

Date 3/1/2010

Term **Bolted joints (Bolted joint)**

Proposed by mkleiber

Citation(s)

Definition

Bolted joints are one of the most common elements in construction and machine design. They consist of cap screws or studs that capture and join other parts, and are secured with the mating of screw threads. There are two main types of bolted joint designs. In one method the bolt is tightened to a calculated clamp load, usually by applying a measured torque load. The joint will be designed such that the clamp load is never overcome by the forces acting on the joint (and therefore the joined parts see no relative motion).

The other type of bolted joint does not have a designed clamp load but relies on the shear strength of the bolt shaft. This may include clevis linkages, joints that can move, and joints that rely on locking mechanism (like lock washers, thread adhesives, and lock nuts). (http://en.wikipedia.org/wiki/Bolted_joint)

Scope note (if needed)

Notational code

Broader term

Narrower term

Associative relationships

Related terms:

Concrete construction (Fcbyg)
Joint construction (Fcbbyg)

Cross-references:

USE/UF terms

Variant forms

Homographs

Usage/Warrant/Statistics (# of hits/search results for term in quotes, e.g., "automobile factories")

- Search term, variants, and/or synonyms identified if necessary
- Use a minimum of five sources
- Note currency of term usage

CATALOGS	TI	KW	SU	AB
NTL Digital Repository	0 (0)	3 (2)	1 (0)	0 (0)
VDOT OneSearch				
DOT HQ	7 (0)	28 (0)	22 (0)	28 (0)
FHWA	3 (3)	9 (9)	8 (8)	9 (9)
NUCAT (NUTL)	1 (0)	4 (0)	3 (0)	0 (0)
TranWeb (NUTL)	0 (0)	1 (0)	1 (0)	0 (0)
NTIS	0 (0)	11 (0)	11 (0)	12 (2)
TRIS Online	28 (1)	124 (17)	100 (0)	51 (17)
UMTRI	- (-)	- (-)	- (-)	- (-)
RiP	- (-)	- (-)	- (-)	- (-)
VDOT	2 (2)	16 (16)	14 (14)	16 (16)
WorldCat	1,058 (345)	2,428 (623)	1,193 (71)	2,428 (623)
Google StateDOT	10 (10)	10 (10)	10 (10)	10 (10)
Google Scholar				
Other thesauri, taxonomies, or schemes LCSH				

Other/Comments

"Bolted joints are one of the most common elements in construction and machine design"--Wikipedia. --
LC Control Number: sh 85015450 -- Contributed by mkleiber 111 (none) CT 03/13/2010 MKleiber

Consultation with FHWA Materials Lab Technicians on 2 August 2010: term not used in their work.

No literary warrant

Action Add Update **Decline**
 Remove Park

Type Preferred term Non-preferred term