SECTION 3.1

BELT SHELF LIFE AND STORAGE

Correct storage and handling of CMW belts will ensure drive efficiency and long life. Improper storage will damage the tensile cords and cause premature failure.

STORAGE RECOMMENDATIONS

In order to retain their serviceability and dimensions, proper storage procedures should be followed for power transmission belts. Often, premature belt failures can be traced to improper belt storage procedures that damaged the belt before it was installed on the drive.

1) All CMW Belts should be stored in a cool and dry environment with no direct sunlight. Ideally, belts should be stored at less than 30°C/ 85°F and with lower than 70% relative humidity. For every 10°C/15°F increase in storage temperature above 30°C/85°F, the time the belt can be stored without reduced performance decreases by one-half.

2) Belts should never be stored at temperatures above 46°C/115°F

3) Belts should not be stored near windows, which may expose the belts to direct sunlight or moisture.

4)Belts should not be stored near heaters, radiators, or in the direct airflow of heating devices.

5) Belts should not be stored near any devices that generate ozone such as transformers and electric motors.

6) Belts should not be stored where they are exposed to solvents or chemicals in the atmosphere.

7) Belts should not be stored on the floor unless they are in a protective container.

8) For Timing Belts avoid sharp bends and do not crimp belts during handling or while being stored. Belts up to 3000 mm length should be stored flat on shelves and if possible in a “nesting “ configuration. Avoid applying any excess weight on the stored belt.

9) Belts must not be bent to diameters smaller than what is recommended (minimum recommended diameter for inside bends and 1.3 times the minimum recommended diameter for back side bends).

10) Do not use ties or tape to pull belt spans tightly together near the end of the belt.

11) Do not hang belts on a small diameter pin that suspends all of the belt weight and bends the belt to a diameter smaller than the minimum recommended diameter.

12) Only use belt rack for smaller length belts. A Belt Rack is a great organization tool, but limitations of length are recommended. As a belt increases in length the weight of the belt increases. The added weight puts stress on the belt where it hangs on the hook, and a “set “ may occur. Belt rack is not recommended for v-belts over 1800mm/70” in total length for this reason.

13) Store belts over 1800mm/70” in total length in on shelving or in bins.

14) If belts are stored in containers or boxes, make sure the belts are not distorted by the weight of others.

15) When equipment is stored for prolonged periods of time (over six months), the belt tension should be relaxed so that the belt does not take a set

16) Handle belts carefully when removing from storage and moving to the application

17) Practice strict "first in – first out" rotation of stock This will ensure the flow of new product is not sold prior to older stock.

18) Belts can be coiled in loops for storage purposes. One coil results in 3 loops, 2 coils 5 loops,3 coils 7 loops…The maximum number of coils depend on the length of the belt. Below are the limits for coiling:

Belt Cross section	Belt Length (in)	Belt Length (mm)	Number of coils	Number of Loops
3L, 4L, 5L, A, AX, AA, B, BX, 3V, 3VX, 9R, 13R, 13C, 13CX, 13D, 16R, 16C, 16CX, 9N	Under 60	Under 1500	0	1
	60 up to 120	1500 up to 3000	1	3
	120 up to 180	3000 up to 4600	2	5
	180 and over	4600 and over	3	7
BB, C, CX, 5V, 5VX, 16D, 22C, 22CX, 15N	Under 75	Under 1900	0	1
	75 up to 144	1900 up to 3700	1	3
	144 up to 240	3700 up to 6000	2	5
	240 and over	6000 and over	3	7
CC, D, 22D, 32C	Under 120	Under 3000	0	1
	120 up to 240	3000 up to 6100	1	3
	240 up to 330	6100 up to 8400	2	5
	330 up to 420	8400 up to 10,600	3	7
	420 and over	10,600 and over	4	9
8V, 25N	Under 80	Under 4600	0	1
	80 up to 270	4600 up to 6900	1	3
	270 up to 3690	6900 up to 9,900	2	5
	390 up to 480	9,900 up to 12,200	3	7
	480 and over	12,200 and over	4	9

19) Variable speed belts are more sensitive to distortion that any other v belt and they cannot be hang from pins, hangs or saddlers. They need to be stored on their edges in shelves. They may be staked as long as you avoid distortion on the belts at the bottom of the stack.

