

Appendix

The appendix section includes additional resource sheets provided by FATA Automation and third-party vendor information. All vendor information will be provided as additional files along with the manual.

Third Party Vendor

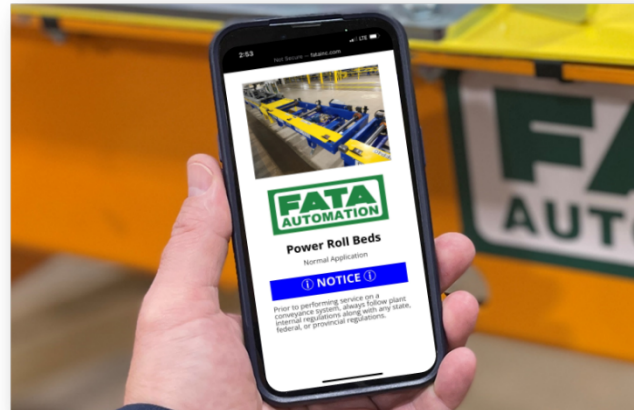
The following list identifies copies of third-party information sheets that have been provided to FATA Automation and will be included upon delivery.

Third Party Vendor	Information Provided
Dodge	Pillow Block Bearing Instruction Sheet
ELBE	Cardan Shaft Installation & Maintenance
IFM	Inductive Sensor Data Sheet & Info Card
INNOMOTICS	SG Geared Motors Installation
	Operating Instructions Manual & Recommended Lubricants
Lubecon	Pendulum Greaser Manual #26174
	Lubrication Owners Manual
Pepperl & Fuchs	Absolute Rotary Encoder Data Sheet
Rougier	631380 - 63.0348.01 - Right current collector set
	631381 - 63.0348.02 - Left current collector set
	A-Shunt 25 ² x 3 Lg 185 - 63.0355.00 - FATA US
	Rougier_Stocking mounting and maintenance instruction (FATA)
	Stocking mounting and maintenance instruction (FATA)
SEW	SEW Eurodrive Manual
Sick	Operating_instructions_dx35_distance_sensors_en_im0052743
SKF	Bearing Manual
SMC	CA2_Z
	SMC Operations Manual - CA2x-OM0071P
Tollok	PT2-001_MA4_catalog
ZMC	UM_W10441Z_maintenance & Technical Notes

QR Codes

As a value added service, FATA Automation has implemented QR (Quick Response) Codes on our standard conveyor modules and systems. The QR Code is a two-dimensional barcode that is readable via a smartphone's camera or app that will automatically "scan" it to access a website and/or perform a function.

FATA Automation utilizes this feature to improve our support for our customers in automotive plants, in particular for its use when it comes to Maintenance and Preventive Maintenance of our products.



Primary benefits of our supplemental QR Codes for Maintenance Manuals:

- Simple, fast and accurate information that is available via any mobile device
- Provides convenient resource for our customers and field personnel for a quick access to standard technical reference material.
- Material is "live" and can be changed or updated quickly when bulletins, adding of how-to videos, etc. are released.
- Provides quick and easy contact links/info for service and spare parts.

