DAYTON SUPERIOR

CONCRETE ACCESSORIES

TAPER-LOCK

REBAR THREADING SYSTEM

- HIGH-SPEED CUTTING
- HIGH-STRENGTH SPLICE
- QUICKER CHANGE-OVERS
- EASY TO MAINTAIN
- PORTABLE DESIGN

DAYTON SUPERIOR

Splice Rebar On-site, in a Fraction of the Time

You already rely on Bar-Lock couplers from Dayton Superior - now, the company you trust is proud to offer the portable, high-speed taper cut solution! Turn the system that's already been proven on sites throughout Europe into your on-site advantage. Dayton Superior is the only company able to bring the reliable Taper-Lock™ design to North American fabrictors and contractors.

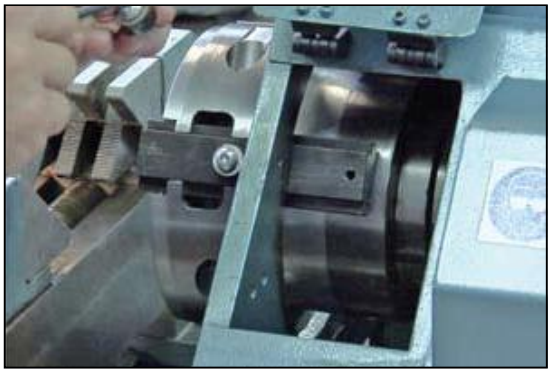
Use the Dayton Taper-Lock™ on Your Next Job Site

The compact design saves room in your fabrication shop or on the job with all the advantages and one-quarter the size of similar machines, it's time to re-think rebar splicing! Strength certification and test results are available upon request through the qualified Dayton Superior Dealer network throughout North America.

Why Taper-Lock™ is Better

- Portable design allows you to take the system wherever you need it.
- Sharpen cutters up to three times for previously unheard of efficiency! Spend less money on new blades, and save your crew from unnecessary downtime.
- Revolutionary high-speed taper cut more than doubles the production of conventional cutters, allowing you to beat deadlines and reduce costs.
- No need to purchase any costly additional cutting fluids - simply use a conventional water-soluble cutting fluid.
- Strong unit withstands tough projects. Straightforward process makes operation and repair easy.

Include the industry's easiest Taper Threaded System on your next project!



TYPICAL SPECIFICATIONS:

Specific:

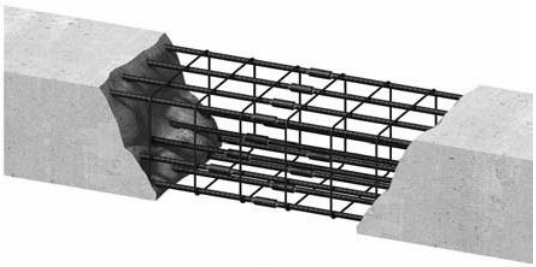
Mechanical connections shall be Taper-Lock™ taper threaded couplers as manufactured by Dayton Superior Corp.

Generic:

The mechanical connection shall meet building code requirements of developing in tension and compression as required by_____ *(insert name here)*. The mechanical connection shall be the positive locking, taper threaded type coupler manufactured from high quality steel. The bar ends must be taper threaded using the manufacturer's bar threading equipment to ensure proper taper and thread engagement. All couplers shall be installed per the manufacturer's approved procedures.

D-310 TAPER-LOCK™ STANDARD COUPLER

PRODUCT DESCRIPTION:
The D-310 Taper-Lock™ is used to join any bar-to-bar connection of the same size, where one bar can be rotated. This simplifies rebar splicing in areas where rebar congestion prevents the use of long lap splices. Engagement of the bar within the coupler is simplified by the taper thread which aids in alignment.



PRODUCT FEATURES AND BENEFITS:
- Used in 80% of all connections
- The compact design of the coupler ensures suitability for use in confined situations where space is restricted or where the loss of cover must be minimized
- Reduces engineering design time
- Eliminates rebar congestion
- Provides Type 2 splicing capacities (160% F_y) and simplifies load paths
- Meets approval from ICC (ESR 2481), ACI, CalTrans, IBC2006, and Ministries of Transportation for Ontario and Quebec
- Approved for use in fatigue applications

PRODUCT SPECIFICATIONS:
- Extension of Taper-Lock™ product line
- Accommodates rebar sizes #4 through #18
- Available in Black, Epoxy or Hot-Dipped Galvanized
- Type 2 Splice (160% of F_y)
- Connect bars of the same size using an internal sleeve with two right hand tapered threads
- Each end must be tightened with calibrated torque wrench