CMW BELT LIFE

1) If belts are correct stored as detailed above, they may be stored for up to seven years. The Rubber Manufacturers Association (RMA) states in RMA Bulletin IP-3-4, that the quality of a belt will not change significantly within seven years of proper storage.

2) If stored at temperatures above 30°C/85°F and relative humidity above 70%, belt life will be reduced. For every 10°C/15°F increase in storage temperature above 30°C/ 85°F, the time the belt can be stored without reduced performance decreases by one-half.

3) At relative humidity levels above 70%, fungus or mildew may form on stored belts. This has minimal affect on belt performance, but should be avoided if possible.

4) Belts should never be stored at temperatures above 46°C/115°F.

SECTION 3.2

SAFETY PRECAUTIONS

Please read all the warnings! Please take all necessary precautions when using our products. Also, please review relevant product applications and specifications in this CMW Drive Design and Technical Manual

POWER TRANSMISSION PRODUCTS

USE

DANGER	- If you expect that a belt could fail and idle, free-run or stop the system, thus potentially causing a fatal or severe accident, please provide an extra safety device. - Do not use a belt as a lifting or towing tool. –
WARNING	- If you expect that static electricity will come from the power transmission belt system, thus causing fire or malfunction of the controller, use an antistatic belt and set a neutralization apparatus in the system.
CAUTION	- Do not use a belt as an insulator. Contact us for information on insulation properties, which vary by belt type. - For a belt that comes into contact with food directly, only use a belt that complies with the applicable food hygiene law of your country. - Do not modify a belt, or its quality and performance could deteriorate.

FUNCTION & PERFORMANCE

CAUTION	- Do not use a belt beyond its capacity or for an application other than that specified in this CMW Drive Design and Technical Manual. This can cause premature failure of the belt. - If water, oil, chemical, paint, dust, etc, sticks to a belt or pulley, its power transmission could deteriorate and the belt may fail.

STORAGE & TRANSPORTATIONS

See our chapter on Belt Life and Storage on pages xx for full recommendations

WARNING	- To store a heavy belts, use a suitable jig or stopper to prevent accidents such as belt toppling or tumbling.
CAUTION	- Use a suitable equipment to carry/handle a heavy belt or pulley. Otherwise, back injury may result. - Do not put weight on or bend a belt forcibly to carry or store it. Otherwise, it will produce defects or scratches to the belt, resulting in damage. - Store the belt in low humidity and a temperature of less than 30˚C/ 85˚F. Do not expose belts to direct sunlight.

SECTION 3.3

IMPORTANT NOTICE AND DISCLAIMER

CMW® produtcs are intended for specialists trading only.

All application, material, photographs, illustrations, sketches, drawings and specifications published in this CMW Drive Design and Technical Manual and associated brochures and websites are for information only and subject to changes without notice in line with production processes and market conditions.

CMW specifically excludes any warranty of merchantability or fitness purpose unless otherwise agreed in writing or imposed under law.

The seller of CMW products is not liable for any damages, direct, indirect or consequential save for any liability imposed under law and the buyer may not rely on any information in this publication unless specially agreed to in writing when the sale agreement is made between the parties.

All buyers and users of CMW products are required to take all safety precautions and should consult the technical department of the seller to ascertain the latest safety requirements.

Application Exclusions

For safety reasons, CMW® belts may not be designed into, applied on, or sold as replacements for any of the following applications:

- Aircraft (propeller or rotor) drive systems or any inflight accessory system drives.
- Any type of lift system for personnel or product that relies solely on the belt for support without an appropriate fail safe type of backup support system(s).

TECHNICAL UPDATES

Visit our website **www.cmwpt.com** for the latest updates of product, applications, technical data and range/part number availability.

We are constantly updating our available range and our manufacturing facilities can, subject to volumes, manufacture sizes and specifications to your requirements.

CMW
POWER TRANSMISSION

Your expert in DRIVE BELT TECHNOLOGY

CMW Power Transmission designs, manufactures and distributes rubber and polyurethane drive belts in wide variety of industrial and agricultural applications to become your favourite power transmission brand.

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