Sample QR Code Landing Page

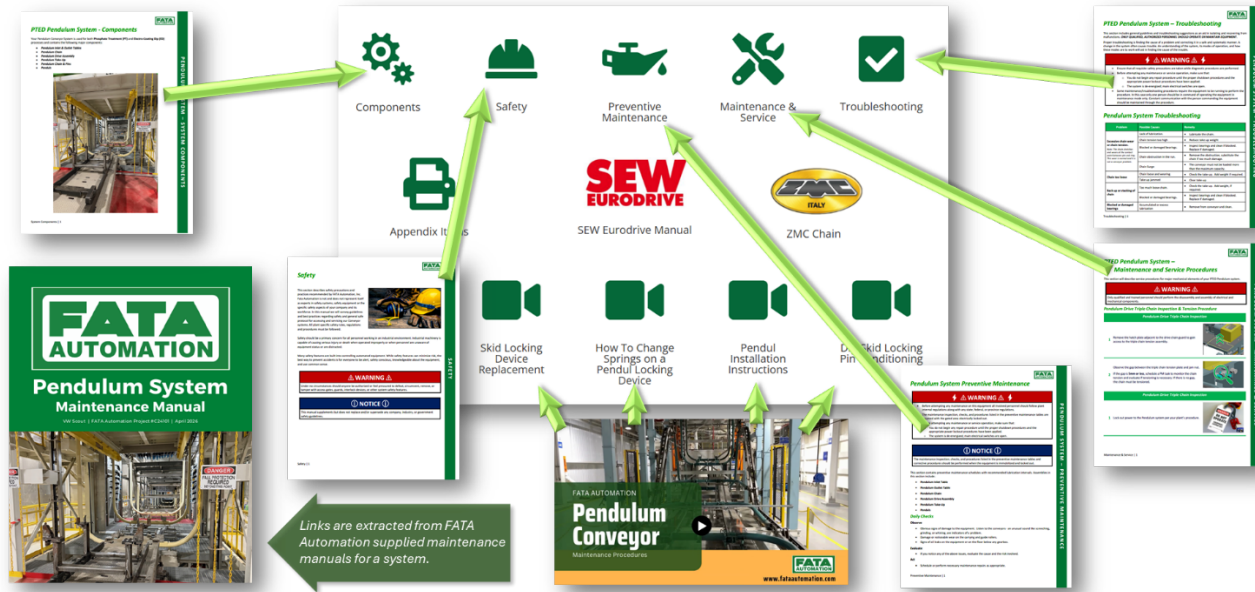
Image of typical conveyor component or system.

Links to specific PDF documents relating to conveyor component or system.

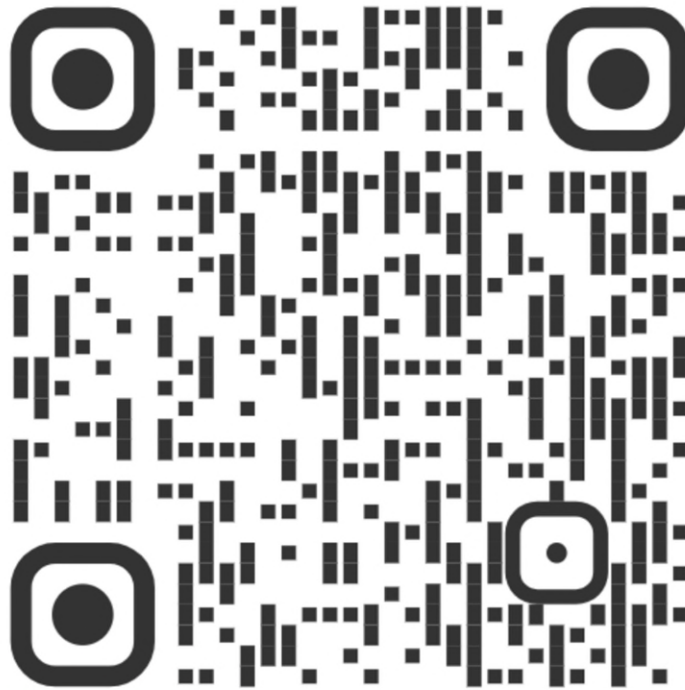
Quick safety reminder.

Links to call or email FATA Automation for service or spare parts questions.

QR Code Landing Page Detail



The following QR Code landing pages are applicable to this project's Maintenance Manual:



Scout
Pendulum System PTED

Bolt Torque Settings

The following sections are FATA Automation Quality Standard torque table specifications for Metric and SAE bolts.

Metric Bolt Torque Table

Below is a table of nominal torque settings in **Foot-Pounds** for all fasteners without required torque settings. Use the minimum grade torque values with screws fastened into steel plates without harden steel.

