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Bosch GCM12 GDL dual bevel mitre saw

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The arms race

The axial glide mechanism is a clever arrangement of two articulated arms supported on 12 sealed ball races that produces effortless movement… hence the name 'axial glide'. This generates a super-smooth cutting action, but the main advantage is in the amount of space taken up at the rear of the machine, or rather the fact that there isn't any. With a conventional twin-guide-bar saw (or even one of the newer quad-bar saws), you need a significant amount of room at the rear. With the GCM12 you have none of these issues, **photo 2**, and the pivot arm can be placed right up against a wall.

A steady glide

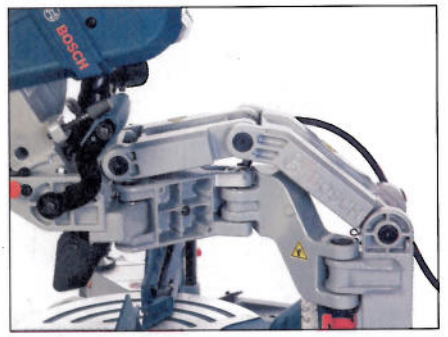
Just the lightest of touches is needed to bring the sawhead forward, **photo 3**. Bosch claims that the glide mechanism will need zero maintenance for the life of the machine, as there's no risk of long guide arms becoming gummed up or getting knocked out of true. If you're sceptical about the rigidity of such a set-up, just look at the robustness of the arm, **photo 4**. It's really strong, with not a trace of wobble.

The glide can be locked in either the 'in' or 'out' position with a simple lever, **photo 5** – either for transport, or if you want to use the saw just in chopsaw mode. A tenoning stop that controls the depth of cut can be engaged for joint or trench cutting, **photo 6**.

Mitres and bevels

Mitre settings are as you would expect, with angles of 52° to the left and 60° to the right, all clearly marked on an adjustable stainless steel scale, **photo 7**. There are ten standard detents at the most commonly used angles, but interestingly you can press a button that disables the detents for fine angle setting – a very neat idea!

A real bonus is that you can set and lock the bevel angles from the front of the machine; there's no more reaching over to operate rear bevel locks. Knobs on the right



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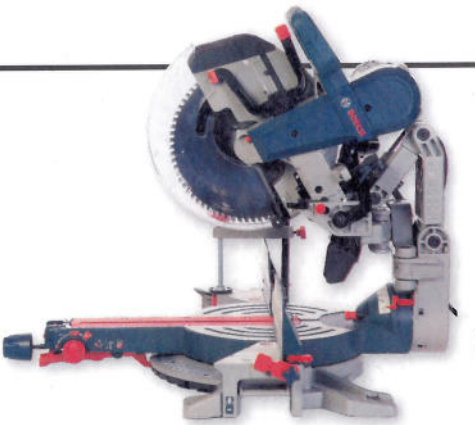

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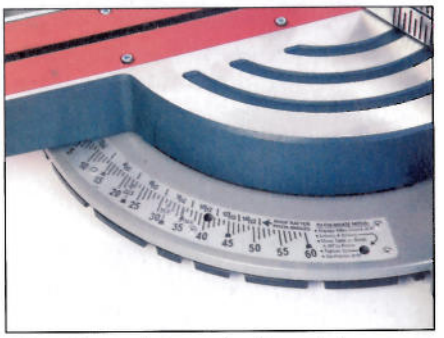

