

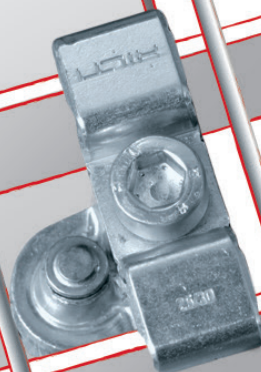


## Grating Fastening Systems

for offshore and onshore  
facilities

# Securely and easily fastened. With simple and efficient fastening systems for gratings.

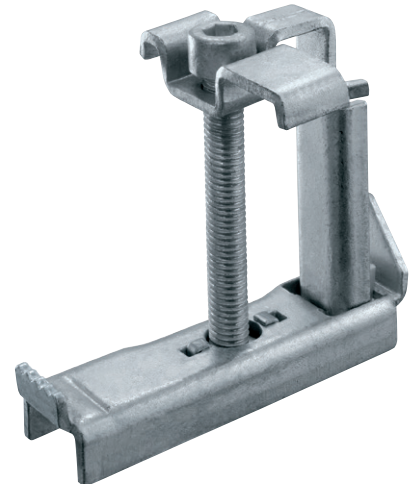
Fastening gratings on steel structures has never been easier. The consistently high-performing Hilti solutions adapt perfectly to any project requirement in all environments. All Hilti grating fasteners are highly productive as they can be installed conveniently by just one person working from above the grating, thus saving time and costs. Gratings can be fastened with maximum reliability and safety, faster than ever before.



## Quick and secure.

**Hilti. Outperform. Outlast.**

## Fastening gratings has never been easier.



### Save time, cut costs

Hilti grating fasteners are designed for productivity and can be installed in a fraction of the time taken by most traditional solutions.

### Durable and reliable

Hilti grating fasteners are available in various materials to meet varying corrosion-resistance requirements.

### Perfect fit

A full range of grating fasteners is available, meeting all requirements in all environments – from large industrial floors to small projects, from offshore platforms to factory floors.

### Simple and convenient

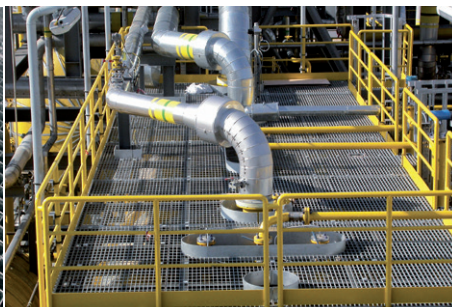
The fasteners can be installed by just one person working from above the grating. Scaffolds are not needed.

### Vibration resistant

The cleverly designed fasteners resist vibration transmitted by grating plates and structural steel beams.

### Maximum safety

Gratings can be installed with maximum reliability and safety – more quickly, more easily and more safely than ever before.



The Hilti X-GR RU grating fastener is fast, convenient and can be easily removed if required.

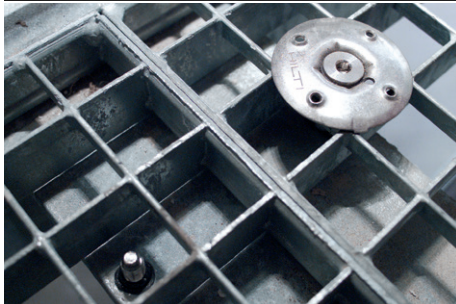
Hilti X-FCM-R is the perfect fit where safety is paramount and corrosion resistance is an important issue.

The X-MGR is designed to bring maximum flexibility to smaller grating projects.



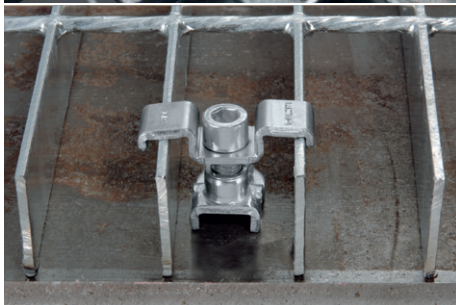
### **X-FCM-R with X-BT – simply the best.**

Arguably the most widely specified proprietary grating fastener worldwide, the Hilti X-FCM-R stainless steel disc with the stainless steel X-BT stud is simply the best solution for offshore structures and highly corrosive environments. Hilti X-BT can be fastened to pre-painted steel without damaging the surface.



### **X-FCM-M with X-CRM – field proven for decades.**

The duplex-coated X-FCM-M disc in combination with the stainless steel X-CR-M threaded stud is the right grating fastening solution for onshore structures and mildly corrosive environments.



### **X-GR RU – top productivity and cost savings.**

Featuring a pre-assembled saddle, screw and pin, the X-GR RU grating fastener raises productivity significantly. The saddle can be removed easily for grating maintenance.



### **X-MGR – your access problems solved.**

The hot-dip galvanized Hilti X-MGR mechanical clamp comes pre-assembled for maximum installation ease and speed. Like all other Hilti grating fastening systems, the X-MGR can be installed by just one person working from above the grating.