	Property Class		Property Class		Property Class		Property Class	
	8.8		9.8		10.9		12.9	
DIA	Dry Threads	Lubricated Thread	Dry Threads	Lubricated Thread	Dry Threads	Lubricated Thread	Dry Threads	Lubricated Thread
M4	*27.5	*.17	*30	*18	*38.5	*24	*53	*32.5
M5	*56.5	*33.5	*61	*37	*78	*47	*107	*65
M6	*95	*57.5	*103	*61	*132	*79	*180	*109
M8	19	12	21	13	27	16	37	22
M10	39	23	42	25	53	32	73	44
M12	67	40	73	44	92	55	127	76
M14	107	64	116	69	148	89	203	122
M16	167	100	181	108	230	138	316	190
M20	325	195	352	211	449	269	617	370
M24	562	337	609	366	775	465	1066	640
M30	1117	670	1210	726	1540	924	2188	1271

*Values in Inch-pounds

1 in-lb = 0.1129 Nm

1 ft-lb = 1.356 Nm

SAE J429 Bolt Torque Tables

Below is a table of nominal torque settings in **Foot-Pounds** for all fasteners without required torque settings. Use the minimum grade torque values with screws fastened into steel plates without harden steel.

Torque-Tension Relationships for SAE J429 Bolts Coarse/Dry Thread			
DIA	Grade 2	Grade 5	Grade 8
1/4--20	65 in-lbs.	100 in-lbs.	143 in-lbs.
5/16--18	134 in-lbs.	210 in-lbs.	305 in-lbs.
3/8--16	20 ft-lbs.	31 ft-lbs	44 ft-lbs.
7/16--14	30	50	70
1/2--13	49	75	107
9/16--12	70	109	154
5/8--11	97	151	211
3/4--10	173	266	376
7/8--9	166	430	606
1--8	250	640	900
1-1/8--7	N/A	800	1288
1-1/4--7	N/A	1120	1817
1-3/8--6	N/A	1470	2382
1-1/2--6	N/A	1950	3161

1 in-lb = 0.1129 Nm

1 ft-lb = 1.356 Nm

Torque-Tension Relationships for SAE J429 Bolts Fine/Dry Thread			
<i>DIA</i>	<i>Grade 2</i>	<i>Grade 5</i>	<i>Grade 8</i>
1/4--28	75 in-lbs	115 in-lbs.	163 in-lbs.
5/16--24	150 in-lbs	230 in-lbs	325 in-lbs
3/8--24	22.5 ft-lbs	35 ft-lbs.	50 ft-lbs.
7/16--20	36	55	78
1/2--20	55	85	120
9/16--18	79	122	172
5/8--18	110	170	240
3/4--16	193	298	420
7/8--14	184	473	668
1--14	N/A	720	995
1-1/8--12	N/A	900	1444
1-1/4--12	N/A	1240	2012
1-3/8--12	N/A	1670	2712
1-1/2--12	N/A	2200	3557

1 in-lb = 0.1129 Nm

1 ft-lb = 1.356 Nm

Tension relationships for Nyloc Fasteners (Foot - Pounds)			
<i>DIA</i>	<i>Lubrication</i>	<i>Recommended</i>	<i>Max. Limit</i>
5/16--18	NONE	17	26
	OILED	12	18
3/8--16	NONE	34	53
	OILED	23	36
7/16--14	NONE	44	67
	OILED	30	46
1/2--13	NONE	83	128
	OILED	57	87
9/16--12	NONE	117	165
	OILED	73	112
5/8--11	NONE	201	309
	OILED	137	211
3/4--10	NONE	384	590
	OILED	262	403
7/8--9	NONE	572	880
	OILED	390	600
1--8	NONE	806	1240
	OILED	549	845
1 1/8--7	NONE	1050	1620
	OILED	715	1100
1 1/4--7	NONE	1525	2340
	OILED	1040	1600
1 3/8--7	NONE	2940	4530
	OILED	2000	3080
1 1/2--6	NONE	3870	5950
	OILED	2640	4060

1 in-lb = 0.1129 Nm

1 ft-lb = 1.356 Nm