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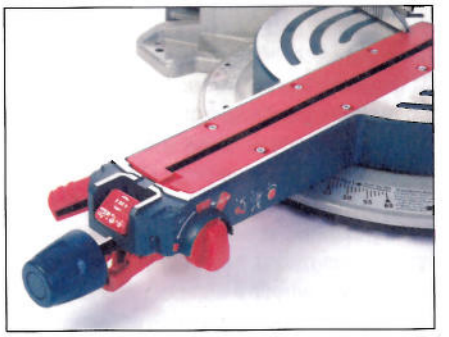
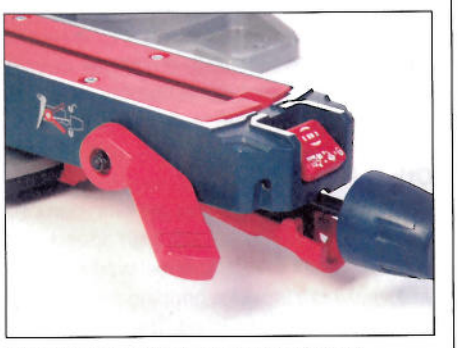


8 Knobs on the front of the pivot arm control which way you can tilt the sawhead



9 A large lever on the left-hand side then locks the setting securely in place

WOODWORKER EXCLUSIVE!

TESTED BY ALAN HOLTHAM

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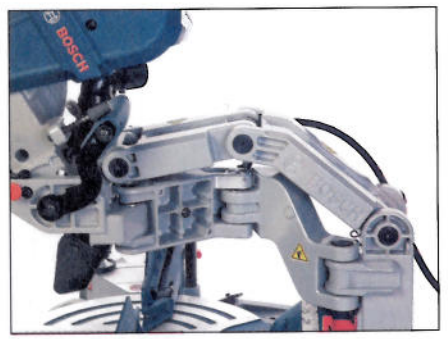

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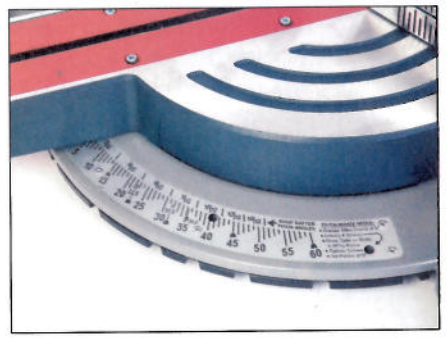

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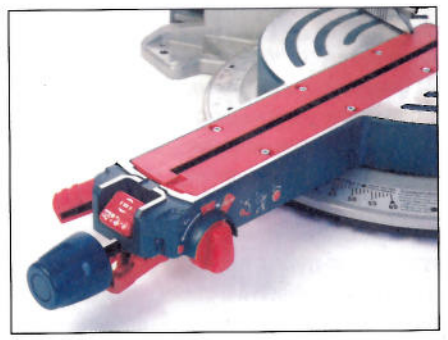

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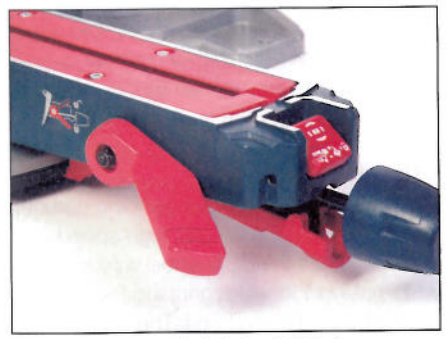

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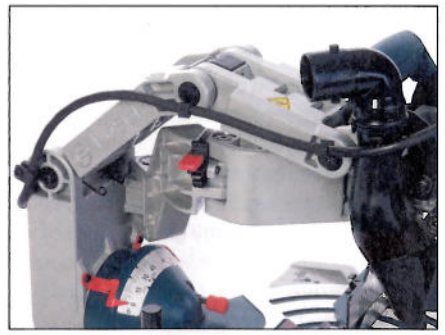
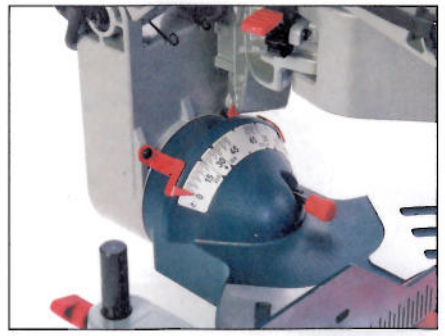


