances.
  - **PRIOR TO OPERATION**
    - Ensure that all hydraulic connections are securely connected and there is no leakage
    - Verify that the Hydraulic hoses are not kinked or otherwise damaged.
    - Ensure the square drive and its retainer are fully and securely engaged.
    - Be certain that all connectors, elbows, fitting and swivels are not bent, loose or damaged.
  - **PRIOR TO USE.**
    - Check sockets for size, quality and flaws. (Do not use if questionable)
    - Cycle tool to ensure proper function.
    - Locate a solid, secure reaction point.
    - Be sure the reaction arm retaining clamp is fully engaged.
    - Be sure the hydraulic hoses are free of the reaction point.
    - Pressurize the system momentarily; if the tool tends to “ride up” or to “creep”, stop and re-adjust the reaction arm to a more solid and secure position.
- NOTE:** Remain clear of the reaction arm during operation and never put body parts between reaction arm and reaction surfaces.
- **ALWAYS USE QUALITY ACCESSORIES.** Always use top quality impact sockets in good condition which are the correct size and fully engage the nut. Hidden flaws, however, remain a possibility which could cause breakage, so stay clear of sockets during operation
  - **DO NOT USE** other equipment to enhance performance (Hammer on Socket/Tool)**NOTE:** Hytorc Pumps are designed to operate Hytorc Tools only. Damage may occur to the pump or the product that is being operated due to misuse.

**SAVE THESE INSTRUCTIONS FOR FUTURE USE!**