

LASER SCREED® & LASER GRINDER

The FAST TRACK combination to a SUPERFLAT floor

Traditional **LONG STRIP**.... Vthe **MODERN** approach to a **FASTER** and usually **CHEAPER** high tolerance floor.



OR ...



The advantages of laying traditional LONG STRIPS:

- Each proposed narrow aisle location is laid as a separate section of floor, allowing for tight control of flatness;
- Good flatness control during construction should mean that little or no grinding is required to achieve Superflat standard;
- The longitudinal joints can be positioned beneath the racks and away from the traffic aisle;

The disadvantages of the LONG STRIP method:

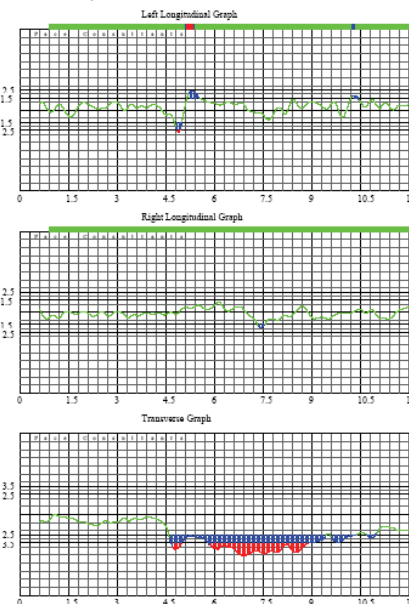
- Maximum output of only 300 to 400m² per day;
- Time required for construction;
- The transfer areas at the ends of the narrow aisles could have joints every 4 or 5metres;
- The entire floor may have to be completed before other trades can start work in the building;
- Only a small number of flooring contractors have the skilled labour and experience required to construct this type of floor;
- The alternate casting pattern can make traffic routes to the casting area difficult;
- If the narrow aisle racks are removed by a future user of the warehouse, the longitudinal joints will be exposed to traffic.

The main advantages of a floor built using LASER SCREED® technology:

- High quality, high output technique allows up to 2,000m² to be constructed in a single day;
- Laser control ensures that a good standard of accuracy is maintained throughout each pour. This can reduce the amount of grinding required if the floor is later converted for defined traffic use in narrow aisles;
- Floor areas of up to 2,000m² can be installed using 'Joint-less', steel fibre reinforcement;
- Surface finishes can be applied by an additional topping spreader during the construction stage to ensure a monolithic slab. These are usually dry-shake hardeners or coloured toppings;
- As each large section of floor is completed and handed over, other trades can start their work whilst the remainder of the floor is constructed;
- Construction programmes can usually be reduced by significant amounts, giving a client / end user early occupation;
- Many flooring contractors are able to install good quality Laser Screed® floors.

The benefits of using the LASER GRINDER process:

- Up to 100 linear metres of narrow aisle can be upgraded to Superflat tolerances in a single day;
- If a good general standard floor has been produced by the Laser Screed contractor, the Laser Grinder can be set up to grind 'isolated sections' of the narrow aisles;
- The left and right load wheel tracks are upgraded simultaneously, or the whole aisle width can be treated;
- The grinding can be performed before, during or after the racking is installed and does not affect the critical path of the construction programme;
- The grinding operation is dust-free and does not affect other trades operating in adjacent aisles;
- Guaranteed flatness—first time and every time.



LEFT: A typical profile of a Laser Screed floor will have areas of very good flatness and other areas where grinding is required to achieve the Superflat tolerances. A floor that is built to an FM2 (Special) standard may require grinding to only 40 to 50% of each narrow aisle length to comply with Superflat tolerances. On the other hand a poor floor may require over 80% grinding, so it pays to use a flooring contractor with a good track record.

RIGHT: A typical Laser Screed floor after the Laser Grinder has been used to upgrade the flatness in the narrow aisle locations.