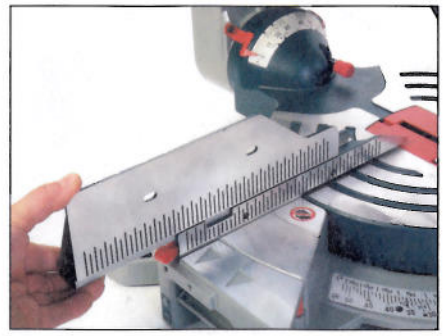
4 The extended arm is extremely robust, with absolutely no trace of a wobble

5 The glide can be locked for transport or for operation in chopsaw mode

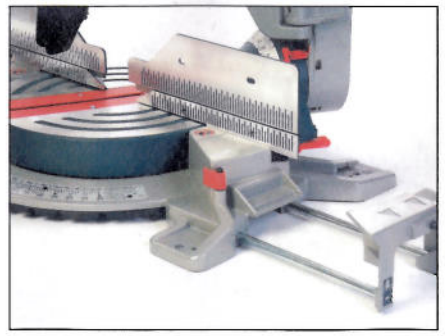
6 A tenoning depth stop can be quickly engaged for joint or trench cutting



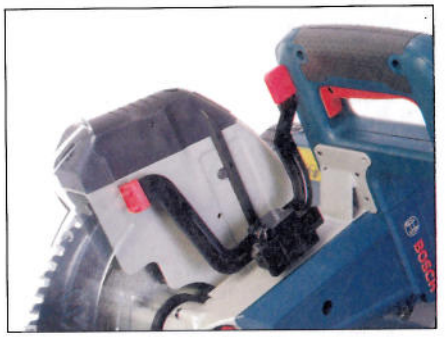
10 Another clearly marked scale shows exactly what bevel angle has been set



11 The engraved fences have a quick-release system and slide back very easily



12 The side extensions are a decent size and give a good overall table length



13 A paddle on the handle releases the guard, which flips back automatically

14 The powerful 2000W brush motor is mounted high up on the machine

15 The standard 72-tooth blade has been specially designed for use on this saw

of the pivot arm control which way you can tilt the head, **photo 8**. A large lever on the left then locks it all securely in place, **photo 9**. The maximum bevel angle is 47° left and right, and again another clear scale shows exactly what angle is set, **photo 10**. A plunger locates everything securely at 90° if you don't need to bevel.

Fences and extensions

At extreme bevel angles the fences have to be slid back, but this is simple as they have a quick-release system and slide very easily, **photo 11**. The fences themselves are clearly engraved with scales which simplify repetition cutting. They are also drilled if you want to fit your own sacrificial or zero-clearance wooden faces.

Most mitre saws have some form of pull-out extension to the table. These are rarely very significant in my experience, but on the GCM12 they're at last a decent size, **photo 12**, and give you a very useful overall table length of 1016mm.

Up and running

The saw is very easy to operate; a large paddle on the handle releases the guard, **photo 13**, which flips back without hesitation. Incidentally the guard is completely clear so you have excellent visibility.

The powerful 2000-watt motor is mounted high up on the machine, **photo 14**, so there are no problems with clearance during bevel cuts. I was a little concerned to see that it's fitted with a brush motor rather than an induction one as the former are generally much noisier, but in reality this one is actually very quiet and you wouldn't know that it wasn't an induction motor.

Speed feedback

What does take some getting used to it is the electronics. When you first switch the saw on the motor kicks up to quite a high speed, but this then slows down as you start to make a cut. However, it maintains this slower speed no matter how heavy you are with the feed.

This is slightly disconcerting until you get used to it, as you think you're overloading the saw and start to back off slightly… but once you realise that the motor has an appetite for anything you throw at it, you soon lose any such worries! It also has a decent brake, so it comes to a halt quickly.

