



Your own Toolbox

Engineers use nuts and bolts in their designs every single day. Then why are high-quality 3D fastener models so hard to come by?

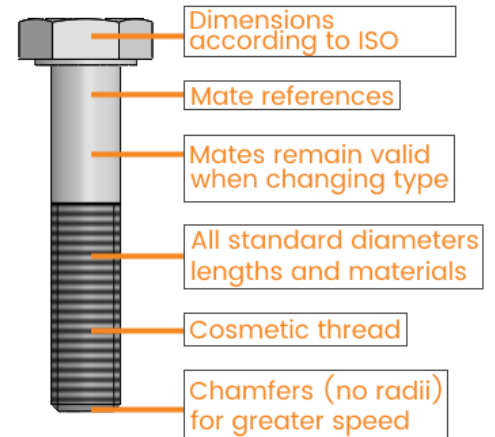
Randomly downloaded 3D files aren't going to cut it and the standard Toolbox from SOLIDWORKS doesn't work well. The dimensions don't match the standards, any engineer can add sizes and sharing the files with customers and suppliers breaks assemblies. That is why we developed our own library.

Our vision

In our opinion, fastener models should have the following properties:

- Correct dimensions
- Very fast
- Freely shareable
- Native SOLIDWORKS models, so not imported

To meet these requirements, we spent more than 500 hours developing software that generates 3D models. Right now it can create thousands of models across 50+ fastener types. We check every model for anomalies to make sure that every single file is perfect.

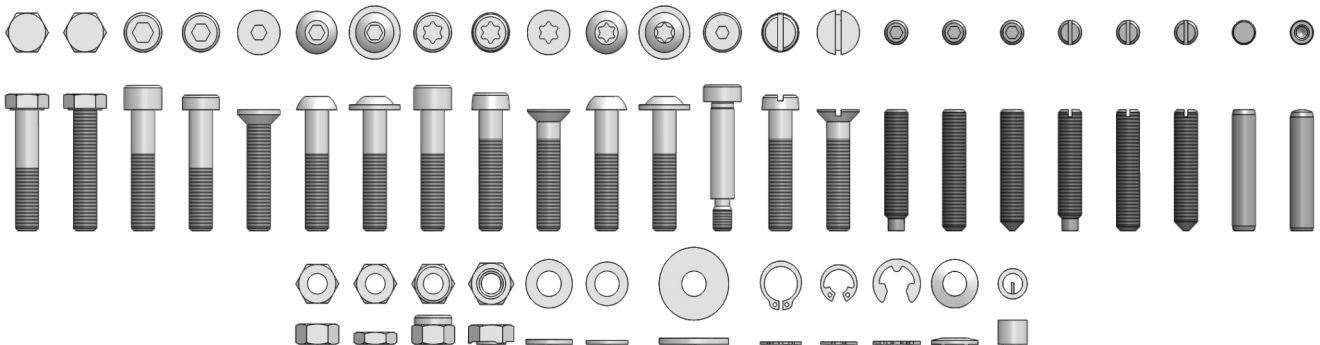


The standard is leading

We always start with the ISO or DIN standard. We buy the standard, plough through the document and add all relevant data to our database. We even partner with NEN, the Dutch arm of ISO, to sell our fasteners together with the standards in their webshop.

Advantages of our fastener library

1. Generated by software for great consistency.
2. Optimized for speed to make sure large assemblies remain snappy.
3. Data is taken directly from ISO and DIN standards to make sure the models are correct.
4. You only purchase the standards you need.
5. Our library is a one-time investment. We don't charge a subscription or maintenance fees.
6. You can use our defaults or we can create a custom export for you.



Model properties

- *Native models*, generated in a SOLIDWORKS version of your choice.
- One configuration per file so the models are as fast as they can be.
- Contains *mate references* so mates are added automatically.
- Mates give no errors when you switch between different types.
- Material and coating are specified.
- *Custom properties* with a description and extra information like the thread pitch and tensile strength.

