



### **Chemical Stud Anchors**

Page 1 of 4

Hobson® Chemical Anchor Studs are a single unit non expansion fasteners that is used in pre-drilled holes into a selected/specified resin. They comprise of a chisel or bevelled point stud available in flat cut or external hexagon type head, a nut and washer. Fixing of the stud is achieved by inserting a suitable curing resin into the hole using a glass chemical capsule or injection adhesive system.

The stud is then inserted into the hole and rotated either by hammer drill (for glass capsule) or hand (for injection type) to allow for proper setting into the resin. The stud can be loaded once appropriate curing time has been achieved.

#### **Applications**

- Fixing to concrete or masonry substrates
- Holding down machinery

Fixture Thickness tfix max

Min. depth of base material

Minimum Edge Distance

Minimum Spacing

- Commonly used in applications that require non expansion type fasteners
- Used in applications that require closer edge

(mm)

h<sub>min</sub> (mm)

 $S_{min}$  (mm)

C<sub>min</sub> (mm)



**External Hex Drive** 



Flat top



#### Features:

- Good load capability
- Non expanding anchor
- Resistant to vibration

43

80

64

 $h_{ef}$  + 2  $d_n$ 

100

59

120

- Complete sealing of hole
- Can be installed close to edge
- Daduand appairs between anchors

distance and sp	• Ex	Excellent holding power in weak bas materials					
		Installati	ion Specifi	cations			
Anchor	M8	M10	M12	M16	M20	M24	
Nominal Hole Ø	d <sub>0</sub> (mm)	10	12	14	18	24	28
Stud Full Length	L (mm)	110	130	160	190	260	300
Effective anchorage depth	h <sub>ef,</sub> rec	80	90	110	125	170	210
Fixture clearence Ø	(mm)	9	12	14	18	22	26
Brush size Ø	(mm)	12	14	16	20	26	30

25

h<sub>ef</sub> + 30mm ≥ 100mm

50

A trix	

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of printing, Hobson Engineering®, its agencies and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.

32

60

Bolt Tension | Anti-Vibration | Product Reliability | Traceability

17

40

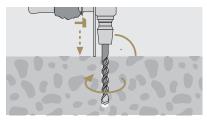


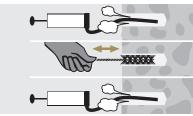


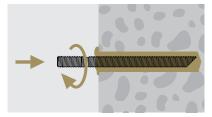


### **Chemical Stud Anchors**

Page 2 of 4









## Installation guide

- 1. Drill a hole of suitable diameter and anchorage depth for the chemical stud being installed. See table for hole diameter and effective embedment depth.
  - Note: Diamond drill bit not to be used where indicated by the manufacturer.
- 2. Clean the hole of dust and debris following chemical manufacturers instructions. As a minimum follow the AEFAC (Australian Engineered Fasteners and Anchors Council) certified installer method:
  - i. From the bottom of the hole use a hand pump (maximum Ø20 mm hole) or compressed air (6 bar minimum) to clean dust and debris. Repeat x 3.
  - ii. Using the correct wire brush (brush  $\emptyset \ge$  hole  $\emptyset$ ) clean the hole from the bottom using a rotating motion as you pull out of the hole. Repeat x 3.
  - iii. From the bottom of the hole use a hand pump (maximum Ø20 mm hole) or compressed air (6 bar minimum) to clean dust and debris.
  - Repeat x 3.
- 3. Prepare chemical (polyester, vinylester, epoxy, etc)
  - Follow the appropriate installation guide from the chemical manufacturer.
- 4. Insert stud anchor into hole, as the stud is being inserted rotate slowly to ensure even distribution of chemical. A hammer drill with suitable drive bit may be used for hex drive style studs with chemical capsules. Note: Following insertion, stud should be set at the bottom of the hole with excess chemical visible at the top of the hole.
- 5. Follow chemical manufacturers instructions for curing time before applying any load. Do not disturb stud anchor during curing process.
- 6. Once chemical is fully cured, the fixture can be installed and secured.

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of printing, Hobson Engineering®, its agencies and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.