Precision cutting

The standard 72-tooth blade has been specially designed for this saw with features you find only on the highest-quality blades, **photo 15**. This is one of the advantages of Bosch owning the Freud saw blade company! The blade cuts incredibly smoothly and leaves a super-fine finish, **photo 16**.

To help line up the cut accurately, an adjustable dual laser projects two sharp lines to indicate each side of the saw cut, **photo 17**. The precision of these lasers has improved dramatically in recent years, and they're now no longer a gimmick but more of an essential aid.

Gathering dust

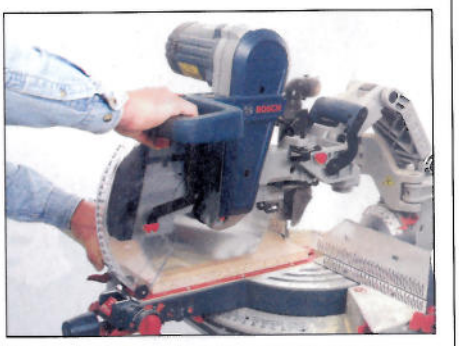
Dust extraction is well catered for, or at least as well as it can be on a saw of this type. A chute at the rear of the blade channels the dust into the swivelling extraction outlet which, when connected to a vacuum extractor, is claimed to be 80 per cent efficient. It seemed pretty good to me.

On the move

You could perhaps argue that all this heavyweight construction and mass, while

18 The saw has a top handle, but is really much too heavy to carry about easily...

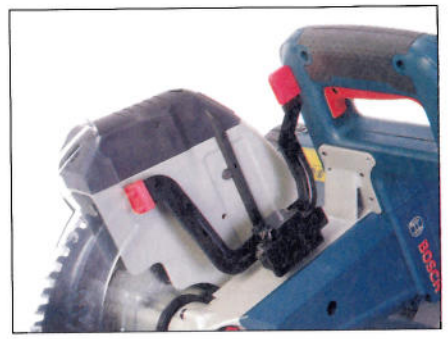
19 The saw will happily cut material up to a maximum of 104mm thick



20 The maximum crosscut capacity at full stretch is a massive 341mm

WOODWORKER EXCLUSIVE!

TESTED BY
ALAN HOLTHAM



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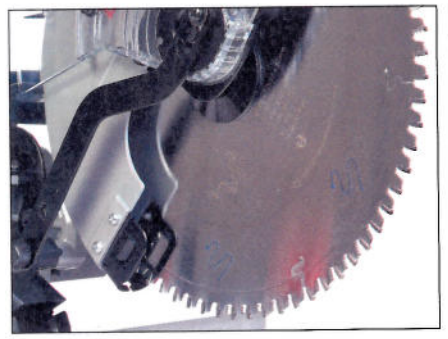

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On the move

You could perhaps argue that all this heavyweight construction and mass, while producing a superbly accurate saw, has made the machine so heavy that it's not readily portable enough for site use. I'm not sure if this is actually an advantage or a disadvantage. There is a carrying handle buried in the top, **photo 18**, but at 32kg this isn't a saw you would want to be lugging around unless you really had to. I see it more as a fixed workshop machine than a site tool.

However, if you team it with the superb GTA 2500 folding stand the whole set-up becomes instantly portable, **below right**. You just wheel the whole caboodle into place, fold the stand out with one single movement and you now have a dedicated sawing station. Simples!

The saw in action

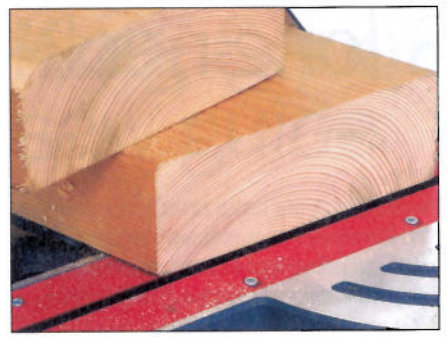
The cutting specifications (see above right) are extremely healthy. The saw will happily chomp its way through material up to 104mm thick, **photo 19**, although you can increase this to 110mm by incorporating a spacer onto the table. Maximum crosscut capacity at 0° is 341mm, and even at full extension there isn't a hint of play in the arm, **photo 20**.