About custom exports

You can download a few sample models on our website to check out our defaults. If you prefer any changes to these defaults, we can create a custom export for you. To do that, we change our code and/or the data. We can:

- Change filenames
- Add or remove custom properties
- Use different materials or colors
- Add sizes that are not in the standard

DIN vs ISO

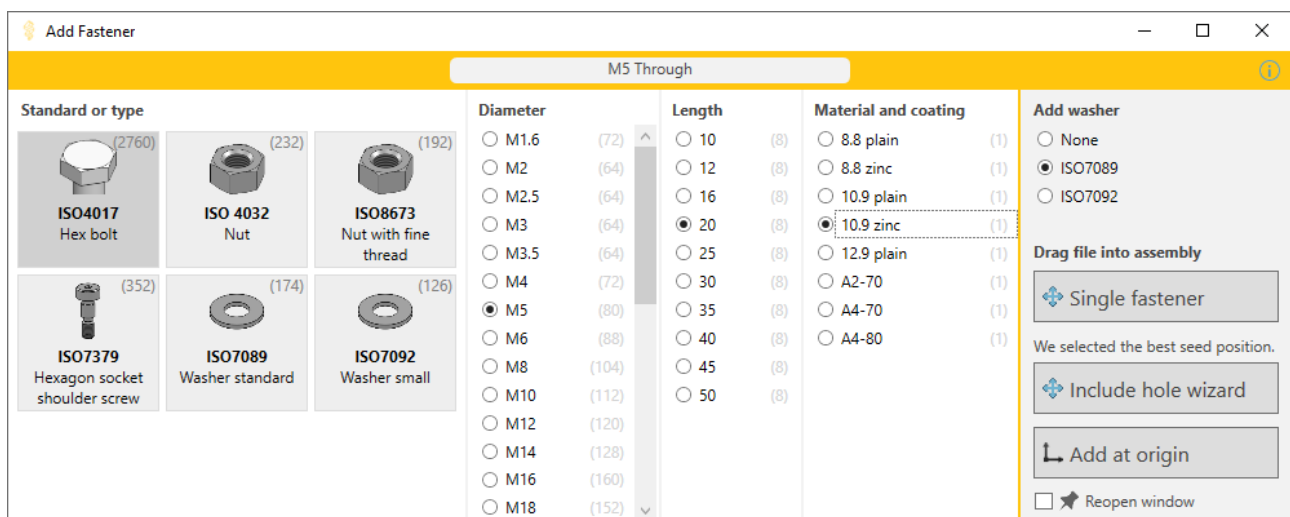
Most DIN fastener standards have been withdrawn since 1992, so it's time to start using their ISO replacements. We know that engineers still love to use the DIN standards and suppliers are happy to sell them, but since we cannot buy these documents anymore, we cannot access the source data.

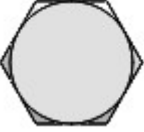
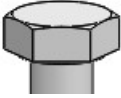
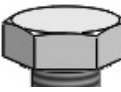
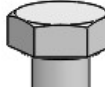
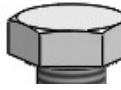







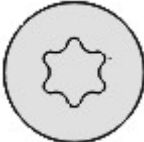





We have listed our current offering on the next few pages, which mentions the withdrawn DIN standards in light gray.



















Spend less time searching with Lightning





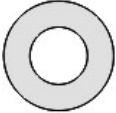









Because we were fed up with scrolling through endless lists of fasteners in SOLIDWORKS, we created Lightning. Lightning is a SOLIDWORKS add-in that makes working with fasteners fun again. You can add, edit and replace fasteners in just a few clicks thanks to our intuitive software that is built just for fasteners. We'll even add a washer and a pattern for you.

You can try Lightning for free for two weeks. For a super-fast demo: <https://cadbooster.com/lightning>



Group	#	Image	Standard	Description – Unique sizes * material/coating
Hexagon head 	1		ISO 4014 DIN 931	Hexagon head 289 * 8 = 2312 files
	2		ISO 4017 DIN 933	Hexagon head, full thread 345 * 8 = 2760 files
	3		ISO 8676 DIN 960	Hexagon head, fine pitch thread 440 * 8 = 3520 files
	4		ISO 8765 DIN 960	Hexagon head, full thread, fine pitch 284 * 10 = 2840 files
Hexagon socket 	5		ISO 4762 DIN 912	Hexagon socket head cap 288 * 8 = 2304 files
	6		ISO 7380-1 -	Hexagon socket button head 94 * 4 = 376 files
	7		ISO 7380-2 -	Hexagon socket button head with flange 94 * 4 = 376 files
	8		ISO 10642 DIN 7991	Hexagon socket countersunk head 121 * 6 = 726 files
	9		ISO 12474 -	Hexagon socket, fine pitch thread 200 * 3 = 600 files
	10		DIN 7984 -	Hexagon socket head cap, low head 136 * 4 = 544 files
Hexalobular head (torx) 	11		~ISO 7380-1 -	Hexalobular socket button head 69 * 4 = 276 files
	12		~ISO 7380-2 -	Hexalobular socket button head with flange 69 * 2 = 138 files
	13		ISO 14579 -	Hexalobular socket head cap 180 * 5 = 900 files
	14		~ISO 14579 -	Hexalobular socket, fine pitch thread 152 * 4 = 608 files
	15		ISO 14580 -	Hexalobular socket head cap, cheese head 115 * 3 = 345 files