HOW TO ORDER:
SPECIFY:
1. Quantity
2. Name
3. Rebar size
4. Finish
5. Made in USA requirement

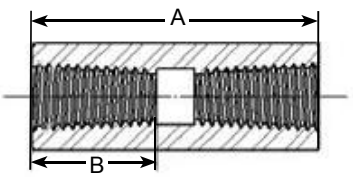
EXAMPLE:
1. 500 pieces
2. D-310 Taper-Lock Standard Coupler
3. #6
4. Black
5. Made in the USA not required

PRODUCT CODES

Bar Size US	Bar Size Metric (mm)	Bar Size CN (m)	Made in the USA (Black) ASTM A311 Grade 1144	Made in the USA (Epoxy) ASTM A311 Grade 1144	Made in the USA (Hot dipped Galvanized) ASTM A311 Grade 1144	(Black) ASTM A576 Grade 1045	(Epoxy) ASTM A576 Grade 1045
#4	[13]	[10]	127020	127258	128037	126389	128322
#5	[16]	[15]	127021	127259	128038	126390	128323
#6	[19]	[20]	127022	127260	128039	126391	128324
#7	[22]	-	127023	127261	128040	126392	128325
#8	[25]	[25]	127024	127262	128041	126393	128326
#9	[29]	[30]	127025	127263	120842	126394	128327
#10	[32]	-	127026	127264	128043	126395	128328
#11	[36]	[35]	127027	127265	128044	126396	128329
#14	[43]	[45]	127028	127266	128045	126397	128330
#18	[57]	[55]	127019	127267	128046	126398	128331

NOMINAL ENGAGEMENT

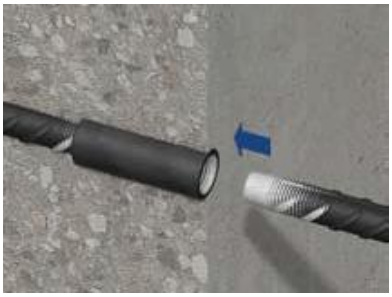
Bar Size US	Bar Size Metric (MM)	Bar Size CN (M)	"A" US	"A" (mm)	"B" (Nominal) US	"B" (Nominal) (mm)
#4	[13]	[10]	2.362	[60]	1.024	[26]
#5	[16]	[15]	2.756	[70]	1.221	[31]
#6	[19]	[20]	2.874	[73]	1.281	[32.5]
#7	[22]	–	3.189	[81]	1.399	[35.5]
#8	[25]	[25]	3.622	[92]	1.615	[41]
#9	[29]	[30]	4.016	[102]	1.812	[46]
#10	[32]	–	4.488	[114]	2.049	[52]
#11	[36]	[35]	4.921	[125]	2.246	[57.5]
#14	[43]	[45]	5.827	[148]	2.719	[69]
#18	[57]	[55]	7.638	[194]	3.625	[92]



INSTALLATION:
D-310 TAPER-LOCK STANDARD COUPLER

STEP 1
The coupler is normally supplied fixed to the reinforcing bar, ready to be installed and cast in concrete.

STEP 2
After casting the concrete and when ready to extend, remove the thread protector from the coupler. Position the continuation bar in the sleeve and rotate the bar into the coupler.



STEP 3
Continue to screw the bar into the coupler until tight.

STEP 4
To ensure correct installation, tighten the joint to the specified torque using the calibrated torque wrench on the continuation bar.

TORQUE SETTINGS:
D-310 TAPER-LOCK STANDARD COUPLER

Bar Designation	Bar Diameter	Torque Nm	Torque Ft - Lbs
#4	12.7 mm	75 Nm	55 Ft - Lbs
#5	15.9 mm	110 Nm	81 Ft - Lbs
#6	19.1 mm	150 Nm	110 Ft - Lbs
#7	22.2 mm	205 Nm	151 Ft - Lbs
#8	25.4 mm	270 Nm	200 Ft - Lbs
#9	28.7 mm	280 Nm	206 Ft - Lbs
#10	32.3 mm	285 Nm	210 Ft - Lbs
#11	35.8 mm	305 Nm	225 Ft - Lbs
#14	43.0 mm	335 Nm	247 Ft - Lbs
#18	57.3 mm	335 Nm	247 Ft - Lbs