The material clamp is perhaps the only disappointing feature, being a very simple screw-down affair, **photo 21**. I've seen much better clamps on lesser saws. This one needs to be more adjustable and quick-acting. That said, it does work and is particularly useful for making compound mitre cuts, **photo 22**.

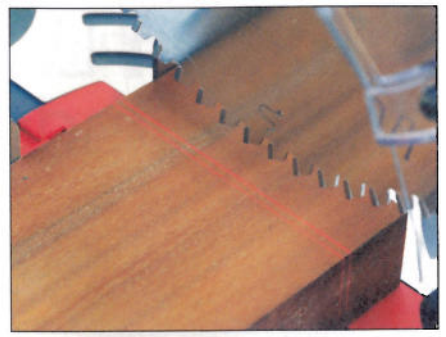
The large height capacity means you can cut material such as crown moulding in the upright position, and the clear design at the rear of the blade means you can cut very deep thin material. I managed to cut some 138mm skirting. I'm not sure if this is allowed but it's certainly possible!

Digging deep

Before I get too carried away extolling all the virtues of this superb machine, I should perhaps introduce the reality check of the price. At the time of writing the final retail price has not been determined, but it will be around the £900 mark, so all this amazing performance and precision comes at a fair old price. However if you're kitting out a workshop, a saw like this will cover most of your needs, particularly if you team it with a decent bandsaw.



16 The blade cuts incredibly smoothly and leaves a super-fine finish on the wood



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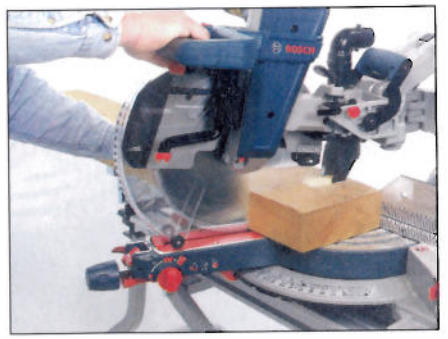

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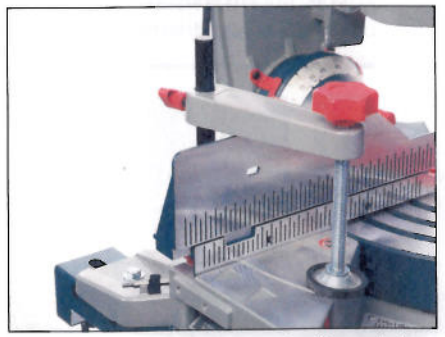

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SPECIFICATION

MOTOR		2000W
NO-LOAD SPEED		3800rpm
BLADE DIAMETER		305mm
CUTTING CAPACITY		
	at 90°	341 x 104mm
	at 45°	240 x 104mm
	at 45 x 45°	341 x 51mm
TURNTABLE SETTING		52° left, 60° right
BEVEL SETTING		47° left or right
WEIGHT		32kg

VERDICT

This is a superb mitre saw that really does live up to all the hype, but if you want the best you will have to dig deep into your pockets.

PROS
- Small footprint
- Excellent build quality
- Precision performance

CONS
- Not readily portable
- Poor material clamp
- I can't afford one!

VALUE FOR MONEY ■■■■■
PERFORMANCE ■■■■■

FURTHER INFORMATION

- Bosch
- 01895 838743
- www.bosch-pt.com

Team it up with the GTA 2500 folding stand and it's ready to roll

Then fold the stand out and you have a dedicated sawing station