	16		ISO 14581 -	Hexalobular socket countersunk head 107 * 4 = 428 files
Fit bolts	17		ISO 7379 -	Hexagon socket head shoulder screw. H8 and F9 88 * 2 fits * 2 materials = 352 files
Slotted screws	18		ISO 1207 DIN 84	Slotted cheese head screw 113 * 1 = 113 files
	19		ISO 2009 DIN 963	Slotted countersunk fat head screw 113 * 3 = 339 files
Set screws	20		ISO 4026 DIN 913	Hexagon socket set screw, fat point 112 * 4 = 448 files
	21		ISO 4027 DIN 914	Hexagon socket set screw, cone point 112 * 4 = 448 files
	22		ISO 4028 DIN 915	Hexagon socket set screw, dog point 105 * 4 = 420 files
	23		ISO 4029 DIN 916	Hexagon socket set screw, cup point 112 * 4 = 448 files
	24		ISO 4766 DIN 551	Slotted set screw, fat point 107 * 5 = 535 files
	25		ISO 7434 DIN 553	Slotted set screw, cone point 94 * 3 = 282 files
	26		ISO 7435 DIN 417	Slotted set screw, long dog point 85 * 3 = 255 files
Nuts	27		ISO 4032 DIN 934	Hexagon regular nut 29 * 8 = 232 files
	28		ISO 4035 DIN 439	Hexagon thin nut, chamfered 29 * 8 = 232 files
	29		ISO 7040 DIN 982	Prevailing torque hexagon nut 13 * 8 = 104 files
	30		ISO 7042 DIN 6925	Prevailing torque all metal hexagon high nut 11 * 7 = 77 files
	31		ISO 8673 DIN 934	Hexagon regular nut, fine pitch thread 24 * 8 = 192 files
	32		ISO 8675 DIN 439	Hexagon regular nut, fine pitch thread 24 * 6 = 144 files
	33		ISO 10511 DIN 985	Prevailing torque nut with nylon insert 13 * 4 = 52 files

	34		ISO 10512 DIN 982	Prevailing torque nut with nylon insert, fine pitch 11 * 6 = 66 files
	35		DIN 929 -	Hexagon weld nut 16 * 3 = 48 files
	36		DIN 981 -	Lock nut 47 * 1 = 47 files
	37		DIN 1587 -	Dome nut 26 * 4 = 104 files
Washers	38		ISO 7089 DIN 125	Plain washer, normal 29 * 6 = 174 files
	39		ISO 7092 DIN 433	Plain washer, small 21 * 6 = 126 files
	40		ISO 7093 DIN 9021	Plain washer, large 18 * 6 = 108 files
	41		No standard	Contact washer 8 * 2 = 16 files
	42		DIN 471 -	Retaining ring for shafts 86 * 3 = 258 files
	43		DIN 472 -	Retaining ring for bores 88 * 3 = 264 files
	44		DIN 6799 -	Retaining washer for shafts 18 * 2 = 36 files
	45		DIN 988 -	Shim rings and supporting rings 796 + 59 = 855 files
Pins	46		DIN 5406 -	Lock washers – for use with DIN 981 47 * 1 = 47 files
	47		ISO 2338 DIN 7	Parallel pin, unhardened, m6 and h8 260 * 2 fits * 2 materials = 1040 files
	48		ISO 8734A DIN 6325	Parallel pin, hardened, m6 and h6 170 * 2 fits * 2 materials = 680 files
49	ISO 8735A DIN 7979		Parallel pin, hardened, internal thread, m6 154 * 2 materials = 308 files	
Inserts	50		DIN 8140-1A -	Wire thread insert 147 * 2 = 294 files
Keys	51		DIN 6885A -	Parallel key 252 * 1 = 252 files