# **Chemical Stud Anchors**

Page 3 of 4

### **Flat Top Stud Anchor**



(L)

Part Number	Description	Stud Property Class	Coating Specification	Length	Mark Height	Max. Fixture Thickness	Nut Property Class	Washer Hardness/ Dimensional Spec	Stud Tensile Strength UTS	Stud Min. UTS
				L (mm)	(mm)	(mm)			(MPa)	(kN)
MCS58GCM100130		CLASS 5.8 AS 4291.1	AS1214	130	88-92	25	CLASS 5 DIN 934	HV100 DIN125	520	30.2
MCS58GCM120160	HDG CHEMICAL			160	108-112	32				43.8
MCS58GCM160190	ANCHOR STUD			190	123-127	43				81.6
MCS58GCM200260	WITH FLAT TOP			260	168-172	59				127
MCS58GCM240300				300	208-212	64				184
MCS88GCM100130		CLASS 8.8 AS4291.1	AS1214	130	88-92	25	CLASS 8 DIN 934	HV200 DIN125	800	46.4
MCS88GCM120160	HDG CHEMICAL ANCHOR STUD WITH FLAT TOP			160	108-112	32				67.4
MCS88GCM160190				190	123-127	43				125
MCS88GCM200260				260	168-172	59				203
MCS88GCM240300				300	208-212	64			830	293
MCS16PCM080110	A4-50 STAINLESS STEEL CHEMICAL ANCHOR STUD WITH FLAT TOP	316 A4-50 STAINLESS STEEL	NA	110	78-82	17	A4 - DIN 934	A4 - DIN 125	500	18.3
MCS16PCM100130				130	88-92	25				29
MCS16PCM120160				160	108-112	32				42.2
MCS16PCM160190				190	123-127	43				78.5
MCS16PCM200260				260	168-172	59				122.5
MCS16PCM240300				300	208-212	64				176.5

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of printing, Hobson Engineering®, its agencies and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.







### **Chemical Stud Anchors**

Page 4 of 4

### **External Hex Drive Stud Anchor**



(L)

Part Number	Description	Stud Property Class	Coating Specification	Length	Mark Height	Hex Drive Height	Max. Fixture Thickness	Nut Property Class	Washer Hardness/ Dimensional Spec	Stud Tensile Strength UTS	Stud Min. UTS
				L (mm)	(mm)	(mm)	(mm)			(MPa)	(kN)
MCA58GCM080110H			AS1214	110	78-82	7	10	CLASS 5 DIN 934	HV100 DIN125	520	19
MCA58GCM100130H		CLASS 5.8 AS 4291.1		130	88-92	7	18				30.2
MCA58GCM120160H	HDG CHEMICAL ANCHOR STUD			160	108-112	8	24				43.8
MCA58GCM160190H	WITH EXTERNAL HEX DRIVE			190	123-127	8	35				81.6
MCA58GCM200260H				260	168-172	8	50				127
MCA58GCM240300H				300	208-212	9	56				184
MCA58YCM080110H		CLASS 5.8 AS 4291.1	ZINC YELLOW ELECTROPLATED TO A MINIMUM ZINC THICKNESS OF 5µm AS PER ISO4042:1999 CLASS Fe/Zn 5c1A	110	78-82	7	10	CLASS 5 DIN 934	HV100 DIN125	520	19
MCA58YCM100130H	71110 1/51 1 014/			130	88-92	7	18				30.2
MCA58YCM120160H	PLATED CHEMICAL			160	108-112	8	24				43.8
MCA58YCM160190H	ANCHOR STUD WITH EXTERNAL HEX DRIVE			190	123-127	8	35				81.6
MCA58YCM200260H				260	168-172	8	50				127
MCA58YCM240300H				300	208-212	9	56				184
MCA16PCM080110H			NA	110	78-82	7	10	_		700	25.6
MCA16PCM100130H	CHEMICAL ANCHOR STUDS WITH EXTERNAL HEX DRIVE  316 A4-5 STAINLES	316 A4-70 STAINLESS STEEL		130	88-92	7	18				40.6
MCA16PCM120160H				160	108-112	8	24				59
MCA16PCM160190H				190	123-127	8	35	A4 - DIN 934	A4 - DIN 125		109.9
MCA16PCM200260H				260	168-172	8	50				171.5
MCA16PCM240300H		316 A4-50 STAINLESS STEEL		300	208-212	9	56			500	176.5

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of printing, Hobson Engineering®, its agencies and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.