## **Performance data**

	<b>X-BT X-FCM-R</b>	<b>X-CRM X-FCM-M</b>	<b>X-CRM X-FCM</b>	<b>X-GR RU</b>	<b>X-MGR</b>
Application environment	Offshore/highly corrosive	Onshore/mildly corrosive	Indoors	Onshore/mildly corrosive	Onshore/mildly corrosive
Material specification	Stainless steel A4	Duplex-coated	Zinc-plated	Duplex-coated	Hot-dip galvanized
Steel base material thickness	≥ 8 mm	6-8 mm	6-8 mm	4-9 mm*	≥ 3mm
Recommended tensile loads (N <sub>rec</sub> )	1.0 kN	0.8 kN	0.8 kN	0.8 kN	0.8 kN
Grating heights	25-50 mm **	25-50 mm **	25-50 mm **	25-40 mm	25-40 mm
Vibration resistance	Yes	Yes	Yes	Yes	No
Approvals	<b>X-BT:</b> ABS, GL, LR, DNV  <b>X-FCM-R:</b> ABS, GL, LR, DNV	<b>X-CR:</b> ABS, LR  <b>X-FCM-M:</b> ABS, GL, LR, DNV	<b>X-CR:</b> ABS, LR  <b>X-FCM-M :</b> GL, LR, DNV		
Recommended DX tool	DX 351 BTG	DX 460-GR	DX 460-GR	DX 460-GR	Electric screw-driver, e.g. SFC 14A

\*Thickness can be increased by pre-drilling

\*\* Max. grating height is 80mm with the X-SEA-R 30 M8 extension adapter

We reserve the right to make technical changes.



## Fastening tools

Ordering designation	Item no.
<b>DX 460 GR powder-actuated fastening tool</b> Refer to catalog for accessories	000000
<b>DX 351 BTG powder-actuated fastening tool</b> Refer to catalog for accessories	000000

## Fasteners

<b>X-BT</b> stainless steel threaded studs	①	377074
<b>X-GR RU 25-30 CR20P8</b>	②	384239
<b>X-GR RU 35-40 CR20P8</b>	②	384240
<b>X-GR RU 1 1/4 CR20P8</b>	②	385932
<b>X-MGR M60</b>	③	384233
<b>X-MGR W60</b>	③	384234
<b>X-FCM 25/30</b> zinc-plated grating disc <sup>1</sup>	④	26582
<b>X-FCM 35/40</b> zinc-plated grating disc <sup>1</sup>	④	26583
<b>X-FCM 45/50</b> zinc-plated grating disc <sup>1</sup>	④	26584
<b>X-FCM 1" - 1 1/4"</b> zinc-plated grating disc <sup>1</sup>	④	247175
<b>X-FCM-M 25/30</b> duplex-coated grating disc <sup>2</sup>	④	378683
<b>X-FCM-M 35/40</b> duplex-coated grating disc <sup>2</sup>	④	378684
<b>X-FCM-M 45/50</b> duplex-coated grating disc <sup>2</sup>	④	378685
<b>X-FCM-M 1" - 1 1/4"</b> duplex-coated grating disc <sup>2</sup>	④	378686
<b>X-FCM-R 25/30</b> stainless steel grating disc <sup>3</sup>	④	247181
<b>X-FCM-R 35/40</b> stainless steel grating disc <sup>3</sup>	④	247182
<b>X-FCM-R 45/50</b> stainless steel grating disc <sup>3</sup>	④	247183
<b>X-FCM-R 1" - 1 1/4"</b> stainless steel grating disc <sup>3</sup>	④	247184

Application areas:

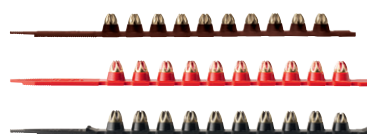
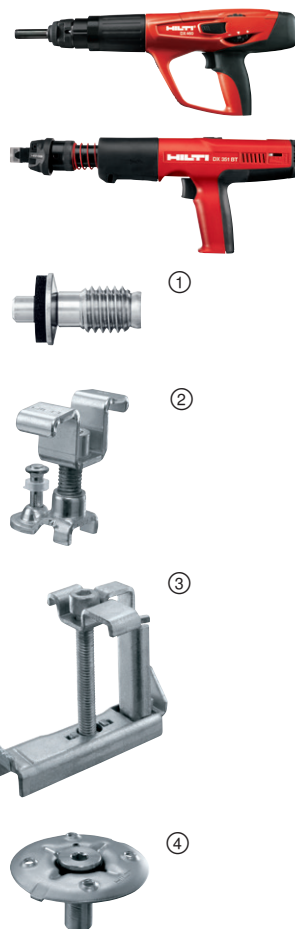
<sup>1</sup> Indoors, dry and non-corrosive environment.

<sup>2</sup> Indoors, mildly corrosive environment, or for limited lifetime use. Note: Not for use in marine atmosphere or in heavily polluted environment.

<sup>3</sup> Marine, offshore, petrochemical, etc.

## Cartridges

<b>6.8/11M caliber, brown</b> high precision, for X-BT	377204
<b>6.8/11M caliber, red</b> heavy power rating, for X-GR RU and X-CRM	50353
<b>6.8/11M caliber, black</b> extra-heavy power rating, for X-GR RU and X-CRM	50354



## Productivity plus

With Hilti products that save you time.



Laser range meters for easy, accurate distance measurement



System solutions for concrete and metal applications



Anchors and steel screws for all common fastening applications and materials



High-performance cordless screwdrivers with perfectly-matched accessories

# Hilti. Outperform. Outlast.

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